

St Kevin's Strategic Housing Development

**At the former St. Kevin's Hospital and Grounds,
Shanakiel, Cork**

Client: Land Development Agency

DMURS Compatibility Statement – Final



ST. KEVIN'S STRATEGIC HOUSING DEVELOPMENT

Description:

DMURS Compatibility Statement – Final

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1 STATEMENT ON DMURS COMPATIBILITY

1.1 Overview

- 1.1.1 The proposed St Kevin’s development consists of 266 residential units comprising apartments, duplex apartments and townhouses. The proposed development also includes a crèche and chapel office / enterprise centre to serve local need.
- 1.1.2 This statement sets out the overall design approach and principles that guided the overall design development process in accordance with the *Design Manual for Roads and Streets* (DMURS) having regard to the location of the proposed development.
- 1.1.3 The proposed St Kevin’s SHD layout is illustrated in Figure 1.1.



Figure 1.1 Proposed St Kevin’s SHD Layout (Source: Reddy Architecture + Urbanism)



2 APPLICATION OF DMURS PRINCIPLES

2.1 Introduction

2.1.1 The following sets out the overall principles which guided the design approach to the overall proposed scheme.

2.2 Overview

2.2.1 In developing the overall scheme the design team had regard to the principles as set out in the *Design Manual for Urban Roads and Streets* (DMURS). The final scheme design proposals are an outcome of an integrated design approach that ensure the promotion of sustainable travel modes are integrated into the overall design layout.

2.2.2 The overall design approach sought to firstly ensure that regard was given to user priorities and towards ensuring appropriate legibility for all road users. The orderly integration of the development into the surrounding residential and employment areas, and the wider urban environment was also promoted through making provision for appropriate pedestrian, cycle and vehicular linkages to adjacent lands and the adjoining transport network.

2.3 Design Approach – User Hierarchy

2.3.1 The overall design approach was informed by the principles as set out in DMURS. Table 2.21 of DMURS, titled '*User hierarchy that promotes and prioritises sustainable forms of transport*', reproduced as Figure 2.1, has significantly informed the design approach, which places the needs of pedestrians and cyclists at the highest order of priority amongst road users.

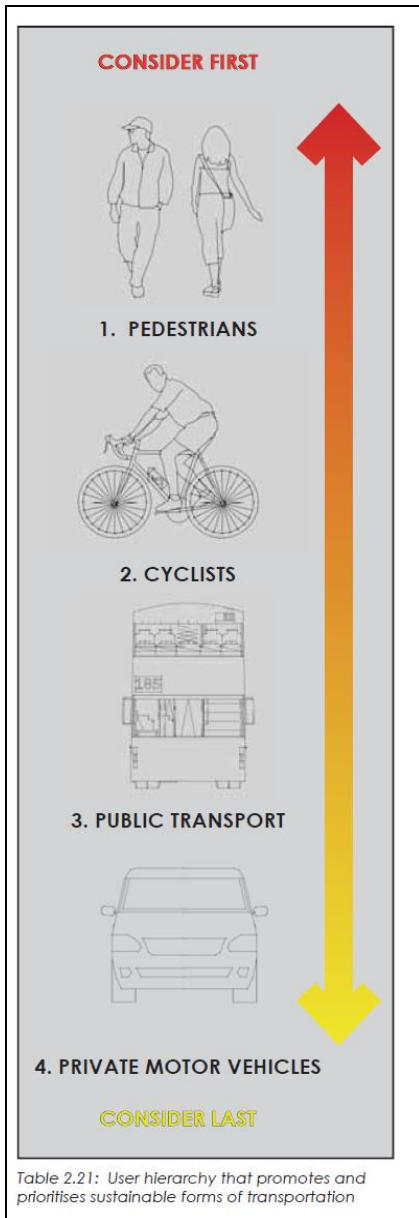
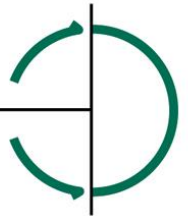
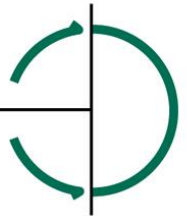


Figure 2.1: User Priorities (Source: DMURS Table 2.21)

2.3.2 The design approach therefore puts pedestrians and cyclists at the top of the user priorities, followed by access to public transport and then access to the wider road network via a street hierarchy consistent with those set out in DMURS.

