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Residential Travel Plan

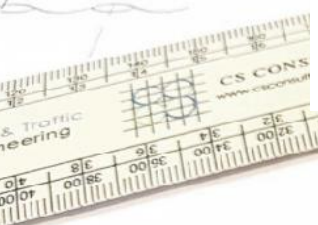
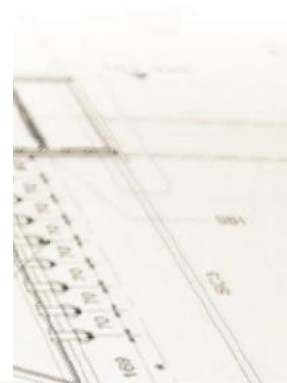
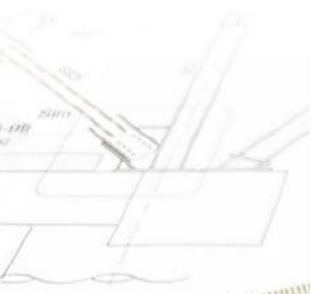
Park West SHD

Park West Avenue and Park West Road, Park West, Dublin 12

Client: Greenseed Limited

Job No. H085

December 2021



RESIDENTIAL TRAVEL PLAN

PARK WEST SHD

PARK WEST AVENUE AND PARK WEST ROAD, PARK WEST, DUBLIN 12

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1.0 INTRODUCTION

Cronin & Sutton Consulting Engineers have been commissioned by Greenseed Limited to prepare a Residential Travel Plan (RTP) for a proposed Strategic Housing Development (SHD) on a site at Park West Avenue and Park West Road, Park West, Dublin 12.

The development shall be supported by an RTP as a suitable mechanism by which the development can maintain a suitable rate of private car use and support the objectives of sustainable development. The final version of the RTP shall be prepared and administered by a Travel Plan Coordinator (see sub-section 7.1), who shall be appointed for the development following its completion.

1.1 Development Site Location and Existing Use

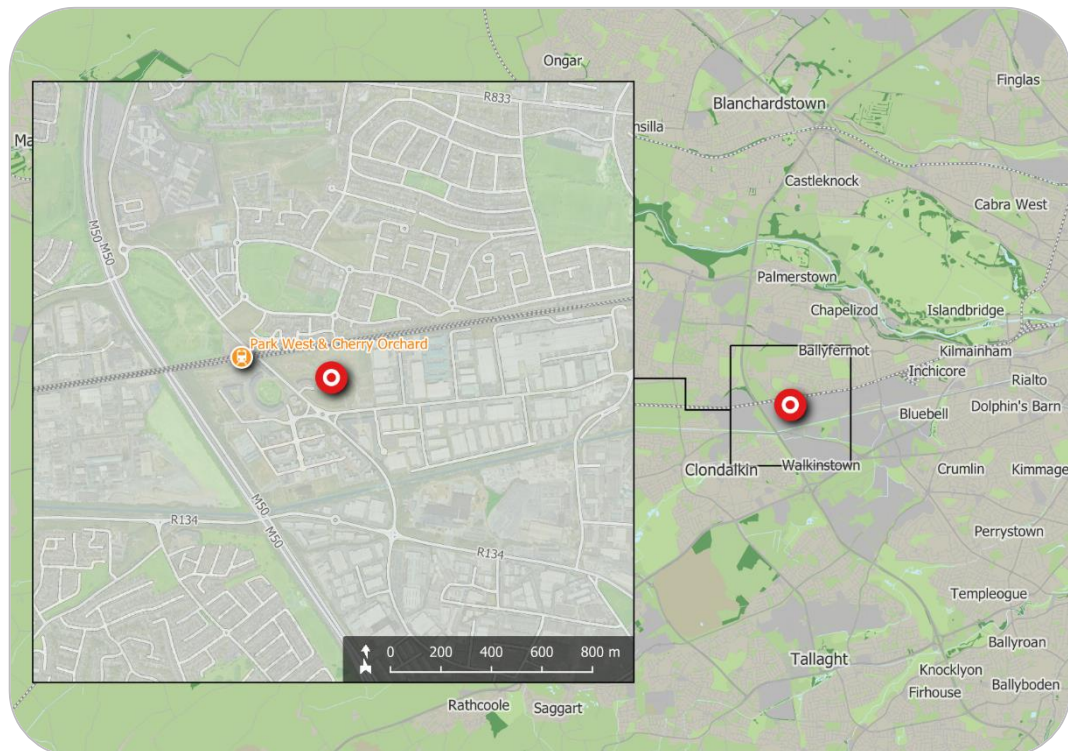


Figure 1 – Location of proposed development site
(map data and imagery: EPA, OSi, OSM Contributors, Google)

The site of the proposed development is located in Dublin 12, immediately to the north-east of the existing Park West development, approximately 400m to the east of the M50 motorway (between junctions 7 and 9), and immediately to the east of Park West & Cherry Orchard railway station. The development site has a gross area of approx. 9.4ha and is located in the operational area of Dublin City Council (DCC).

