



Contact us
+353 1 5242060
info@ors.ie
www.ors.ie

2024

**Stage 1 Quality Audit Report
Social Housing Bundle 4, Development
at Wellmount Road, Finglas**

Stage 1 Quality Audit Report
Social Housing Bundle 4, Development at Wellmount Road, Finglas

Document Control Sheet

Client:	Dublin City Council
Document No:	SHB4-WRF-RP-ORS-CS-P3-0001-Stage 1 Quality Audit Report

Revision	Status	Author:	Reviewed by:	Approved By:	Issue Date
P01	S2	AK	MG	AP	03/04/2024
P02	S2	AK	MG	AP	12/04/2024
P03	S2	AK	MG	AP	22/04/2024
P04	S2	AK	MG	AP	02/07/2024

Table of Contents

1 Introduction	1
2 Background	4
2.1 Description of the Proposed Development	4
2.2 Existing Road Network	6
3 Quality Audit Scope	9
4 DMURS Street Design Audit	10
4.1 Overview	10
4.2 Connectivity	11
4.3 Self-Regulating Street Environment	13
4.4 Pedestrian and Cycling Environment	16
4.5 Visual Quality	18
5 Additional Audits	20
5.1 Accessibility and Walkability Audit	20
5.1.1 Public Transport Network	20
5.2 Cycle Audit	23
6 Road Safety Audit	24
6.1 Introduction	24
6.2 Problems Raised from the Road Safety Audit	26
6.2.1 Potential Problems Identified	26
7 Audit Team Statement	31
Appendix A – Inspected Documents	32
Appendix B – Designer Response Form	33

1 Introduction

This report documents the findings of a Stage 1 Quality Audit (QA) carried out with respect to the Proposed Social Housing Bundle 4 Development for the construction of 77 no. apartment dwelling units at Wellmount Road, Finglas.

The audit team conducted the site visit on Thursday the 18th of January 2024 in order to identify elements within the road environment that could impact the accessibility and mobility of road users as well as safety issues observed in the proposed scheme.

The audit team comprised of the following people:

Audit Team Leader:

Adam Price BEng (Hons), CEng, MIEI

Audit Team Member:

Mark Gallagher AEng, MIEI

Audit Team Observer:

Ankita Kirtane B.Arch, MSc, MIEI

The audit team reviewed the following documents and drawings provided Malone O'Regan Consulting Engineers:

- (1) SHB4-WRF-DR-MOR-CS-P3-101 Rev 4– Proposed Site Layout
- (2) SHB4-WRF-DR-MOR-CS-P3-116 Rev 4– Proposed Sight Lines
- (3) SHB4-WRF-DR-MOR-CS-P3-117-Swept Path Analysis Refuse Truck Rev 5 (4) SHB4-WRF-DR-MOR-CS-P3-130 Rev 3 – Foul & Surface Water Drainage
- (5) SHB4-WRF-DR-SMK-ME-P01-6000 Lux plot_Ver1– Lighting Plan.

Documents/Information not supplied:

- Speed Survey
- Departures from Standards.

Guidance and information on the completion of the Quality Audit was found in:

- Design Manual for Urban Roads and Streets (DMURS), Department of Transport, Tourism and Sport.
- DMURS Supplementary Material – Advice Note 4 – Quality Audits.
- DMURS Supplementary Material – DMURS Street Design Audit (May 2019).
- Traffic Advisory leaflet 5/11, Department of Transport UK; and
- Building for Everyone - A Universal Design Approach, National Disability Authority.

The audit examined only those issues within the design relating to the road safety implications and accessibility of the scheme and has therefore not examined or verified the compliance of the design in any other criteria.

The Quality Audit should not be treated as a design check. The problems identified and described in this report are considered by the Audit Team to require action to improve the safety of the development and minimise accident occurrence.

All comments, references and recommendations in this audit are in respect of the review of information supplied by Malone O'Regan Consulting Engineers and a subsequent site visit by the audit team.

The information supplied to the Audit Team is also listed in **Appendix A**.

2 Background

2.1 Description of the Proposed Development

ORS have been commissioned to conduct a DMURS Quality Audit (including a stage 1 Road Safety Audit) on behalf of the Dublin City Council for the construction of 77 apartment dwelling units at a site c.1.3 ha bound by Cardiffsbridge Road, Wellmount Road and Wellmount Drive, Finglas, Dublin 11, which will consist of the following:

- One apartment block with primary frontage onto Cardiffsbridge Road, ranging in height from 4 to 6-storeys, comprising 77 residential units (38 no. 1 bed units, 25 no. 2 bed units and 14 no. 3 bed units);
- 28 no. car parking spaces, 2 no. motorcycle spaces and 1 no. loading bay;
- 175 no. bicycle parking spaces;
- 135 sqm of internal community, arts and cultural floor space;
- 0.56 ha of public open space and 0.11 ha communal open space;
- Two vehicular accesses are proposed, one from Cardiffsbridge Road and one from Wellmount Road;
- Boundary treatments, public lighting, site drainage works, internal roads and footpaths, ESB substation, stores, bin and bicycle storage, plant rooms, landscaping; and
- All ancillary site services and development works above and below ground.

The proposed development is located within land zoned as '*Z1 Sustainable Residential Neighbourhoods*' by the Dublin City Council. The site is within a developed residential area in Finglas, Co. Dublin and is currently a green space. A topographical survey has been conducted on the site; this was used for the road levels and the layout on the site. The site has a steep fall across the site from the northwest to the southeast.

The site can be accessed off R103 (Cardiffsbridge Rd) via Deanstown Ave/R103(Cardiffsbridge Road) to the northwest corner of the site and via Wellmount Road to the southeast of the site. A segregated footpath is located along either side of R103 and Wellmount Road which will help the pedestrians to access/egress the site. No cycle tracks are observed in the vicinity of the site. However, GDA Cycle Network Plan has proposed a secondary route along Wellmount road to the southeast of the application site and a feeder route is proposed along R103 to the southwest of the application site.

Please refer to **Figure 2.1** displayed below, which provides an overview of the site location.



Figure 2.1: Site Location Map (Source: Google Earth)

Figure 2.2 shows the proposed site layout provided by Malone O'Regan Consulting Engineers.



Figure 2.2: Site Layout (Source: Malone O'Regan Consulting Engineers)

2.2 Existing Road Network

As previously noted, vehicular access proposed to the site is off R103 (Cardiffsbridge Rd) to the northwest of the site via 3-arm Deanstown Ave/R103 (Cardiffsbridge Rd) junction and off Wellmount Road to the southeast of the site. Service vehicles can access the site off the same vehicular accesses mentioned above. The pedestrian access/egress is off R103 (Cardiffsbridge Rd) and Wellmount Road adjoining the vehicular accesses to the site. Separate pedestrian accesses are given to the landscaped public open space to the east of the site. Separate access for cyclists is not provided throughout the site. Cyclists have to share the carriageway with other motorists or pedestrians. Segregated footpaths along with streetlights and puffin style pedestrian crossings are provided on the R103 (Cardiffsbridge Rd) and Wellmount Road in the vicinity of the application site.

