

MOBILITY MANAGEMENT PLAN

PROPOSED STRATEGIC HOUSING DEVELOPMENT AT
BLACKGLEN ROAD, SANDYFORD, DUBLIN 18

Zolbury Limited

Project No. Z040

19 July 2022



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**PROPOSED STRATEGIC HOUSING DEVELOPMENT AT BLACKGLEN
ROAD, SANDYFORD, DUBLIN 18**

ZOLBURY LIMITED

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1. INTRODUCTION

O'Connor Sutton Cronin & Associates (OCSC) have been commissioned to undertake this assessment with respect to the Proposed Strategic Housing Development at Blackglen Road, Sandyford, Dublin 18. The exact site location can be seen in Figure 1 below.

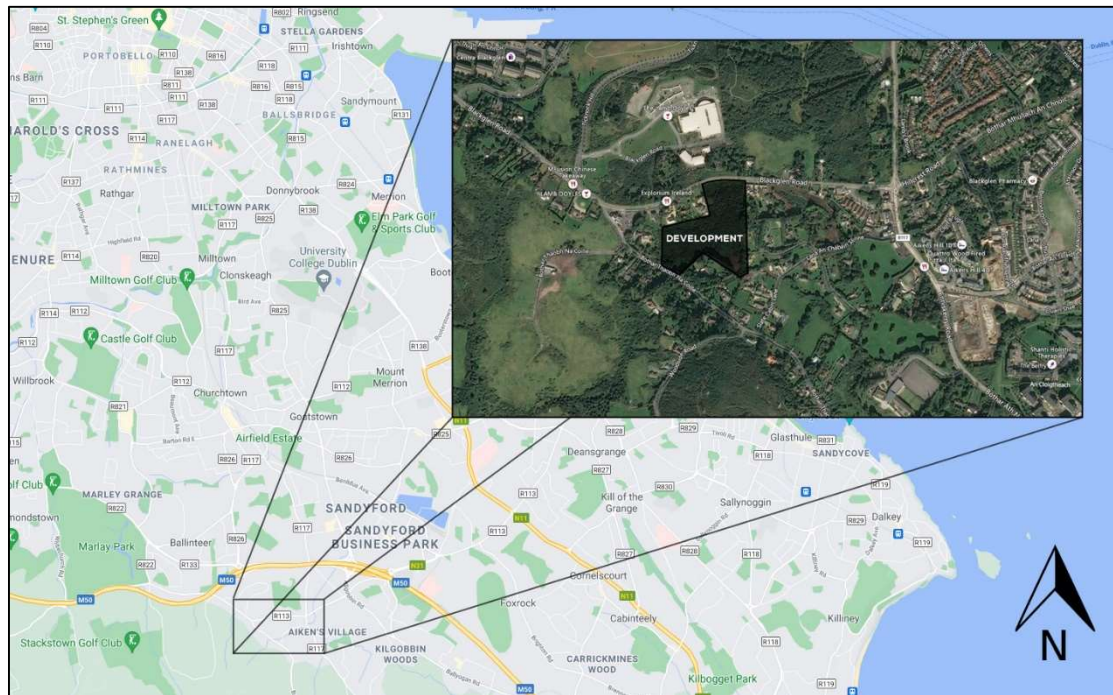


Figure 1: Site Location Map

Zolbury Limited intend to apply to An Bord Pleanála for planning permission for a Strategic Housing Development on a site of c. 3.7 ha at Blackglen Road and Woodside Road, Sandyford, Dublin 18. The development shall consist of a new residential scheme comprising 360 no. residential units, associated resident amenity facilities and a childcare facility in the form of 9 no. new apartment buildings (A1 – C3) as follows:

- Block A1 (4 storeys) comprising 18 no. apartments (3 no. 1 bed units and 15 no. 2 bed units); a crèche facility of approx. 401 sq. m with associated outdoor play space of approx. 20 sq. m; and resident amenity facilities of approx. 30 sq. m.

- Block A2 (3-4 storeys) comprising 24 no. apartments (2 no. 1 bed units and 22 no. 2 bed units) and resident amenity facilities of approx. 390m².
- Blocks B1 and B2 (2-6 storeys) comprising 69 no. apartments (30 no. 1 bed units, 34 no. 2 bed units, 5 no. 3 bed units).
- Blocks B3 and B4 (2-6 storeys) comprising 62 no. apartments (30 no. 1 bed units, 27 no. 2 bed units and 5 no. 3 bed units).
- Blocks C1, C2 and C3 (3-6 storeys) comprising 187 no. apartments (58 no. 1 bed units, 126 no. 2 bed units and 3 no. 3 bed units); and resident amenity facilities of approx. 187.5 sq. m.

Each residential unit is afforded with associated private open space in the form of a terrace / balcony.

Total Open space (approx. 22,033 sq. m) is proposed in the form of public open space (approx. 17,025 sq. m), and residential communal open space (approx. 5,008 sq. m).

Podium level / basement level areas are proposed adjacent to / below Blocks A2, B1, B2, B3, B4, C1, C2 and C3 (approx. 12,733 sq. m GFA). A total of 419 no. car parking spaces (319 no. at podium/basement level and 100 no. at surface level); to include 80 no. electric power points and 26 no. accessible parking spaces); and 970 no. bicycle spaces (740 no. long term and 230 no. short term), and 19 no. Motorcycle spaces are proposed. 10 no. car spaces for creche use are proposed at surface level.

Vehicular/pedestrian and cyclist access to the development will be provided via Blackglen Road to tie in with the Blackglen Road Improvement Scheme. A second access is also proposed via Woodside Road for emergency vehicles, pedestrian and cyclist access only.

