



DMURS Statement of Consistency

Cherry Orchard Point – Phase 3 of Proposed Development at
Sites 4 and 5, Park West Avenue, Dublin 10

September 2026

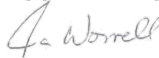
Waterman Moylan Consulting Engineers Limited

Block S, Eastpoint Business Park, Alfie Byrne Road, Dublin D03 H3F4
www.waterman-moylan.ie

Client Name: The Land Development Agency
Document Reference: 22-010r.048
Project Number: 22-010

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015)

Issue	Date	Prepared by	Checked by	Approved by
No. 1	14 September 2026	M. Castro	Brian McCann	

Comments

Disclaimer

This report has been prepared by Waterman Moylan, with all reasonable skill, care and diligence within the terms of the Contract with the Client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the Client.

We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above.

This report is confidential to the Client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

Content

1. Introduction	1
1.1 Contents of the DMURS Statement of Consistency	1
1.2 Standards	1
1.3 Site Description	1
1.4 Site Location	2
2. Street Networks	3
2.1 Integrate Street Network	3
2.2 Movement and Place	4
2.2.1 Movement Function	4
2.2.2 Place Context	6
2.3 Management	7
2.3.1 Vehicle Permeability	7
3. Street Design	9
3.1 Movement, Place and Speed	9
3.1.1 A Balanced Approach to Speed	9
3.1.2 Self-Regulation Streets	9
3.2 Streetscape	10
3.2.1 Material and Finishes	10
3.3 Pedestrian and Cyclist Environment	10
3.3.1 Footways, Verges and Strips	10
3.3.2 Corner Radii	12
3.3.3 Cycle Facilities	13
3.4 Carriageway Conditions	13
3.4.1 Carriageway Widths	13
3.4.2 Forward Visibility	14
3.4.3 Visibility Splays	15
4. Conclusion	17

Figures

Figure 1 Site location Map	2
Figure 2 Existing Road Network	3
Figure 3 Terminology used within DMURS compared with other key publications	5
Figure 4 Proposed Development – Site Access Points	6
Figure 5 Site Location and Zoning	7
Figure 6 Type of Street Network (Source: Figure 3.22 – DMURS)	8
Figure 7 Design speed selection	9
Figure 8 Spaces needed for pedestrian to pass each other	11

Figure 9 Pedestrian and Cycle Facility	12
Figure 10 Carriageway Widths	14
Figure 11 Reduced SSD standards for application within cities towns and villages	15
Figure 12 Visibility splay refers to an X and Y value	15
Figure 13 Visibility Splay Proposed Site.	16

1. Introduction

This DMURS Statement of Consistency Report has been prepared by Waterman Moylan on behalf of the Land Development Agency to accompany a planning application to Dublin City Council for Phase 3 of a proposed new residential development on lands at Park West Avenue, Cherry Orchard, Dublin 10.

1.1 Contents of the DMURS Statement of Consistency

This document presents a review of the main section within both Chapters 3 'Street Networks' and 4 'Street Design' of the Design Manual Urban Roads and Streets. It examines how these chapters were implemented during the design phases, with the aim of providing a statement of the coherence of the Subject Development.

1.2 Standards

This Design Statement has been prepared in accordance with the Design Manual for Urban Roads and Streets (May 2019, Version 1.1).

1.3 Site Description

The proposed development will consist of the construction of a residential led mixed-use scheme containing 312no. residential apartments comprising 244no. cost rental and 68no. social units, 8no. local retail and commercial units, landscaped public and communal open space. The proposed development includes a new principal access via Barnville Park to the south, providing entry to an internal undercroft parking court, upgraded pedestrian and cycle footpaths, Barnville link connecting the Park West Avenue and Cherry Orchard railway station and all associated site and public realm works. The proposed development represents Phase 3 of the overall planned development at Cherry Orchard Pointe for Development Sites 4 and 5 of the LAP lands. Phase 1 of the overall planned development was granted permission in July 2024 (ACP Case Ref: 318607-23) and Phase 2 was granted in September 2025 (ACP Ref. 31-395-2025). The proposed development comprises the works to be undertaken on Site 5: Barnville, which forms the subject of this planning application.

The proposed development (Total GFA c. 28,413 sq.m) involves construction of 312no. residential apartments (c. 24,556 sq.m), across 7 blocks consisting of 4 to 10 floors, comprising 16no. studio units, 146no. one-bed units, 139no. two-bed units (15no. two-bed three-person and 124no. two-bed four person), 9no. 3-bed units (three four-person) and 2no. 4-bed units (one four-bed seven-person) together with 8no. Local Retail and Commercial units (c. 1,441 sq.m GFA), and all ancillary and sundry accommodation (c. 2,416sq.m total GFA). The proposed development also includes the provision of landscaped public open space of 1691 sq.m and 6519sq.m of communal open space. The communal open space has been designed to provide a high-quality amenity area, incorporating a community garden seating and play areas and fitness facilities, and associated landscaping. The scheme also provides private open space for all residential units.

The proposed development will involve the provision of car parking (including accessible and EV car parking spaces), car sharing spaces, bicycle parking spaces, motorbike spaces, motorcycle parking spaces, and loading bays. The scheme includes a Barnville link to the south of the site connecting Barnville Park with Park West Avenue and providing direct pedestrian access to the railway station, along with over 40no. pedestrian crossing points connecting Park West Avenue, Barnville Park and New Cherry Orchard Park.

The development will also provide for all associated ancillary site development infrastructure including site clearance, boundary treatment, associated public lighting, internal roads and pathways, substations, switch

room, water tank rooms, storage room, rainwater/surface water attenuation, stormwater, bin storage, bicycle stores, hard and soft landscaping, play equipment, boundary walls, attenuation area, green and blue roof systems, photovoltaic panels and all associated works and infrastructure to facilitate the development including connection to foul and surface water drainage and water supply.

Refer to the enclosed statutory notices for a full description of development as part of this planning application.

1.4 Site Location

The subject site of this application is situated Cherry Orchard, Dublin 10. The site is located approximately 8.0km from Dublin City Centre to the East. The site is currently in greenfield condition.

The location of the subject development is shown in the **Figure 1** below.



Figure 1 | Site location Map
(Source: Google Earth)

2. Street Networks

2.1 Integrate Street Network

Design Manual Urban Roads and Streets approach encourages the integration of land use and transportation, allowing the consolidation of development along strategic connections and around nodes. According to the Design Manual, the strategic connections represent the principal routes for public transport, whereas the nodes constitute the primary destinations. This approach improves accessibility to services and promotes more sustainable modes of transport, thereby reducing reliance on private cars.

The subject site is situated in Cherry Orchard, Dublin 10, approximately 8.0 km west of Dublin City Centre. It is currently a greenfield site. The site is located to the north of the southwestern railway line, and benefits from good vehicular and pedestrian connectivity, as is detailed below.