The R103 (Cardiffsbridge Rd) is a two-way regional road with single lane in each direction of the carriageway. R103 (Cardiffsbridge Rd) connects Mellows Road/Kildonan Road junction towards the north of the application site to the Tolka Valley Road/R103 junction to the south of the site. The overall width of the vehicular carriageway is approximately 11.2 metres with footpaths and streetlights on either side of the carriageway. The junction with Deanstown Ave/

R103 (Cardiffsbridge Rd) is equipped with a signalised pedestrian crossing, well connected pedestrian infrastructure, road markings and signage as shown in **Figure 2.3** and **Figure 2.4**.



Figure 2.3: Pedestrian facilities along R103 (Cardiffsbridge Rd) (Source: Google Maps)



Figure 2.4: R103 (Cardiffsbridge Rd) at the site frontage (Source: Google Maps)

Wellmount Road is a two-way local road forming the southeast boundary of the application site. The road connects the R103/Wellmount Round roundabout towards the southern corner of the application site to the R135 (Finglas Road)/Wellmount road junction to the northeast of the site. Wellmount road runs parallel to the southern boundary of the site while passing through the proposed vehicular access junction of the site. Along the length of the carriageway the road features uncontrolled pedestrian crossings. The overall width of the vehicular carriageway is approximately 11.2 metres with footpaths and streetlights on either side of the carriageway as shown in **Figure 2.6** and **Figure 2.6**. No cycling facilities are observed along the road.



Figure 2.5: Overview of Wellmount Road (Source: Google Earth)



Figure 2.6: Wellmount Road at the site frontage (Source: Google Maps)

3 Quality Audit Scope

The primary goal of a Quality Audit is to ensure that high-quality places are delivered and maintained by all relevant parties, ultimately benefiting all end users. During that process, the Quality Audit team considers access for disabled people, pedestrians, cyclists, and drivers of motor vehicles to ensure that the scheme is inclusive and caters to the needs of all users.

The scope of this Quality Audit is to review the proposed layouts supplied by the Design Team and make recommendations in line with guidelines as per the Design Manual for Urban Roads and Streets (DMURS) and the Transport Infrastructure Ireland Road Safety Audit Standard GESTY-01024, in order to ensure compliance and good practice of regulations defined in these standards documents.

The introduction of DMURS have sought to improve the design of streets in urban areas and to facilitate the implementation of policy on sustainable living by achieving a better balance between all modes of transport and road users. The introduction of DMURS is intended to encourage more people to walk, cycle or use public transport by making the experience safer and more pleasant.

In general, the principles of DMURS are intended to 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 the individual communities and places.

DMURS Quality Audits are undertaken to demonstrate that appropriate consideration has been given to the relevant aspects of the design from a DMURS point of view. The benefits of undertaking a DMURS Quality Audit are as follows:

- The needs of all user groups and the design objectives of the project are fully considered.
- An audit enables the project's objectives to be delivered by putting in place a check procedure.
- It can contribute to cost efficiency in design and implementation.
- A DMURS Quality Audit encourages engagement with stakeholders.

This Quality Audit will be divided into the following assessments:

- A DMURS Street Design Audit
- Additional Audits (Access, Walking and Cycling Audits)
- A Road Safety Audit.

A DMURS audit template, consisting of a series of short tables, is available online by the Department for Transport, Tourism and Sport (DTTAS) and has been adopted into this report.

This Quality Audit was carried out to identify any potential difficulties road users, particularly mobility impaired users, older people and families with children may encounter when accessing the proposed housing development and also to address any safety issues associated with the proposal. The elements found in this Audit that require further consideration with the guidelines set out in DMURS are outlined at the following pages.

4 DMURS Street Design Audit

4.1 Overview

The DMURS Street Design Audit is an essential tool for evaluating the compliance of street designs with the principles outlined in the Design Manual for Urban Roads and Streets (DMURS). This audit serves to ensure that key considerations outlined in DMURS have been appropriately addressed. The audit focuses on four critical aspects of street design, namely:

- Connectivity;
- Self-Regulating Street Environment;
- Pedestrian and Cycling Environment; and
- Visual Quality.

4.2 Connectivity

Connectivity				
Key Issues	Key DMURS Reference	Comments	Audit Suggestion	Design Team Response
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	3.1 – Integrated Street Network 3.2.1 – Movement Function 3.3.1 – Street layouts 3.3.4 – Wayfinding	3.1 – The internal network connects dwelling entrances with parking area and open spaces. 3.2.1 – The development creates a permeable network for pedestrians restricting private vehicles. 3.3.1 – The design creates a strong sense of enclosure by using landscaping and various streetscapes to enclose the streets and development as a whole. 3.3.4 – Site layout is legible directing users towards site and building entrances.		
Multiple points of access are provided to the site/place, in particular for sustainable modes.	3.3.1 – Street Layouts 3.3.3 – Retrofitting	3.3.1 – The development maximises the number of walkable routes between destinations within the development through the provision of footpaths at open spaces. 3.3.3 – The development creates a permeable network for pedestrians with restrictions on the movement of private vehicles.	An existing footpath is provided along the frontage of the site along Wellmount Road and R103. It is unclear how cyclists and pedestrian will integrate into the site.	Pedestrian footpath is integrated into the site. The existing road layout of Wellmount Road and R103 does not show a cycle track. In keeping with the existing road layout, it is not proposed to integrate cycling into the site.

<p>Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.</p>	<p>3.3.1 – Street Layouts 3.3.2 – Block Sizes 3.4.1 – Vehicle Permeability</p>	<p>3.3.1 – Adequate number of footpaths 3.4.1 – The development has created a network with restrictions on the movement of private vehicles. 3.4.1 – The site provides vehicular accessibility to the development by road from the northwestern and southeastern boundary of the site which only provides access to the car parks located to the northwest and southeast of the site. This can benefit service vehicles like refuse truck. However, no provision has been given for other service vehicles to access entirety of apartment buildings.</p>	<p>Separate cyclist tracks have not been provided on the scheme. Cyclists will be required to share the road with vehicles, dismount and reach their destination through the provided footpaths.</p> <p>The site should provide better accessibility for all types of service vehicles.</p> <p>Service vehicles might have to manoeuvre into the landscaped area to access other areas of the development. This could pose a hazard for vulnerable users.</p>	<p>Pedestrian footpath is integrated into the site. The existing road layout of Wellmount Road and R103 does not show a cycle track. In keeping with the existing road layout, it is not proposed to integrate cycling into the site.</p>
--	--	---	---	---

<p>Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures.</p>	<p>3.2.1 – Movement Function 3.2.2 – Place Context 3.4.1 – Vehicle Permeability</p>	<p>3.2.1 – The development comprises internal streets that provides access to the internal car parking areas and consequently the apartment building. This access road does not provide a through route for vehicles. 3.2.2 – The development comprises an appealing living place enriched with valuable green attributes. 3.4.1 – The development has created a network with restrictions on the movement of private vehicles through the use of short driving distance so that drivers are more likely to maintain lower speeds over shorter distances.</p>		
--	---	---	--	--

