

Car Parking Rationale and Mobility Management Plan

Proposed Strategic Housing Development at Fosterstown North,
Dublin Road / R132, Swords, Co. Dublin

April 2022

Waterman Moylan Consulting Engineers Limited

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

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No 1	April '22	P. Ingle	J. Gibbons	E.Caulwell

Comments

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1. Introduction

Waterman Moylan has been appointed by J. Murphy (Developments) Limited to provide Engineering services on the development of lands at lands at Fosterstown North, Dublin Road / R132, Swords, Co. Dublin.

This report has been prepared as part of a Strategic Housing Development planning submission to An Bord Pleanála, for the proposed development which will consist of 645no. residential units (comprising of 208no. 1-bedroom units, 410no. 2-bedroom units, and 27no. 3-bedroom units), in 10no. apartment blocks, with heights ranging from 4no. storeys to 10no. storeys, including undercroft / basement levels (for 6no. blocks). The proposals include 1no. community facility in Block 1, 1no. childcare facility in Block 3, and 5no. commercial units (for Class 1-Shop, or Class 2- Office / Professional Services or Class 11- Gym or Restaurant / Café use, including ancillary takeaway use) in Blocks 4 and 8. The proposal includes all associated and ancillary development.

The sections to follow describe the development's proximity to existing and future high-quality public transport, as well as the surrounding employment opportunities and amenities, which would support reduced parking requirements within the development. The following document is aligned with and complements the Carparking Strategy Chapter of the accompanying Traffic Impact Assessment prepared by OCSC which is included as part of this application under a separate cover.

This report comprises two distinct sections:

- a) Car Parking Rationale which sets out the logic and reasoning behind the level of car parking proposed, and;
- b) Mobility Management Plan which provides details for incentives and measures to be put in place in order to increase awareness of alternative public transport and walking/cycling options so as to reduce the need for private cars.

2. Site Description

The site is located in Fosterstown, Swords, Co. Dublin and is bound to the north by a greenfield site, which forms the northern portion of the Fosterstown Masterplan, to the east by the R132 and to the south and west by the Boromimhe residential development. The subject site is located 2km north of Dublin Airport and 1km south of Swords Main Street.

Refer to Figure 2-1 for the location of the proposed development.



Figure 2-1: Area of Proposed Development (image taken from Google Maps)

2.1 Existing Development

The total area for the proposed development works is approximately 4.635 hectares and is currently greenfield and includes part of the R132. The site falls from the existing high point in the southwest corner with a level of 47.88m OD Malin to the low point in the northeast corner of the site with a level of 36.75m OD Malin. The site slopes sharply to the northeast with an average slope of 1:34. There is an existing watercourse (Gaybrook Stream) along the entirety of the northern boundary of the site which flows from west to east. The site is currently accessed by a gate from the R132.

2.2 Proposed Development

The proposed development comprises a Strategic Housing Development of 645 no. residential units (comprising 208 no. 1 bedroom units, 410 no. 2 bedroom units, and 27 no. 3 bedroom units), in 10 no. apartment buildings, with heights ranging from 4 no. storeys to 10 no. storeys, including undercroft / basement levels (for 6 no. of the buildings). The proposals include 1 no. community facility in Block 1, 1 no. childcare facility in Block 3, and 5 no. commercial units (for Class 1-Shop, or Class 2- Office / Professional

Services or Class 11- Gym or Restaurant / Café use, including ancillary takeaway use) in Blocks 4 and 8. The proposal includes all associated and ancillary development.

The development includes a total of 363 no. car parking spaces (63 at surface level and 300 at undercroft / basement level). 1,519 no. bicycle parking spaces are provided at surface level, undercroft / basement level, and at ground floor level within the blocks / pavilions structures. Bin stores and plant rooms are located at ground floor level of the blocks and at undercroft / basement level. The proposal includes private amenity space in the form of balconies / terraces for all apartments. The proposal includes hard and soft landscaping, lighting, boundary treatments, the provision of public and communal open space including 2 no. playing pitches, children's play areas, and an ancillary play area for the childcare facility.

The proposed development includes road upgrades, alterations and improvements to the Dublin Road / R132, including construction of a new temporary vehicular access, with provision of a new left in, left out junction to the Dublin Road / R132, and construction of a new signalised pedestrian crossing point, and associated works to facilitate same. The proposed temporary vehicular access will be closed upon the provision of permanent vehicular access as part of development on the lands to the north of the Gaybrook Stream. The proposal includes internal roads, cycle paths, footpaths, vehicular access to the undercroft / basement car park, with proposed infrastructure provided up to the application site boundary to facilitate potential future connections to adjoining lands.

The development includes foul and surface water drainage, green roofs and PV panels at roof level, 5 no. ESB Substations and control rooms (1 no. at basement level and 4 no. at ground floor level within Blocks 2, 4, 7 and 8), services and all associated and ancillary site works and development.

3. Public Transport, Employment and Amenities

3.1.1 Proximity to Existing Public Transport

The 4 No. bus operators (Dublin Bus, Go Ahead, Bus Eireann and Swords Express) offer a variety of alignments to Dublin City centre and beyond to UCD as well as catering for more local trips to Swords village and Dublin Airport. The range and frequency of these services are set out below.

There are primarily three bus corridors serving the Fosterstown / south Swords area,

- Eastwards to the M1 motorway via Holywell and on to Dublin City via the Port Access Tunnel
- Southwards via the R132 regional road to Dublin City and Dublin Airport
- Southwestwards via Forest Road to Dublin Airport

Swords-City Centre via M1

There are some 20 No. services between Swords and the City Centre via the M1 during the AM peak hour. See Table 3.1.

Route	Operator	Origin	Destination	Via	Frequency (Peak) Mins
41X	Dublin Bus	Knocksedan/ Swords manor	UCD Belfield	Port Tunnel	7 peak trips
42D	Dublin Bus	Portmarnock	DCU	Port Tunnel	1 peak trip
142	Dublin Bus	Portmarnock	UCD Belfield	Port Tunnel	5 peak trips
500/X	Swords Express	Abbeyvale/ Swords Manor	Dublin City Centre	Port Tunnel	3 peak trips
504	Swords Express	Rathingle, Swords	Dublin City Centre	Port Tunnel	1 only (0 peak)
505	Swords Express	Forest Road	Dublin City Centre	Port Tunnel	2 peak trips
506X	Swords Express	Miller's Glen	Dublin City Centre	Port Tunnel	1 peak trip
507	Swords Express	Abbeyvale/ Swords Manor	Dublin City Centre	Port Tunnel	1 peak trip

Table 3.1: Services between Swords and City Centre via M1

Swords-City Centre/Dublin Airport via R132

There are some 14 peak hour services per day between Swords and the City Centre/Dublin Airport via the R132, in the AM peak hour. See Table 3.2.

Route	Operator	Origin	Destination	Via	Frequency (Peak) Mins
33	Dublin Bus	Balbriggan/ Skerries	Dublin City Centre	R132	3 peak trips
33A	Go Ahead	Balbriggan	Dublin Airport	R132	1 peak trip
41	Dublin Bus	Swords Manor	Dublin City Centre	R132	3 peak trips
41B	Dublin Bus	Rolestown	Dublin City Centre	R132	1 peak trip
41C	Dublin Bus	Swords Manor	Dublin City Centre	R132	3 peak trips
500X	Swords Express	Miller's Glen	Dublin City Centre	R132	2 peak trip
501X	Swords Express	Abbeyvale/ Swords Manor	Dublin City Centre	R132	1 peak trips
506X	Swords Express	Abbeyvale/ Swords Manor	Dublin City Centre	R132	1 peak trip

Table 3.2: Services between Swords and City Centre / Dublin Airport via R132

Swords-Dublin Airport via Forest Road

There are some 3 No. services between Swords and Dublin Airport via Forest Road. See Table 3.3.