The site is directly served by public transport. Park West and Cherry Orchard Railway Station is located within a 5-minute walk, and several bus stops are accessible within a 15-minute walk. Further information regarding public transport access to and from the Site is presented in **Section 2** of the Waterman-Moylan report No. 22-010r.202 *Traffic and Transport Assessment*.

The key roads within this network are shown in **Figure 2** and described below.

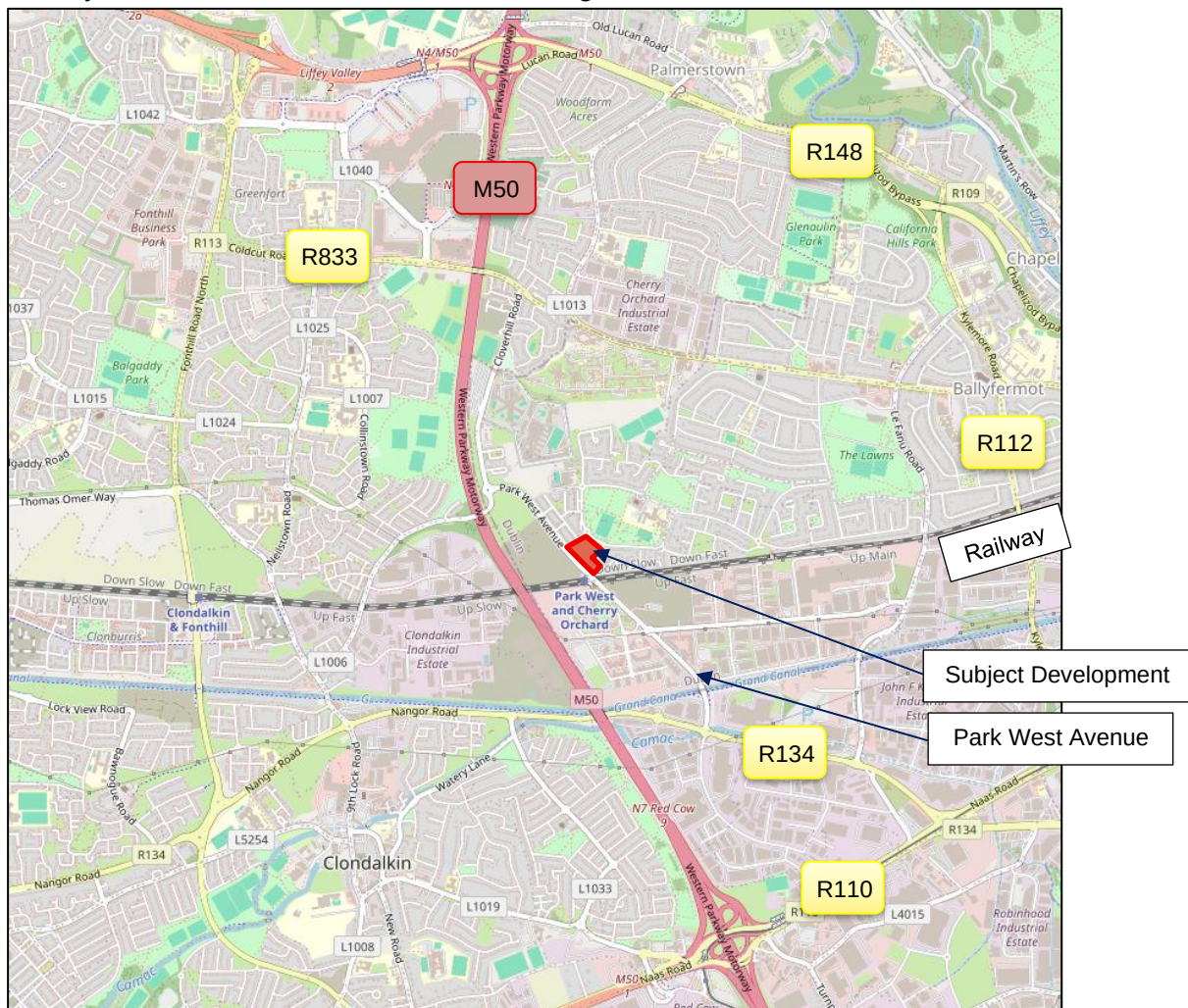


Figure 2 | Existing Road Network

Park West Avenue is a one carriageway road link with pedestrian and cycle facilities on both sides, that begins at the three-arm roundabout with Cloverhill Road to the north and ends at the intersection with R134 and Oak Road to the south. The road has a width of approximately 7.5m, with wider and narrower segments throughout, 2m cycle tracks, 2m pedestrian footpaths, speed bumps and a signalised T-junction with Barnville Park.

R833 (Ballyfermot Road/Cold Cut Road) is a regional road located in South Dublin, linking R148 to the R113. It comprises of a varying width carriageway, and pedestrian/ cycle facilities on both sides.

R148 is one of Ireland's regional roads which was classified following the opening of a bypassed national primary road. The section of the old N4 which has been by-passed by the M4 motorway was reclassified R148. The R148 runs from Dublin to Kinnegad in County Westmeath. The road is 45 km long. It is generally of a very high standard for a regional road, with wide lanes, hard shoulders, and turning bays. It is still heavily used by traffic avoiding the tolled M4 between Kilcock and Kinnegad.

R112 road is a regional road in south Dublin, Ireland. It begins at the junction with the R148 road at Chapelizod and arcs southeastwards, then eastwards across the middle of south Dublin, ending at the Mount Merrion junction of the R138. The road is a single-carriageway, with cycle lanes on some stretches. Improvements to the road have been made over the last 10 years, the most significant being at Dundrum Cross where the road was widened to make room for the new Luas bridge and Dundrum bypass (R117 road).

R134 road is a regional road in South Dublin, Ireland connecting the R110 (Naas Road) to the R120 (Lock Road). The road is 7.6 kilometres long.

R110 road is a regional road in Ireland which goes from St Stephen's Green to Red Cow, Dublin. Its route is completely within the Dublin urban area. Some of the route is the original route of the N7 road prior to the construction of the Chapelizod bypass on the N4, at which point N7 traffic was redirected to use the M50 motorway and N4 road instead to travel between Dublin city centre and the Red Cow roundabout. It is therefore the alternative route for motorway prohibited traffic for this section of the N7.

The **M50 motorway** is a C-shaped ring road in Dublin and the busiest motorway in Ireland. It begins at Dublin Port, running northward through the Dublin Port Tunnel and along a portion of the Airport Motorway. It then turns west at its junction with the M1, circling the northern, western and southern suburbs of Dublin, before merging with the M11 at Shankill in South East Dublin. The road forms part of European route E01.