The location of the proposed development site is shown in **Figure 1** above; the indicative extents of the development site, as well as relevant elements of the surrounding road network, are shown in more detail in **Figure 2**.

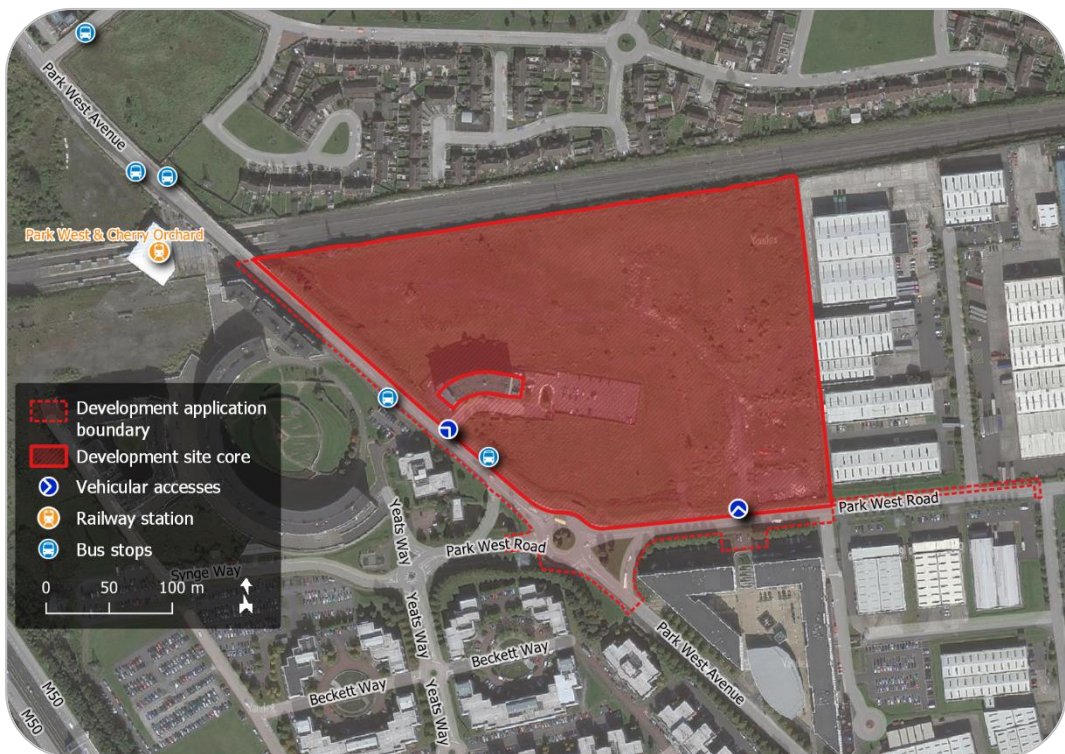


Figure 2 – Site extents and environs
(map data and imagery: NTA, OSi, OSM Contributors, Yandex)

The site is bounded to the north by the Dublin-Kildare railway line, to the east by an existing industrial estate, to the south by Park West Road (along a road frontage of approx. 180m), and to the west by Park West Avenue (along a road frontage of approx. 300m).

The site is predominantly greenfield and has never been fully developed. The car park and access road of the existing Aspect Hotel form part of the development site, though the hotel building itself is excluded from the development application boundary. Limited vehicular traffic is currently generated by the Aspect Hotel, the existing access to which shall also serve as one of the proposed development's 2no. vehicular access junctions.

1.2 Description of Proposed Development

The proposed development (70,649 sqm gross floor area - GFA) will consist of:

- 750no. residential units (Blocks A to G) comprising a mix of one, two and three bed apartments and all associated ancillary accommodation (69,989sqm GFA)
- Non-residential uses (705sqm GFA) including a retail unit, a creche, community space, café/ bar.

The proposed development is described below on a block-by-block basis.

- Block A (11,563sq.m GFA): - A 2 to 15 storey with 109no. residential units and 1no. retail/ commercial unit of 156sq.m.
- Block B (4,180sq.m GFA): - A 2 to 8 storey block with 44no. residential units and resident services and amenities of 84sq.m.
- Block C (8,865sq.m GFA): - A 2 to 8 storey block with 100no. residential units.
- Block D (16,403sq.m GFA): - A 2 to 8 storey block with 179no. residential units in. Residential services and amenities of 403sq.m are proposed at ground, first and second floor levels.
- Block E (15,995sq.m GFA): - A 2 to 8 storey block with 179no. residential units.
- Block F (9,629sq.m): - A 2 to 8 storey block with 99no. residential units.



