Project Title: Proposed Strategic Housing Development at Dolcain House, Clondalkin, Dublin 22

Report Title: DMURS Compliance Statement

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Project Ref: 2148

Client: Randelswood Holdings Ltd.

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Contents:

1.0   <u>Introduction:</u>

Lohan & Donnelly Consulting Engineers (L&D) have been appointed by Randelswood Holdings Ltd to prepare this DMURS statement with respect to the proposed strategic housing development at Dolcain House, Clondalkin, Dublin 22. The proposed scope of works is generally the development of a brownfield site to incorporate new residential development in the form of four 5-6 storey apartment blocks with a total of 130 No. apartment units above existing single storey undercroft carpark.

1.1   Site Location:

The site is located to the southeast of Clondalkin Village as per map extract shown in Figure 1 with national grid coordinates of E307867, N231076. Vehicular site access is via the roundabout at Monastery Road and Woodford Hill, with pedestrian access to the site from a signal-controlled pedestrian crossing on Monastery Road.

Figure 1: Site Location Map

1.2   Existing Site Usage:

The site currently contains three existing office blocks, two of which are currently vacant. The three blocks were built at different times, with westernmost Block B being constructed in the 1970s, block A and central atrium built in 2000 and block C in the southern part of the site being constructed in 2006. The existing structure is surrounded by bitmac paving, which is partially above a car park undercroft and partially on grade. The site includes a number of planted areas along the site boundary as per Figure 2. Bedrock is also known to be very close to the ground floor level towards the southern part of the site, with considerable rock excavation having been undertaken previously as part of forming the current ground level and undercroft structure.
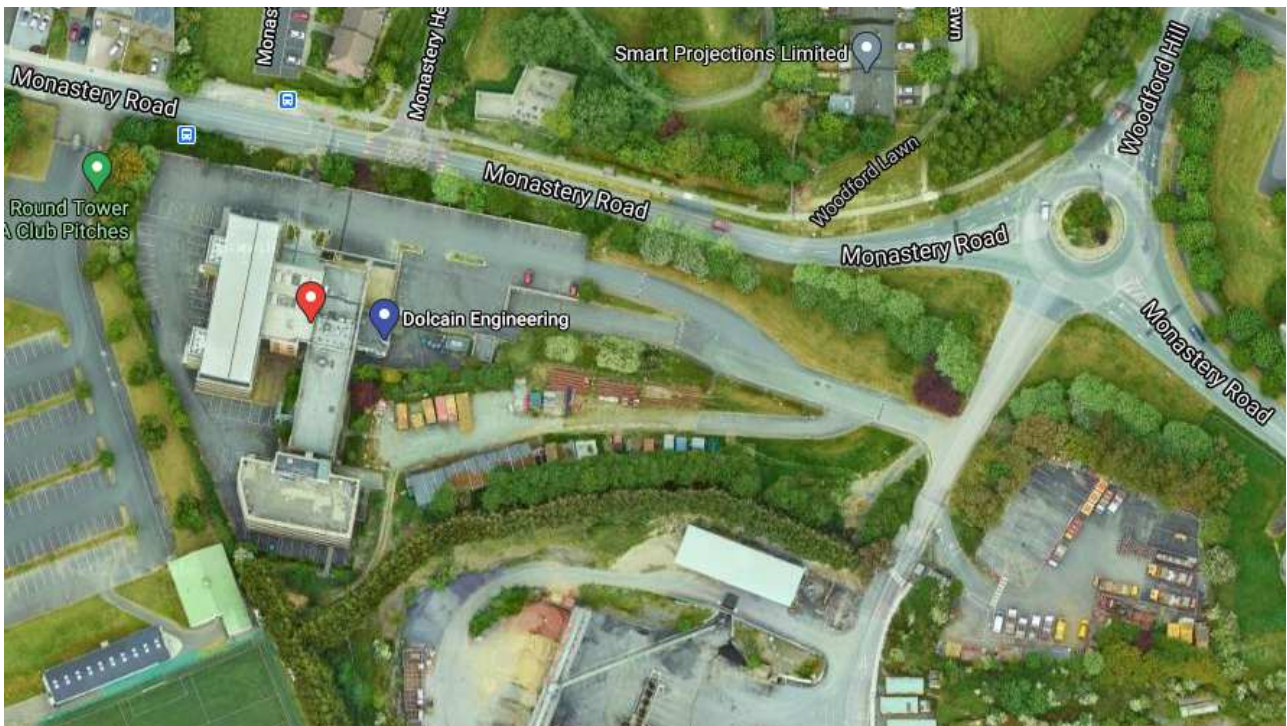

