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# DMURS Statement of Consistency

SHD at Holybanks, Swords

March 2022

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## Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
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**Comments**

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# Content

# 1. DMURS Statement of Consistency

This statement of consistency has been prepared to accompany a Strategic Housing Development (SHD) planning application for a proposed mixed use development at Holybanks Swords, Co.Dublin.

The proposed development will consist of a residential scheme of 621 no. units (145 no. 1-bed units, 278 no. 2-bed units, 187 no. 3-bed units and 11 no. 4-bed units) along with ancillary childcare facility (506.5 sq.m) and a range of residential amenity facilities (573 sq.m) including gym, concierge, meeting room and multi-purpose room.

The development will include the construction of:

- 118 no. houses comprising: 8 no. 1-storey, 1-bed maisonette units; 99 no. 2-storey, 3-bed units (18 no. mid-terrace and 81 no. semi-detached) and 11 no. 2-storey, 4-bed units (semi-detached).
- 349 no. apartment units (137 no. 1-bed units, 201 no. 2-bed units, and 11 no. 3-bed units) provided within 2 no. blocks ranging in height from 1 no. to 7 no. storeys (over basement level) to the south side of the site along Glen Ellan Road. A single level basement has been provided for Block B and an under-croft area is provided within Block A incorporating parking areas, waste management areas, plant rooms and other ancillary services.
- 154 no. duplex units that are arranged within 14 no. 3-storey blocks comprising of 77 no. 2-bed units (ground floor) and 77 no. 3-bed units.
- Apartments and duplexes are provided with balconies/terraces along all elevations and dedicated services / bin store areas.
- The development will also provide for an ancillary childcare facility (506.5 sq.m), and residential amenity facilities (573 sq.m) including gym, concierge, meeting room and multi-purpose room within the ground floor of Block B.
- Provision of 705 no. car parking spaces, 856 no. bicycle parking spaces and 21 no. motorbike parking spaces (within basement, under-croft and at surface levels);
- The landscape proposal includes extensive public open space (10,008 sq.m.), in addition to a new public park measuring 29,400 sq.m as an extension of Broadmeadow Riverside Park to the north of the site.
- Principal vehicular access to the site is from Glen Ellan Road, with an additional new secondary site entrance provided from Jugback Lane/Terrace. New pedestrian connections are provided to the site from Jugback Lane/Terrace, Glen Ellan Road and the proposed Broadmeadow Riverside Park extension to the north of the site. Further, a segregated pedestrian/cycle path is proposed along a central green spine, connecting Glen Ellan Road in the south with Broadmeadow Riverside Park extension in the north.
- Junction and road improvement works are proposed to the Glen Ellan / Balheary Road junction and R132/R125 Seatown West Roundabout. This will include widening of Balheary Road (South), upgrade works to cycle/pedestrian facilities and for the partial signalisation of R132/R125 junction. The application also contains proposals to upgrade existing Irish Water infrastructure including the construction of a stormwater storage tank and overflow outfall gravity sewer to the Broadmeadow River.
- All associated site development works above and below ground including hard and soft landscaping, roads/footpaths/cycle paths, play areas, public art, boundary treatments, lighting, SuDs, pumping station, EV charging points, green roofs, ESB substations and services to facilitate the development.
- As part of the proposed development, temporary permission (3 no. years) is sought for a single-storey Marketing Suite and associated signage (including hoarding) during the development construction stage.

It is a requirement of the SHD regulations that the proposed housing development is compliant with the requirements of the Design Manual for Urban Roads and Streets (DMURS).

The stated objective of DMURS is to achieve better street design in urban areas. This will encourage more people to choose to walk, cycle or use public transport by making the experience safer and more pleasant. It will lower traffic speeds, reduce unnecessary car use and create a built environment that promotes healthy lifestyles and responds more sympathetically to the distinctive nature of individual communities and places. The implementation of DMURS is intended to enhance how we go about our business, enhance how we interact with each other and have a positive impact on our enjoyment of the places to and through which we travel.

# 2. Creating a Sense of Place

Four characteristics represent the basic measures that should be established in order to create people friendly streets that facilitate more sustainable neighbourhoods. These are:

a) Connectivity;

b) Enclosure;

c) Active Edge; and

d)Pedestrian Activity/Facilities.

Each of these characteristics are set out in the chapters below together with a commentary setting out how the proposed development complies with each of these characteristics.

## 2.1 Connectivity

*"The creation of vibrant and active places requires pedestrian activity. This in turn requires walkable street networks that can be easily navigated and are well connected."*


In order of importance, DMURS prioritises pedestrians, cyclists, public transport then private cars.