The proposal also provides for Bin Storage areas and 4 No. ESBN substations to supply the development. 3 no. sub-stations shall be integrated within the building structures of Blocks B and Blocks C. In

addition, one Sub-station shall be classed as a unit sub-station mounted externally on a dedicated plinth.

The associated site and infrastructural works include provision for water services; foul and surface water drainage and connections; attenuation proposals; permeable paving; all landscaping works; green roofs; boundary treatment; internal roads and footpaths; electrical services; and all associated site development works.

Given the nature of the development, it is expected that the majority of trips will be by commuters during the normal peak travel hours of 08:00 – 09:00 and 17:00 – 18:00.

This plan is being prepared as a transportation demand management tool for the site. This includes the residential component, as well as any ancillary operations such as the creche. The aim is to increase the awareness, attractiveness, and practicality of sustainable modes of transport.

The MMP targets set out herein will take account of future potential improvements in public transport provision over and above those currently in operation. In this context, the MMP will set targets for the future which will be flexible and reflective of the maximum achievable modal split at any time dependent on a variety of factors including actual local infrastructure and other facilities available.

While an MMP generally relates to the long-term operational stage of development, this plan also gives due consideration to the short-term construction stage. It is intended that this will form the basis of a contractor-specific MMP which will be put in place for the duration of the construction period.

2. CONTENT OF THE TRAVEL PLAN

There are generally considered to be two types of MMP, dictated by the stage of development and whether or not the final occupants are known at the time of its development. In this instance, the final occupants are not known and given the residential nature of the development, there is considered to be significant potential variation in their travel habits. As a result, based on best practice, this MMP is intended to meet the following requirements:

- Provide a comprehensive outline of public transport services (existing and proposed) available;
- Prepare a statement on the nature and extent of facilities that will be considered for provision, and that would serve to encourage walking and cycling;
- Set out the anticipated targets with respect to modal choice;
- Provide an outline of the various schemes that may be appropriate to facilitate a change in travel patterns.

Based on the above, this report is a statement of the broad objectives in respect of Mobility Management for the site as a whole. The plan sets out targets and objectives along with the mechanisms, including both hard and soft measures, which could be put in place to support the modal shift.

However, at this stage, the plan is intended to be preliminary and will be revised accordingly once more detailed information regarding the final occupiers becomes available. Moving forward from this, the plan will continue to be regularly updated based on experience gained from its implementation and operation.

3. EXISTING PUBLIC TRANSPORT, CYCLE & PEDESTRIAN FACILITIES

The site is located in close proximity to a number of public transport services including both rail and bus as discussed following.

RAIL

The northern boundary of the site is located approximately 1.9km (27 min) walk, 9 min cycle) from Glencairn Train Station (Green Luas Line). This station provides access to Brides Glen in the east, and Broombridge in the north. This forms part of the wider Luas network throughout the Greater Dublin Area and links the site directly to Dublin City Centre and the Red Luas, as set out in the following figure.

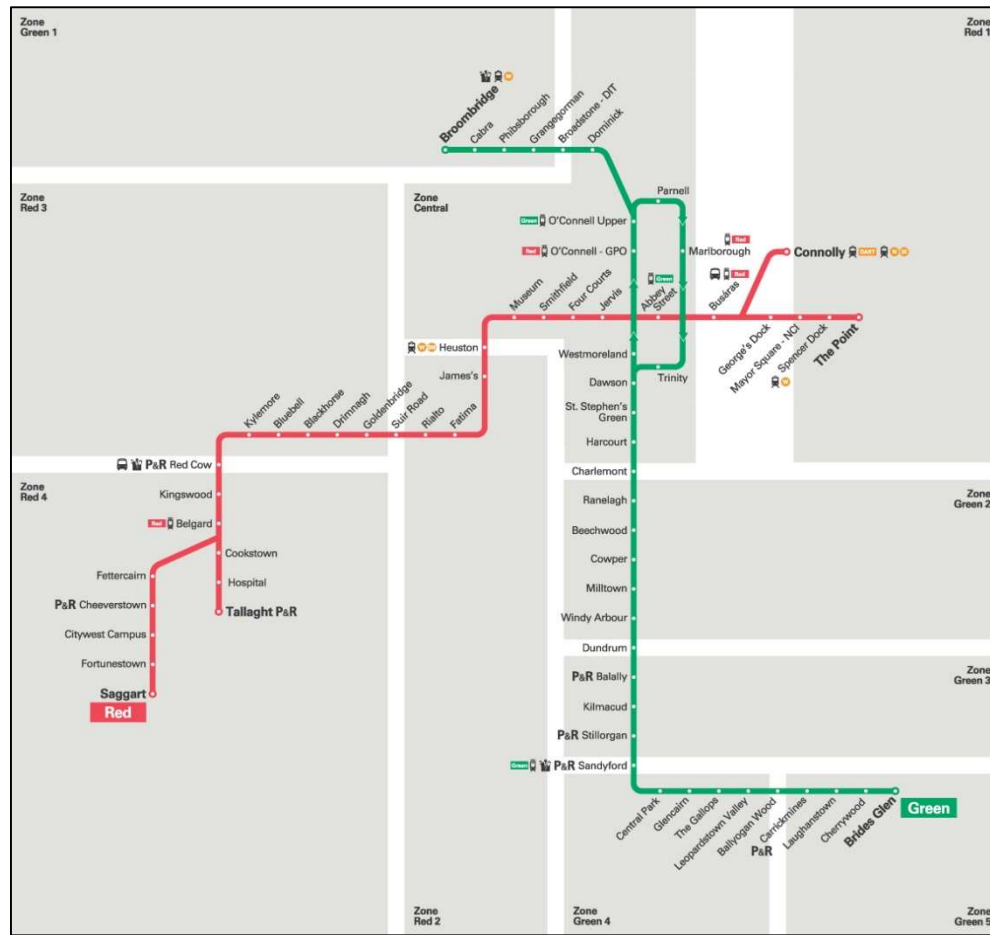


Figure 2: Luas Map¹

The frequency of the Luas Green Line at the Glencairn Station is shown in the tables below:

Day	Min	Avg	Max
05:44 – 07:00	10	16	20
07:00 – 10:00	6	9	14
10:00 – 16:00	12	13	14
16:00 – 19:00	6	10	16
19:00 – 00:14	12	13	15

Table 1: Glencairn Luas Frequency - Monday – Friday

¹ Source: www.luas.ie/map

Day	Min	Avg	Max
06:44 – 7:0010	15	16	20
10:00 – 16:00	14	14	15
16:00 – 19:00	14	14	14
19:00 – 00:14	7	14	15

Table 2: Glencairn Luas Frequency - Saturday

Day	Min	Avg	Max
07:14 – 12:00	12	14	20
12:00 – 19:00	12	12	12
19:00 – 23:14	12	13	15

Table 3: Glencairn Luas Frequency – Sunday & Bank Holidays

BUS

The northern boundary of the site is located approximately 120m (2-minute walk, 1 min cycle) from the nearest bus stop, Blackglen Court Stop 3533 east and stop 3494 west, which is served by Dublin Bus Service No. 44B and Go ahead service 114.

These services operate during peak hours, every 30 mins, and provide connections to the following nearby urban centres. Dublin Bus 44b provides a connection between the Dundrum Luas Station, Dundrum, Sandyford and Glencullen. Go Ahead service 114 provides access to Blackrock Station, Stillorgan Road, Ravenscourt Park and Rockview.

Neither bus route currently provides connections to the city centre. It is noted that BusConnects' plan for the area includes the introduction of bus services 86, 87, 88 and L33. Although these services will provide connections to the city centre, they are not expected to be "high frequency". These routes are discussed in more detail in the BusConnects section of this report.

CYCLING AND WALKING

The local cycle facilities within DLR currently consist of Radial and Orbital Cycle Routes, which span most of the county. The radial routes mainly service north-south movements, while the orbital routes service east-west movements. The closest connection with the DLR cycle route is on the R117, which is approximately 450m (1 min cycle) from the northern boundary of the site. A map of the cycle routes within the county is shown in Figure 3.

Currently, there is no pedestrian infrastructure present along Blackglen Road. It should be noted that the Blackglen Road Improvement Scheme will improve walking and cycling infrastructure in the immediate vicinity. This is discussed in more detail in Section 4. This will significantly improve accessibility for this development.

Two isochrone maps were prepared to indicate the proximity of the development to public transport points in terms of walking and cycling. The proximities are colour coded with green indicating areas within 10 minutes, the orange area within 20 minutes and red areas within 30 minutes of the development. These two isochrone maps are shown in Figure 4 and Figure 5.

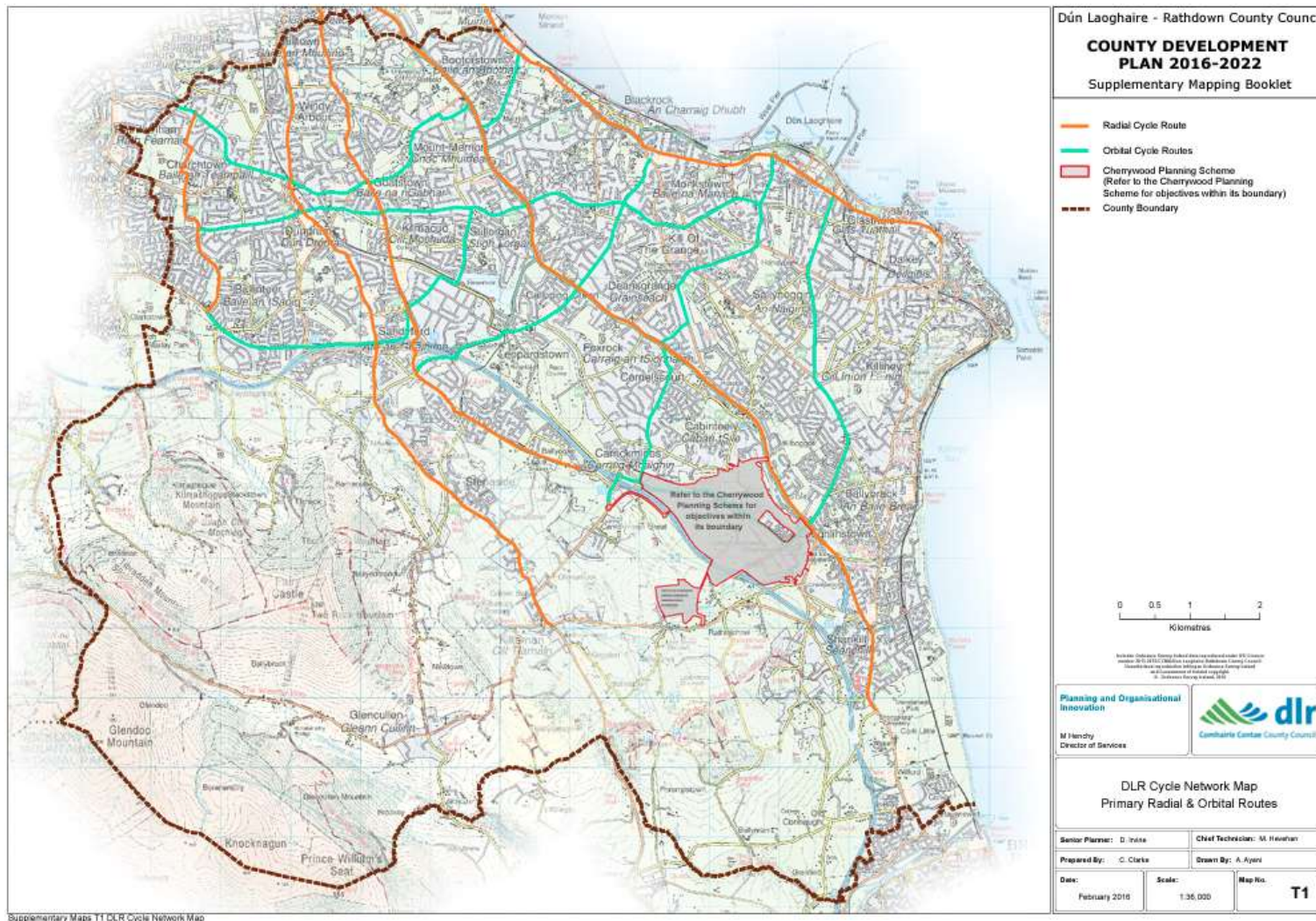
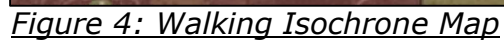