2.4 National Cycle Manual

2.4.1 The design approach also sought to ensure that the overall designs was consistent with the principles as set out in the *National Cycle Manual* and to ensure that appropriate and sufficient cycle parking and facilities was also included in the overall development.



3 APPLICATION OF DESIGN PRINCIPLES TO THE PROPOSED SCHEME

3.1 Overview of Proposed Design Layout

3.1.1 Central to the overall design approach was the need to ensure that pedestrians and cyclists were given the higher priority and more direct linkage than the private car.

3.1.2 It is proposed that pedestrians and cyclists can travel to and from the site via the proposed access on Beechtree Avenue, which were designed to ensure that the needs of cyclists and pedestrians were considered ahead of vehicular traffic. The overall internal street, cycle and pedestrian network is illustrated in Figure 3.1. Also included is the location of provision for future connectivity to adjacent lands. These include:

- Provision for a pedestrian / cycle link through to Atkins Hall apartments to southwest
- Provision for pedestrian, cycle and /or vehicular links to zoned developed lands to west
- Provision for pedestrian, cycle and /or vehicular links at reservoir to east
- Provision for a pedestrian/cycle link to Rose Hill Upper at south east of the site.

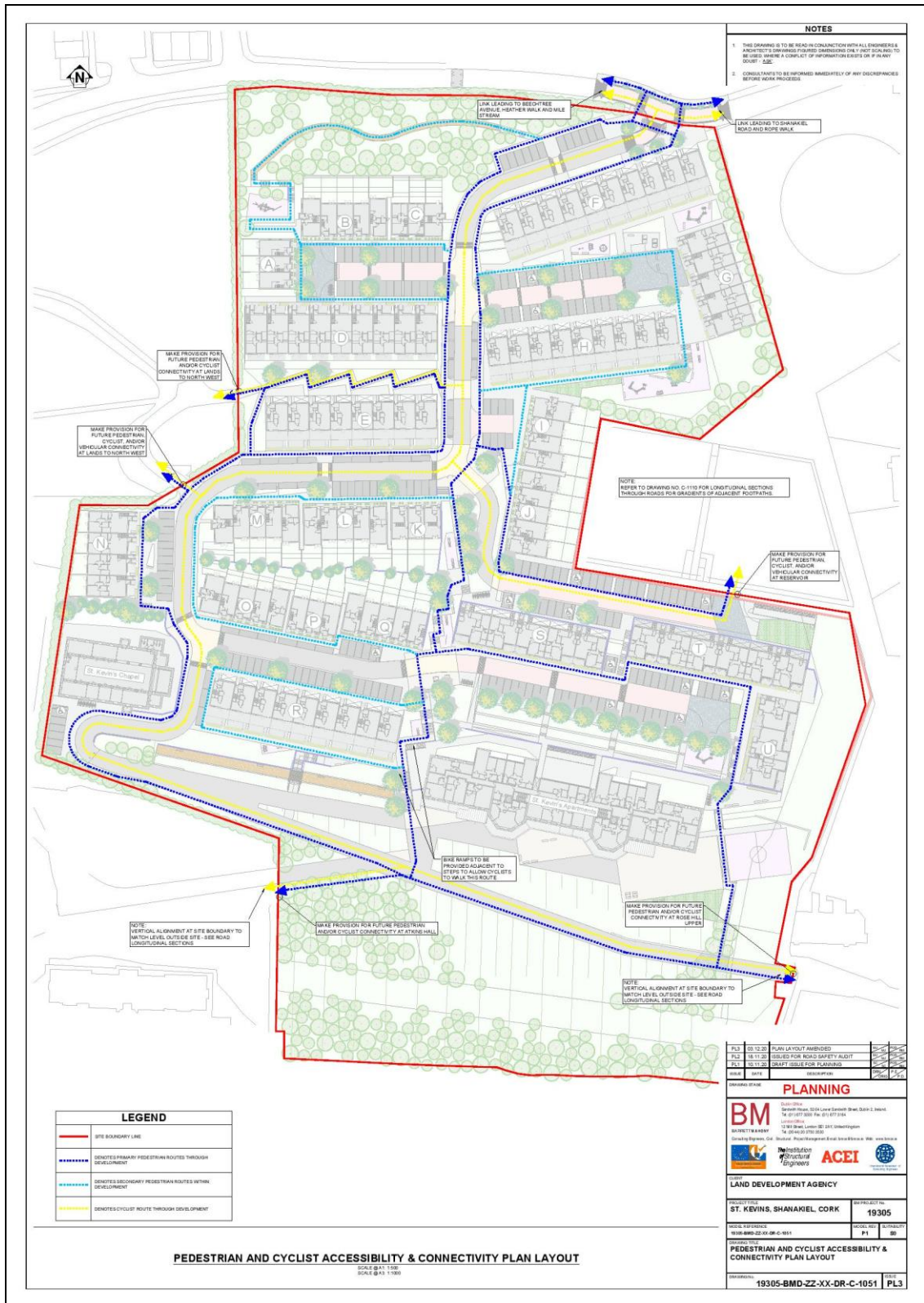
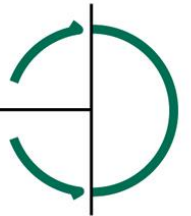