Route	Operator	Origin	Destination	Via	Frequency (Peak) Mins
102	Dublin Bus	Portmarnock	Dublin Airport	Forest Road	3 peak trips

Table 3.3: Services between Swords and Dublin Airport via Forest Road

Peak Frequency – AM Peak House – Inbound

From Tables 3.1-3.3, the peak frequency of Bus services between Swords and City Centre / Dublin Airport is 37 buses per hour equivalent to an average frequency or one bus per 1.5-2.0 minutes.

Access to these services are available at the four number bus stops immediately adjacent the site, asset out in Table 2.4 and Figure 3.1 below.

Bus Stop No.	Location on Map	Distance to site	Routes served
3694	R132 (Pinnock Hill)	30m	33, 33A, 41, 41B, 41X, 197, 500X, 501, 501X, 506X
3695	R132 (Pinnock Hill)	30m	33, 33A, 41, 41B, 41X, 197, 500X, 501, 501X, 506X
5028	L2300	450m	41C, 41X, 500, 501, 502, 503, 504, 505
7115	L2305 (Nevinstown Lane)	300m	41X, 197, 500, 500X, 501, 502, 503, 504, 505, 506X

Table 3.4: Bus Stop Location / Route Plan

It is acknowledged that these services will be replaced by Bus Connects, including the Swords to City Centre Core Bus Corridor Route, as discussed further below. However, until Bus Connects is in place, these routes would serve the development site and provide access to local services. Refer to Figure 3-1 below for a map showing the bus stop locations.

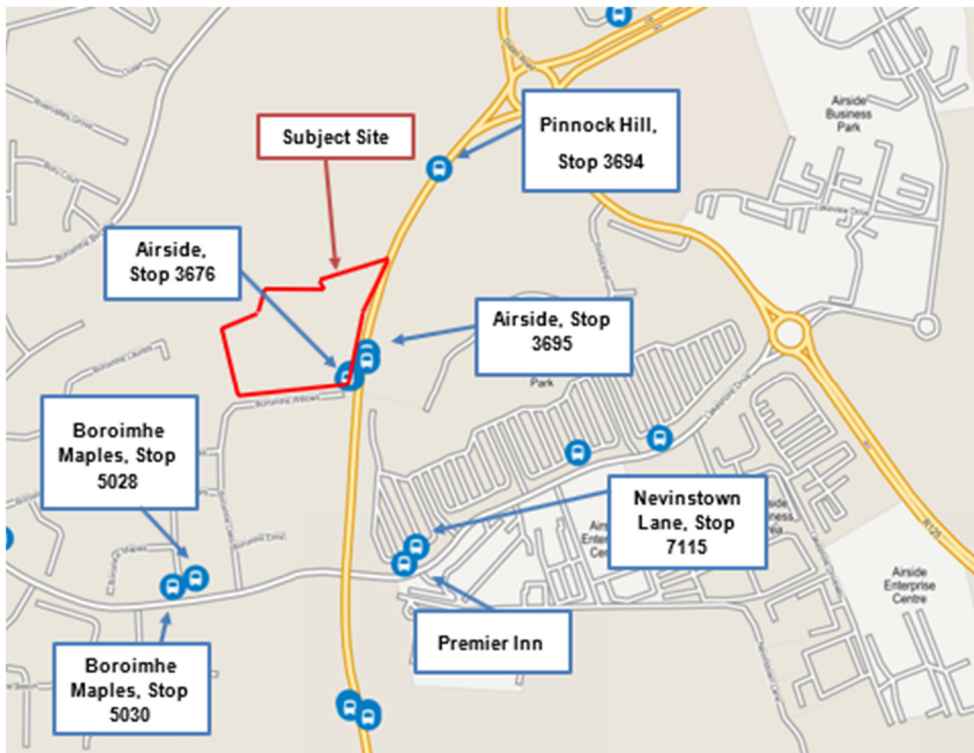


Figure 3-1: Dublin Bus and Swords Express Bus Stop Locations

3.1.2 Proximity to Future/Planned Public Transport

Bus Connects

As shown in Figure 3-2 below, the proposed development is immediately adjacent to a proposed route of Bus Connects which will connect Swords directly to Dublin City Centre. Bus Connects is a programme of investment in the greater Dublin area bus network which aims to overhaul the current bus system to deliver a more efficient, reliable, and high-frequency bus network. It is estimated that the Bus Connects service will improve current journey times to the city centre by 40% - 50% and mitigate against any future increase in journey times. The improved journey time to the city centre will encourage a greater modal shift towards the bus and bike.



Figure 3-2: Site Proximity to BusConnects Route

The route will run service to the City Centre running at frequency of a bus every 3-5 minutes along the Core Bus Corridor Route 2 (A spine) indicated in Figure 3-2. Furthermore peak hour express routes will continue to operate via the M1 at a frequency of a bus every 3-5 minutes. The development lands are therefore within less than 5 minutes walking of a high frequency bus service. Once Bus Connects is operational, the total travel time from the proposed development to the City Centre will be 40 minutes via the R132 / Core Bus Corridor 2 / Spine A. The BusConnects preliminary business case was approved by Government in March 2022 with the application for the Swords to City Centre Corridor scheduled to be submitted to An Bord Pleanála in the latter half of 2022.

Metro Link

Metro Link is a proposed high-frequency, high-capacity rail line to run between Swords and Charlemont via Dublin Airport and the City Centre. The proposed Fosterstown Station as shown in Figure 3-3 below is adjacent to the proposed entrance of the development. It will run mostly underground and connect to the upgraded LUAS Green line in Dublin City Centre. Travel time from the city centre to Swords will be 25 minutes.

The preferred route was subject to a public consultation in March 2019. The TII provided an update in March 2022 outlining that a preliminary business case for the Metrolink was submitted to the Department of Transport for approval in December 2021. It is anticipated that the Metro Link Rail Order will be submitted in 2022.