Figure 3: DLR Cycle Network Map - Primary Radial & Orbital Routes (source: dlrcoco.ie)



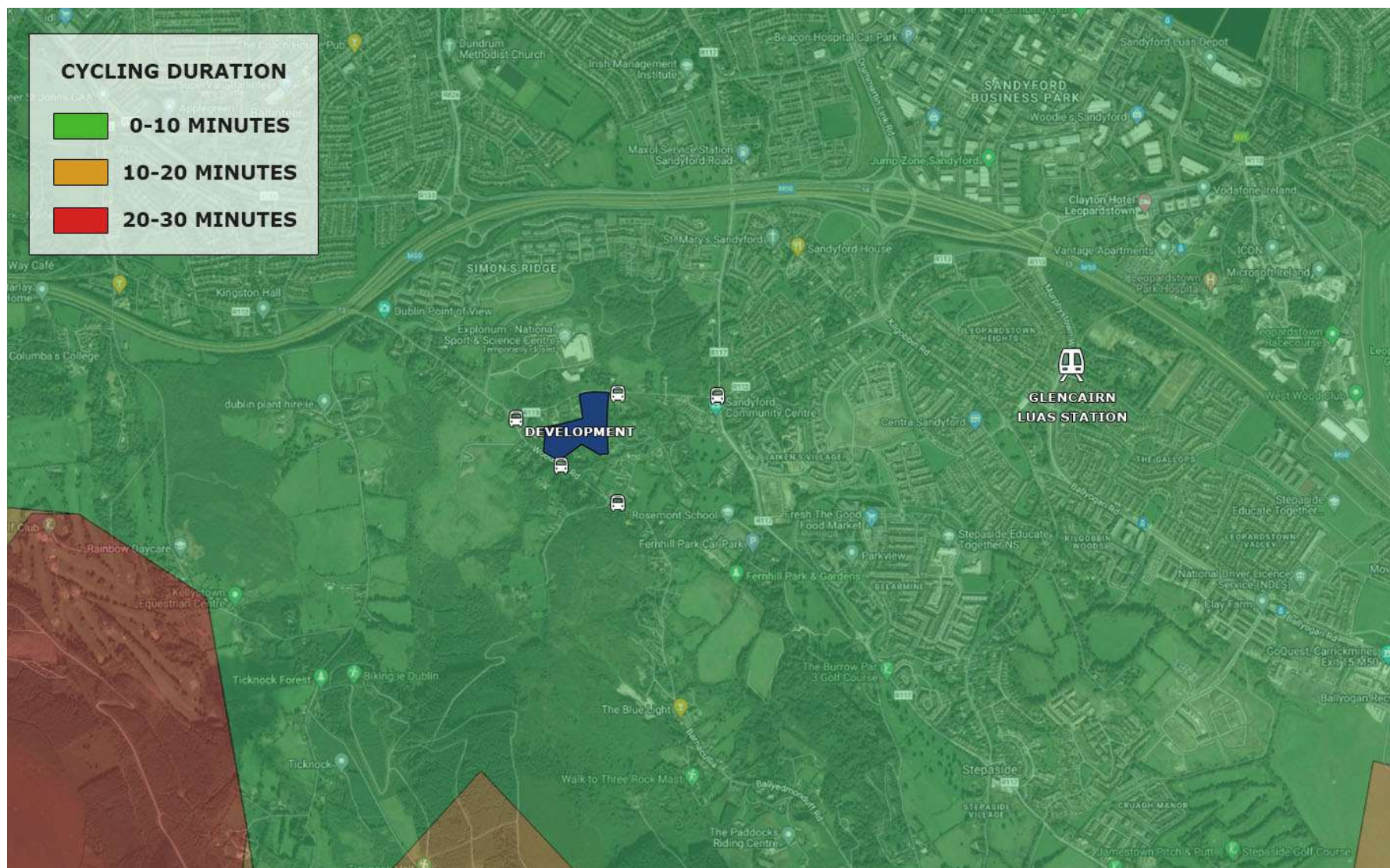


Figure 5: Cycling Isochrone Map

4. FUTURE PUBLIC TRANSPORT, CYCLE & PEDESTRIAN FACILITIES

There are a number of proposals which will further enhance the sustainable transport infrastructure serving the site, be it directly or indirectly. These are discussed in further detail below.