4.3 Self-Regulating Street Environment

Self-Regulating Street Environment				
Key Issues	Key DMURS Reference	Comments	Audit Suggestion	Design Team Response
<p>A suitable range of design speeds have been applied with regard to context and function.</p>	<p>3.2.1 – Movement Function 3.2.3 – Place Context 4.1.1 – A Balanced Approach to Speed</p>	<p>3.2.1 – It is not clear what the intended speed limit on the internal road is. 3.2.3 – An appropriate speed limit should be applied in the context of the proposed design. 3.2.3 – Higher levels of pedestrian movement are catered for. 4.1.1 – The design provides for limited traffic calming measures which could result in higher speeds through the development.</p>	<p>As the proposed scheme is a residential development a speed limit <30km/h should be applied.</p>	<p>Speed limit of 30km/h applied to site.</p>

<p>The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures.</p>	<p>4.2.1 – Building Height and Street Width 4.2.2 – Street Trees 4.2.3 – Active Street Edges 4.2.4 – Signage and Line Marking 4.2.7 – Planting 4.4.2 – Carriageway Surfaces 4.4.9 - On-Street Parking Advice Note 1 – Transitions and Gateways</p>	<p>4.2.2 – Tree plantings are proposed in the layout plan. 4.2.3 – Active Street edges are provided through the provision of a combination of landscaping, pedestrian connection, and parking bays besides vehicular carriageway. 4.2.4 – Signage kept to minimum. 4.2.7 – Planting is used to create a softer landscape and encourage slower speeds. 4.4.2 – To reinforce narrower carriageways each parking bay is finished so that it is clearly distinguishable from the main carriageway. 4.4.9 – On-street parking has been provided throughout the site which will visually narrow the carriageway.</p>	<p>The type of tree planting proposed should be such that they do not obscure visibility splays from junctions.</p>	<p>Tree locations amended to avoid obstructing driver sightlines. Tress specified as clear stem up to a height of 2m.</p>
---	---	---	---	---

<p>A suitable range of design standards / measures have been applied that are consistent with the applied design speeds.</p>	<p>4.4.1 - Carriageway Widths 4.4.4 – Forward Visibility 4.4.5 – Visibility Splays 4.4.6 – Alignment and curvature 4.4.7 – Horizontal and Vertical Deflections Advice Note 1 – Transitions and Gateways</p>	<p>4.4.1 –Measurements of the road carriageway are specified in the drawings provided. 4.4.4 – Forward visibility has been reduced through the provision of on-street parking and changes in horizontal alignments along the access road. 4.4.5 – Junction visibility splays in accordance with DMURS. 4.4.6 – The development features changes in horizontal curvature which promotes lower speeds. 4.4.7 Vertical deflections are not proposed in the design.</p>	<p>Consider providing vertical deflections in the form of entry raised tables or asphalt speed bumps that will allow most vehicles to cross at moderate speeds.</p> <p>The use of planting of a vertical nature to provide the feel of enclosure.</p>	<p>Vertical deflections are provided in the form of raised tables. Planting around the site is used to provide the feel of enclosure.</p>
--	--	---	---	---

ORS

4.4 Pedestrian and Cycling Environment

Pedestrian and Cycling Environment				
Key Issues	Key DMURS Reference	Comments	Audit Suggestion	Design Team Response
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	4.2.1 – Building Height and Street Width 4.2.3 – Active Street Edges 4.2.5 – Street Furniture 4.4.9 – On-Street parking	4.2.1 – Limitations in crosssectional width and the emphasis on delivering segregated footpath and, and the provision of separated pedestrian access increases pedestrian safety. 4.2.3 – Active Street edges provide passive surveillance of the street environment and promote pedestrian activity. 4.2.5 –Street furniture such as seatings, picnic tables are provided in certain sections of the development. 4.2.9 – On-street parking is proposed only at sections of the development.	Designers should prioritise sufficient lighting in all the pedestrianised areas throughout the development and in all open public areas. Designers should ensure that tree canopies over time do not impede the illumination provided by street lighting.	Sufficient lighting is priorities in all pedestrianised areas throughout the development and in all public areas. Trees specified as clear stem up to a height of 2m.
Junctions been designed to ensure the needs of pedestrians and cyclists are prioritised.	4.3.2 – Pedestrian Crossings 4.3.3 – Corner Radii 4.4.3 – Junction Design 4.3.4 – Pedestrianised and Shared Surfaces	4.3.2 – Pedestrian crossings are not provided throughout the development. However, Cardiffsbridge Road to the west of the development is well equipped with controlled pedestrian crossing. 4.3.3 – Corner radii of 3 to 6 metres have generally been provided at both the proposed vehicular access road. 4.3.4 – Pedestrianised surfaces are provided in abundance throughout the scheme.	Designers should ensure that all the proposed vehicular access points should be appropriately designed according to DMURS standards. The proposed locations of pedestrian crossings to be positioned along pedestrian desire lines.	Vehicular access points are designed according to DMURS standards. Pedestrian crossings are positioned along pedestrian desire lines.

Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	3.2.1 – Movement Function. 3.2.3 – Place Context. 4.2.5 – Street Furniture 4.3.1 – Footways, Verges and Strips 4.3.2 – Pedestrian Crossings	3.2.1 – The development maximises the number of walkable routes to the south of the development. 3.2.3 – The development comprises an appealing living place with green attributes. 4.3.1 – Footways are generally of 1.8 metres which is the minimum		
		recommended width. Other pedestrianised surfaces are generally of a wider nature throughout the development.		
The particular needs of visually and mobility impaired users been identified and incorporated in the design.	4.2.5 – Street Furniture 4.3.1 – Footways, Verges and Strips 4.2.5 – Street Furniture 4.3.2 – Pedestrian Crossings 4.3.4 – Pedestrianised and Shared Surfaces	4.3.4 – Accessible parking spaces are proposed throughout the site. However, measures to allow mobility impaired users to navigate safely into the building is unclear.	Drop-kerbs/ramps and appropriate tactile paving at the car park area, close to every accessible parking space should be provided. Tactile paving and drop kerbs should be appropriately placed to not conflict with the vehicular traffic.	Layout amended in response to audit suggestion.
Cycling facilities will cater for cyclists of all ages and abilities.	3.2.1 – Movement Function 3.2.3 – Place Context 4.3.5 – Cycle facilities	4.3.5 – Dedicated cycling lanes are not provided. Cyclists will share the carriageway with pedestrians. However, cycle parking spaces are provided with the building in the form of 4 No. enclosed cycle storage area.	Appropriate signage leading to bicycle parking area should be provided within the development.	

4.5 Visual Quality

Visual Quality				
Key Issues	Key DMURS Reference	Comments	Audit Suggestion	Design Team Response
The landscape plan responds to the street hierarchy and the value of the place.	3.2.1 – Movement Function 3.2.3 – Place Context 4.2.2 – Street Trees 4.2.7 – Planting Advice Note 1 – Transitions and Gateways	3.2.1 – Adequate number of attractive walkable routes are provided throughout the development. 3.2.3 – The development embodies an appealing living environment with an emphasis on green features, enhancing the sense of place and discouraging excessive speeds. 4.2.2 – The inclusion of street trees across the site enhances the sense of enclosure achieving a sense of place. 4.2.7 – Planting is proposed to create a softer landscape.		
Street furniture is orderly placed.	3.2.1 – Movement Function 3.2.3 – Place Context 4.2.5 – Street Furniture 4.3.1 Footways, Verges and Strips	4.2.5 – Street furniture provided does not restrict pedestrian movements.		
The use of signage and line marking has been minimised.	3.2.1 – Movement Function 3.2.3 – Place Context 4.2.4 – Signage and Line Marking	4.2.4 – Details of signage are provided, and signage is kept to the minimum required.		