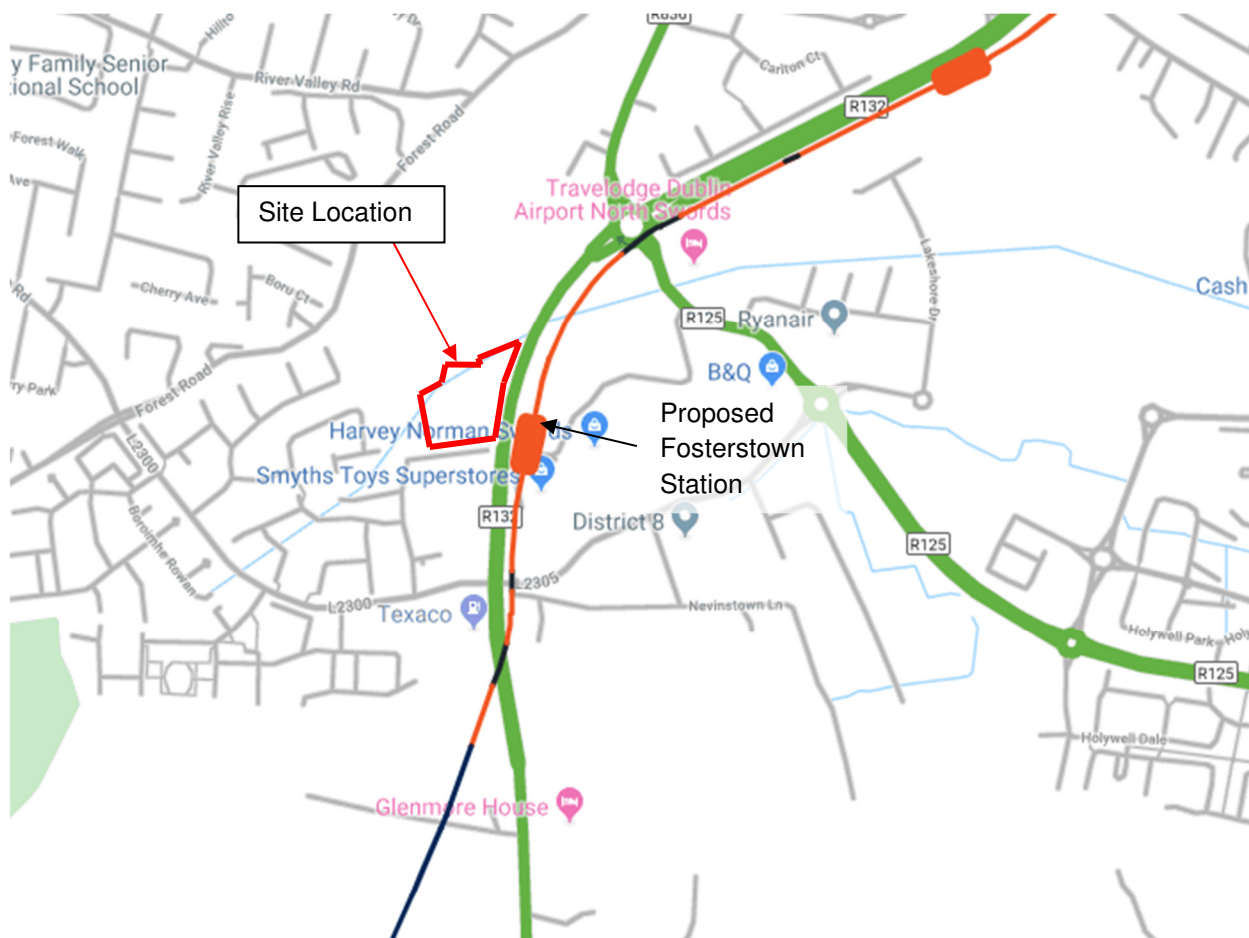


Figure 3-3: Site Proximity to Metro Link

3.1.3 Proximity to Employment Centres

The development is located within 1.2km of the Airside Business Park, a c.14-minute walk from the south of the subject site, refer to Figure 3-4 for the google map travel time. The proposed development is also a 13-minute walk or 2-minute cycle to Swords Main Street which has direct access to a number of

employment centers including Swords Business Park and North Dublin Corporate Park, refer to Figure 3-5 for further details.

Swords Town has many available amenities and services including industrial and retail parks, banks, supermarkets, churches, shops, pubs, cafes, and restaurants as well as Swords Castle, the Pavilion Shopping Centre, the Fingal County Council headquarters. Swords is off the M1 motorway and has close proximity to Dublin Airport.

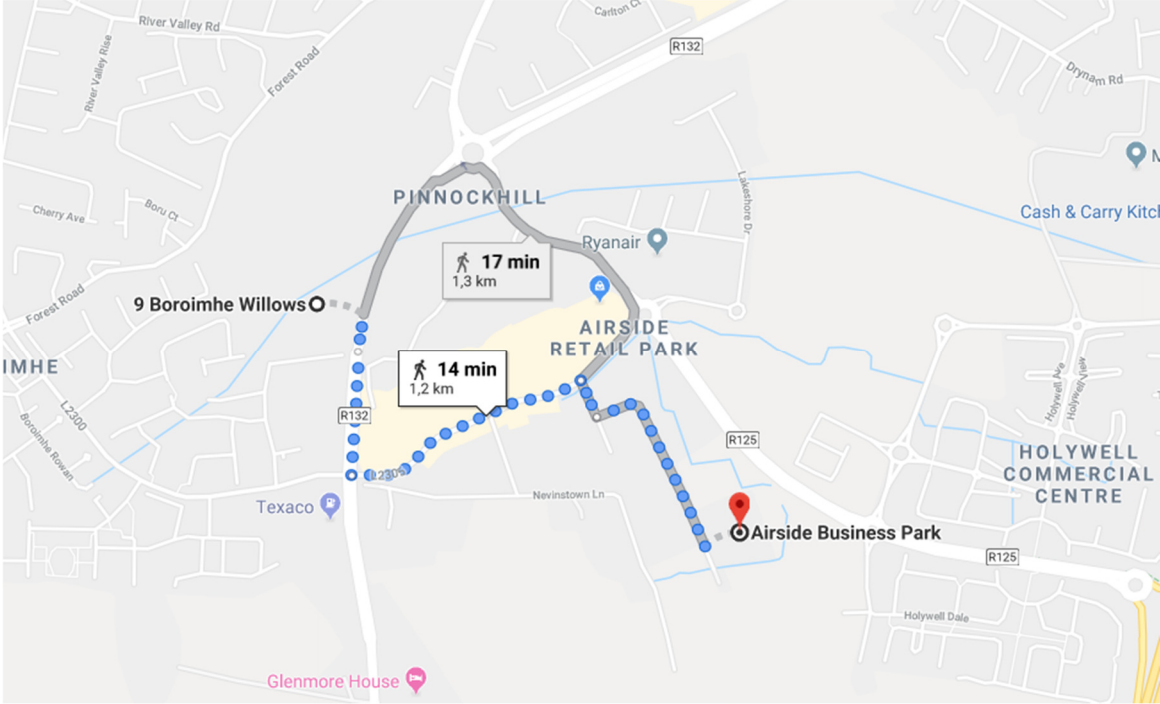


Figure 3-4: Walk routes to Airside Business Park from Subject Site

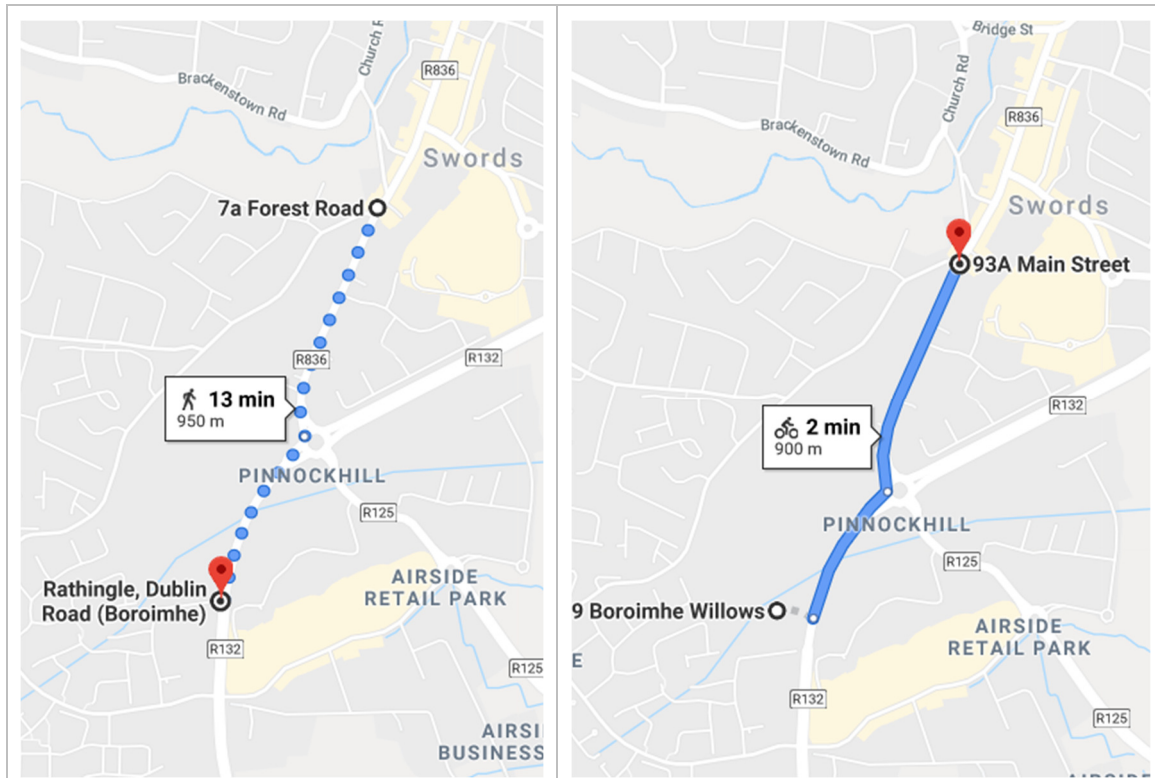


Figure 3-5: Walk and Cycle routes to Swords Mains Street from Subject Site

4. Pedestrian & Cycling Infrastructure

4.1 Overview of Infrastructure

4.1.1 Proposed Development's Infrastructure

Pedestrian and cyclists' connectivity is provided internally along the site's roads from the proposed cycle track on the main R132 surrounding the development. A pedestrian and cycle way has been incorporated along the open green space area with provision for future connections to surrounding developments.