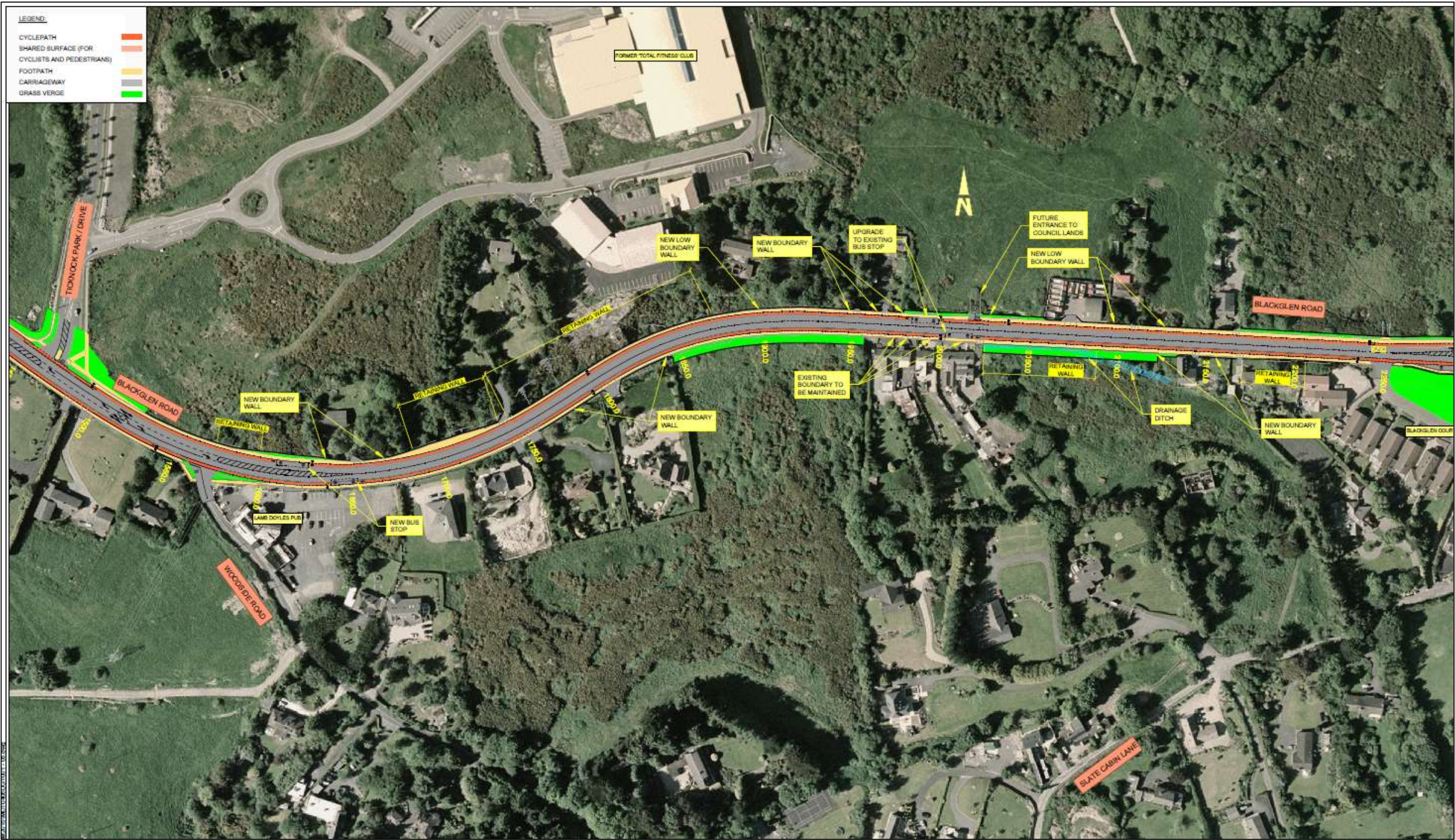
BLACKGLEN ROAD UPGRADE

DLR County Council is currently busy with road upgrades along Blackglen Road. The improvement entails the upgrade of 2.02 km of road, and includes the following transport infrastructure-related items:

- Construction of pavement, footpaths and cycle lanes which are currently not present along Blackglen Road;
- Upgrading of existing signalized junctions at Lambs Cross and Grange Road/Harold's Grange Road/Kellystown Road/College Road and new toucan crossing on Blackglen Road;
- Upgrading of bus stops on Blackglen Road, Sandyford Road and Enniskerry Road;

The extent of road improvements planned along this road is shown in the figure overleaf.

Specific to this site, walkways and cycle lanes will be added to both sides of the road adjacent to the site frontage. These upgrades will tie into the larger network and provide access to a variety of public transport services, including bus routes and the Luas Green Line.