- Block G (4,059sq.m): - A 1 to 8 storey block with 40no. apartments, a creche of 410sq.m with associated external play area, a café/ bar unit of 91sq.m and a community space of 48sq.m.
- Public Open Space: - c.1.3ha (16%) of public open space is provided and comprises a linear park orientated west to east and functioning as a link to the established residential areas to the west of Park West Avenue and a public plaza/ square including Multi-Use Games Area (MUGA) located centrally within the site.
- Communal Amenity Space: - Communal amenity spaces totalling 6,175sq.m are provided at podium level within each of the proposed Blocks A to F and at roof levels within Block G and include passive open spaces that are visually and functionally accessible to the future residents of the development.
- Private Open Spaces: - Will be in the form of balconies for the apartments and duplexes and terraces for ground floor units.

Vehicular access to serve the proposed development will be provided via access roads off Park West Road and Park West Avenue. Tie-in works are required to Park West Avenue and Park West Road to provide for suitable junctions and pedestrian crossings at the proposed access points.

In addition to pedestrian and cycle access at the above two locations there will be a pedestrian and cycle access at the north western corner of the site adjoining Park West Avenue and providing access to the proposed west to east street along the northern boundary of the site. This access to Park West Avenue will facilitate safe and efficient access for pedestrians and cyclists to Park West and Park West - Cherry Orchard Train Station located directly to the north west across Park West Avenue.

Car parking is provided at ground floor/ undercroft level beneath Blocks A, B, C, D, E and F and at street level. A total of 487no. car parking spaces are proposed including 482no. residential car parking spaces at ratio of 0.64

per residential unit. The remaining 5no. car parking spaces will serve the proposed non-residential uses.

An additional 70no. car parking relating to the existing Aspect Hotel are included within the current application site. The Aspect Hotel is a pre-existing building located centrally within the site. Permission was granted for an extension to this hotel in February 2019 (Reg. Ref. 3436/18). Condition 3 attached to Reg. Ref. 3436/18 addresses a legacy issue relating to the Aspect Hotel car park which is located on the site of the proposed Block G. The current application provides for the relocation of the hotel car park to facilitate the development of Block G. It is proposed that the car parking (totalling 70no. spaces) to serve the hotel will be located beneath Blocks A-B-C (36no. spaces) and at street level to the south of the existing Aspect Hotel (34no. spaces).

A total of 1,276 cycle parking spaces are proposed. The cycle parking is provided at ground floor/ undercroft level beneath Blocks A to F to serve the proposed residential units and integrated into the public realm at street level for visitors.

The residual lands within Site 6, identified as development Stages 2 and 3, are sites for future development and will be seeded/ grassed and fenced until such time as development proposals for those sites are advanced. The Stage 2 lands include a site for a proposed school as identified within the LAP and to be brought forward by the Department of Education and Skills.

Permission is also sought for associated hard and soft landscaping, boundary treatments and all associated site and development works.



2.0 RESIDENTIAL TRAVEL PLAN PURPOSE

RTPs are developed for the purpose of promoting and enhancing travel via more sustainable modes of transport. They serve to identify travel demand strategies that reduce single occupancy private car travel, which in turn reduces traffic congestion, noise pollution and environmental impacts. Residents of the development are informed of existing alternatives to the private car and are given the required advice, support, and encouragement to travel in a sustainable way. The Residential Travel Plan also includes reference to proposed future improvements to those transport options already available.

The aim of the RTP is to provide more sustainable transport choices, which lead to a reduction in the need for vehicular journeys, especially by private car. The RTP recognises that not all trips can be taken by sustainable modes and that some motor vehicle trips will still be necessary.

The RTP should be considered as a dynamic process, wherein a package of measures and campaigns is identified, piloted, and then monitored on an ongoing basis. The nature of the plan therefore changes during its implementation: measures that prove successful are retained, while those that are not supported are discarded. It is important that the plan retains the support of users and receives continuous monitoring. Feedback and active management of the plan are required for it to continue to be successful.

3.0 EXISTING SITE CONDITIONS AND PUBLIC TRANSPORT SERVICES

As shown in **Figure 3**, the development site benefits from proximity to Park West & Cherry Orchard railway station, as well as to bus stops on Park West Avenue and to an existing car-sharing base operated by GoCar. The walking times illustrated have been calculated on the basis of an average walking speed of 4.5km/h.