Cycling spaces have been designed in accordance with the Apartment Guidelines and County Development Plan.

The proposed development provides a total of 1,519 no. bicycle parking spaces. 828 no. bicycle parking spaces will be provided at basement level, 244 no. ground floor secure bicycle parking spaces, 100 no. store secure bicycle parking spaces and 347 no. external spaces at ground surface level throughout the site.

The total number of bike spaces provides for more sustainable travel movements and is greater than the number required under the Fingal Development Plan (809 no. spaces) and the Apartment Guidelines 2020 (1432 no. spaces).

It is also proposed to construct a left in / left out arrangement at the entrance of the development which will include pedestrian and cyclist facilities.

4.1.2 Surrounding Cycling Infrastructure

There are a number of cycle facilities in the local area as shown in Figure 4-1 below. There are separated cycle lanes on the L2305 near to the masterplan site, and on-road cycling is possible along many local roads.

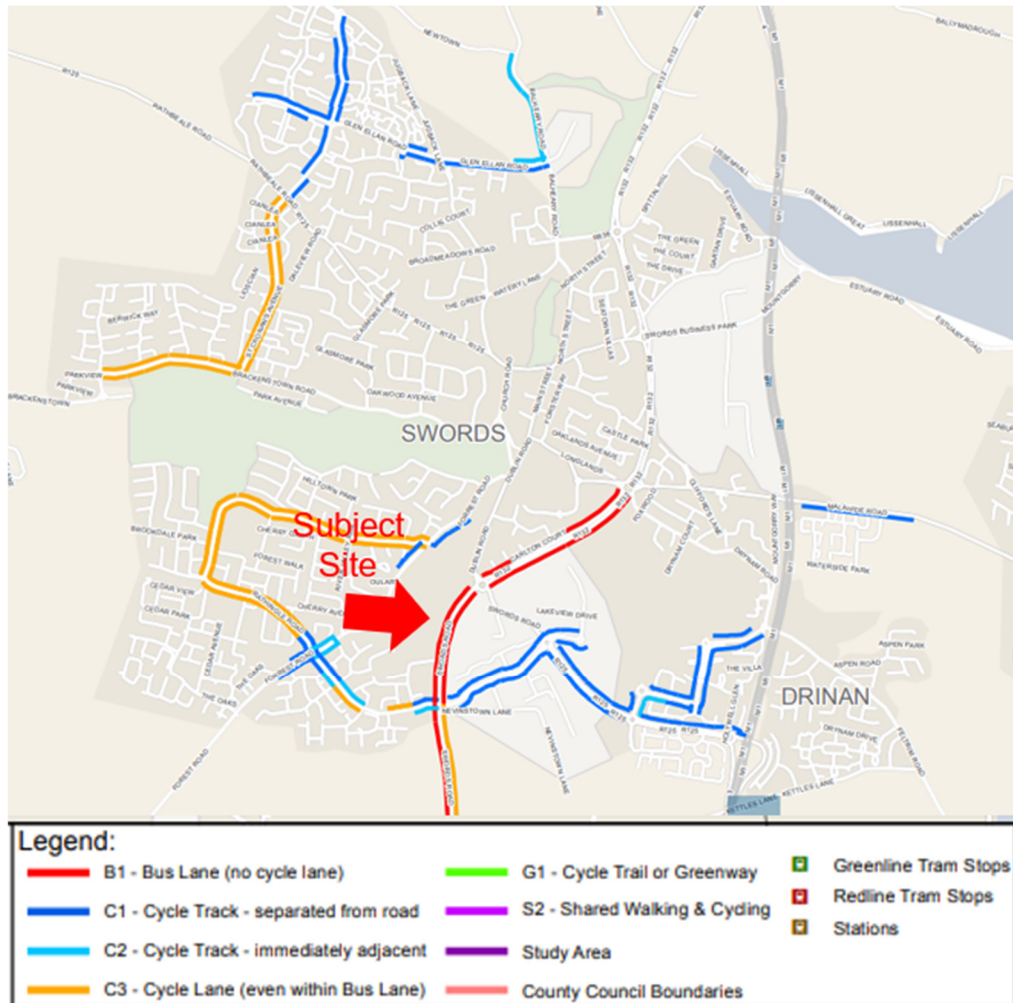


Figure 4-1: Existing Local Cycle Infrastructure - Extracted from GDA Cycle Network Plan

Additionally, according to the GDA Cycle Networks Plan will further improve the cycle facilities by providing dedicated cycle lanes from Swords to the City Centre. Refer to Figure 4-2 which shows the proposed cycle network in the vicinity of the site.