Figure 3.1 Proposed Connectivity (Source: BMCE)



- 3.1.3 Making provision for future linkages to adjacent lands represents good planning practice and will allow for the integration of adjacent lands in the future to the subject lands, thereby ensuring that wider permeability can be provided over time in the area in accordance with the DMURS principles.
- 3.1.4 The proposed development also includes extensive pedestrian-only paved areas and green areas throughout the site to facilitate greater comfort and ease of movement for pedestrians.
- 3.1.5 The entire SHD development will also be within a 30kph Slow Zone.
- 3.1.6 Low speed will also be promoted with junction radii designed in accordance with Cl.4.3.3 of DMURS to be between 3 - 6 metres. By providing reduced corner radii this will improve pedestrian and cyclist safety at junctions by lowering the speed at which vehicles can turn corners.
- 3.1.7 Due to the steep gradient of the site from north to south the proposed main access road through the St Kevin's development winds gradually through the site to achieve shallower gradients. This creates natural speed reduction bends along the main access road, which serve as effective traffic calming features.
- 3.1.8 In addition, raised table crossings are used at junctions and other key locations throughout the site to slow the movement of vehicular traffic and afford movement priority to non-motorised users.
- 3.1.9 The proposed main access junction off Beechtree Avenue has also been configured to ensure high priority for pedestrians and cyclists through measures such as providing pedestrian crossings at the junction, upgrade of the existing footpaths, the use of a raised area through the junction, localised carriageway narrowing, and variations in surface materials. This will slow vehicles through the junction to provide more comfort for non-motorised road users
- 3.1.10 Detailed designs will be undertaken in accordance with DMURS. A *Stage 1 Road Safety Audit* will be undertaken as part of the planning application. *Stage 2 - Detailed Design Stage and Stage 3 - Post Construction Road Safety Audits* will also be undertaken to ensure that road safety remains part of the overall design and delivery process up to scheme completion.

3.2 Street Hierarchy

- 3.2.1 The street hierarchy is shown in Figure 3.2. This shows the Primary Local Street / Main Access connected to a series of Secondary Local Access Streets and Home Zones. The internal Local Access Road and Local Streets will accommodate only local traffic and therefore all motorised road users will be very familiar with the internal road and street layouts.



Figure 3.2 Proposed Street Hierarchy (Source: Reddy Architecture + Urbanism)



- 3.2.2 This design approach is in accordance with the principles set out in DMURS, but more importantly will actively promote the use of the more sustainable travel modes.
- 3.2.3 The provision for future linkages to existing and zoned residential areas adjacent to the development means that over time opportunities will arise for greater linkages to be provided from adjacent lands. Therefore, increased permeability can be provided in future which will benefit both the existing and new communities.
- 3.2.4 A fundamental feature of the proposed development is the overlooking of the front access by residential properties and overlooking provided onto all key internal streets and open spaces.