BUSCONNECTS

With the planned implementation of the BusConnects network, additional routes will be added in the vicinity of the development. These are:

Other City Bound Routes:

- Route 86: Ticknock – Goatstown – Mountjoy Square
- Route 87: Belarmine – Dundrum – Mountjoy Square
- Route 88: Enniskerry – Belarmine – Dundrum – Mountjoy Square

Local Routes

- Route L33: Glencullen - Dundrum

Orbital Routes

- Route S8: Tallaght – Sandyford – Dún Laoghaire

The extent of these routes relative to the site location is shown in the figure below:

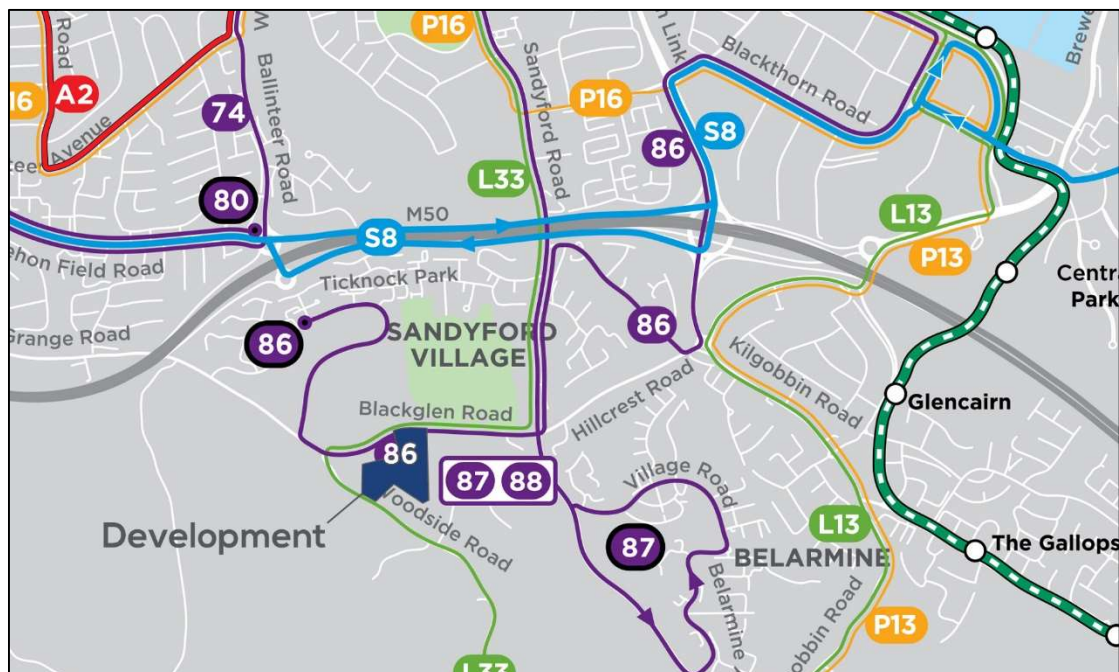


Figure 7: Location of Planned BusConnects Routes relative to Development

The planned frequency of these routes is shown in the table below:

Route	Peak	
	Weekday (mins)	Weekend (mins)
86	30	30
87	60	60
88	60	60
L33	60	-
S8	15	30

Table 4: Peak Time Frequency of Routes

From the above table, it can be surmised that in the vicinity of the development, a total of 5 local BusConnects services will be added to the area and replace the existing routes (44B & 114) during peak hours. This addition will significantly increase access to main areas from the development. It should be noted that these three City Bound Routes will also connect with the Luas Station at Glencairn.

Additional to this, the Orbital Route will add another 4 services within peak hours. This service will offer enhanced access to and from the area of the development and the coast, although it should be noted that the closest bus stop for this route is likely to be outside of a comfortable walking distance. This could potentially change should pedestrian access to this route be added through the Ticknock Park area. This would create a 1.5km (17-minute) walk from the development to this stop. However, at this stage, it is unclear if such an addition is planned.

RAIL

The only projected rail-related upgrade discussed in the County Development Plan is the progression of the development of the Blue Line Bus Rapid Transit Service, which will link the DART line at Sydney Parade Avenue to Sandyford/Dundrum Town Centre. This will provide integration between DART, bus and Luas services.

CYCLING/ WALKING

According to the County Development Plan, the Council has the following cycling and walking-related upgrades planned for implementation:

Six-year objectives Cycling and Walking:

- Leopardstown Link Road from South County Business Park;
- E.S.B. Roundabout on Leopardstown Road to Arena Road and Blackthorn Road;
- Leopardstown Roundabout Re-configuration to a signalized junction;
- Sandyford Pedestrian and Cycle Bridge, linking Kilgobbin Road to the Drummartin Link Road on the west side of the M50 junction 13.

Long-term objectives Cycling and Walking:

- Central Park to South County Business Link Road;
- Blackthorn Drive/Drummartin Link Road Grade Separation;
- Murphystown Road, over the M50 Motorway, to Central Park and South County Business Park;
- Cycle/pedestrian link, via the exiting, M50 access bridge, from Ballyogan Road into Horse Racing Ireland property and connecting Central Park and South Country Business Park.

The planned upgrades are shown in Figure 8.