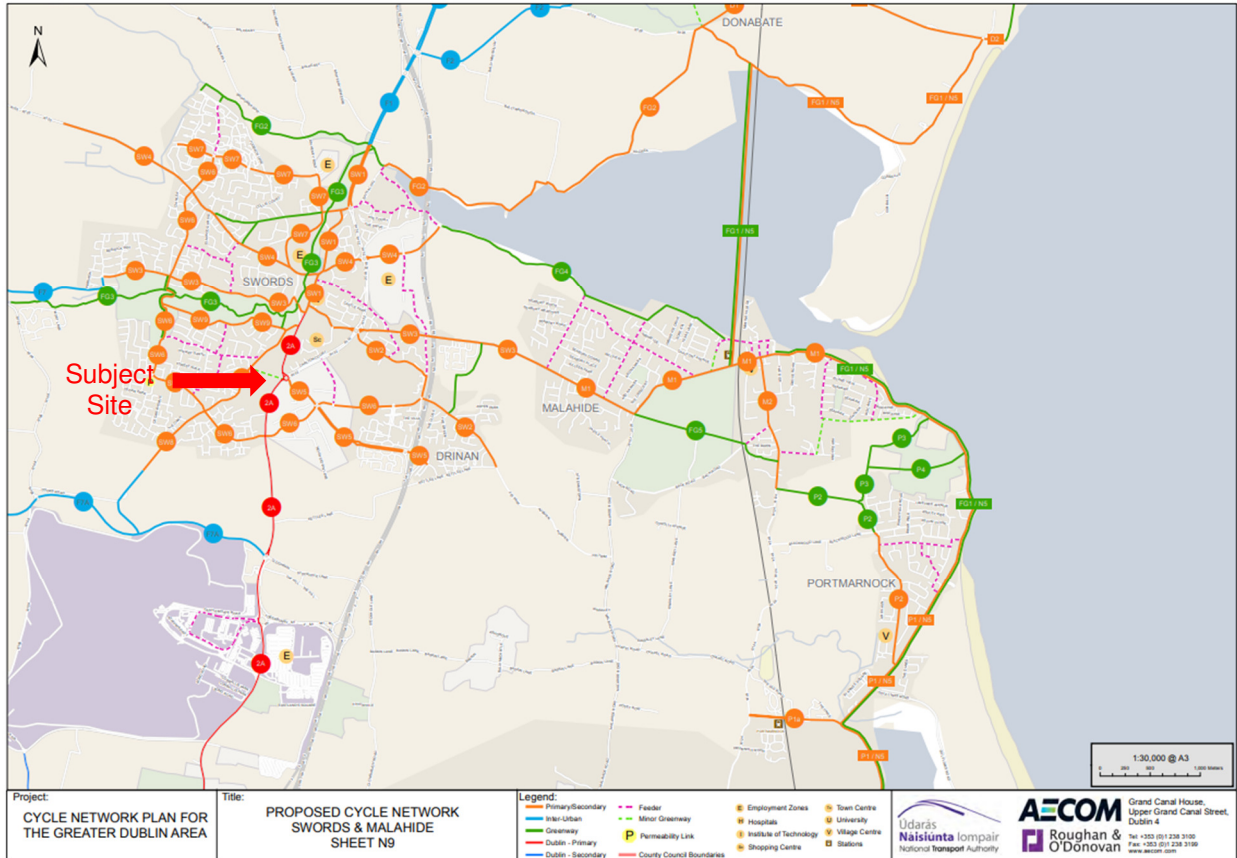


Figure 4-2: Proposed GDA Cycle Network Plan

Dublin City Centre is also accessible from the proposed development by bike. The cycling time to Dorset Street from the Masterplan Lands is under 50 minutes, as shown in Figure 4-3.

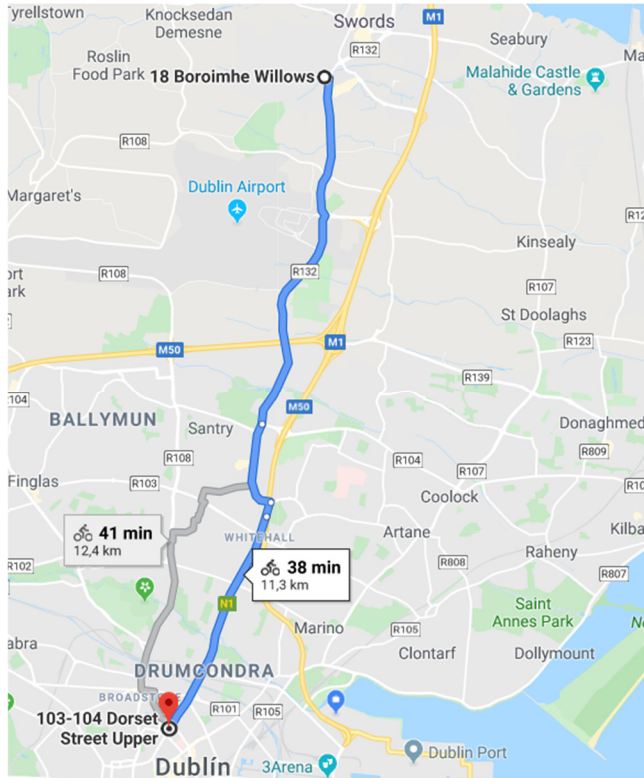
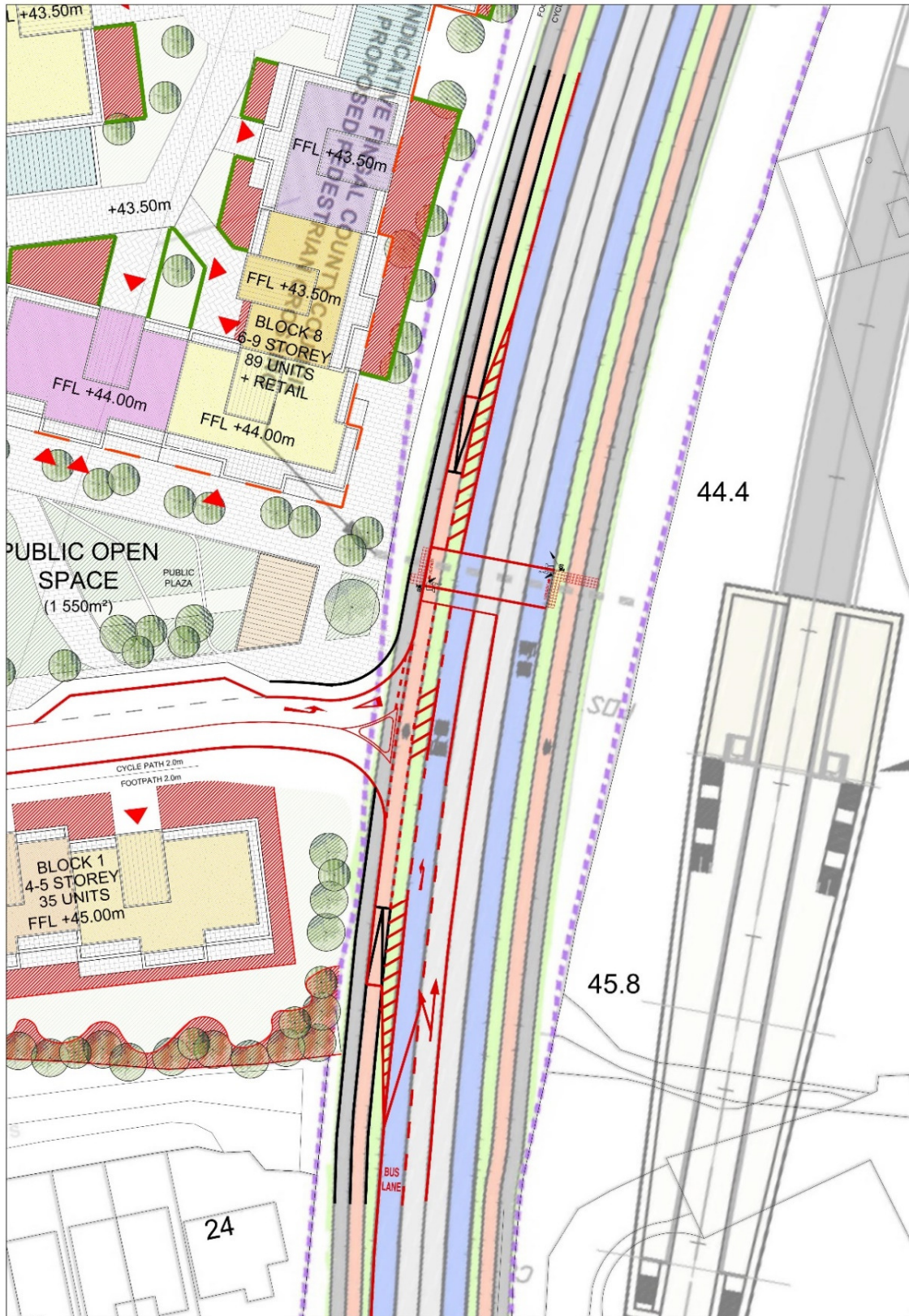


Figure 4-3: Cycle route to Dublin City Centre

As part of the Bus Connects project, there will be specific footpaths, cycle lanes and bus lanes on R132 directly adjacent to the proposed development. Figure 4-4 indicates the current preferred bus connects and metrolink route, including the Fosterstown metrolink stop and demonstrates the proposed temporary access and pedestrian crossing will not prejudice the future BusConnects or Metrolink proposals.

As part of the works for the proposed development, a footpath and a cycle lane will be provided on the eastern boundary of the site. In the future will form part of a continuous path along R132 connecting into the Bus Connect Plan network.



PLAN VIEW - FUTURE LEFT IN LEFT OUT JUNCTION

Figure 4-4: Future Bus Connects Proposed Road section immediately adjacent to the site

4.1.3 Site Access Points

Left In / Left Out Proposal

It is proposed to construct a temporary left in/left out junction to access from the R132 which can be closed off when the roads infrastructure set out in the Fosterstown Masterplan is constructed and access via this infrastructure is available to connect to the public roads.