The **N7** is a national primary road in Ireland, connecting Limerick and Dublin. The majority of the route (between Naas and Limerick) is motorway standard and is designated as the M7 motorway. At the Rosbrien interchange in Limerick the route continues as the N18 dual carriageway to Galway, Shannon and Ennis. The road passes through the midlands of Ireland, and acts as a trunk route out of Dublin for the N8 and N9 national primary routes to Cork and Waterford respectively. It forms part of European route E20.

2.2 Movement and Place

2.2.1 Movement Function

DMURS establishes that a hierarchy of streets encourages residents to use sustainable modes of transport. The manual classifies streets into three categories: Arterial Streets, Link Streets and Local Streets. In accordance with the Design Manual, Arterial Streets are the major routes via which major centres / nodes are connected. Arterial streets may include orbital or cross metropolitan routes within larger cities and larger towns. Link Streets provides the link to arterial streets or between centres, neighbourhoods, and/or suburbs. Finally, Local Streets are the streets that provide access within communities and to arterial and link streets.

As a reference, the Design Manual provides a table which shows the terminology used within this Manual compared with other key publications. The table is presented below.

DMURS Description	Roads Act/ DN-GEO-03031	Traffic Management Guidelines	National Cycle Manual
Arterial	National	Primary Distributor Roads	Distributor
Link	Regional (see note 1)	District Distributor Local Collector (see Notes 1 and 2)	Local Collector
Local	Local	Access	Access

Notes

Note 1: Larger Regional/District Distributors may fall into the category of *Arterial* where they are the main links between major centres (i.e. towns) or have an orbital function.

Note 2: Local Distributors may fall into the category of *Local* street where they are relatively short in length and simply link a neighbourhood to the broader street network.

Figure 3 | Terminology used within DMURS compared with other key publications
(sources: Table 3.1 - DMURS)

Access to the Subject Site is proposed from an at-grade priority junction to be located on Cedar Brook Way, as illustrated in **Figure 4** below.

The Site Access Road comprises a 6.0 m wide, two-way carriageway, providing access to the car parking areas associated with the residential units.

In addition, the Proposed Development will benefit from several pedestrian and cycle access points, providing good permeability to the surrounding developments and roads, as shown in **Figure 4** below.

The design and layout of the proposal have been prepared to fully comply with the current relevant design standards and specifications applicable to this form of development.

Figure 4 below shows the access points for vehicles, pedestrian and cyclist to each site, the car parking access roads and the surrounding road network.

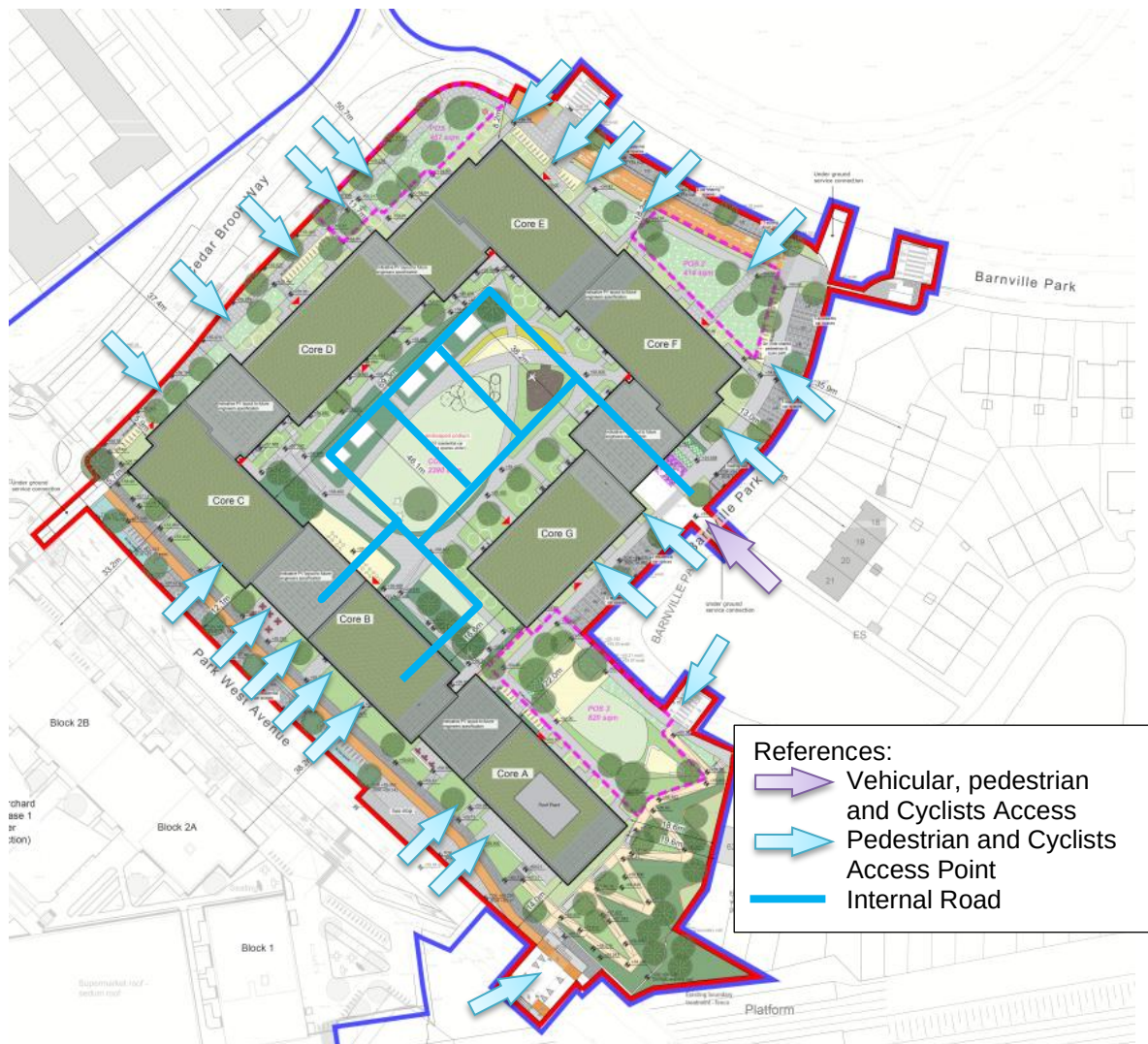


Figure 4 | Proposed Development – Site Access Points

Vehicle will access the Subject Site through an at grade priority junction, as indicated. The low design speeds and traffic calming measures, such as on-street parking and reduced corner radius will ensure the safe operation of the junction.

2.2.2 Place Context

DMURS recognises that urban roads and streets pass through a variety of areas with different characteristics, requiring different design solutions in each of these different contexts. Consequently, based on the Irish urban landscape, the Design Manual has divided urban areas according to their collective similarities, defining the following categories: Centre, Neighbourhood, Suburb and Business Park/Industrial Estate.