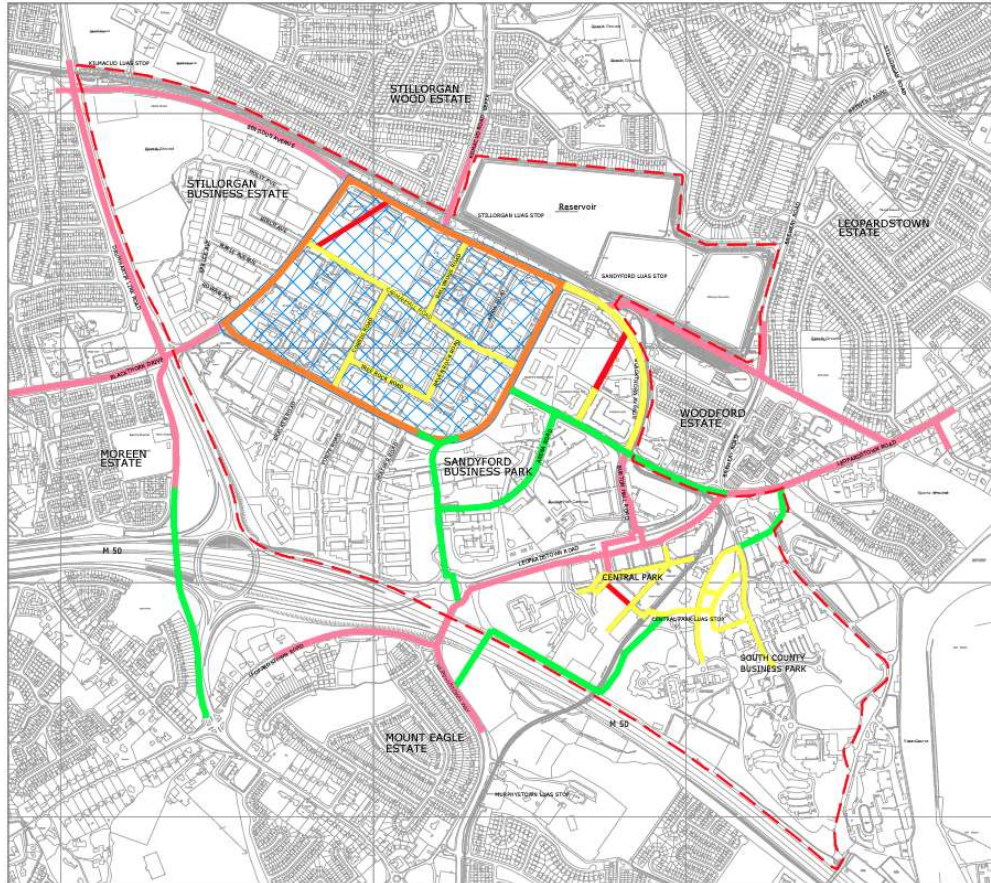


Figure 8: Walking & Cycling Routes (source: dlrcoco.ie)

The Council also plans to improve permeability and connectivity within the Sandyford Business District by creating a low-speed environment for cyclists and pedestrians, and by implementing circulation routes and traffic management measures. This should promote the use of non-motorised transport.

5. OBJECTIVES OF THE TRAVEL PLAN

The primary goal of this MMP is to both facilitate and encourage a positive modal shift towards more sustainable modes of transport. With this in mind, the objectives of this MMP are as follows:

- to reduce the dependence on the private car as a means of travel;
- to discourage the use of the private car in those circumstances where car use does occur;
- to increase and facilitate the number of people choosing to walk, cycle or travel by public transport;
- to develop an integrated and unified approach to traffic management for the site which will include public transport, private vehicles, business fleet management and suppliers of commercial services;
- to work closely with the Local Authority, the National Transport Authority, Irish Rail, Dublin Bus, the Railway Procurement Agency and Bus Éireann in a partnership model to promote an increased uptake in public transport.

In order to achieve the foregoing objectives, the targets set out hereunder are proposed in specific key areas. These targets are based on current information pertaining to existing and proposed infrastructural investment locally. The targets are intended to be preliminary only and will be refined in light of ongoing experience gained from the implementation of this plan.

CAR TRAVEL & OCCUPANCY

It is an objective of this plan to minimise the number of people using private cars, particularly during peak commuting hours, and in cases where it does occur, to increase the number of people travelling as passengers.

BUS

There are currently two routes which serve stops within a 120m (2 minutes) walk of the development site. It is an objective of this plan to increase awareness of such services and encourage their use as a viable and convenient alternative to private car travel where possible during both the construction and operational stages. It is also an objective to inform about any changes to these services and any new services that come on line.

RAIL

The commuter service provides direct access via the Green Luas Line and a number of key employment areas. It is an objective of this plan to increase awareness of existing and future services and encourage their use as a viable, convenient alternative to travelling by private car wherever possible during both the construction and operational stages. It is also an objective to inform about any changes to these services and any new services that come on line.

CYCLING/ WALKING

It is an objective of this plan to promote cycling/walking as viable means of transport and to facilitate their use wherever possible during both the construction and operational stages.

MODAL SPLIT

As previously noted, there is no information available regarding the ultimate occupier of the development. Therefore, it is envisaged that within 6 months of opening of the development, following a survey of the occupiers, the existing modal split of the development will be established and at this stage, it will be possible to set out a target modal split.

These target modal splits will take into account the types of development \infrastructure locally.

6. SPECIFIC MEASURES

In order to achieve the objectives and modal split targets set out in *Section 5*, a number of specific measures are proposed to be put in place.

While not a place of work, it is nevertheless intended that the development will give due consideration to information available as part of the Smarter Travel Workplaces programme. This programme assists companies in encouraging staff to travel by means other than by car through various schemes and plans. More information on this programme can be found at www.smartertravelworkplaces.ie and www.nationaltransport.ie.

CRECHE SPECIFIC MEASURES

A separate Mobility Manager/Travel Coordinator will be appointed at the creche. It is expected that role will be fulfilled by a member of the Management Company staff. The specific details of the Coordinator will be determined at a later stage of the development. The duties of the Mobility Manager will include inter alia:

- Conduct travel surveys at regular intervals once the creche is completed and operational. These surveys will provide detailed and up-to-date information on travel habits which can be used to develop new strategies that encourage travel by alternate modes;
- Implementation of various schemes/plans aimed at encouraging the uptake of more sustainable means of travel;
- Acting as an information point and posting information in common areas;
- Negotiating with public transport companies and other service providers;
- Setting up and administering registers for particular measures such as taxis if the need arises;
- Branding of the plan;

- Ongoing promotion and marketing of the plan through various mediums;
- Evaluation and adaptation of the plan in light of experience.