Details of the proposed left in / left out junction and the rationale behind this proposal have been discussed in detail in the Waterman Moylan document “Engineering Assessment Report”, refer to Section 7.2 of the document for further information.

The proposed development has been carefully designed to promote strong levels of connectivity in favour of pedestrians and cyclists. Connectivity throughout the scheme is heavily weighted towards the pedestrian and cycle access from east to west through the site to other residential developments and to the northeast to Swords town centre. Whilst the proposed development provides the opportunity for future pedestrian and cycle connectivity to the existing Boraimhe residential estate to the west, there is an area of land not in the applicant’s ownership between the subject site and the Boraimhe estate, which militates against providing the connections into this adjoining development. The applicant understands that this area of land is in the ownership of a third party and it is not within their gift to make the connections to Boraimhe. However, the proposed development includes for cycle and footpath infrastructure up to the application site boundary to facilitate potential future connections to the adjoining lands, that will need to be delivered by the Planning Authority through their statutory powers.

Straight and through access roads have been avoided to reduce the speed of traffic and eliminate through traffic. The connectivity throughout the site is illustrated in Figure 4-5 which shows the proposed access locations and access type.

It is considered that the proposed development is fully compliant with the connectivity objectives of DMURS.

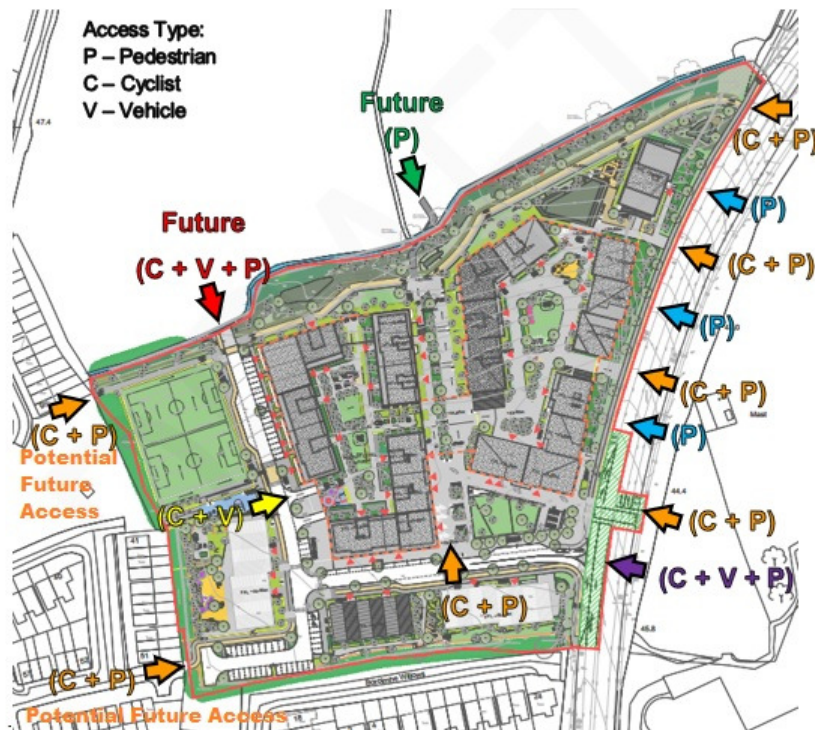


Figure 4-5: Site Access Points

4.2 Cycle Parking Rational

4.2.1 Fingal County Council Cycle Parking Required

The Fingal Development Plan 2017-2023 as well as the National Design Standards for New Apartments were consulted with regards to cycle parking requirements. The National Standards are more onerous than the Fingal County Council Development Plan standards for apartments. The number of spaces provided is greater than that required by the Fingal Development Plan and the Apartment Guidelines.

Table 12.9 of the 'Fingal Development Plan 2017-2023' sets out the cycle parking requirements as follows:

Table 4-1 Total cycle parking spaces required

Land-Use	FCC Requirements	Proposed Development	Number of Bicycle Parking Spaces Required
Apartment	1 per unit	645	645
Retail/Retail services	1 per 100 sqm	1,330 sqm	14
Crèche	0.5 per classroom	42 staff 197 children	21
Visitor Spaces	1 per 5 apartment unit	645	129
Total			809

4.2.2 Design Standard for New Apartments – March 2018 – Cycle Parking Required

The Design Standards for New apartments, who set out a requirement of 1 long stay space per bedroom and 1 visitor space for every two units, have also been reviewed with regards to cycle parking requirements and are set out in Table 4-2 below.

Table 4-2 Bicycle Design Standards for New apartments

Land Use	Beds/Units		Long stay parking required (National Standards)	Short stay parking required (National Standards)
Residential – Long Stay	1,109 beds	1 space per bedroom	1,109	
Residential – Short Stay	645 units	1 space per 2 units		323
Total				1432

4.2.3 Cycle Parking Proposed

The proposed development will provide a total of **1,519** cycle spaces for the apartments and retail units, with 347 spaces at the surface level, 244 spaces at the ground floor level in secure parking, 100 spaces within the store secured parking, and 828 basement spaces. The location of the cycle parking can be seen on the accompanying architect's drawings.

The proposed cycle parking is in excess of that required by both the County Development Plan and the Design Standard for New Apartments and therefore the required number of spaces is hence considered both acceptable and a means of aiding a modal shift to cycling.

5. Proposed Car Parking Provision

The total car parking proposed for the apartments is 330 spaces with 300 spaces at undercroft / basement level and 30 spaces at the surface level. A total of 10 car spaces (including 5 no. drop-off spaces) are proposed for the childcare facility, and 23 spaces are proposed for the community facility and commercial units, which will be provided at surface level. An overall total of 363 car parking spaces will be provided within the development. The rationale and justification for the car parking spaces has been discussed in detail in the following sections.

5.1 Fingal County Council Standards

Table 12.8 of the 'Fingal Development Plan 2017-2023 sets out depending on the land use the norm and maximum car parking standards as shown in Table 5-1. Table 5-1 also outlines the breakdown of the carparking spaces provided on completion of the development.

Table 5-1 Car Parking Required and Provided

Land-Use	Max FCC Requirements	Units / Staff Members	Norm / Maximum No Car Parking Spaces
Apartment	1 per 1 bed unit	208	
	1.5 per 2 bed unit	410	495 (norm)
	2 per 3 bed unit	27	
Visitors	1 per every 5 units	645	129 (norm)
Crèche	0.5 per classroom	42 staff	10 (max)
		197 children	
Community Facility and Commercial units	1 per 30 sqm	1,330.5 m ²	23 (max)
Total			657

Based on Fingal County Council maximum car parking standards as represented above, the maximum number of spaces required for the overall development is 657no. car parking spaces. However, The Fingal County Council Development Plan currently includes standards which limit the amount of car parking at new developments, especially places of work and education. Employment-based developments that are close to public transport need fewer car parking spaces. An allowance for a reduction in car parking is given to areas which are within a Zone 1 category in the Fingal Development Plan, namely:

- Within 1600m of DART, Metro, Luas or BRT, (existing or proposed);
- Within 800m of a Quality Bus Corridor;
- Zoned MC Major Town Centre;
- Subject to a Section 49 Scheme;

In this case, the proposed development will be located 50m from the proposed Metro Link station across the R132, i.e. within 1600m, and 50m from the Swords Quality Bus Corridor and 10m from Dublin Bus

Stops, i.e. within 800m, and therefore this development meets multiple criteria for reasonable grounds to minimise car parking provision for the residential apartments and commercial elements. The proposed development is well located in terms of public transport and proximity to amenities.