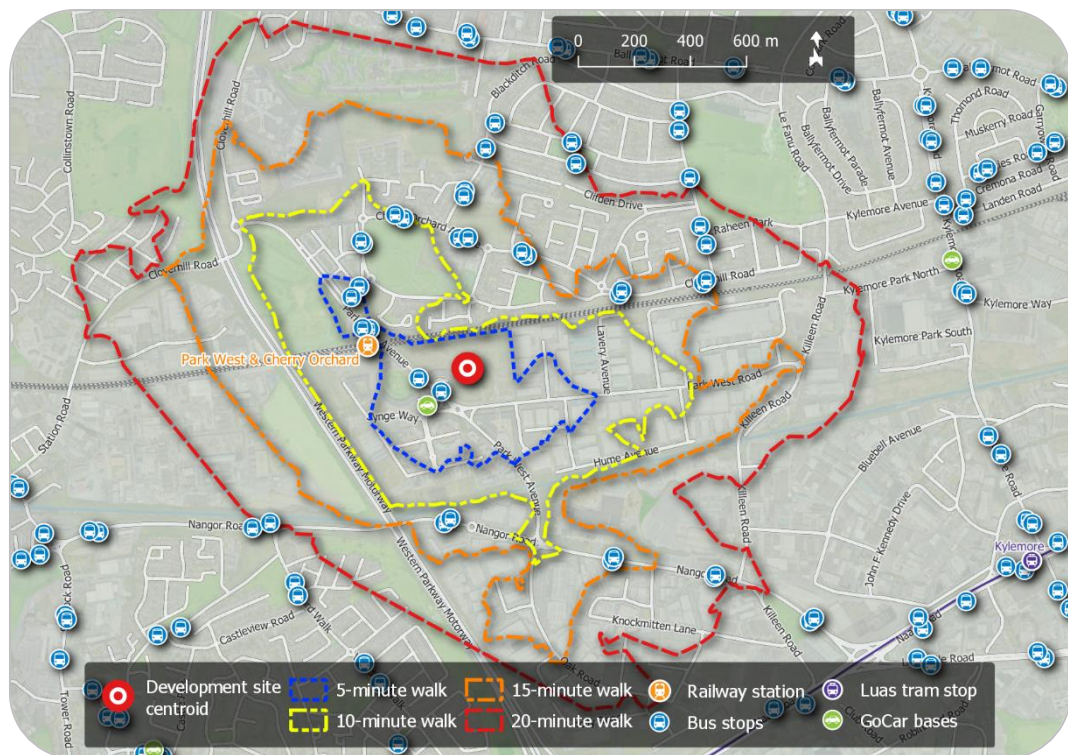
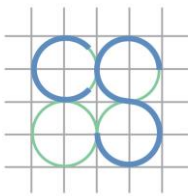


Figure 3 – Walking times and public/shared transport service points (map data & imagery: EPA, NTA, OSi, GoCar, OSM Contributors, Google)

3.1 Pedestrian Accessibility

Existing pedestrian facilities on the wider street network in the vicinity of the development site are generally of good quality; raised footpaths and public lighting are in place on both Park West Avenue and Park West Road.

Pedestrian access to the proposed development shall be possible at the following locations:



- via the development's western access junction on Park West Avenue (the existing Aspect Hotel access junction);
- via the development's proposed new southern access junction on Park West Road; and
- at multiple points along the development's western boundary, where the development's internal footpaths tie in to the existing footpath along Park West Avenue.

In addition to these initial access provisions, the development's internal road network and footpaths are continued up to the site's eastern boundary. This facilitates future access to lands to the east, should these be put to residential or retail use in future, ensuring east-west pedestrian permeability through the development.



Figure 4 – Development layout and access provisions
(map data & imagery: Murray & Associates, NTA, OSi, OSM Contributors, Yandex)

As part of the proposed development, its access junctions on Park West Avenue and Park West Road shall both incorporate signal-controlled pedestrian crossings on all arms. Refer to CS Consulting drawing nos. **PWT-CSC-XX-XX-DR-C-0021** and **PWT-CSC-XX-XX-DR-C-0040** for further details on the development's access points and pedestrian permeability through the development site.

3.2 Existing Public Transport Services

The development site is within a 5-minute walk of Park West & Cherry Orchard railway station. Intercity and commuter rail services operating to and from this station connect it directly to Dublin city centre, as well as to other towns and cities including Cork, Waterford, Portlaoise, and Carlow. Details of these train services are given in **Table 1** and their routes to and from Dublin city centre are illustrated in **Figure 5**.

Table 1 – Train Services to/from Park West & Cherry Orchard Station

Direction	Destinations	Weekday Services ¹	Peak Interval
Eastbound	Dublin Heuston / Grand Canal Dock	44	15 min
Westbound	Portlaoise / Cork / Waterford	44	15 min

Table 2 – Bus Services within 5-minute Walk of Site

Route No.	Operator	Destinations	Weekday Services ²	Peak Interval
79A	Dublin Bus	Aston Quay – Park West	33	20 min
860	Express Bus	Temple Bar – Park West	22	20 min

¹ Total services per day in given direction, Monday-Friday

² Average number of services per day in each direction, Monday-Friday

Bus stops on Park West Avenue, immediately adjacent to the development site, are served by 2no. NTA-regulated bus routes, details of which are given in **Table 2**. The extents of these routes are also illustrated in **Figure 5**.