3.3 Proposed Cross Section of Streets - DMURS Compatibility

- 3.3.1 The proposed cross sections of the various streets within the SHD development shown in Figure 3.2 are detailed in Figure 3.3.

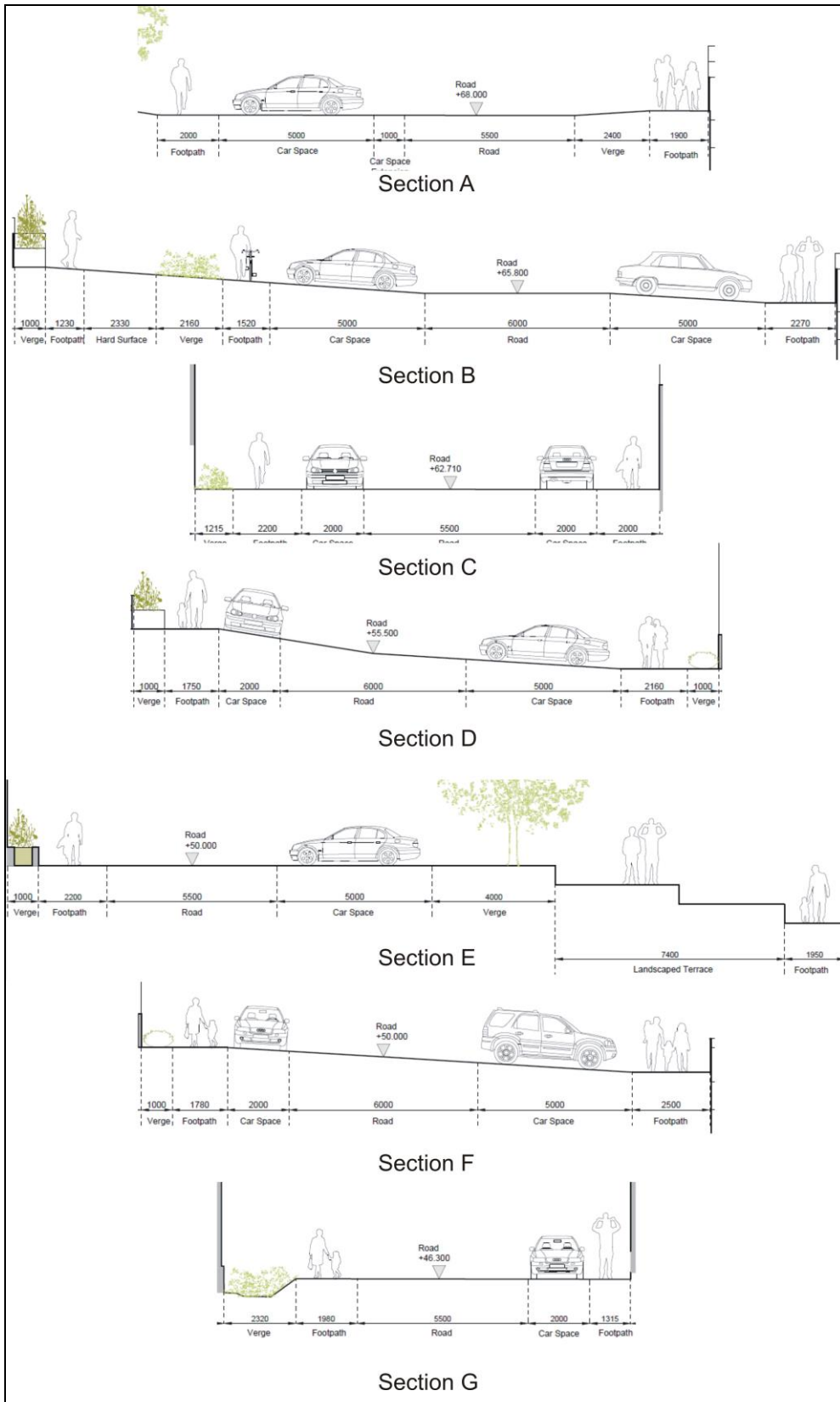
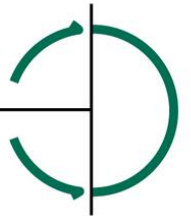