5.2 National Policy on Parking - Design Standards for New Apartments; Guidelines for Planning Authorities

In December 2020, a revised version of the document *Sustainable Urban Housing: Design Standards for New Apartments* was released, and it has been noted that the parking standards set out in this document see to achieve a considerably lower parking ratio than those contained in the Fingal Development Plan 2017-2023 in respect of Apartment Developments.

The following extracts from the “Design Standards for New Apartments – March 2020” summarise the guidelines for parking:

“The quantum of car parking or the requirement of any such provision for apartment development will vary, having regard to the types of location in cities and towns that may be suitable for apartment development, broadly based on proximity and accessibility criteria”

“In larger scale and higher density developments, comprising wholly of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimised, substantially reduces or wholly eliminated in certain circumstances. The policy above would be particularly applicable in highly accessible areas such as in or adjoining city cores or at a confluence of public transport such rail and bus stations located in close proximity”

“These locations are most likely to be in cities, especially in or adjacent to (i.e. within 15 minutes walking distance of) city centres or centrally located employment locations. This includes 10 minutes walking distance of DART, commuter rail or Luas stops or within 5 minutes walking distance of high frequency (min 10 minute peak hour frequency) bus services.”

As noted given the site’s accessibility to high frequency urban bus services, within 400-500m of the site, in addition to the future BusConnects and Metrolink, a reduced level of parking is considered acceptable.

5.3 GoCar

East of the development, within Airside Retail Park, 1 no. GoCar space is available for rental. Refer to Figure 5-1 which shows the location of the GoCar space in relation to the subject development.

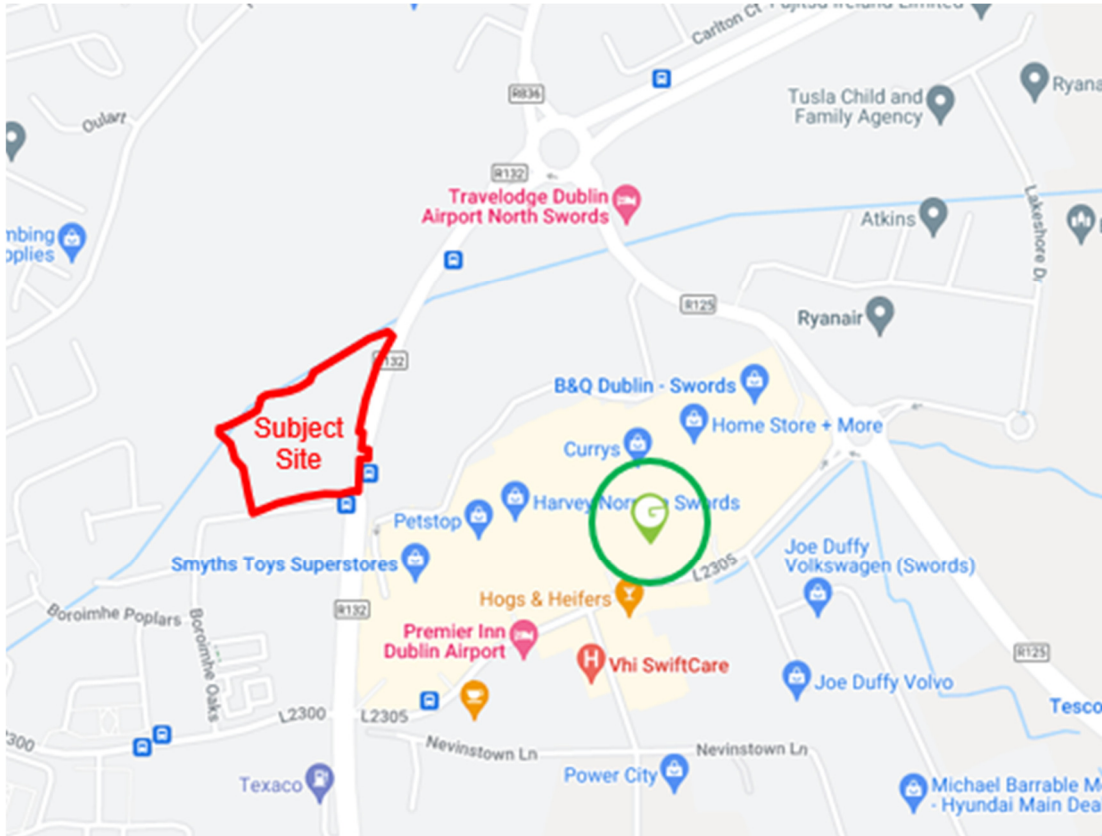


Figure 5-1: GoCar near Site

5.4 Private Vehicles

Given the proximity of the proposed development to the proposed Metro Station and the Swords QBC, the development is classified as Zone 1 within the Fingal Development Plan 2017-2023, therefore the allowance for car parking spaces provided can be reduced substantially. Furthermore, based on the Guidelines for Planning Authorities, Design Standards for New Apartments (March 2018) due to the close proximity to the existing and future high-frequency public transport and cycling facilities, as well as the high public transport usage of existing similar developments, it is considered reasonable that the car parking ratio for the residential units can be reduced below the ratio preferred by Fingal County Council. The car parking rationale has been set out in Section 5.5.

5.5 Car Parking Rationale Summary

As discussed above, the development is well serviced by existing and proposed modes of transport including several Dublin Bus routes, the Swords Express and future BusConnects routes, a proposed Metro Station, and 1no. GoCar stations. In addition to this, a vast selection of amenities and employment opportunities are within short walking distance of the site. Due to these discussed points, it is proposed that the development does not require a substantial number of private car parking spaces for the residents, retail units and creche.

The maximum number of car parking spaces for the development based on Fingal County Council requirements is 657no. spaces.

It is proposed to provide **363 spaces** in total, 300 basement parking spaces for the apartments, 30 surface spaces for the apartments, 23 spaces for the retail offer and 10 no. for the creche, including 5 no. drop-off spaces. This provides 0.51 spaces per unit for the residential units. The justification for this is set out in the material contravention statement.

The Fosterstown Masterplan seeks to encourage the use of public transport and in the case of commercial uses, Fingal County Council maximum car parking standards will be reduced by 50% after the delivery of Metro Link. After the construction of the metro station, any excess car parking spaces will revert to designated green open space or an alternative permissible use, in line with the Masterplan. The proposed parking ratio provided for this development is 0.51, with 330 parking spaces for the apartments and 645 apartment units, in line with the Masterplan objective.

A minimum of 10% of the carparking spaces (37 no.) will have EV charging points and these will be located within the undercroft carparking area.

The proposed development will have a dedicated Management Company to facilitate the management of parking on-site.

In order to ensure the car parking provision does not exceed demand, this Mobility Management Plan has been prepared to outline how a modal shift away from the private car and towards sustainable modes of transport will be implemented on-site and how the car parking on site will be managed. Details of the Mobility Management Plan are set out overleaf.

6. Mobility Management Plan

6.1 Introduction

The Dublin Transportation Office in its Advice Note on Mobility Management Plans (July 2002) describes Mobility Management as “a transport demand management mechanism that seeks to provide for the transportation needs of people and goods. The aim is to reduce demand for and use of cars by increasing the attractiveness and practicality of other modes of transport.”

Mobility management will be a key operational feature in the development. A Travel Plan will be implemented and developed on an ongoing basis with the triple objectives of promoting sustainability, enhancing public transport and reducing dependency on the use of the private car. It is important to strike an appropriate balance between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use.

The Travel Plan is intended to deal with the typical day-to-day operating conditions at the site. The targets set out in the Plan will be achieved against the background of expanding public transport capacity.

It will also encourage the general public using the development to avail of public transport by improving awareness of public transport options and by providing information on bus routes.

6.2 Trip Generation

A detailed Traffic Impact Assessment (TIA) report by O’Connor Sutton Cronin & Associates Multidisciplinary Consulting Engineers (OSCS) is submitted as part of this application under a separate cover.