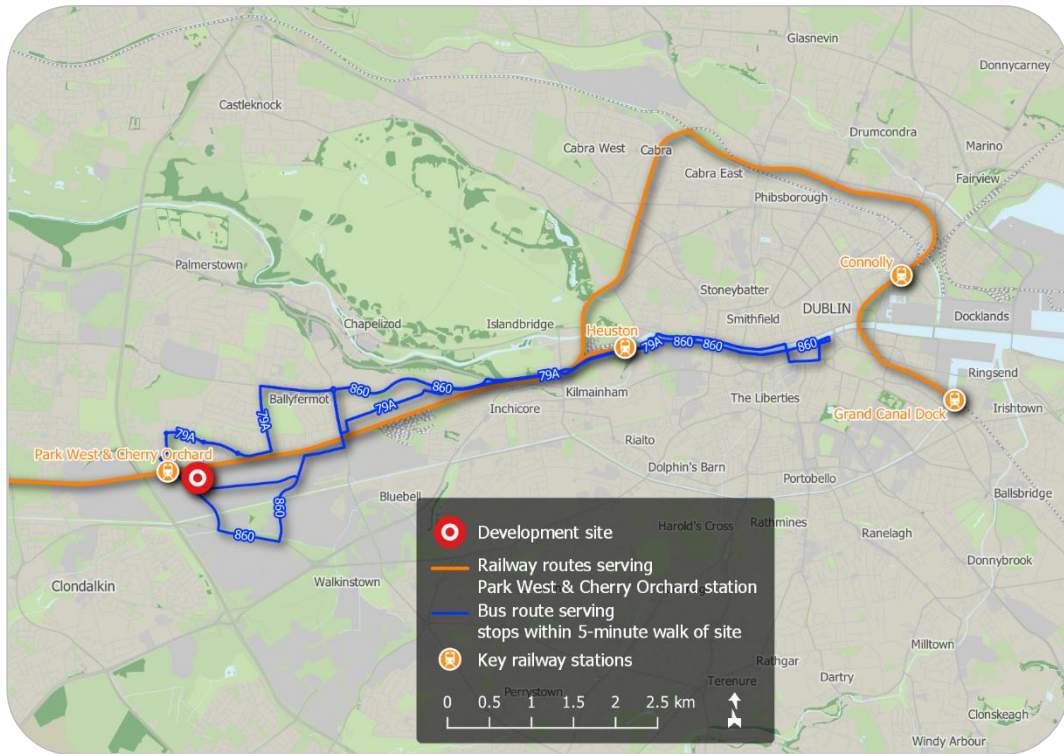


Figure 5 – Existing nearby rail and bus routes
(map data sources: EPA, NTA, OSi, OSM Contributors)

Figure 6 shows the reach of public transport journeys from the development site by total travel time (including service interchanges, and walking to and between stops), based upon a departure time of 08:00 on a typical weekday.

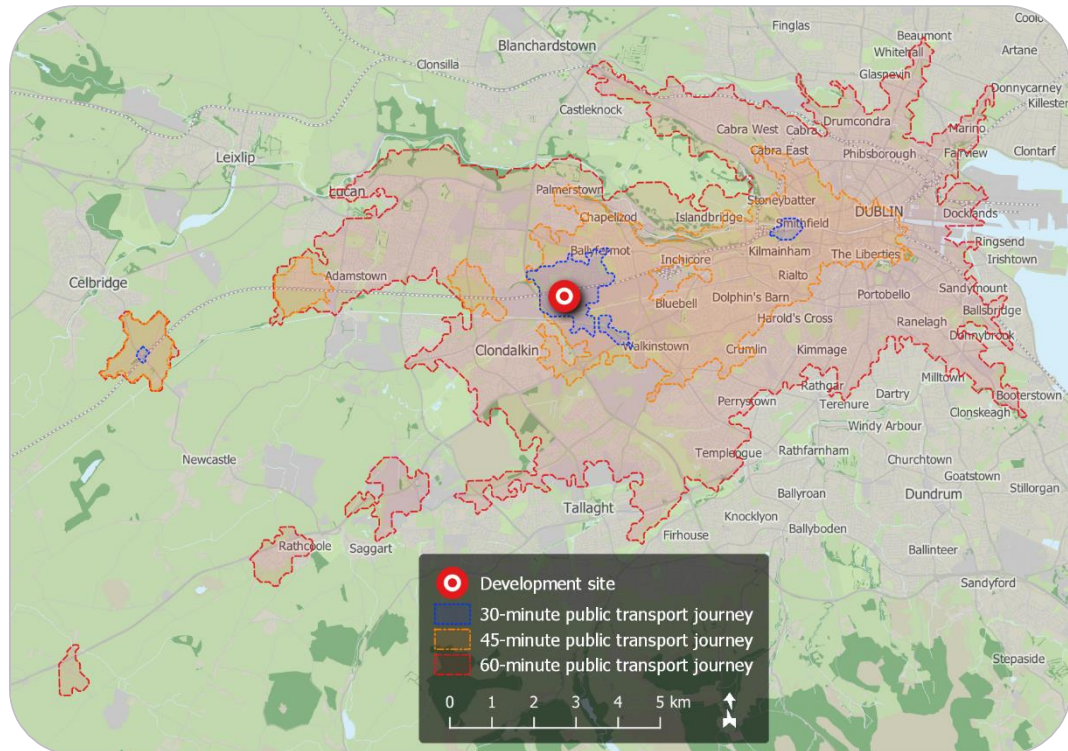


Figure 6 – Public transport travel times from development site
(map data sources: EPA, OSM Contributors, TravelTime platform)

3.3 Bicycle Infrastructure

As shown in **Figure 7**, the development site is within a 10-minute bicycle journey of numerous employment concentrations, including the following:

- Cherry Orchard Hospital
- Cherry Orchard Industrial Estate
- Clondalkin Industrial Estate
- Western Industrial Estate
- John F. Kennedy Industrial Estate

Liffey Valley Shopping Centre, Fonthill Retail Park, and Ballymount Industrial Estate are all within a 15-minute bicycle journey, while the Phoenix Park and the western edge of Dublin city centre are within a 20-minute bicycle journey. These bicycle journey times have been calculated on the basis of an average cycling speed of 18km/h.