<p>Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place?</p>	<p>3.2.1 – Movement Function 3.2.3 – Place Context. 4.2.6 – Materials and Finishes 4.2.8 – Historic Contexts 4.3.2 – Pedestrian Crossings 4.4.2 – Carriageway Surfaces</p>	<p>3.2.1 – Adequate number of walkable routes are provided to the south of the development. 3.2.1 – Materials and finishes are chosen to improve movement by creating visual distinctions between surfaces. 4.3.2 – Different surface Colour and pattern at one single pedestrian crossing act as traffic calming and indicate the crossing location to drivers accessing off R103.</p>	<p>Consider using different surface textures, materials and colour at every pedestrian crossing to function as traffic calming and indicate the crossing location to drivers and pedestrians.</p>	<p>Layout amended in response to audit suggestion.</p>
	<p>Advice Note 2 – Materials and Specifications</p>			

5 Additional Audits

5.1 Accessibility and Walkability Audit

As mentioned previously the proposed site will be accessed off R103 (Cardiffsbridge Rd) to the northwest of the site and off Wellmount road to the southeast of the application site. The pedestrian access to the site is off Cardiffsbridge Rd and Wellmount road as well in close proximity to the vehicular access. The pedestrian footpaths are segregated from the vehicular traffic.

Multiple pedestrian accesses are given to the shared public landscaped area to the east of the apartment buildings via Wellmount road and to the southeast and Wellmount Drive to the north of the site which is further directed to the footpaths leading up to the apartment buildings. However, it is unclear how the pedestrian footpaths tie in with the existing footpaths as there is currently no footpath provisions along Wellmount Drive in particular. The local road network is well connected with footpaths and crossing points in the vicinity of the site on Cardiffsbridge Rd and Wellmount Road which provides a safe environment for pedestrians. However, no cycling facilities are observed in the vicinity of the site.

The site is well accessible via footpaths that connects the site to several local amenities like train station, shopping centre, schools, and hospitals.

5.1.1 Public Transport Network

The proposed development is well served by public transport, as it is located in Finglas West along Cardiffsbridge Rd and Wellmount road. This strategic location facilitates seamless connectivity to the M50, offering convenient access to various areas within Dublin city. The location of the residential development will ensure great external connectivity by means of walking and public transport to future residents of the site and it should be expected that the movements to and from the site will be less car-dominated. The proposal is well-served by several bus routes in the vicinity of the site, as shown in **Figure 5.1** below.

There are 5 No. bus stops located in the vicinity of the site out of which 3 No. are located on Cardiffsbridge Rd and 2 No. are located on Deanstown avenue. All the bus stops are located ca. 100 to 200 metres from the application site. Pelletstown Train Station is located to the south of the site which is served by Dublin-Maynooth and Longford and M3 Parking. There are continuous footpaths leading the site to the bus stops located adjacent to the site and the train station. The footpaths are deemed to be in good condition and of appropriate width in the vicinity of the site entrance. The bus stop provided in the vicinity of the site on Cardiffsbridge Rd has the provision of a bus shelter with a bench. **Table 5.1** overleaf outlines the available bus services in the area.



Figure 5.1: Bus stops in the vicinity of the development (Source: TFI)

Table 5.1 – Bus Services Available (Source: TFI)				
Route No.	Bus Operator	Origin	Destination	Weekday Services
40	Dublin Bus	Earlsfort Terrace	Charlestown Shopping Centre	Every 15 mins
40E		Tyrrelstown	Broombridge Luas	Every 15 mins
220	Bus Éireann	Carrigaline	Ballincollig	Every 30 mins to 1 hour
220A		Lady's Well Road	DCU	1 service /day

Future residents and visitors of the site will enjoy access to an extensive network of existing bus routes in the vicinity, which will be further enhanced by the major Bus Connects proposal to improve the public transport, pedestrian, and cyclist network around the site, the maps of which are included in **Figure 5.2** overleaf. The proposed Bus Connects project includes a peak time F spine route in the vicinity of the site connecting Finglas to City Centre.

This is followed by an orbital route along Cappagh Road to the north that connects Blanchardstown and the Point Village via Collins Avenue and Finglas and Howth Junction.

Some local routes will also be introduced in the vicinity of the site.

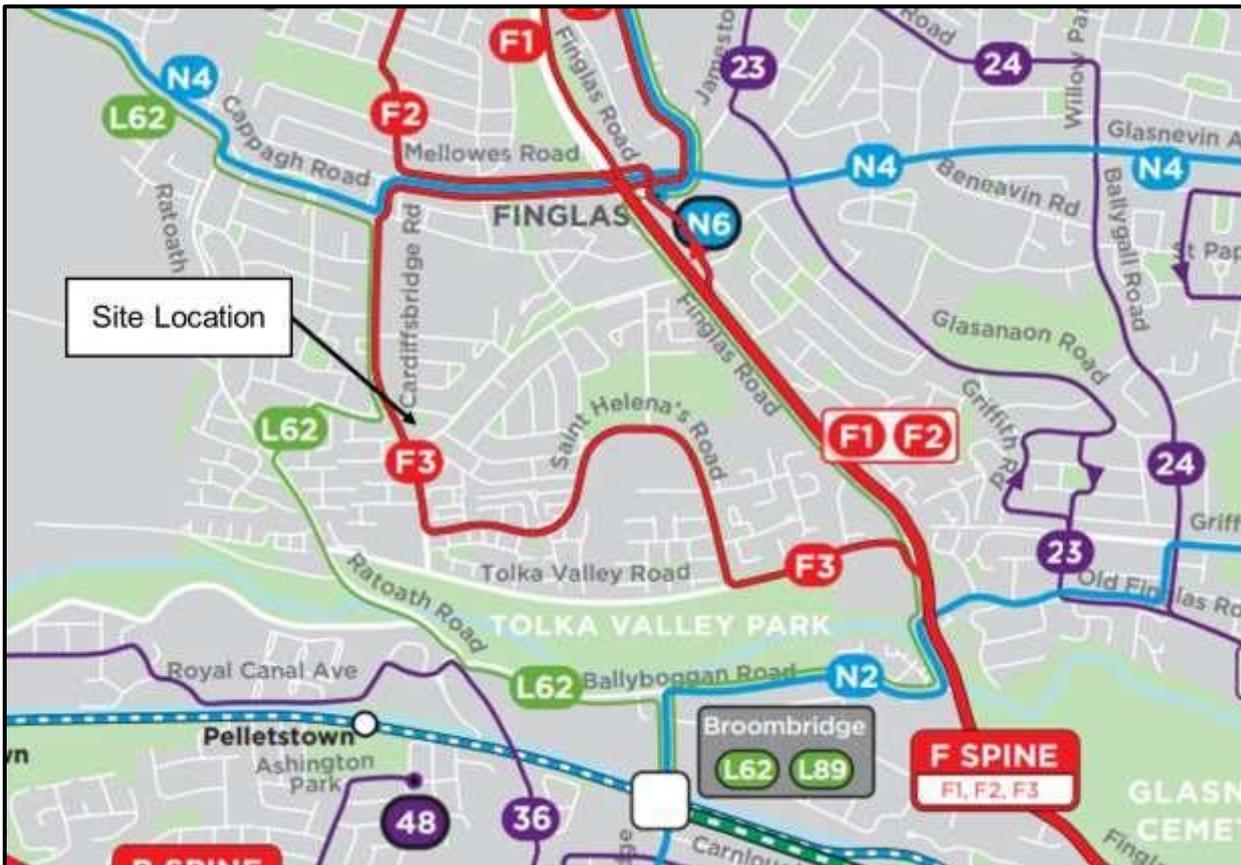


Figure 5.2: Proposed Bus Connects in the vicinity of the development (Source: Bus Connects)