This is illustrated in the adjacent image extracted from DMURS.

The proposed development has been designed with careful consideration for pedestrians and cyclists. Pedestrian and cyclists connectivity is provided throughout the development with good links to the nearby amenities at Applewood Village and the existing established residential developments to the west via a new network of pedestrian pavements and roads on site. Balheary Road is accessible to the east via the proposed public park link and a new vehicular access onto Glen Ellan Road will be provided to access the development.

Pedestrian and cycle links are illustrated below which clearly demonstrate the dominance of pedestrian/cycle connectivity within the proposed development and to the surrounding area.

The site is served by a high frequency bus service to the city centre, “Swords Express” which has two stops on Glen Ellan Road c. 200m from the site entrance. Dublin Bus routes 41, 41b, 41c, 41x, 43, 33, 33a, 33b, 33e and 33n also service the subject area. In addition, the proposed development is immediately adjacent to the A4 branch of Bus Connects which will connect Swords directly to the City Centre and there will be a MetroLink station within 1500m of the development in the future. In addition, Swords Main Street (R836) is located within 1.1km of the subject development and has 1 bus stop that connects the development to the Dublin Airport and Dublin City Centre.

The proposed development has been carefully designed to promote strong levels of connectivity in favour of pedestrians and cyclists. Connectivity throughout the scheme is heavily weighted towards the pedestrian and cyclist access from east to west through the site to Applewood Village and to the northeast to Balheary Road. Direct pedestrian and cycle access from the proposed development to Glen Ellan Road, Greenback Lane/Terrace and Balheary Road is provided

The main vehicular access to the site is proposed from south via a new priority-controlled T-junction on Glen Ellan Road providing access to each of the residential streets. Straight and through access roads have been avoided to reduce the speed of traffic and eliminate through traffic. A secondary vehicular access will be provided from the west via Jugback Lane/Terrace. This additional access will be constructed, primarily to provide connectivity to the adjacent Applewood Village and all its associated services/amenities.

Figure 1 below shows all the proposed vehicular and pedestrian and cyclist (PC) site access points. In addition, future connection points are shown. Figure 2 below shows the pedestrian and cyclist routes through the site.

It is considered that the proposed development is fully compliant with the connectivity objectives of DMURS. Refer to the Transport and Movement strategy set out in the Architect’s Design Statement which further indicates pedestrian/cyclist links throughout scheme.