Existing off-road cycle lanes are in place along Park West Avenue, at the western boundary of the development site. These connect to cycle facilities and bus lanes on the R134 Nangor Road and the R110 Long Mile Road, which provide a route into Dublin city centre.

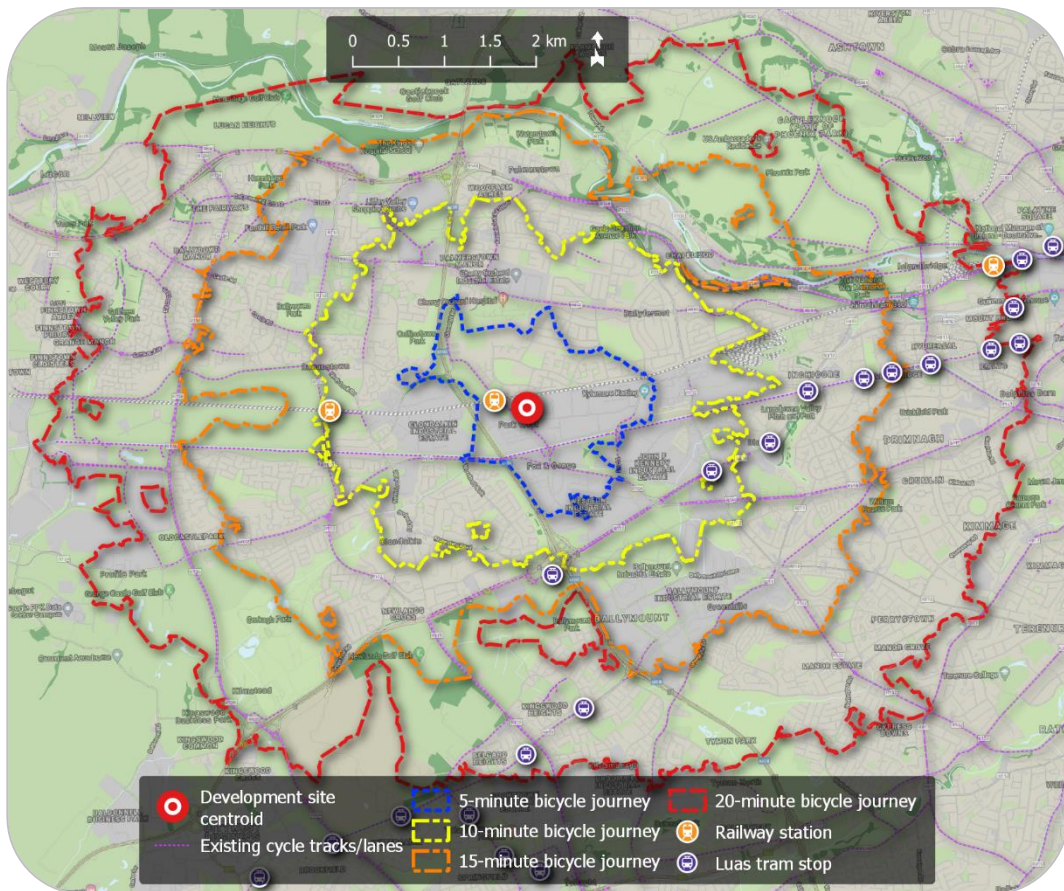
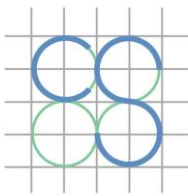


Figure 7 – Bicycle journey times and cycle facilities
(map data sources: EPA, NTA, OSi, OSM Contributors, Google)

Within the development, long-term and short-stay bicycle parking shall be provided in accordance with the requirements of the *Dublin City Development Plan 2016–2022* and the recommendations of the December 2020 policy document *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities)*, to promote and support cycling as a mode of transport for both residents and visitors.

3.4 External Shared Transport

As shown in **Figure 3**, an existing base for the GoCar commercial car-sharing service is located in the Park West Business Park, within a 5-minute walk of the development site.