Luas Finglas is the next extension of the Luas Green Line. It will create a new public transport connection between the communities of Charlestown, Finglas Village, Finglas west, St Helena's, Tolka Valley and the city centre. The proposed route is 3.9km in length and will include four new stops: St Helena's, Finglas Village, St Margaret's and Charlestown. A 350vehicle park and ride facility will be provided near the St Margaret's Road stop, close to the M50.

As seen in **Figure 5.3** overleaf, the new Luas Finglas line is to be located ca. 1.1 km to the east of the development site.

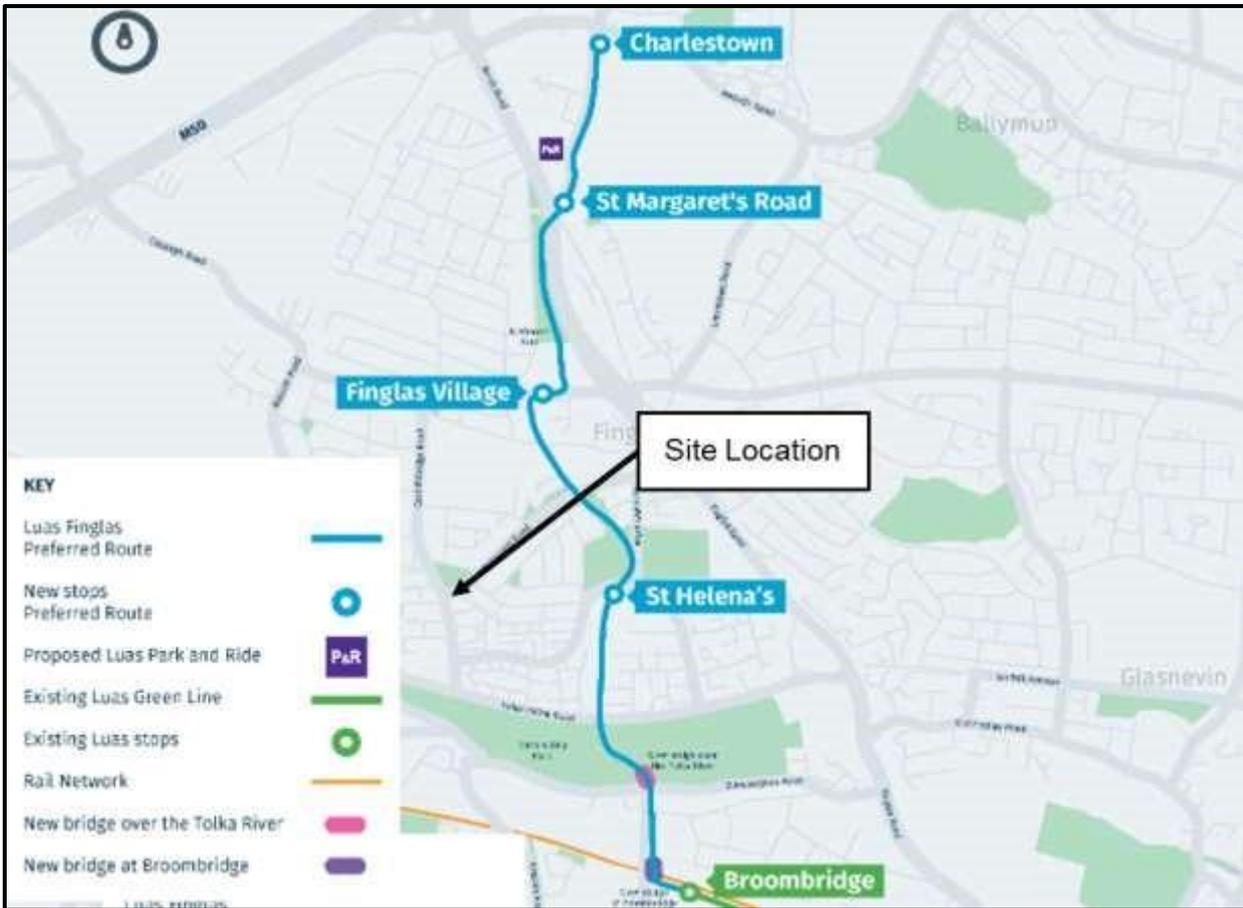


Figure 5.3: Luas Finglas Extension in the vicinity of the development (Source: Luasfinglas.ie)

5.2 Cycle Audit

Currently there are no dedicated cycle lanes in place within the scheme as well as in the immediate vicinity of the application site. Cyclists are expected to share pathways with pedestrians to access the building. The drawings indicate the presence of 175 No. cycle parking spaces in the form of 4 No. closed cycle storage areas. However, the provided cycle parking spaces should adhere to the specifications outlined in Dublin City Development Plan 2022-2028. The closed and secured cycle parking facilities are crucial for encouraging the use of cycle stands. The proposed locations are safe for bicycles and will discourage informal parking on footways or at property entrances,

NTA GDA Cycle Network Plan consisting of the Urban Network, Inter-Urban Network and Green Route Network for each of the seven Local Authority areas comprising the GDA was adopted as part of the GDA Transport Strategy 2022-2042. Secondary Route is proposed on Wellmount Road in front of the site while a Feeder Route is proposed on Cardiffsbridge Rd to the west of the site. Overall, the site is proposed to be very well connected with cycle infrastructure in the vicinity of the site, as shown in **Figure 5.4** overleaf.

Mark Gallagher

AEng, MIEI

Audit Team Observer:

Ankita Kirtane

B.Arch, MSc, MIEI

During the site visit the weather was partly cloudy with occasional sun. The road surface was dry, and the traffic levels were noted to be low across the audit period.

Previous Road Safety Audits were not available for review. The audit team reviewed the following documents and drawings provided by Malone O'Regan Consulting Engineers.

- (1) SHB4-WRF-DR-MOR-CS-P3-101 Rev 4– Proposed Site Layout
- (2) SHB4-WRF-DR-MOR-CS-P3-116 Rev 4– Proposed Sight Lines
- (3) SHB4-WRF-DR-MOR-CS-P3-117-Swept Path Analysis Refuse Truck Rev 5 (4) SHB4-WRF-DR-MOR-CS-P3-130 Rev 3 – Foul & Surface Water Drainage
- (5) SHB4-WRF-DR-SMK-ME-P01-6000 Lux plot_Ver1– Lighting Plan.