The traffic generation potential of the proposed development and the third-party lands to the north of the site has been estimated using the TRICS software modelling database. The peak morning hour for the overall development is 08:00-09:00. The peak evening hour is 17:15 – 18:15. The Trics output files can be found in appendix C of the TIA.

It must be noted that not only the traffic growth from the proposed development has been generated but also consideration has been given to the lands directly north of the proposed development as can be seen in Figure 6-1 below.



Figure 6-1: Fosterstown Link Road & 3rd Party Land Development

The subject development will generate approximately an additional 1,241 trips per day, being 114 departures and 25 arrivals during the A.M peak hour and 107 arrivals and 40 departures during the P.M peak hour.

It is anticipated that the overall adjacent third party development will generate approximately 1,932 additional trips. Of these, approximately 39 arrivals and 177 departures will occur during the morning peak hour while 166 arrivals and 63 departures are expected during the afternoon peak hour.

These figures will act as the baseline figures for this Mobility Management Plan. Upon full occupation of the apartments a survey of the residents should take place to ascertain new baseline data for the development.

6.3 Strategy for Travel

There are 330 parking spaces allotted for 645 apartments. Car parking spaces will be allocated on a first come first served basis to residents and managed by the Management Company.

With the above policy in mind, it is in the interest of the developer to ensure alternative modes of sustainable travel are well publicised and accommodated within the development. To this end, the strategy will be to encourage residents to reduce dependency the private car and instead encouraging travel by public transport, by cycle, on foot or car sharing.

The methodology to be employed to implement the strategy will include:

- The provision of an extensive information service for public transport routes at a public location(s) within the development;
- The ongoing updating of public transport information adjacent to the development;
- Advising residents of tax incentives for public transport and bike to work schemes which may be available from their employer;
- Lobbying the public transport operators to ensure the ongoing provision of a high level of service on the public transport routes serving the development;
- The provisions of secure cycle parking at the development;
- The provision of high-quality footpaths and signal-controlled pedestrian crossings in the area of the development.

Pedestrians are well catered for in the area by way of the existing footpaths together with safe pedestrian crossings. In this regard, walking to connect to bus stops will be encouraged.

The strategy for cyclists is based upon providing cycle facilities such as safe and secure bicycle parking. There is a fine network of cycle paths already in the area with cycle paths along L2305. In the coming years, Bus Connects and the GDA Cycle Networks Plan will further improve cycle connectivity by providing dedicated cycle lanes from Swords to the City Centre.

6.4 Targets and Indicators

The strategy for this Mobility Management Plan is based on the movement of people not vehicles. The objectives of the Plan are:

- To endeavour to reduce the use of the car by single occupants.
- To endeavour to reduce the use of the car for trips from and to the development.
- To encourage the residents to use sustainable transport modes.

- To increase the percentage of people choosing to walk, cycle or travel by public transport to and from the development.
- To create an alliance with Fingal County Council, providers of public transport and tenants/owners of other major developments to promote a sustainable transport network in the local area.

In pursuance of these objectives, targets have been set for the reduction in private car use for the first 5 years. These targets are based on data presently available and will be measured to monitor progress. They follow examples of good practice in other developments both in Ireland and overseas. Further targets will be developed during the implementation of this Plan as new data becomes available.

6.5 Specific Measures

6.5.1 Transport Co-ordinator

A management company will be appointed by the developer to manage the development. A senior member of staff from the management company who supports the philosophy of the Plan will be appointed as the Co-ordinator. The Co-ordinator should be appointed within 2 months of the development being occupied. A dedicated commuter space will be provided within the tenant amenity area where travel information, timetables, access to the internet and notice boards will be provided.

The Co-ordinator will be responsible for:

- Implementation and maintenance of the Plan;
- Monitoring progress of the Plan;
- Liaison with public transport operators and officers of the Planning and Highway Authorities;
- Production of information reports for the Developer, the Occupier(s) and the Planning and Highway Authorities; and
- Ongoing assessment of the objectives of the Plan.

Within the first 4 months of being appointed, the Co-ordinator shall arrange for a residents travel survey to be carried out. This can be achieved by means of self-completion questionnaires, which will help to identify travel requirements and set targets for modal splits.

The information requested in the questionnaire should include:

- Personal details;
- Primary mode of transport;
- Current travel patterns including the time taken to travel to work and the place of work;
- Views on alternative modes to the car (i.e. what would encourage them to switch to other modes); and

Traditionally, response rates to such questionnaires are relatively low and it may be necessary to encourage recipients to complete and return them.

The information obtained from the survey should be entered onto a database and used to formulate and monitor the implementation of the Plan and to set and review targets. These targets are to be agreed with the Planning and Roads Authorities or their agents within 6 months of the survey being carried out.

6.5.2 Public Transport

Up to date local bus timetables will be maintained within the tenant amenity area and other fixed points within the buildings on the site. Residents will be advised of their location. In addition, Internet access to

travel information will be provided. The developer will provide all new residents with a travel pack showing alternative modes of travel to the development. Where possible, the developer will advise visitors to the site of alternative modes of travel to that of the car.

6.5.3 Provision for Cyclists

Secure cycle parking facilities will be provided within the basement levels for residents and at a number of locations through the site at ground level for visitors, crèche and commercial users. Local cycle route information will be provided in the tenant amenity area and at other fixed points within the development and residents will be advised of their location. Details of the cycle parking provided is included in the *Engineering Assessment Report* and TIA provided with the planning submission.

6.5.4 Car Parking

The co-ordinator will be responsible for the management of inappropriate parking within the development. This parking management will ensure that spaces are reserved for those who have rented the space and will be accessible only to those users.

6.6 Monitoring of the Mobility Management Plan

The monitoring and review of the Plan will be the responsibility of the Co-ordinator. The travel survey will establish the initial modal split of travel by residents.

The Co-ordinator, in consultation with the Developer, the Occupiers, and the Local Authority or its agents, will agree annual targets, following completion and analysis of the travel survey, for increasing the percentage of non-car modes.

The Co-ordinator will:

- Meet with officers of the Local Authorities or its agents within a period of 6 months following occupation of the building(s) and thereafter every 12 months to assess and review progress of the Plan and agree objectives for the next 12 months, and
- Prepare and submit to senior management of the Developer, the Occupier(s) and the Local Authorities or its agents, an annual Monitoring Report.

6.7 Marketing and Implementation

As part of the implementation of this Plan, the Management Company will provide all new residents and Crèche staff at the site with a Travel Pack. The pack will include:

- The Travel Plan;
- Public Transport information;
- Benefits of the Travel Plan for employees and employers;
- Travel Survey Form; and
- Details of pedestrian facilities.

All residents and Crèche staff will be encouraged to adopt the Travel Plan with the objective of putting in place efficient and sustainable procedures for all elements including transportation.

7. Conclusion

The proposed development is ideally suited to facilitate reduced parking from the normal requirements as set out in the Fingal County Council Development Plan, and in line with the New Apartment Guidelines for the following reasons:

- The proposed development is well located in proximity to existing bus routes from Dublin Bus and Swords Express.
- After the completion of the Bus Connects and Metro Link projects, the development will be within 5 minutes' walk of high quality, high frequency public transport, with the Bus Connects route to the south and the Fosterstown Metro station to the east.
- The proposed development is well located with regard to employment centers. The site is within 1000m of Airside Business Centre and 13 minutes' walk or 2 minutes cycle to Swords Main Street which has direct access to Swords Business Park, and North Dublin Corporate Park.
- Bus Connects and the GDA Cycle Networks Plan will provide dedicated cycle lanes from Swords to the City Centre.
- The proposed development will provide 1,519no. cycle parking spaces, including secure and safe cycle parking.
- The proposed development will provide 363no. car parking spaces for the residents, creche, and retail units.

UK and Ireland Office Locations