Urban Centre areas include areas that are the focus of economic and cultural activity, where pedestrian activity is highest, and contain a concentration of retail and commercial frontages that open directly onto the street. Neighbourhoods include new and existing areas that are intensively developed with medium to high density housing and/or a broad mix of uses. Suburbs consist mainly of existing lower density housing developed over large areas. Business parks / industrial estates are areas primarily focused on providing areas of commercial and industrial activity outside of centres.

Land uses are defined in the Dublin City Development Plan 2022-2028, which indicates that the subject site is located within an area designated as “Strategic Regional Development Area (SDRA)”, the objectives of which include: *“Enhance accessibility and connectivity both within the Park West – Cherry Orchard area and to the surrounding areas to service the remaining development sites”* And *“Promote sustainable modes of transport by making them convenient and attractive (including walking and cycling) through the implementation of a well-connected, permeable, coherent street network with high levels of accessibility to an integrated public transport network with improved infrastructure to maximise its potential use”*.

Primary Land Use Zoning and Specific Objectives are shown on Map D of the Development Plan, illustrated in **Figure 5** below.

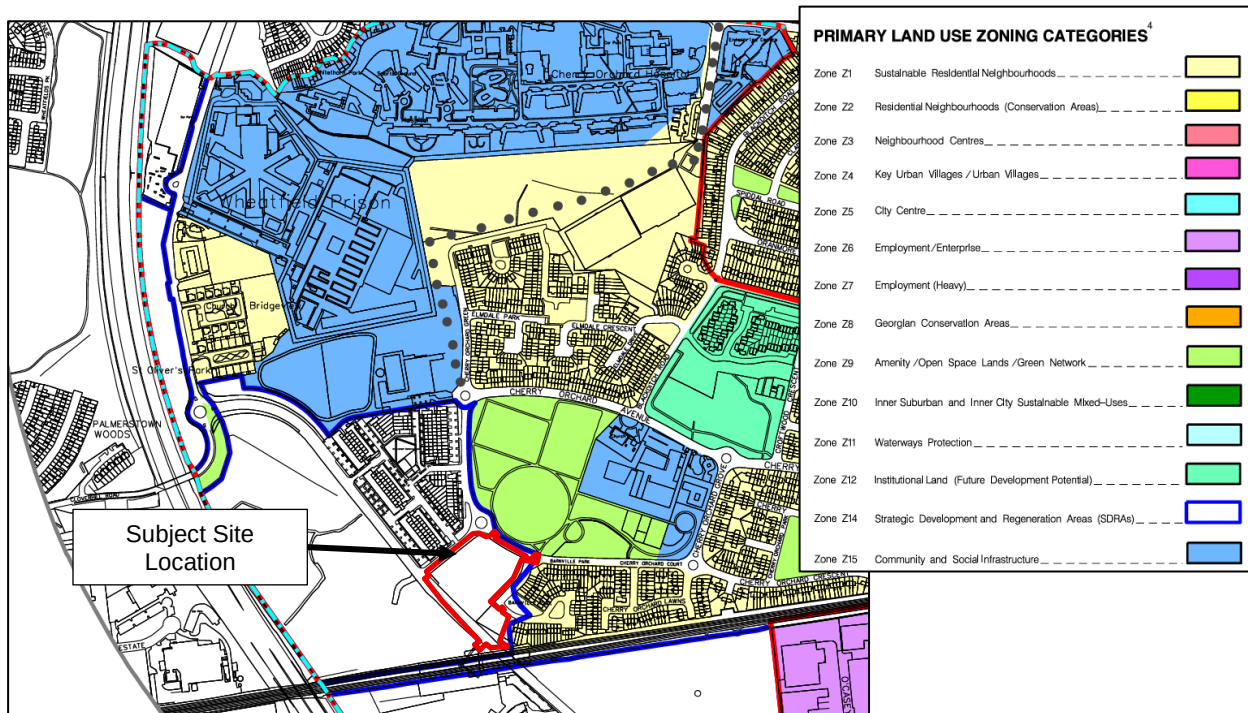


Figure 5 | Site Location and Zoning

(Source: Map D of the Dublin City Development Plan 2022-2028)

2.3 Management

2.3.1 Vehicle Permeability

DMURS has classified the degree of permeability provided for different transport modes into four categories, as outlined below.

- Dendritic Networks, which severely restrict the movement of all users, should be avoided by the designer as they severely restrict movement.
- Open networks that allow full permeability for all users are the best accessibility. This is desirable for all users, such as within town centres and business park / industrial areas. The latter to allow more efficient access for commercial vehicles.
- 3-way offset networks, which comprise a significant number of 3-way junctions, permit through movement for all modes. However, this results in slower speeds for faster modes, as vehicles are required to decelerate, stop and/or change direction on numerous occasions when traversing local streets. This configuration presents a number of advantages and disadvantages with regard to its overall

effectiveness. The use of multiple junctions can reduce legibility and discourage walking and cycling, as the network becomes challenging to navigate, and the route becomes unclear.

- Filter permeability network may be employed to permit full permeability to some users while imposing greater restrictions on others. This may be applied in instances where designers seek to prioritise the movements of more sustainable modes over private vehicles.

The figure below shows an elementary diagram of the types of road networks.

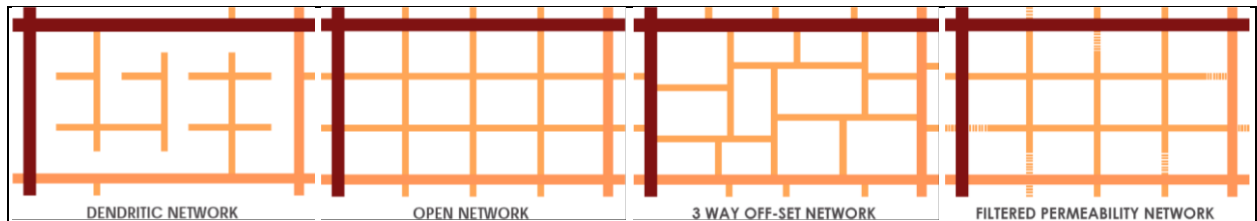


Figure 6 | Type of Street Network (Source: Figure 3.22 – DMURS)

The Design Manual outlines two final considerations regarding cul-de-sacs and one-way streets. For the former, DMURS considers that they should be used with caution to prevent the formation of dendritic networks. Regarding the one-way streets, the manual considers that the use of one-way streets can encourage faster car speeds and can be confusing for users if they divert people away from destinations. Nevertheless, the Design Manual also indicates that one-way streets may be beneficial in narrow carriageways in shared streets and where the implementation of this street type provides more space for pedestrian use.

The proposed development comprises a single access road serving the car parking area and exhibits filtered permeability characteristics, owing to the extensive pedestrian and cyclist access routes surrounding the Site, as highlighted in **Figure 4** above.