4.0 PROPOSED TRANSPORT INFRASTRUCTURE AND SERVICE IMPROVEMENTS

4.1 BusConnects Network Redesign

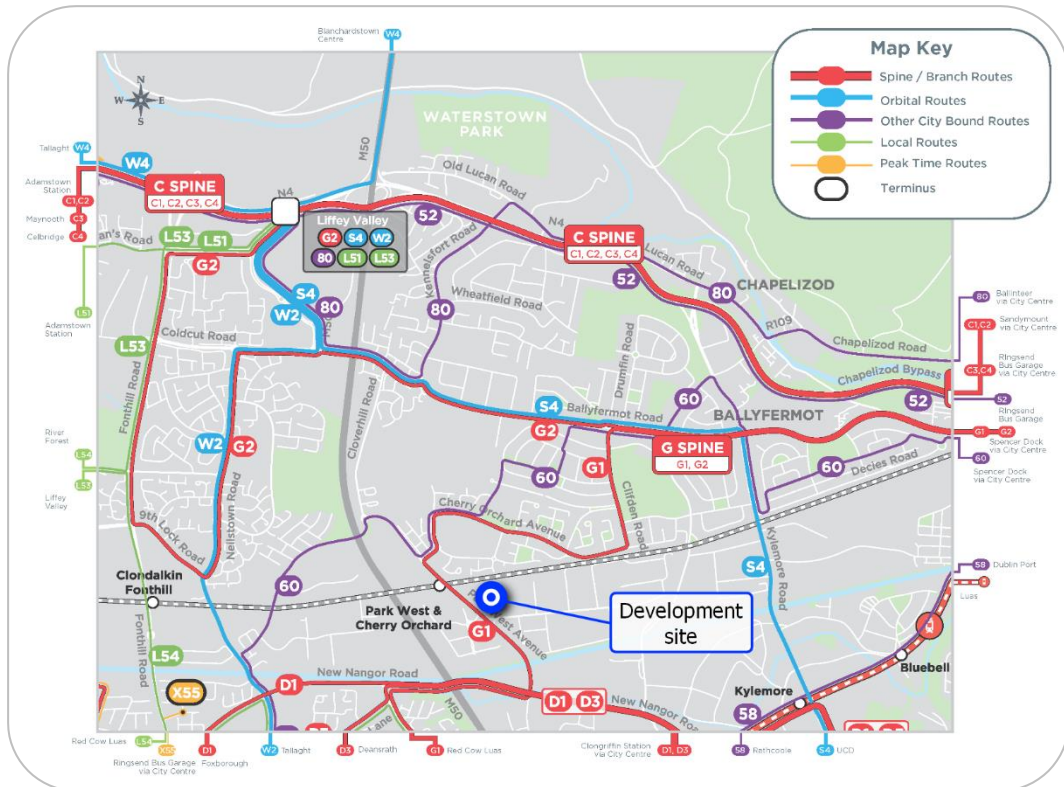
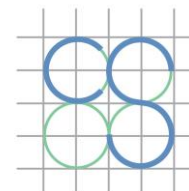


Figure 8 – Dublin Area Revised Bus Network Ballyfermot area map
(background imagery source: NTA)

Table 3 – Future Bus Services in Proximity to Site

Route No.	Route Type	Destinations	Weekday Services ³	Peak Interval
G1	Spine	Spencer Dock – Red Cow	77	12 min
D1/D3	Spine	Clongriffin – Grange Castle / Clondalkin	144	8 min
60	Radial	Spencer Dock – Red Cow	18	60 min

³ Average number of services per day in each direction, Monday-Friday



As part of the NTA's BusConnects framework, the Dublin Area Revised Bus Network initiative seeks to improve the overall convenience and efficiency of the city's bus routes. Under these Revised Bus Network proposals, which are in the process of being implemented by the NTA, bus stops in proximity to the subject development site will in future be served by the bus routes listed in **Table 3**.