Figure 1 Site access points

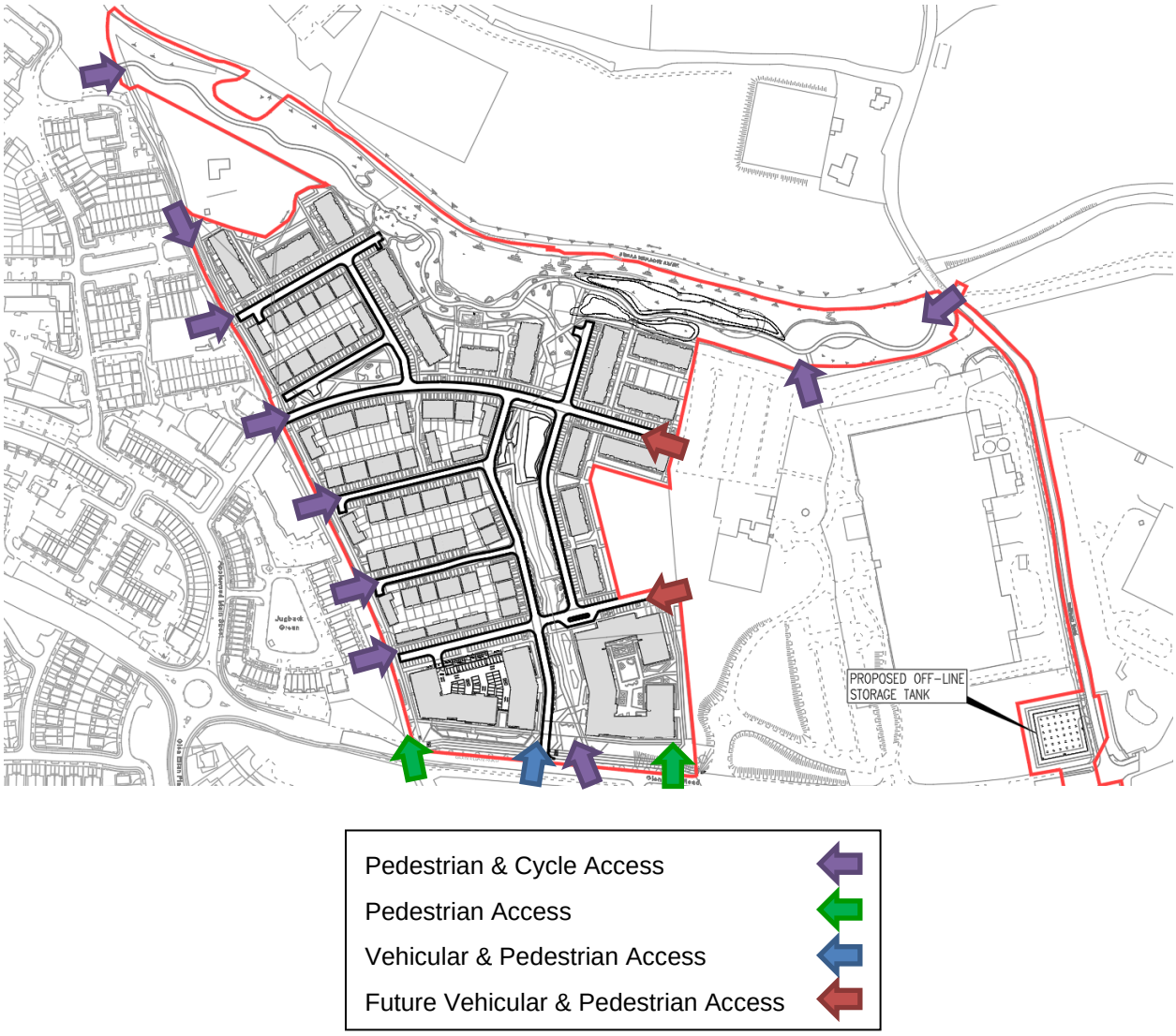


Figure 2 Pedestrian and Cyclist Routes

## 2.2 Enclosure

*"A sense of enclosure spatially defines streets and creates a more intimate and supervised environment. A sense of enclosure is achieved by orientating buildings towards the street and placing them along its edge. The use of street trees can also enhance the feeling of enclosure."*

The proposed development has been designed so that the residential units are overlooking streets and public open spaces which provide passive surveillance. Landscaping and tree planting are provided along the roads/streets which assist in providing a sense of enclosure.

There are a number of Homezone areas and cul-de-sacs which provide enclosed residential communities and give a sense of place to these individual communities.

## 2.3 Active Edge

*"An active frontage enlivens the edge of the street creating a more interesting and engaging environment. An active frontage is achieved with frequent entrances and openings that ensure the street is overlooked and generate pedestrian activity as people come and go from buildings."*

Residential housing units are all located so that they front directly onto the roads and streets. Entrances to the units are provided directly from the street which will ensure that there is plenty of activity as residents come and go.

Although some of the streets/roads are cul-de-sacs, the pedestrian and cycle links at the end of these cul-de-sacs provide short cuts which will further enhance activity and enliven the streets/roads.

## 2.4 Pedestrian Activities/Facilities

*"The sense of intimacy, interest and overlooking that is created by a street that is enclosed and lined with active frontages enhances a pedestrian's feeling of security and well-being. Good pedestrian facilities (such as wide footpaths and well-designed crossings) also makes walking a more convenient and pleasurable experience that will further encourage pedestrian activity."*

As outlined in the items above the proposed development has been designed to provide excellent pedestrian connectivity. The apartments are all located so that they front directly onto the active edges/open space, which will provide surveillance to enhance pedestrians feeling of safety and wellbeing.

The proposed development has been designed to reduce traffic speeds. In this regards, long straight sections of road which encourage higher traffic speeds have been avoided by introducing slight bends into the main access road onto the site.

The pedestrian routes across the site are generally 2.0m wide which provide adequate space for two people to pass comfortably. DMURS identifies a 1.8m wide footpath as being suitable for areas of low pedestrian activity and a 2.5m footpath as being suitable for low to moderate pedestrian activity. It is considered that a 2m wide footpath is appropriate for the proposed development.

As described in section 2, there is a network of inter-connecting footpaths on the road network in the area around the site, providing access to the local transport links and amenities. In addition, cyclists can benefit from the provision of dedicated cycle tracks in the surrounding highway network, creating a fully integrated cycle network which will increase the overall accessibility by this mode.

# 3. Key Design Principles

DMURS sets out four core design principles which designers must have regard in the design of roads and streets. These four core principals are set out below together with a commentary setting out how these design principals have been incorporated into the design of the proposed residential development.