The developed has been designed with the following considerations:

- The subject site is located within an existing residential neighbourhood.
- The site is currently a greenfield site, bounded to the southwest by Park West Avenue, to the northwest by Cedar Brook Way, to the northeast by Barnville Park and to the south by residential dwellings and the Southwestern Commuter Railway Line
- The internal movements are dedicated to car parking area serving the apartment residents.
- Access to the car parking area is provided through a single priority-controlled junction off Barnville Park.
- Pedestrian and Cyclist permeability around the Site.

It is reasonable to conclude that the configuration is appropriate and that drivers will not be inclined to travel at high speeds or experience any significant disruption to their journey times as a result of driving on the network roads.

3. Street Design

3.1 Movement, Place and Speed

3.1.1 A Balanced Approach to Speed

In order to achieve an effective and balanced design solution, DMURS advises the designer to consider the management of speed, the values of place and the reasonable expectations of appropriate speed in accordance with the context and functions in question. In order to facilitate this, DMURS has outlined a matrix which allows for the selection of an appropriate design speed on the basis of the links between place, movement and speed. The aforementioned matrix is presented in the figure below.

		 PEDESTRIAN PRIORITY	 VEHICLE PRIORITY			
FUNCTION	ARTERIAL	30-40 KM/H	40-50 KM/H	40-50 KM/H	50-60 KM/H	60-80 KM/H
	LINK	30 KM/H	30-50 KM/H	30-50 KM/H	50-60 KM/H	60-80 KM/H
	LOCAL	10-30 KM/H	10-30 KM/H	10-30 KM/H	30-50 KM/H	60 KM/H
		CENTRE	N'HOOD	SUBURBAN	BUSINESS/ INDUSTRIAL	RURAL FRINGE
CONTEXT						

Figure 7 | Design speed selection

(Source: Table 4.1 – DMURS)

As previously discussed in **Section 2.2.1**, the Site Access Road comprises a 6.0 m wide, low-speed, two-way carriageway, providing access to the car parking areas associated with the residential units.

Accordingly, the design speed is set at 20 km/h, in line with the maximum speed considered.

3.1.2 Self-Regulation Streets

It is recognised by DMURS that the development itself can be used to manage movement as a response of an appropriate design response, which can balance the functional needs of different users, enhance the sense of place and manage speed in a manner that does not rely on extensive regulatory controls and physically intrusive measure for enforcement.

The Design Manual provides a several number of examples that can assist designers in the creation of a safe road, including the incorporation of a continuous street-tree walls, pedestrian activity zones, horizontal and vertical deflection, narrow carriageways, on-street parking, tighter corner radii, and shared surfaces, among others

As referenced in **Section 2.2.1** above, the internal roads are primarily dedicated to parking-related movements, providing access to the car parking areas associated with the residential units.

In addition, the proposed development includes measures on the surrounding road network that will help reduce vehicle speeds along Cherry Orchard Green and Barnville Park, including:

- Raised pedestrian crossings, strategically positioned around the Subject Development (refer to Drawing No. COP-WMC-PH3-00-DR-C-P0101 - *Proposed General Arrangement & Levels Layout*).
- On-street parking (refer to Traffic and Transport Assessment, Waterman-Moylan report No. 22-010r.202 *Traffic and Transport Assessment*, Section 10, which is included in the documentation package). Parallel

parking is provided along Park West Avenue to the south and Barnville Park to the northeast, while perpendicular parking is provided along Barnville Park to the southeast.

As demonstrated by the measures outlined above, the potential for excessive vehicle speeds to develop within the proposed development is considered to be low.

3.2 Streetscape

3.2.1 Material and Finishes

DMURS emphasises that the use of materials and finishes is one of the most defining elements of a street, particularly where it is used to define the levels of segregation and integration within a street. The material range can define space, calm traffic and improve legibility, reducing the need for barriers, signage and line marking in favour of texture and colour. Materials can be used to enhance the value of place and produce more attractive and cost-effective streets.

The proposed development incorporates a range of materials and surface finishes to segregate vehicular, cyclist and pedestrian movements. In addition, pedestrian crossing points are provided with tactile paving to assist visually impaired pedestrians.

The site access junction has also been designed as a courtesy crossing, incorporating contrasting surface materials to alert drivers to a change in road environment and encourage lower vehicle speeds.

3.3 Pedestrian and Cyclist Environment

3.3.1 Footways, Verges and Strips

DMURS indicates that a strong sense of enclosure and active street edges contribute to pedestrians' and cyclists' sense of security and comfort. In addition, it suggests that the provision of wider and better-quality walking facilities may result in an increase in walking. Well-designed footpaths are free of obstacles and wider enough to allow pedestrians to pass each other comfortably. In this regard, the Design Manual presents a guideline for the design of each area thought of as the footpath:

- **Footway:** is the area along which people walk. The minimum width for a footway is 1.8 metres. In areas of high population density and along streets with high traffic volumes, additional width must be provided to facilitate the passage of people in larger groups. **Figure 8** below illustrates the requisite space for pedestrians to pass each other comfortably, with reference to the levels of activity within a street.
- **Verges:** serve to provide a buffer between pedestrians and the vehicle traffic. The verges wide depend on the function of the street and the presence of on-street parking. The Design Manual has established that on arterial and link streets without on-street parking, a verge of 1.5-2.0m should be provided. In contrast, there is no minimum verge requirement for local roads. Where on-street parking is provided, a verge (and change of kerb line) may be needed on approaches to junctions to enforce the visibility splay. In addition, a verge of a minimum of 0.3m should be provided in areas of perpendicular parking a verge should be provided. Finally, where cycle tracks are located adjacent to parking spaces, a verge should be provided.
- **Strips:** are spaces provided directly to the front of a building that may be occupied by activities generally associated with retail/commercial uses and may be incorporated into the private spaces of a dwelling.

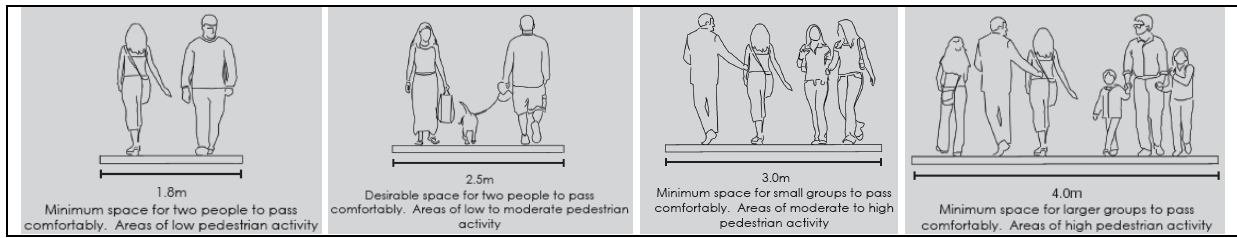


Figure 8 | Spaces needed for pedestrian to pass each other

(Source: Figure 4.34 – DMURS)

The Subject Development comprises a residential area and local retail buildings. In addition, the Subject Development is proposed within an established residential neighbourhood undergoing continued residential growth through ongoing and planned developments. The Subject Site also provides parking arrangements comprising both perpendicular and parallel on-street parking. Dedicated raised pedestrian crossings are also proposed, strategically around the Site.