Figure 2: Existing site highlighted in red boundary

1.3   Proposed Redevelopment of Site:

The proposed scope of works is generally the development of a new 6 storey Block in the Eastern part of the site, above the basement carpark entrance. The works will also include the removal and replacement of the external perimeter cladding fabrics of the existing blocks as well as the addition of an extra floor on each existing block; blocks A and C to become 6 storeys, and block B to become 5 storeys. The existing undercroft carpark shall remain as it currently is. Limited structural alterations will also take place to the interior of the existing blocks to change them to better suit residential use.
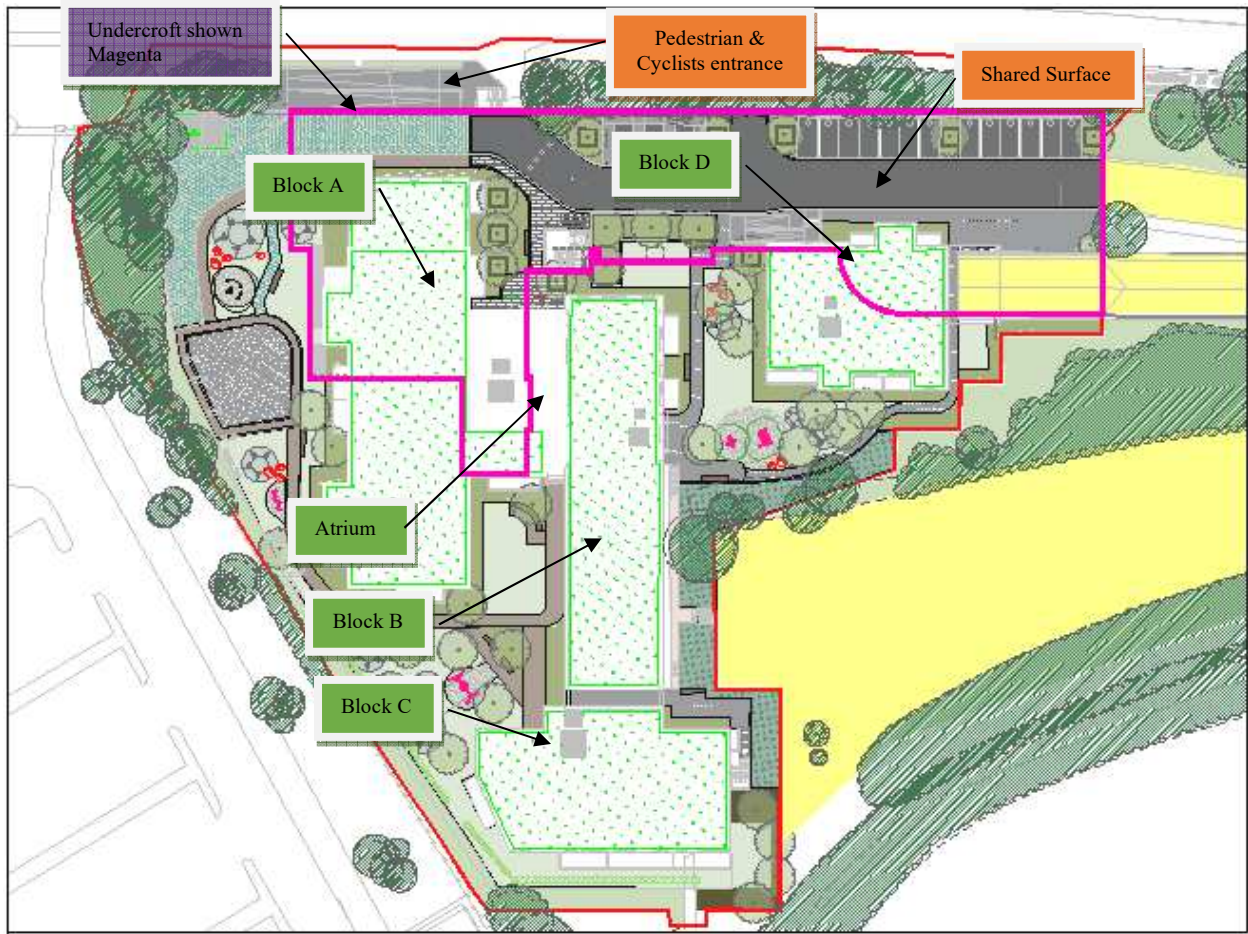
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Figure 3: Proposed Site Plan