## 3.1 Design Principal 1 (Connected Networks)

*"To support the creation of integrated street networks which promote higher levels of permeability and legibility for all users and in particular more sustainable forms of transport."*

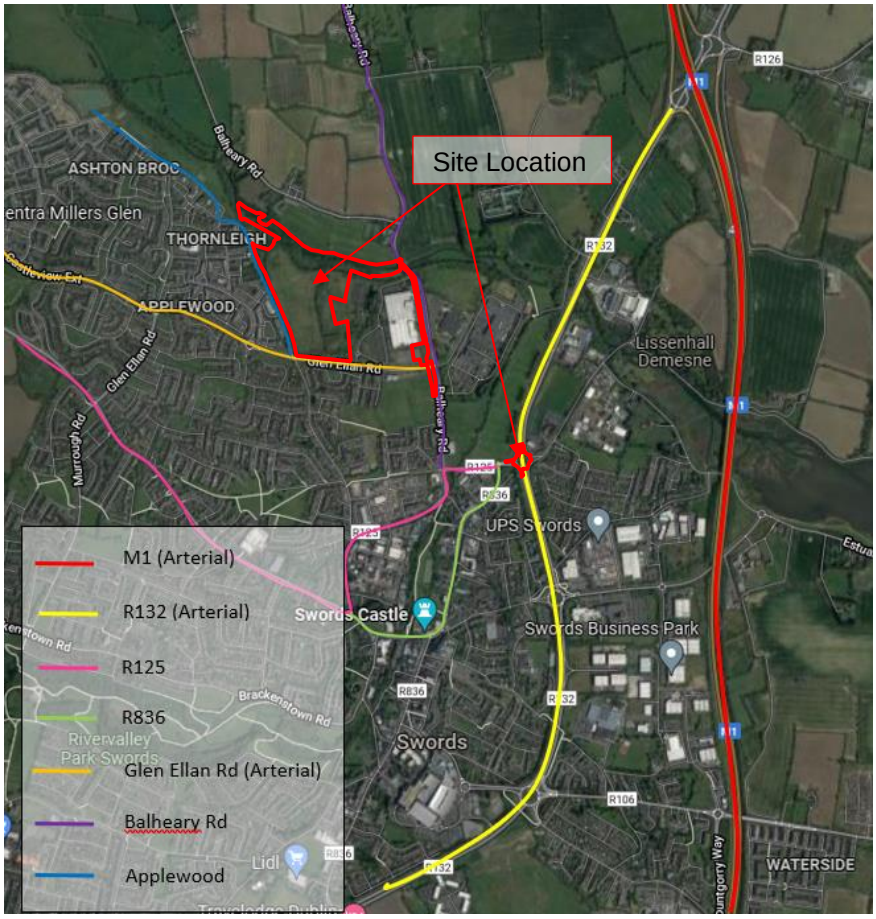
As described above the proposed development has been carefully designed, providing filtered permeability, to ensure that the focus on connectivity is centred on pedestrians and cyclists. The provision of the high levels of connectivity for pedestrians and cyclists are intended to promote walking and cycling by making them a more attractive option to the private car.

The proposed development is well connected to the surrounding primary roads network with access to Glen Ellan Road, Applewood Village and Balheary Road.

DMURS promotes the "consolidation of development along strategic connections around nodes (including city, town and village centres)". The proposed development is the natural infill between the existing Applewood and Thornleigh development to the west, Glen Ellan Road to the south and the Broadmeadow River Park, which is being constructed as part of the proposed development and will provide new links to surrounding residential developments in line with section 3.1 of DMURS.

The proposed development is a natural continuation of the town of Swords providing compact development alongside the provision of improved physical infrastructure as demonstrated by figure 3 below.

Figure 3 Links and Connections



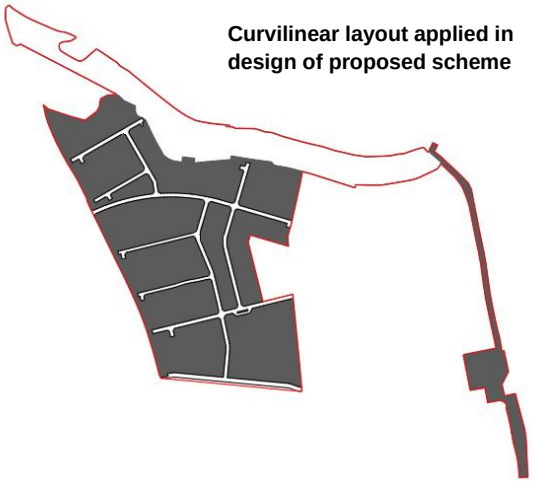

**Place Context** (DMURS Section 3.2.2)

The site falls in the "Neighbourhood" category as defined in section 3.2.2 of DMURS and would generate higher to more moderate levels of pedestrian activity. The highest levels of pedestrian activity occur along major streets which connect destinations, where public transport services run. In this sense, the proposed development would provide a central spine that links the Broadmeadow River Park and the overall development to Glen Ellan Road to the south which access the main public transport services. In addition, the Broadmeadow River Park provides a pedestrian and cycling link between the development and Balheary Road to the east which will eventually connect the development to the future Metrolink Station further east.