In light of the well-connected footpath network (see **Figure 9** below) and the characteristics of the surrounding area (refer to **Section 2.1** and see **Figure 5** above), the Subject Development is well positioned to support a safe, accessible, and convenient environment for both pedestrians and cyclists.

The proposed development features a network of interconnected footpaths, ensuring permeability throughout the site, as well as to the adjacent developments and the surrounding area.

All footpaths within the development are designed to be 2.0 metres wide, in accordance with Section 4.3.1 of the Design Manual for Urban Roads and Streets (DMURS), which recommends a minimum footpath width of 1.8 metres.

Additionally, the development offers well-connected pedestrian and cycle links to the surrounding area, including a two-way cycle track to the northeast of the Site, adjacent to Barnville Park.

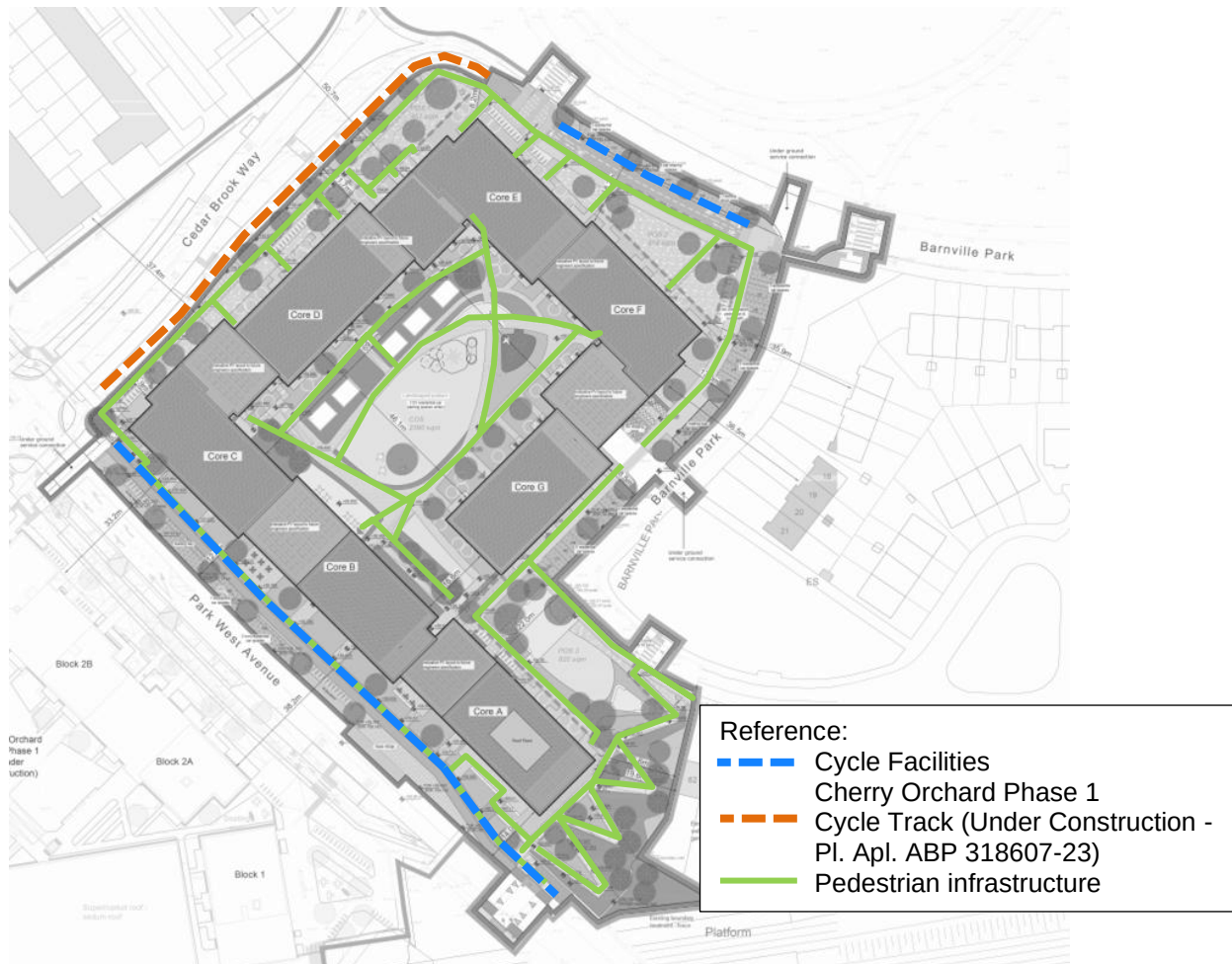


Figure 9 | Pedestrian and Cycle Facility

3.3.2 Corner Radii

DMURS indicates that the reduction of corner radii will markedly enhance the safety of pedestrians and cyclists at junctions. This is achieved by reducing the speed at which vehicles can turn corners and by increasing inter-visibility between users. Furthermore, it is essential to verify the swept path of the main vehicles that will utilise the streets. In this regard, designers must consider the following:

- On junctions between arterial and / or link streets, a maximum corner radius of 6m should be applied.
- Where turning movements occur from an arterial or link street into a local street, corner radii may be reduced to 4.5m.
- Where design speeds are low and movements by larger vehicles are infrequent, a maximum corner radius of 1-3m should be applied.
- In circumstances where there are regular turning movements by articulated vehicles, the corner radii may be increased to 9m.
- In instances where designers find difficulties in applying the aforementioned radii, they should consider the following: (i) the implementation of setback vehicular stop lines at signalised junctions, which would permit turning vehicles to traverse the enter line of the intersection street without conflicting with oncoming movements, and (ii) the removal of obstacles from corners to facilitate the passage of emergency vehicles.

Following the above, the Proposed Site includes several self-regulating design features to promote traffic calming, including the implementation of 3.0 metre corner radii on access junction. Details are shown on the Waterman Moylan Consulting Engineer Drawings No. *COP-WMC-PH3-00-DR-C-P0101 - Proposed General Arrangement & Levels Layout* which is accompanying the documentation package

Furthermore, the Subject Site will be accessible for refuse vehicles and fire tender. AutoTrack analysis has been undertaken. Details of the AutoTrack layouts is shown on the Waterman Moylan Consulting Engineer Drawings No. *COP-WMC-PH3-00-DR-C-P0115 - Swept Path Analysis Refuse Vehicle* and *COP-WMC-PH3-00-DR-C-P0116 - Swept Path Analysis Fire Tender*, which are accompanying the documentation package.