2.0   Design Attributes:

2.1   Design Approach

The overall design approach was fully informed by the principles as set out in DMURS. Figure 2.21 of DMURS, titled "User hierarchy that promotes and prioritises sustainable forms of transport", reproduced as Figure 1, has significantly informed the design approach, which places the needs of pedestrians and cyclists at the highest order of priority amongst road users.
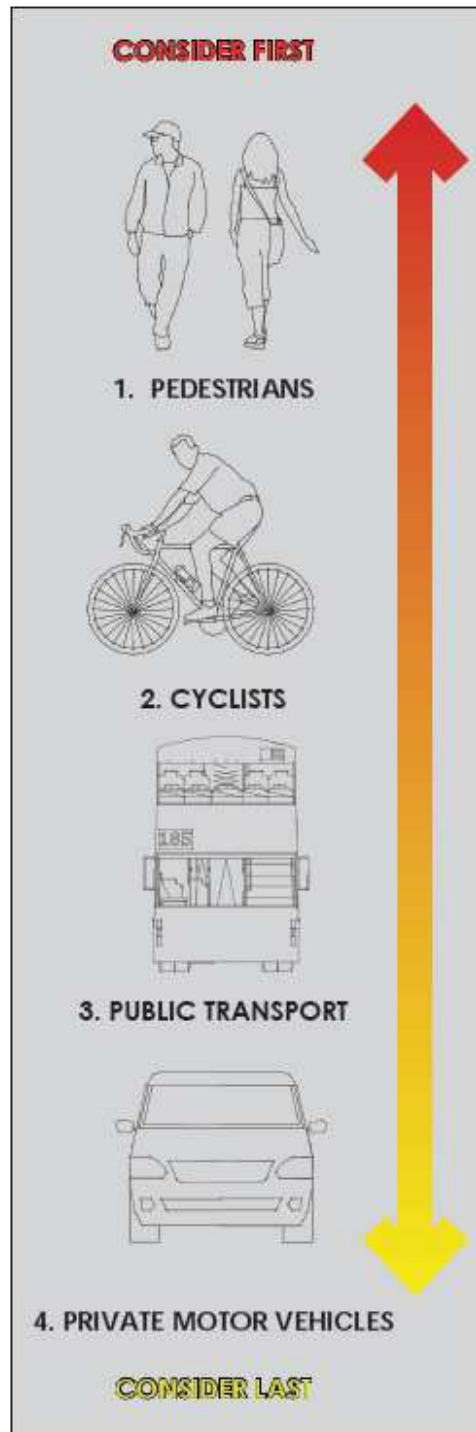
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Figure 4: DMURS Extract on User Hierarchy

2.2 Permeability, Sustainable Transport and DMURS Compliance

Central to the overall design approach is the need to ensure that pedestrians and cyclists are given the higher priority and more direct linkage than the private car. The proposed site layout and pedestrian and cycle links seek to give pedestrians and cyclists a separate entrance to the site and connectivity to the wider area to ensure that many local trips can be made using these sustainable travel modes through the provision of access to public transport and cycle lanes, which provide linkage to the surrounding area.

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As the main entrance for vehicles to the site does not include a footpath this entrance is less desirable for pedestrians and cyclists; this entrance will be used almost exclusively by cars entering and exiting the development. The separate entrance for pedestrians and cyclists along the North of the site boundary includes a gently sloped ramp which will bring cyclists or pedestrians from Monastery Road up to the central concourse in front of the entrance of the development, where a shared surface has been designed as the centrepiece of the concourse. The entry point onto the concourse is located beyond a series of vehicular bollards which prevent routine traffic from passing the entry point, meaning that pedestrians and cyclists can navigate through the site without requiring to interact with cars.

The shared surface arrangement is designed to limit the number of car spaces located around the shared surface, with the majority of car parking being provided within the lower ground floor undercroft car park. The shared surface design incorporates rumble strips at the entry point to highlight to entering motorist that they are entering a shared surface and must be aware of others. The site entrance design includes an access ramp straight into the undercroft carpark of the development, encouraging most motorists to park within the undercroft.

Ample cycle parking is provided throughout the development along with access to Dublin Bus routes. Reduced car parking coupled with increased cycle facilities and other support measures as set out in the separate TTA & MMP will ensure that sustainable travel will be delivered by the proposed development.

2.3   Cyclists

The design of the site entry has been based on a shared internal surface use based on guidance within the National Cycle Manual and DMURS for low speed and low use roads. The shared bicycle and pedestrian ramp is premised on a 1/14 design gradient and allows for increased ramp width to facilitate turning and directing bicycles.

2.4   Site Entrance

The site entrance for vehicles has low design speeds, and movement of larger vehicles is to be expected near the roundabout on Monastery Road as the road that services the site is also used by a Quarry to the southeast of the site. This entrance is not designed for cyclists or pedestrians to access the site via. This will be reinforced through appropriate surface signage. By providing a separate and segregated site entrance for pedestrians and cyclists, more safety can be provided to them.

Once in the site there is then a shared surface at podium level with the aim of lowering speeds of vehicles by making them aware that cyclists and pedestrians will also be using the area.

The design of vehicle crossovers in the development clearly indicate that pedestrians and cyclists have priority over vehicles. There is be no change in level to the shared access paving showing that pedestrians and cyclist coming from the north entrance have right of way when crossing the shared surface to get to their respective blocks. The shared surface will not use asphalt (which would incorrectly indicate vehicular priority across a footpath) at podium level. The shared

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surface will be paved from the site boundary on the east along the northern edge of the site up till the pedestrian and cyclist entry point.

Figure 5: Shared surface paving for pedestrians, cyclists, and cars

3.0   Conclusion:

Taking the above into consideration, the proposed development has incorporated a series of design measures to promote more sustainable modes of transport and support vulnerable road users which is in line with the core principles of DMURS and all other relevant guidance.

Signed: ___Frank Wade___   Date: 17th January 2022
          Frank Wade

For Lohan & Donnelly Civil & Structural Consulting Engineers