## Permeability and Legibility (DMURS Section 3.3)

### Street Layouts (DMURS Section 3.3.1)

The street layout design approach for this scheme is an "Curvilinear" layout as described in section 3.3.1 of DMURS, Fig. 3.8(b). DMURS indicates that " street networks that are curvilinear (see Figure 3.8b) may also be highly effective" in terms of permeability (and legibility). The internal curvilinear layout not only makes pedestrian and cyclist movement through the scheme direct, efficient and safe, but also draws people toward spaces creating attractive curvilinear streetscapes such the central spine and the Broadmeadow River Park.



**Curvilinear layout applied in design of proposed scheme**


*Figure 3.8: Permeable street layouts may be formed via a number of different configurations including examples of the more rigid orthogonal, curvilinear and/or organic.*

### Block Sizes (DMURS Section 3.3.2)

DMURS provides guidance at Section 3.3.2 in regard to block sizes within a street network that are considered to aid permeability. Optimal block size is 80m x 60m with an indication that a larger block of 100m x 60m would be permissible in Neighbourhood and Suburb contexts, the category which the application site falls into. This guidance on optimal block sizes has been applied to the design of this scheme. It is considered that optimal block sizes are for guidance and any minor exceeding of the indicated dimensions are more than compensated for by the highly permeable nature of the overall layout with many alternative routes available to pedestrians and cyclists.

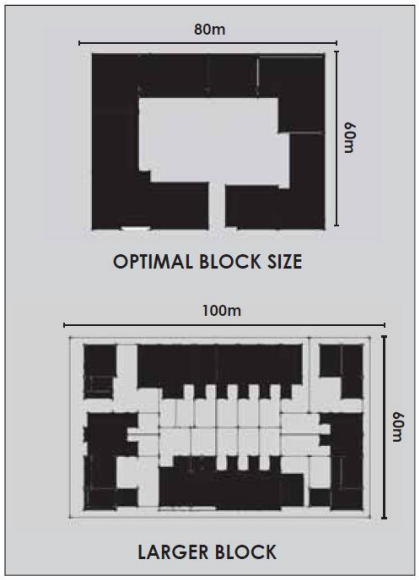


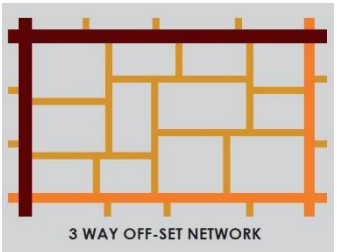

*Figure 3.10: Optimal block dimensions in varying contexts that will promote a walkable neighbourhood.*

Figure 4 Block Size


**Wayfinding** (DMURS Section 3.3.4)

As outlined in "street layout" section earlier, the layout has been designed in a "Curvilinear" manner, for which DMURS states (Section 3.3.4), "the network should be structured to draw people towards Focal Points such as landmarks, Gateways and other civic buildings and spaces". The layout as designed provides a central green corridor running through the scheme and the development of the Broadmeadow River Park which will open up the entire area and provide new links to surrounding residential development. There central areas are very much the focal point of the scheme and all roads/paths generally lead to and from these two main areas.

**Vehicle Permeability** (DMURS Section 3.4.1)




The internal layout has been designed as a "3 Way Off-Set Network" as defined at Section 3.4.1 of DMURS, which states: *"3 Way Off-Set Networks allow through movement for all modes, however, they discourage faster modes by requiring vehicles to slow, stop and/or change direction repeatedly when travelling along Local streets. Such networks are suitable to all contexts but there are limitations to their overall effectiveness. The use of multiple junctions off-sets can reduce legibility. This can discourage walking/cycling as the network is difficult to navigate and the route unclear (as well as*

*increasing journey times). It can also result in driver frustration, as noted above."*

The scale of the development and the limited use of 3 way off-set junctions exploit the advantages of this design approach, slowing vehicular movements, but avoids the disadvantages by providing a legible, permeable layout for pedestrians and cyclists and a reasonable number of strategically located entry/exit points for vehicles to avoid driver frustration.