3.3.3 Cycle Facilities

DMURS promotes cycling as a sustainable mode of transport and seeks to rebalance design priorities to promote a safer and more comfortable environment for cyclists. In this regard, the Design Manual follows the baseline described in the National Cycle Manual and refers to it in the design of cycle facilities.

DMURS highlights that on lightly trafficked / low speed streets, designers are generally directed to create shared streets where pedestrian, cyclist and motor vehicles share the carriageway. However, on busier / moderate speed streets, designers are generally directed to apply separate cycle lanes / cycle tracks.

The subject development included a total a total of 653 no. cycle parking spaces (627 no. for residential units and 26 no. for the retail facility) are provided. This provision includes 176 no. visitor spaces. Resident cycle parking is proposed in the form of secure bicycle store enclosures to the front of terraced units; on curtilage spaces to the rear of units with side access; and a bicycle store for apartment units. Visitor parking is proposed in the form of Sheffield stands.

Further information about the number of cycle parking spaces can be found in the Waterman Moylan Consulting Engineer Report No. *22-010r.202 Traffic and Transport Assessment*, which are accompanying the documentation package.

3.4 Carriageway Conditions

3.4.1 Carriageway Widths

As indicated by DMURS, narrow carriageways represent one of the most effective design measures for calming traffic. This is measured from the kerb to the kerb, from the outside line of a cycle lane, or from the edges of parking spaces.

The figure below, extracted from the design manual, illustrates various examples of width road.

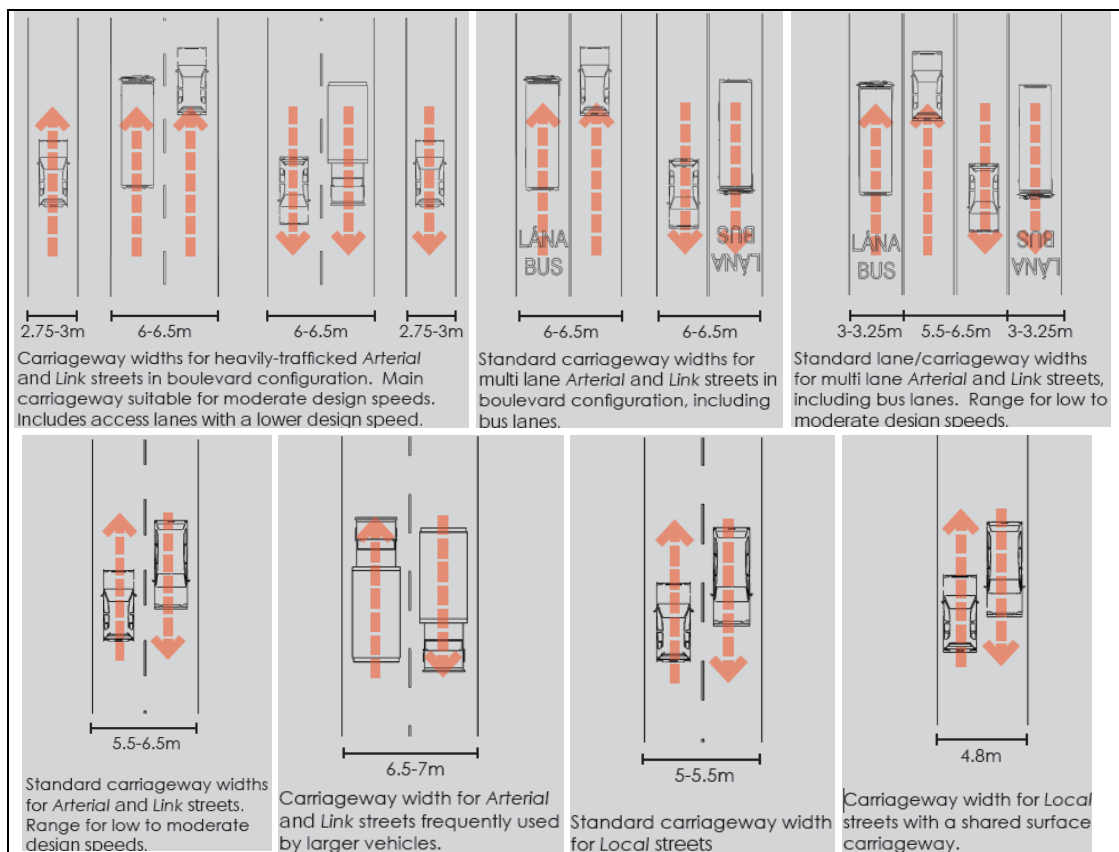


Figure 10 | Carriageway Widths

(Source: Figure 4.55 – DMURS)

As described in **Section 2.2.1**, the Site Access Road comprises a 6.0 m wide, two-way carriageway, providing access to the car parking areas associated with the residential units.

The mentioned dimensions are consistent with the width of roads indicated in the DMURS. Furthermore, measurements are taken from the kerb to kerb or from the edges of parking spaces.

As indicated before, the Subject Site will be accessible for refuse vehicles and fire tender. AutoTrack analysis has been undertaken. Details of the AutoTrack layouts is shown on the Waterman Moylan Consulting Engineer Drawings No. *COP-WMC-PH3-00-DR-C-P0115 - Swept Path Analysis Refuse Vehicle* and *COP-WMC-PH3-00-DR-C-P0116 - Swept Path Analysis Fire Tender*, which are accompanying the documentation package.

3.4.2 Forward Visibility

DMURS defines the term 'forward visibility' or 'forward sight distance' (FSD) as the distance along the street ahead which a driver of a vehicle can see. Furthermore, it is stated that the minimum level of forward visibility required for a driver to stop safely if an object enters their path is based on the Stopping Sight Distance (SSD), as illustrated in the figure below.

SSD STANDARDS			
Design Speed (km/h)	SSD Standard (metres)	Design Speed (km/h)	SSD Standard (metres)
10	7	10	8
20	14	20	15
30	23	30	24
40	33	40	36
50	45	50	49
60	59	60	65

Forward Visibility

Forward Visibility on Bus Routes

Figure 11 | *Reduced SSD standards for application within cities towns and villages*
(Source: Table 4.2 – DMURS)

As described in **Section 2.2.1**, The internal roads within the Subject Development function as low-speed internal roads. The visibility design focuses primarily on the junctions connecting the development to the surrounding road network.

3.4.3 Visibility Splays

It is emphasised by DMURS that visibility splays are applicable to junctions of particular importance, where drivers are required to exercise their own discretion in determining the optimal moment to enter the junction.