It is however anticipated that the majority of the utilisation of the creche will be by residents of the development. As such, it is not anticipated that the creche will generate any specific vehicular trips. All vehicular trips will be pass-by trips. Trips with the creche as an end destination will likely be by means of walking/cycling.

Most of the measures listed below, related to the development, will also be relevant to the creche.

MANAGEMENT AND CO-ORDINATION

A separate Mobility Manager/Travel Coordinator will be appointed at the development during both the construction and operational stages. For the operational stage, in particular, it is expected that role will be fulfilled by a member of the Management Company staff. The specific details of the Coordinator will be determined at a later stage of the development. The duties of the Mobility Manager will be similar to that of the Creche Mobility Manager. Frequent communication between the various Mobility Managers will also be required.

CAR SHARING

The Mobility Manager for both the construction and operational stages will ensure that car-sharing would be promoted via schemes such as establishing a car-sharing database or encouraging the use of existing car-sharing services. Commuters will be able to avail of this service in order to get in contact with other people who are travelling to and from similar destinations with the aim of sharing the costs and increasing the number of people travelling as passengers.

Taxis also provide an opportunity for people who require the flexibility of car travel while also reducing the requirement to own/drive a private car. Information on local taxi services will be provided and the possibility of negotiating deals/discounts with providers will also be investigated by the Mobility Manager.

BUS USE

The Mobility Manager for each stage will encourage and facilitate the use of the existing bus facilities operating in the local area and any future services that may come on stream.

Timetables and information on routes, ticket prices etc. will be kept on hand at all times and made readily available. The Mobility Manager will also promote and distribute information on any special tickets available such as tax-saver tickets, integrated ticket systems etc. on an ongoing basis. All information will be updated on a regular basis, particularly in relation to any changes/disruptions to services.

The Mobility Manager will also keep in contact with all bus service providers working in the area with the aim of improving/creating new services locally where possible.

RAIL USE

The Mobility Manager for each stage will keep information on hand at all times regarding ticket prices, frequency of services, routes etc. for all existing services. Again, information on any ticket offers such as tax-saver tickets, integrated ticket systems etc. will be made available and promoted on an ongoing basis. All information will continue to be updated regularly, particularly in relation to any changes/disruptions to services or any new services which may come online.

As with the other public transport services, the Mobility Manager will keep in contact with all rail service providers working in the area with the aim of improving/promoting these services where possible.

CYCLE/PEDESTRIAN FACILITIES

During the construction stage, temporary on-site cycle parking facilities will be provided in a safe and secure area, as agreed with the contractor. The demand for cycle parking will be monitored by the Mobility Manager for this stage and increased as necessary.

The completed development apartments will include the provision of cycle parking spaces for use by residents to avoid the need for storage within the residential units. The demand for cycle parking will be monitored by the Mobility Manager for this stage and increased as necessary.

The development will also provide a Cargo Bike service, as well as an on-site bicycle workshop. The Cargo Bike service will be highlighted to residents with associated information on how to register, how the system operates and the cost of use. The bike workshop, which includes facilities such as air pumps and repair tools will be available for use by a resident of the development.

Other services which could be investigated for implementation at this site include e-Cargo bikes. This would be beneficial to residents due to the topography of the local area. This service as well as the potential number required will be determined once the demand has been established.

The site Mobility Manager will seek to promote cycling through various schemes and promotions which may include:

- 'Bike to Work Week';
- cycle safety training;
- discounts on bikes and accessories from various stores;

- provision of high visibility vests;
- regular cycle clinics.

The Mobility Manager will also investigate the possibility of setting up a 'buddy' cycle database, where people who chose to begin cycling can get in touch and travel with more experienced cyclists with the aim of increasing confidence and safety. Further schemes such as the Cycle to Work Scheme will also be continually promoted.

USE OF TECHNOLOGY

Recent advancements in technology present several additional opportunities in relation to encouraging a positive modal shift. As part of this MMP, residents at the completed development will be informed of a variety of potentially useful tools including the following:

- The NTA Journey Planner – Available on the NTA website and as a downloadable app, the journey planner provides a comprehensive list of travel options available from any origin/destination point in the country. Most notably, this is not limited to a single mode of travel and includes routes that consider multiple modes and multiple public transport services while also providing details such as journey times and distances for each option;
- Public Transport Providers – Each of the major public transport providers, including Dublin Bus, Bus Éireann and Irish Rail, now have dedicated apps that can be downloaded to a smartphone and/or tablet. These contain detailed information on all services offered including timetables and also allow for real-time updates on changes or disruptions to services;
- RealTime Ireland – An application available for download to smartphones and tablets, this app provides real-time arrival and departure listings for a range of public transport options from major rail stations to individual bus stops. This app also links with the

aforementioned NTA Journey Planner to provide a compressive travel planning tool.

The above are just a few examples of the services available which would be of significant use in promoting more sustainable means of transport. The availability of such services will be promoted amongst residents regularly and information on any new services that become available will also be provided.

SUMMARY

Overall, the location of the proposed development, along with the measures considered, will aim to ensure that travel by public transport, by bike or by foot is a preferred alternative to travel by private car during both the construction and operational stages.

7. PHASING & MONITORING

A critical part of any MMP is ongoing monitoring. It is proposed that an initial evaluation of the operation of the plan will take place 6 months into its operation. The plan will be appropriately adjusted at that stage based on the results.

The MMP will be monitored and regularly reviewed on a minimum yearly basis with regular travel surveys being carried out. In particular, the demand for cycle parking at the site will be closely monitored with a view to increasing the amount as required. In general, the overall plan will be refined based on experience and consultations with the respective stakeholders.

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