Documents/Information not supplied:

- Speed Survey
- Departures from Standards.

The terms of reference / procedure for the Audit were as per the relevant sections of the **Transport Infrastructure Ireland Road Safety Audit Standard GE-STY-01024**. The audit examined only those issues within the design relating to the road safety implications of the scheme and has therefore not examined or verified the compliance of the designs to any other criteria. The Road Safety Audit should not be treated as a design check.

The problems identified and described in this report are considered by the Audit Team to require action to improve the safety of the development and minimise accident occurrence.

All comments, references and recommendations in this safety audit are in respect of the review of information supplied by Malone O'Regan Consulting Engineers.

Section 6.2 of this report presents the findings of the Stage 1 Road Safety Audit of the proposed residential development. For development's description and site layout please refer to **Section 2**.

The information supplied to the Audit Team is also listed in **Appendix A**.

A feedback form for the Designer to complete is contained in **Appendix B**.

6.2 Problems Raised from the Road Safety Audit

The following are problems and recommendations to address the safety issues associated with the proposal. The recommendations are proposed to the designer of the scheme to reduce any safety risks associated with it.

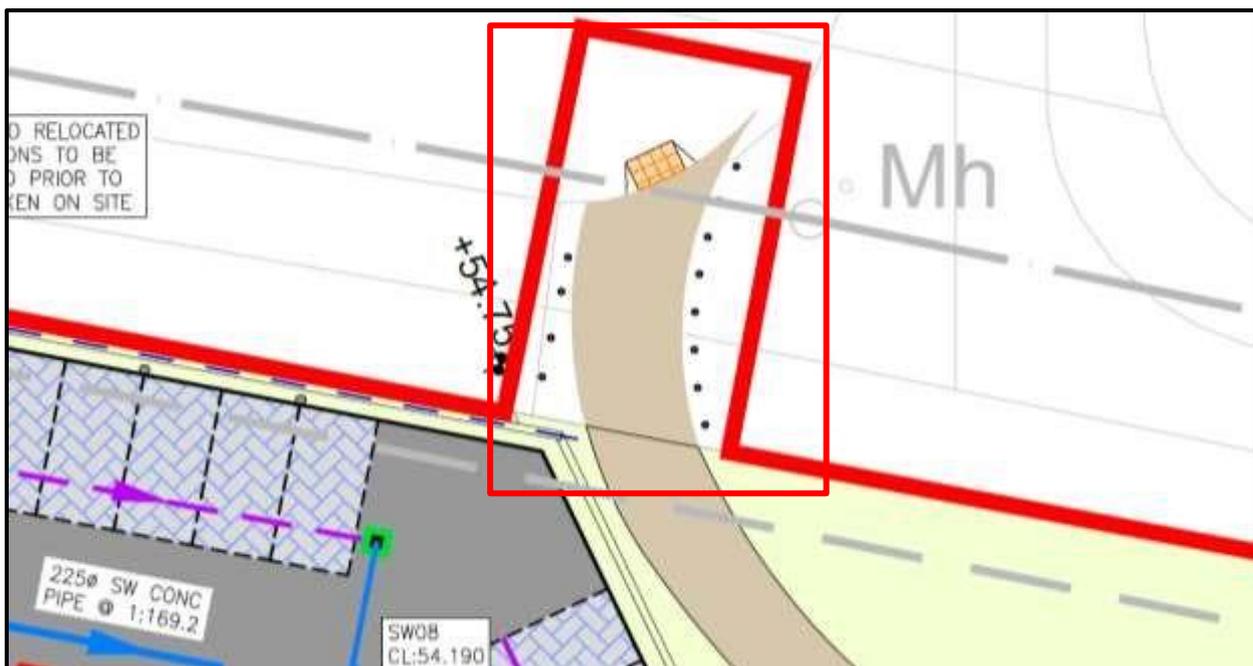
Due to ongoing review of road traffic collision data by the Road Safety Authority website, no traffic collision data could be obtained for the vicinity of the proposed development site.

6.2.1 Potential Problems Identified

Problem No.1: Crossing Point Orientation/Location

Location: Wellmount Drive

The audit team note from the provided drawings that a pedestrian crossing is proposed at the identified location. The pedestrian path is not aligned at right angles to the main carriageway. Additionally, tactile paving is only provided at one end of the pedestrian path, with none at the proposed development's end, which could create conflicts for visually impaired users. The audit team is concerned that this misalignment could lead to trips and falls for vulnerable users.



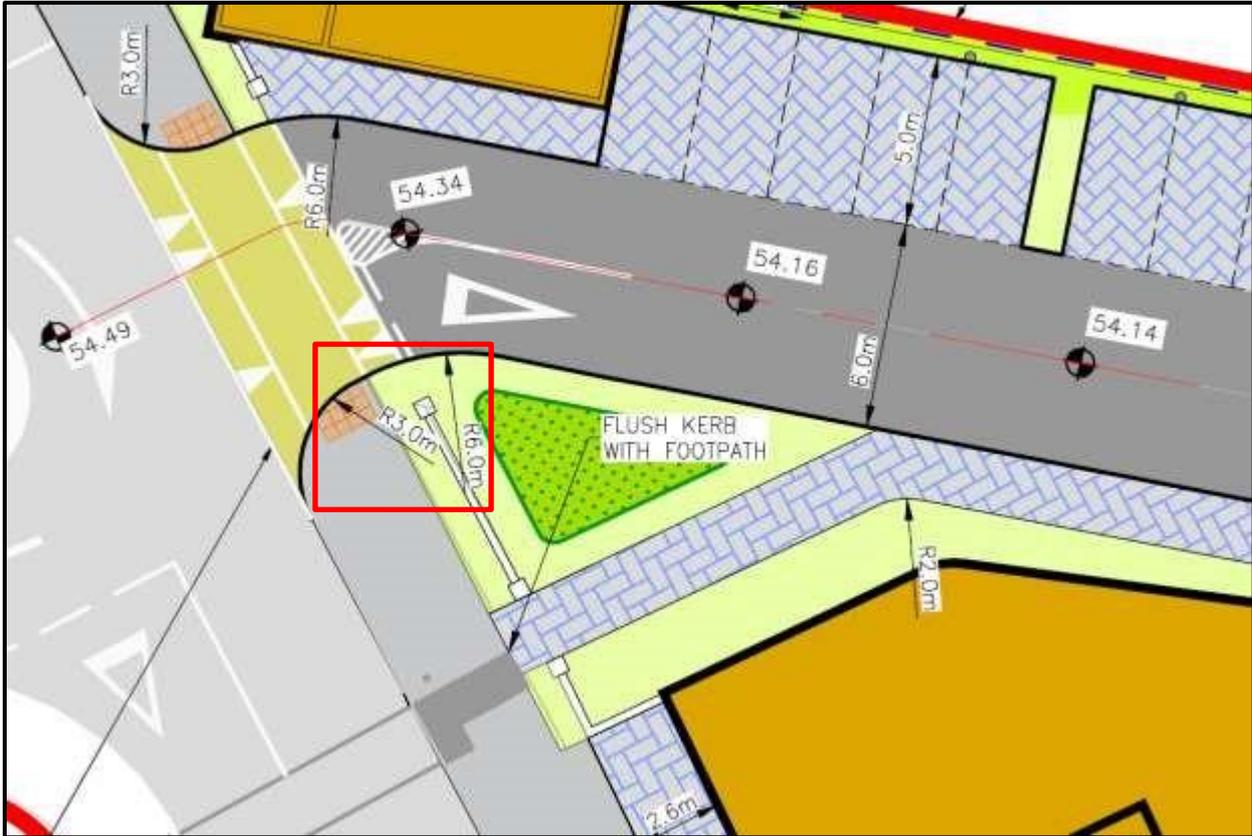
Recommendation:

The design team should ensure crossing facilities are provided on both sides of the carriageway with tactile paving and dropped kerbs for vulnerable users and ensure that it is orientated at right angles to the main carriageway.