The junction visibility splay is composed of two elements: the X distance, which is the distance along the minor arm, and the Y distance, which is the distance a driver exiting from the minor road can see to the left and right along the major arm. The former is gotten from the stop line, and a distance of 2.4 metres should be considered in the major case, while a distance of 2.0 metres may be used where vehicle speeds are slow and flows on the minor arm are low. The Y distance should correspond to the Stopping Sight Distances set out in **Figure 11** above. The methodology for measuring distances is illustrated in **Figure 12** below.

The Design Manual indicates that visibility splay should be kept clear of obstructions. However, objects that would not be large enough to wholly obscure a vehicle, pedestrian, or cyclist may be acceptable, provided that their impact on the overall visibility envelope is not significant.

Finally, the DMURS indicates that designers may have reservations about reducing visibility splay at junctions that experience higher traffic volumes at relatively moderate speeds.

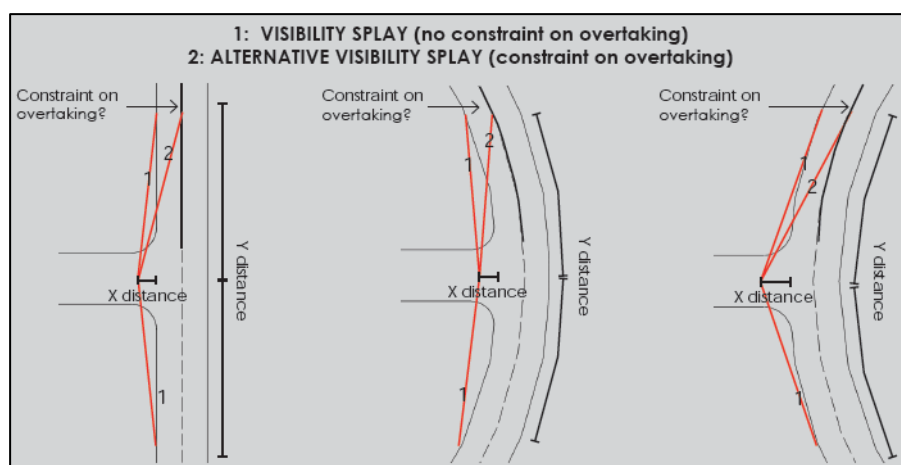


Figure 12 | *Visibility splay refers to an X and Y value*
(Source: Figure 4.63 – DMURS)

In order to facilitate pedestrian movements and enhance the safety of pedestrians at access junction, courtesy crossing has been designed with a change in the material surface of the street and vertical deflection.

It is anticipated that these uncontrolled junctions, situated in a low-speed street environment (as discussed in **Section 3.1.2** above), will function effectively without the need for further assessment.

Visibility splays have been assessed for both junctions the proposed site access / Barnville Park and Barnville Park / Cherry Orchard Green. The assessment for the site access junction is based on a design speed of 20 km/h on Barnville Park, while the assessment for the Barnville Park/Cherry Orchard Green junction is based on the posted speed limit of 50 km/h on Cherry Orchard Green.

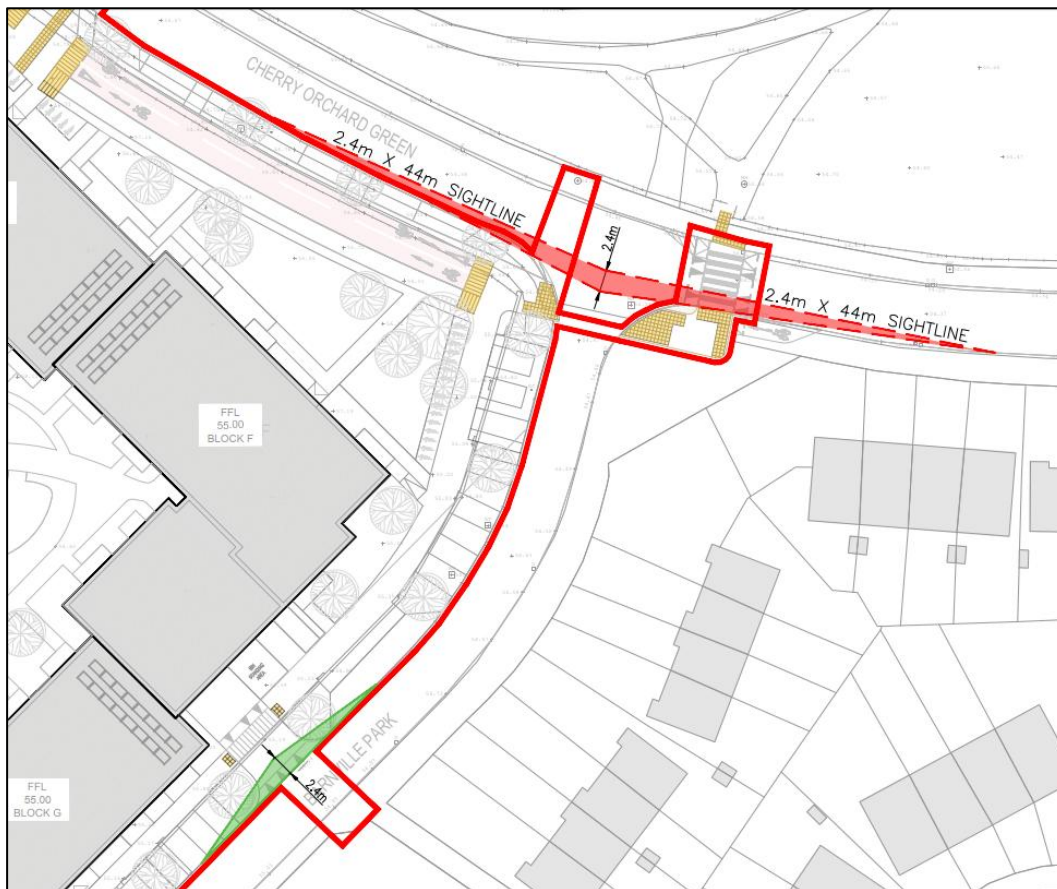


Figure 13 | Visibility Splay Proposed Site.

Details of the sightline's layouts are shown on the Waterman Moylan Drawings No's Details of the sightline's layouts are shown on the Waterman Moylan Drawings No. *COP-WMC-PH3-00-DR-C-P0113 - Proposed Visibility Splays*, which is included in the documentation package.

4. Conclusion

This DMURS Statement of Consistency Report has been prepared by Waterman Moylan on behalf of the Land Development Agency (LDA) to accompany a planning application to Dublin City Council for Phase 3 of a proposed new residential development on lands at Park West Avenue, Cherry Orchard, Dublin 10.

The aforementioned statement illustrates how the proposals align with the objective outlined in DMURS, which aims to enhance street design in order to encourage individuals to opt for walking or public transportation over private vehicle use.

In light of the aforementioned considerations, it is our assessment that the proposed development is aligned with the standards set forth for the design of urban roads and streets as outlined in DMURS.

UK and Ireland Office Locations