## 3.2 Design Principal 2 (Multi-Functional Streets)

*"The promotion of multi-functional, place based streets that balance the needs of all users within a self-regulating environment."*

The road, street and housing layout has been designed to include new connections to adjoining lands and a hierarchical street pattern enhancing the streets use for both pedestrians and vehicles. Open space proposals have been designed to complement and enhance the street hierarchy with street trees provided to act as a buffer to traffic noise, provide traffic-calming and enhance legibility of the main access road.

Footpaths are incorporated into the road network providing numerous cross site links including pedestrian and cyclist links where vehicular cul-de-sacs are present. This design will encourage this multi-functional use and create balance. The hierarchical internal road network creates a calm and composed environment by virtue of the number, layout and composition of dwellings and the design will contribute a positive urban response to the local context, place making and identity of the area and in the process promote the multi-functional, place based street.

The overall masterplan layout strategy for the entire lands, set out a network of streets and open spaces that reinforce the sense of place. There are two prominent features of the proposal. The first, a strong north south axis established by a linear park, the central spine, incorporating paths, roads and bicycle routes. This brings a visitor from the Glen Ellan Road to the Broadmeadow River Park's edge and allows movement independent of motorised traffic. It also acts as a clear mental marker orientating people and reinforcing the identity of the proposal and allows this relative position at any time.

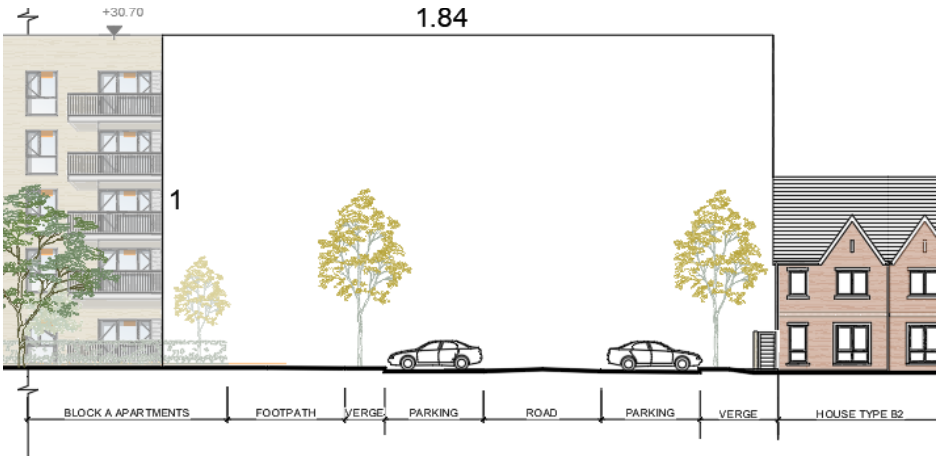
The roads have been laid out to feature curves and corners that will inherently slow traffic and yet do not act as a deterrent for bicycle users and pedestrians. The road hierarchy is outlined in Figure 4 below.

Figure 5 Road Hierarchy

### Building Height and Street Width *(DMURS Section 4.2.1)*

DMURS Fig. 4.7 shows a number of ratios of street enclosure. 4 no. sections are shown below through houses/apartment building fronting the central spine, road along Jugback Terrace and duplexes fronting the Broadmeadow River Park. Building height to street width ratios in the example sections range from 1:1.84, 1:1.55 and 1:1.7 (strong sense of enclosure with street trees provided to further increased the sense of enclosure).