Figure 3.3: Proposed Cross Sections of Various Streets within SHD Development (Source: Reddy Architecture + Urbanism)

- 3.3.2 The proposed street cross sections vary throughout the proposed development and include a range of parallel and perpendicular car parking. All roads include footpaths on both sides, with additional pedestrian areas at some locations. The entire development is proposed to be within a 30kph slow zone, which will facilitate a more comfortable cycling environment for cyclists on carriageway.
- 3.3.3 The proposed street cross sections within the St. Kevin's SHD will be designed in accordance with DMURS and included in the planning application in further detail.

3.4 Access to Public Transport

3.4.1 The locations of the existing public transport services relative to the subject lands are shown in Figure 3.4.

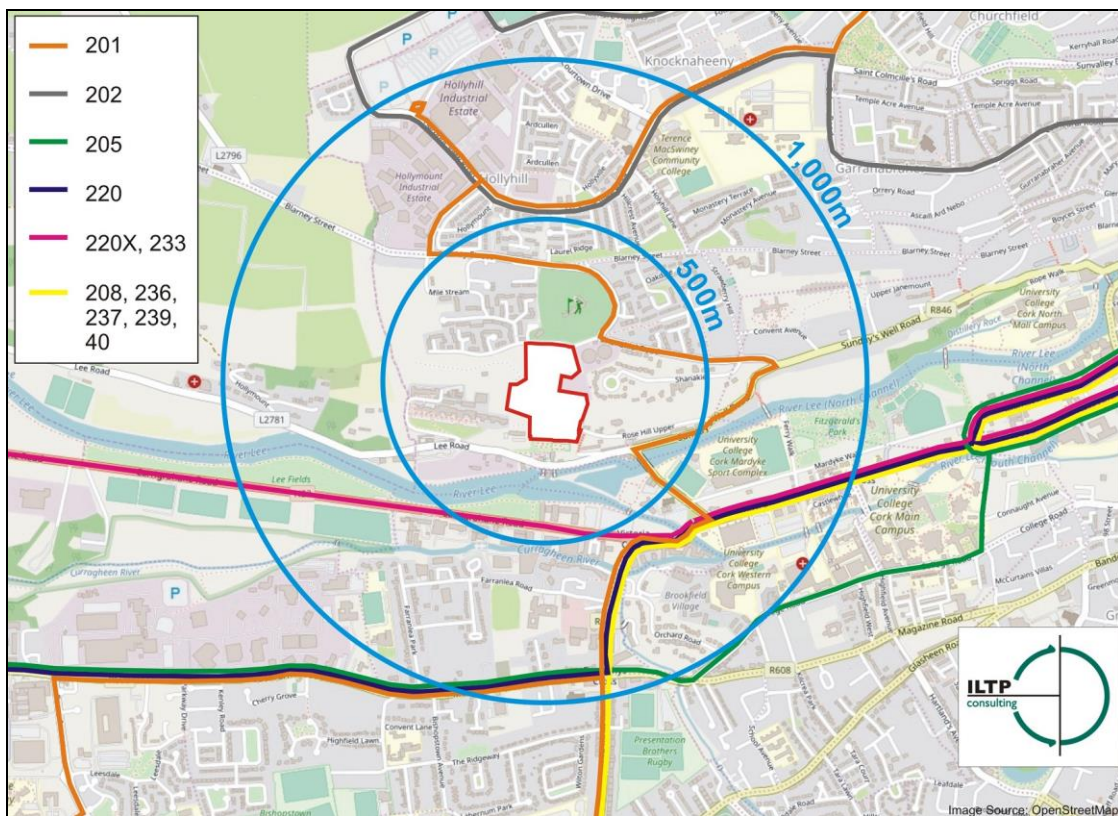


Figure 3.4: Proximity of Subject Lands to Existing Public Transport Services

3.4.2 The existing bus routes in the immediate vicinity of the subject site provide an opportunity for good access from the SHD lands to the existing public transport network, which links to various destinations including Cork city centre and to existing employment lands and local services to the north of the site. The existing public transport also provides access to Kent Rail Station and Cork Bus Station where extensive local and intercity services are available.