Problem No.2: Proposed Surfacing

Location: Adjacent to Northwest Access of the Site

The audit team notes from the drawings that clarity is lacking at the specified location regarding the proposed surfacing in the area identified. It appears that the surface is not a formal proposed pedestrian access. However, integrating it with the existing pedestrian infrastructure without appropriate detailing could create a significant safety hazard for vulnerable users.



Recommendation:

The design team should ensure that measures are implemented to prevent pedestrians from accessing this surface, or that appropriate tie-in measures are detailed in the proposed drawings.

Problem No.3: Landscaping Restricting Visibility

Location: Access Road along Southeast Side of Development

The audit team note from the drawings that the proposed landscaping at the identified car park access point may obstruct drivers' sightlines to the left, potentially compromising visibility and safety for vehicles entering the car park.



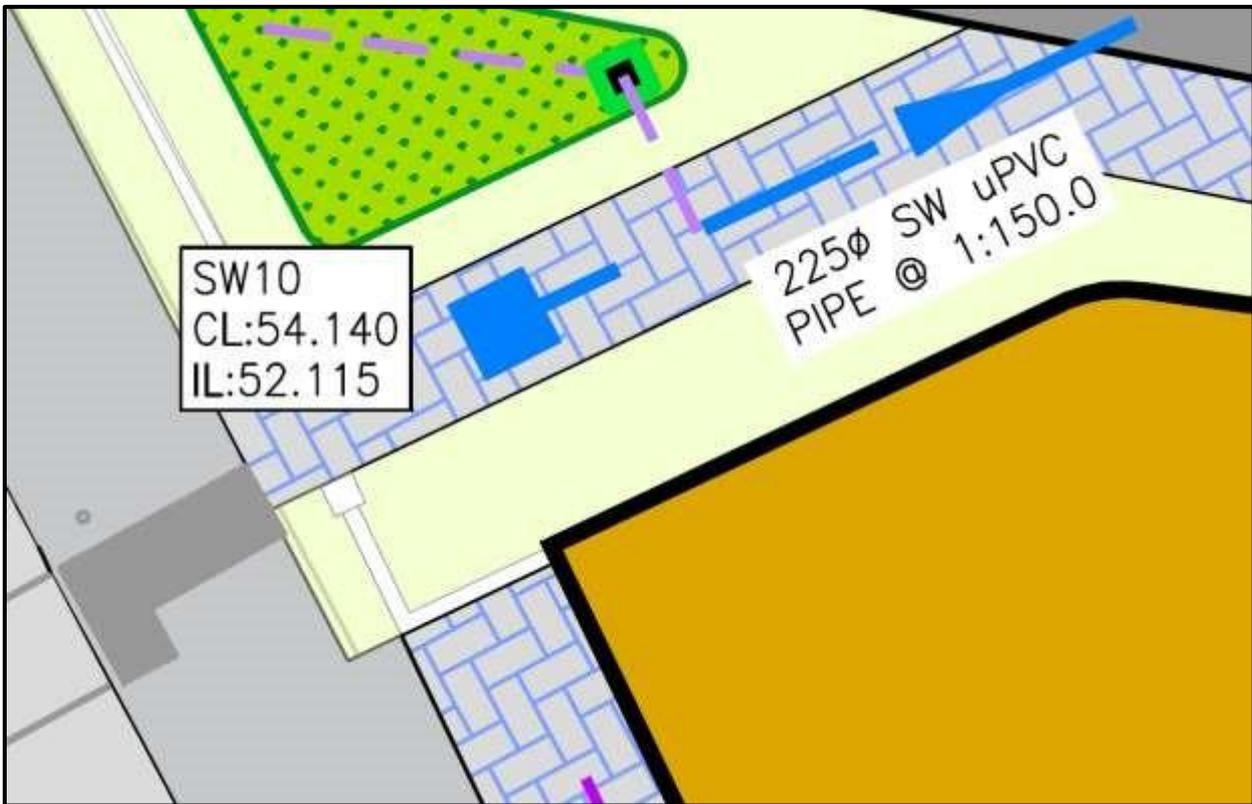
Recommendation:

The design team should ensure that the proposed landscaping does not impair visibility of internal roads and junctions or affect forward visibility.

Problem No.4: Drainage Manhole Lids

Location: Pedestrianised area

The audit team note from the provided drawings that drainage manholes are proposed within the footpath are identified which is designated for pedestrian movement. The proposed placement of drainage manholes in footpaths raises concerns. If walkways are not kept clear of gratings, or channels, and are not level with the pavement surface or should the surface be slippery, it may pose challenges for wheelchair users or individuals with mobility aids, potentially resulting in trips and falls.



Recommendation:

The design team should ensure that manholes are strategically positioned to minimise obstruction to pedestrian movement and level with the pavement surface to eliminate tripping hazards. The design team should also ensure that the manhole lids are covered with anti-slip surfacing.

Problem No.5: Public Lighting Columns in Footpath & Parking Spaces

Location: Throughout Development

The audit team note from the provided drawings that some public lighting columns are positioned with the footpath in the northern carpark which could result in potential conflicts with vulnerable users and will restrict the passage of mobility impaired users. The audit team also note that there is also a public lighting column within a car parking space in the southern carpark which will result in vehicle conflicts with the column.



Recommendation:

The design team should ensure that public lighting columns are positioned outside of pedestrian walkways and to ensure that they are positioned outside of carpark and carriageway areas. The design team should also ensure that lighting columns do not restrict users from exiting parked vehicles.

6.2.2 General Problems Identified

Problem No.6: Drainage gullies

Location: Proposed Scheme

It is understood that permeable paving is provided on pedestrianised surfaces and car parking bays. However, no road gullies are provided on other surfaces which can lead to flooding.

Recommendation:

The design team should ensure that road gullies are illustrated and appropriately placed all over the layout.

Problem No.7: Landscaping

Location: Internal Site Layout

The audit team note from the drawings provided that proposed landscaping within the development may impact the visibility of road users if positioned inappropriately. Trees, high bushes, and shrubbery should be avoided in areas where visibility is to be maintained to ensure that drivers are clearly able to see approaching vehicles and pedestrians at junctions and designated pedestrian crossing locations. This could potentially lead to instances of vehicle-vehicle or pedestrian-vehicle collisions resulting in injury.