Figure 6 Enclosure Ratios on proposed development



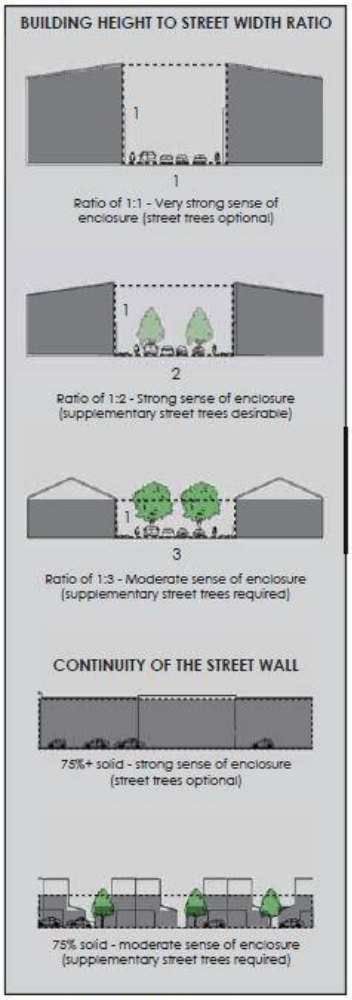
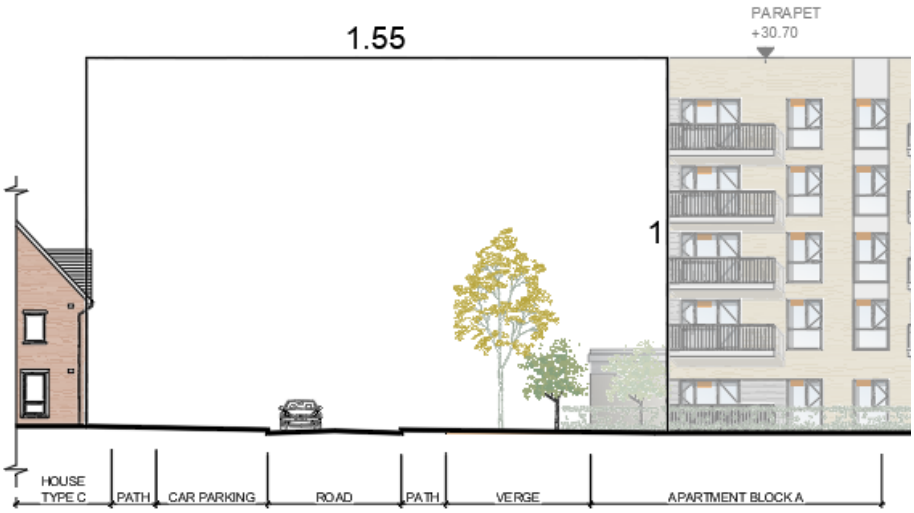
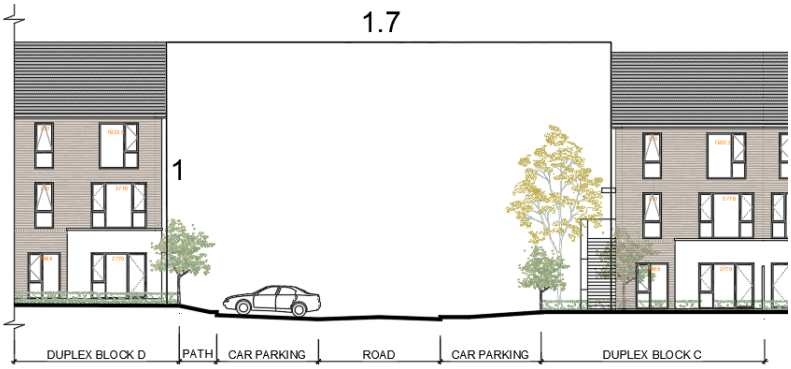




*Figure 4.7: Measurements that indicate the sense of enclosure by way of building height to street width ratio and the percentage of the street wall that is solid.*






Street tree planting (DMURS Section 4.2.2) is proposed along all the internal roads as well as in the verge of the side boundary road along Glen Ellan Road. Street tree planting is as specified in the Landscaping Masterplan.

**Active Street Edges** *(DMURS Section 4.2.3)*

Generally, along Glen Ellan Road and internal roads, setbacks to the pedestrian footway are provided to ensure a strong street presence, as required.

Figure 7 Example of Active Street Edge along proposed section of Glen Ellan Road.

**Signage and Line Marking** *(DMURS Section 4.2.4)*

In line with section 4.2.4 of DMURS, only mandatory street signage, as outlined in the Traffic Signs Manual (TSM) (2010) have been incorporated in the development. This allows for the implementation of a self-regulating street environment so that drivers are forced to navigate the development with full regard to their own behaviour and the behaviour of those around them.

**Street Furniture & Street Lighting** *(DMURS Section 4.2.5)*

Street furniture in the form of bench seating and selected play equipment is proposed throughout the scheme as specified in the Landscape Masterplan. Seating is located in verges or off the public footpaths as required.

A site-specific public lighting plan has been designed for the scheme and is included with the application. This public lighting scheme makes use of LED units as required by the Fingal County Council Public Lighting Technical Specification & Requirements which is consistent with the guidance contained in DMURS. The proposed public lighting scheme will ensure that both the vehicular carriageway and pedestrian / cycle paths are sufficiently illuminated. The public lighting design has been taken into account by the Landscape Architect to ensure that trees would not interfere with public lighting performance.