3.4.3 The *Cork Metropolitan Area Transport Strategy* (CMATS) includes plans for significant improvements to the transportation network of Cork city. This includes the implementation of high priority high frequency Bus Connects corridors throughout the city, to be delivered by 2027, and a Light Rail Corridor by 2040. Therefore, over time there will be increased access to public transport with the implementation of CMATS, which was also be taken into consideration when deciding on the urban layout for the new residential area of St. Kevin's.

3.4.4 The overall proposed development has good linkage to the surrounding locality and to Cork City Centre. Again, the priority was to provide cycle and pedestrian linkages to and from the site which in turn will connect with existing and planned routes surrounding the SHD lands. The overall design philosophy to promote sustainable travel modes, by first encouraging and promoting greater use of non-motorised trips, followed by access to existing and future public transport links that serve the site, has been achieved through the design process by having full regard for the DMURS principles.

3.5 National Cycle Manual - Compatibility

3.5.1 In developing the overall scheme the design team had regard to the principles as set out in the *National Cycle Manual*, 2012. First and foremost, the design proposals acknowledge the vulnerability of cyclists relative to motorised modes of transport as set out in the *National Cycle Manual*. The proposals therefore seek to ensure that cyclists generally have higher priority in accessibility and connectivity throughout the development.

3.5.2 The specific measures proposed to prioritise and facilitate safe, comfortable and efficient cycle movements in accordance with the *National Cycle Manual* include:

- A low-speed environment is proposed throughout, including 30kph on all roads within the development.
- Inclusion of shared Home Zones throughout residential areas to prioritise movement of more vulnerable road users and reduce speed of motorised traffic.
- The proposed main access junction off Beechtree Avenue has also been configured to provide priority for cyclists through measures such as the use of a raised area through the junction, localised carriageway narrowing, and variations in surface materials. This should slow vehicles through the junction to provide more comfort for cyclists.
- Cycle ramps are also proposed parallel to the internal steps, which will allow more direct access to the street network by cycles.
- As also set out above, the proposed cycle facilities can afford direct linkages to future development lands adjoining the site, and to nearby amenities and employment lands.
- Full visibility will be maintained at all proposed access points to the site, with road user priority clearly established at potential conflict points.

3.5.3 The proposed new infrastructure set out in accordance with the *National Cycle Manual* is also to be subject to the full Road Safety Audit process. The audit process emphasises safety and accessibility for all road users, particularly for vulnerable road users including pedestrians and cyclists.

3.5.4 Generous cycle parking provision and storage facilities are also proposed which were agreed with CCC as part of the pre-planning consultation process, details of which are set out in the Traffic and Transport Assessment (TTA).



3.6 Existing and Planned Cycle Linkages

- 3.6.1 Cycle routes are currently available through the Beechtree Avenue residential estate to the north which can provide linkage to major employment areas to the north. During consultations with Cork City Council it was noted that a cycle route to the east via Rope Walk is under consideration and the proposed development can link with this future cycle route. Provision for future cycle connectivity to the adjacent lands is also proposed as set out earlier.
- 3.6.2 There are also significant improvements planned for the bicycle network for the city as set out in the *Cork Metropolitan Area Transport Strategy* (CMATS). The planned network in the vicinity of the subject site is shown in Figure 1.7, and includes a primary cycle route along Shanakiel Road and Beechtree Avenue which borders the site to the north.