Recommendation:

The design team should ensure that any proposed landscaping does not impact on visibility of the internal roads and junctions or forward visibility at the proposed pedestrian crossings.

7 Audit Team Statement

We certify that we have examined the drawings listed in Appendix A and examined the site by means of a site visit. This examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified to improve the DMURS compliance and safety of the scheme. The issues that we have identified have been noted in the report, together with suggestions for improvement, which we recommend should be studied for implementation.

Audit Team Leader: Adam Price: BEng (Hons), CEng, MIEI

ORS

Signed:



Date: 02nd July 2024

Audit Team Member: Mark Gallagher, MIEI

ORS



Signed:

Date: 02 July 2024

Audit Team Observer: Ankita Kirtane: B.Arch, MSc, MIEI ORS

Date: 02nd July 2024

Appendix A – Inspected Documents

The audit team reviewed the following documents and drawings provided by Malone O'Regan Consulting Engineers:

- (1) SHB4-WRF-DR-MOR-CS-P3-101 Rev 4– Proposed Site Layout
- (2) SHB4-WRF-DR-MOR-CS-P3-116 Rev 4– Proposed Sight Lines
- (3) SHB4-WRF-DR-MOR-CS-P3-117-Swept Path Analysis Refuse Truck Rev 5 (4) SHB4-WRF-DR-MOR-CS-P3-130 Rev 3 – Foul & Surface Water Drainage
- (5) SHB4-WRF-DR-SMK-ME-P01-6000 Lux plot_Ver1– Lighting Plan.

Appendix B – Designer Response Form

Job: 231860 – Proposed Social Housing Bundle 4 Development, Wellmount Road, Finglas,

Stage of Audit: Stage 1

Date Audit Completed: 02/03/2024

Problem Reference in Safety Audit Report	To Be Completed by the Designer			To be Completed Audit Team Leader
	Problem Accepted (Yes/No)	Recommendation Accepted (Yes/No)	Alternative Option (Describe) (Only complete if recommendation not accepted)	Alternative Option Accepted by Auditors (Yes/No)
P1	Yes	No	The curved outline to the pedestrian footpath on Wellmount Drive reflects the continuation of the curvature of the POS footpath and to provide for a more successful connection at the corner junction of the existing footpath. It is intended that a continuous landscape level would be provided at the interface of the POS footpath and Wellmount Drive, therefore the requirement for a dropped kerb would only be required at the existing kerb to the north of Wellmount Drive as shown on MOR drawings. Due to the presence of existing bollards, this is a no-through road, and it is proposed to introduce additional bollards to the opposite side of the new crossing point. It is also noted that a generous	Yes

			width is proposed to the pedestrian link thus allowing for greater ease to navigate. We would welcome your feedback on how this item can be closed out. As a suggestion, we can indicate on our drawings a dashed outline overlay to show the suggested right angle footpath connection	
P2	Yes	Yes		
P3	Yes	Yes		
P4	Yes	Yes		
P5	Yes	Yes		
P6	Yes	Yes		
P7	Yes	Yes		

Signed:  Designer Date: 03/07/2024.....

Signed:  Audit Team Leader Date: 03/07/2024

Signed: [Gareth Rowan](#) Employer Date: [03.07.2024](#).....

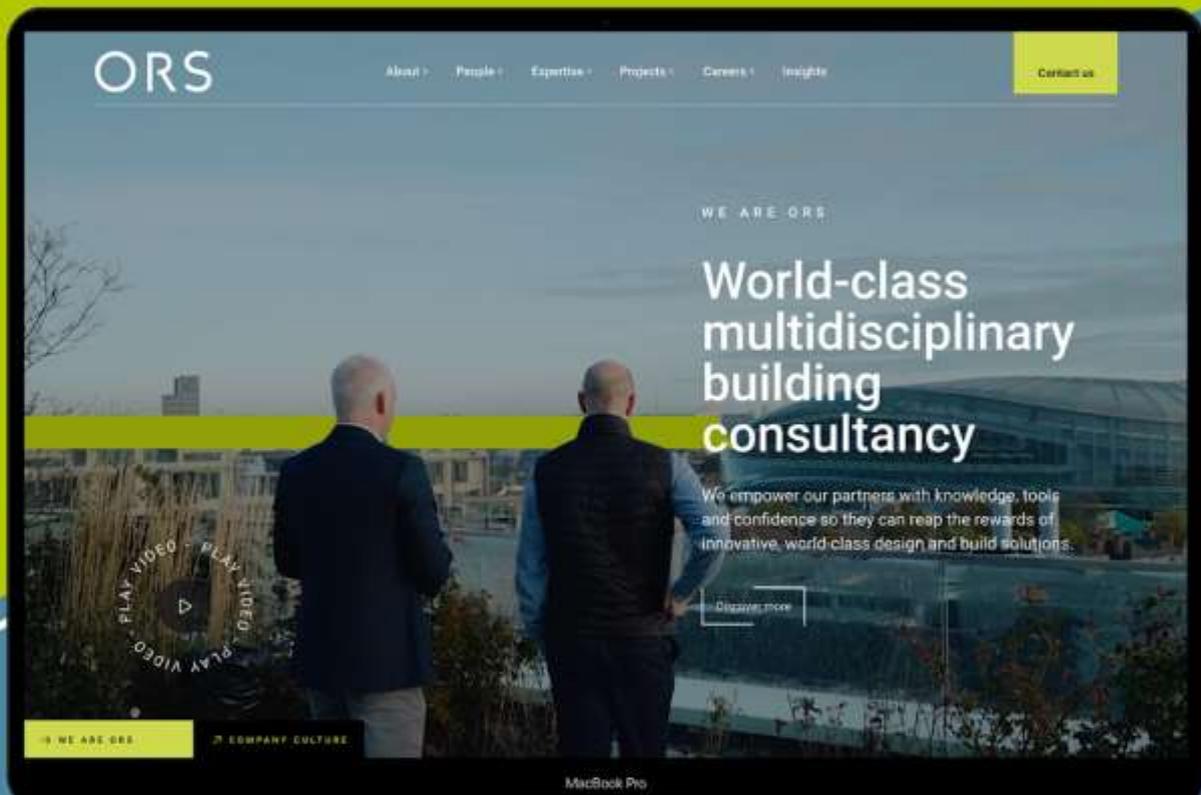
ORS

Multidisciplinary Building Consultancy



Access more information on our services and expertise by visiting our brand-new website.

Click here



Find Us Nationwide, on LinkedIn or on Youtube  

 Block A,
Marlinstown Business Park,
Mullingar, Co. Westmeath,
Ireland, N91 W5NN

 Suite: G04, Iconic Offices,
Harmony Row,
Dublin 2, Co. Dublin,
Ireland, D02 H270

 Level One, Block B,
Galway Technology Park,
Parkmore, Co. Galway,
Ireland, H91 A2WD

 Office 2, Donegal Town,
Enterprise Centre, Lurganboy,
Donegal Town, Co. Donegal,
Ireland, F94 KT35

 Office 4, Spencer House,
High Road, Letterkenny,
Co. Donegal,
Ireland, F92 PX8N

 NSQ2,
Navigation Square,
Albert Quay, Cork
Ireland, T12 W351