**Materials and Finishes** *(DMURS Section 4.2.6)*

Materials and finishes have been chosen to provide a robust finish. Asphalt is used on all road surfaces and a coloured asphalt will be used on shared surfaces to alert drivers of the change in driving conditions. Tactile paving will be used at crossing points to assist the visually impaired and the use of tactile paving is consistent throughout the development.

## 3.3 Design Principal 3 (Pedestrian Focus)

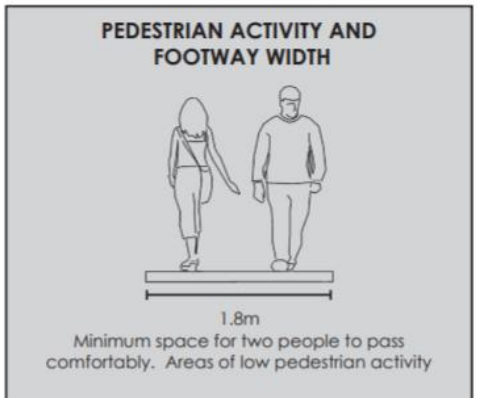
*"The quality of the street is measured by the quality of the pedestrian environment."*

The design of the scheme has placed a particular focus on the pedestrian. Connectivity throughout the scheme is heavily weighted towards the pedestrian.

The streetscape has been designed to provide a sense of enclosure and to be active with good passive surveillance in order to enhance pedestrians sense of safety and wellbeing.

The street design incorporates well thought out pedestrian facilities such as appropriate footpaths, pedestrian crossings, and raised tables.

Particular attention has been paid to the detail design of roads, kerbs, margins, foot paths, lighting and screening. The aim is to achieve a balance between architecture, safety, privacy and practical durability. Again, the hierarchy of road types, pavement and surfaces will reinforce their completeness and thoroughness of the overall proposal and provide a clear distinctive sense of place.




**Pedestrian Crossings** *(DMURS Section 4.3.2)*

Due to the lightly trafficked and low speed nature of the development, controlled crossings are generally not required and therefore have not been provided. Informal crossings in the form of dropped kerbs and tactile paving have been provided to align with key desire lines such as crossing points to main site access and the proposed parks and playground areas. The proposed crossing points are indicated on Waterman Moylan Drawings 17-088 P002 and P003 which have been included as part of this application.

Reduced corner radii significantly improve safety for both pedestrians and cyclists at junctions. Corner radii are generally 4.5m to accommodate occasional large vehicles (refuse trucks). Please refer to accompanying drawing 17-088 P004 and P005 which complies with DMURS for occasional larger vehicles as per DMURS section 4.3.3.

**Shared Surfaces** *(DMURS Section 4.3.4)*

Shared surfaces are an effective way of calming traffic. They have been used on a number of the cul-de-sac streets and streets with large number of active house frontages to encourage safe driving behaviour.

**Cycle Facilities** *(DMURS Section 4.3.5)*

In line with section 4.3.5 of DMURS, the National Cycle Manual (2011) has been used to design the cycle path proposed along Glen Ellan Road.

As demonstrated on the enclosed Waterman Moylan Drawing 17-088 P002 and P003, the cycle crossings are in line with section 4.9 of the National Cycle Manual, and the cycle path and footpath widths are in line with section 1.5.2 of the National Cycle Manual allowing cycle movements in both directions across all junctions.

## 3.4 Design Principal 4 (Multi-disciplinary Approach)

*"Greater communication and co-operation between design professionals through promotion plan led multidisciplinary approach to design."*

The design of the proposed scheme has been developed through the design team working closely together. The proposed development design is led by MCORM Architects working together with Waterman Moylan Consulting Engineers, CSR Land Planning & Design and KPMG Future Analytics Planning Consultants. The developer and promoter of the scheme, Cairn Homes, is committed to delivering a high-quality development which complies with the recommendations of DMURS as demonstrated by their recently completed developments such as Parkside, Malahide Road, Dublin 17, Shackleton Park, Lucan, Co Dublin and Glenheron, Greystones, Co Wicklow.

# 4. Conclusion

- Waterman Moylan Consulting Engineers have been appointed by Cairn Homes Properties Ltd. to provide Engineering advice for the proposed residential development at Holybanks Swords, Co. Dublin.
- The statement set out above demonstrates how the proposals achieve the objective set out in DMURS to achieve better street design to encourage people to choose to walk or use public transport over using the private car.
- Having regard to the above we would be of the opinion that the proposed development is consistent with the requirements for the design of urban roads and streets as set out in DMURS.

# UK and Ireland Office Locations