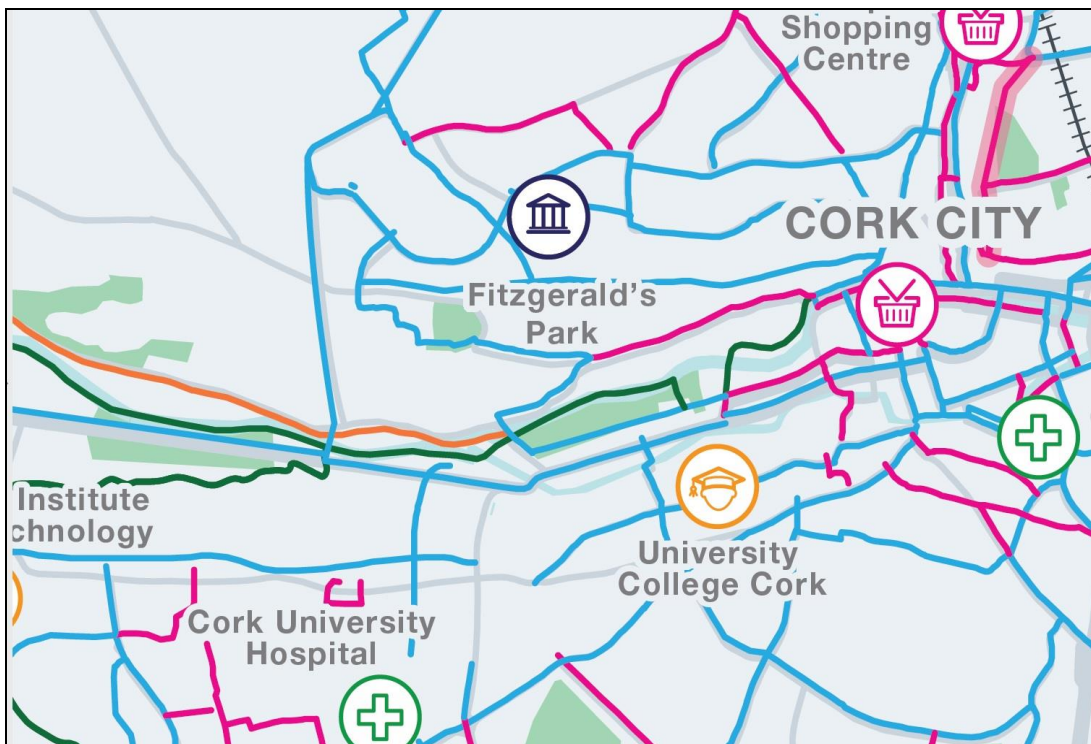


Figure 1.7: Proposed Cycle Network in vicinity of Subject Site (Source: *Cork Metropolitan Area Strategic Plan*)

- 3.6.3 This will further promote sustainable travel patterns to and from the proposed development over time.

3.7 Complimentary Mobility Management Measures

- 3.7.1 Establishing sustainable travel patterns from the outset in a new development is essential. It is well recognised that achieving subsequent changes to more sustainable travel is both difficult and costly to implement and can take years to achieve. The promotion of travel mode changes in favour of sustainable modes such as walking and cycling, and greater public transport usage is a long-standing policy objective at national and local levels. The proposed SHD development is also fortunate to be able to link into the public transport services already available and also to avail of future public transport upgrades to the city as set out in CMATS.



3.7.2 Mobility Management Plans are a transport demand management mechanism that aim to provide for the transport needs of people and goods. Mobility Management Plans seek to lessen the demand for the use of cars by increasing the attractiveness and practicality of other modes of transport.

3.7.3 The MMP sets out the complimentary measures that will support the DMURS design philosophy that underpins the overall design of the development.

3.8 Summary

3.8.1 The proposed St Kevin's SHD fully promotes the sustainable transport principles as set out in DMURS. The design process commenced with establishing User Priorities in accordance with DMURS. This was followed by developing a permeable and legible street layout and street hierarchy that minimises car traffic movements in the new residential areas and prioritises pedestrian and cycle linkages to the wider area

3.8.2 ILTP would commend the overall design approach as one that is in keeping with the DMURS principles and is a residential development that is appropriately integrated into the existing and planned urban fabric of Shanakiel and the wider area.

3.8.3 The above compatibility statements set out the rationale and principles of the design for the internal streets, access and linkages through the lands within the applicant's ownership, along with the provision for future linkages to adjacent lands. The proposed layout adheres to the design principles as set out in the *Design Manual for Urban Roads and Streets* (DMURS) and the *National Cycle Manual*.