4.2 Greater Dublin Area Cycle Network Plan

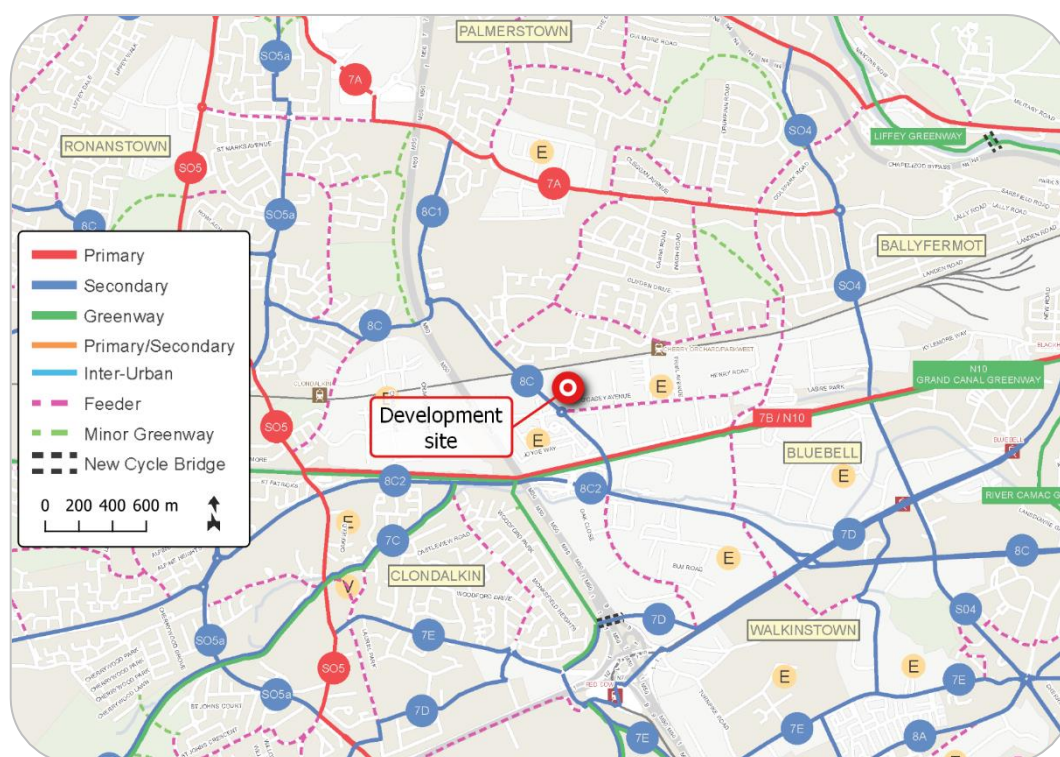
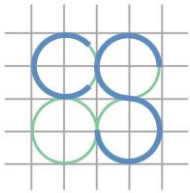


Figure 9 – Extract of Greater Dublin Area Cycle Network Plan mapping
(background imagery source: NTA)

The *Cycle Network Plan for the Greater Dublin Area*, administered by the National Transport Authority, provides for the integration of the existing cycle facilities along Park West Avenue and Nangor Road into a secondary arterial cycle route (route 8C/8C2) leading to Dublin city centre, while a feeder cycle route is to be provided along Park West Road. A new primary arterial cycle route and greenway (route N10/7B) is to run along the Grand



Canal, providing a direct segregated cycle route into the city centre from the vicinity of the development site.

No information is yet publicly available on the proposed design or delivery timeframe of these cycle infrastructure objectives. The relevant maps extracted from the *Cycle Network Plan for the Greater Dublin Area* are provided as part of **Appendix B** to this report.

5.0 CONTENT OF THE RESIDENTIAL TRAVEL PLAN

The Residential Travel Plan is a management tool that brings together transport, residents and site management issues in a coordinated manner. This report sets out the objectives and specific measures required to establish an effective Residential Travel Plan.

This Plan's aim is to provide more sustainable transport choices that will allow the lowest possible proportion of journeys to/from the site to be made by single-occupant private cars.

The Plan sets out specific targets and objectives, including measures to be implemented to establish an effective modal shift in transport to and from the development. The Plan will require regular monitoring to develop an effective implementation of mobility management measures.

Within Ireland, travel demand management is becoming well established through the initiatives and strategies identified in the document *A Platform for Change*, which was published by the Dublin Transportation Office (DTO) in 2001. Within this document, the first steps for travel demand management in Ireland are described as seeking "*to reduce the growth in the demand for travel while maintaining economic progress, [through measures] designed to encourage a transfer of trips to sustainable modes*".

Building on the policies set forth in *A Platform for Change*, further progress in the Irish context was made with the publication of the document *Smarter Travel: A Sustainable Future – A New Transport Policy for Ireland 2009-2020* and, more recently, the publication of the *Transport Strategy for the Greater Dublin Area 2016-2035*. Within these documents, numerous actions have been proposed which aim to foster improved sustainable travel habits for Ireland.



An effective RTP should be informed by and founded upon the following:

- A travel survey of development users, to establish the origins and destinations of trips to and from the development;
- An outline of specific schemes/measures implemented to discourage car-dependent transport to and from the site;
- Any comments/suggestions on travel that have been offered by development users;
- A set of targets, to be set out in accordance with approved guideline documents;
- An outline of the specific schemes that the development plans to make available to its users, in order to encourage the desired travel patterns to and from the site. These might include, for example: cycle facilities, public transport subsidies, walking groups, cycle groups, communication and consultation, etc.

The Residential Travel Plan for the subject development follows the above guidelines. The success of the Plan depends on the co-operation of all parties; the appointment of a co-ordinator and a steering group is vital for the success of the Plan. This Residential Travel Plan will need to be reviewed on a regular basis by the steering group, with updates implemented as improvements to the transport network in the vicinity of the development site are carried out.

The objectives of the Residential Travel Plan for the proposed development are as follows:

- To encourage/increase the use of public transport, walking and cycling for residents and visitors and to facilitate travel by bicycle, bus, light rail, and train.
- To reduce the overall number of single-occupant vehicles trips (especially for journeys to places of work or study).

- To integrate mobility management into the development decisions, policies, and practices, and to work closely with governing bodies on means and use of transport services near the development site.
- To provide information and have resources readily available to increase awareness and continue education on sustainable modes of travel for both residents and visitors to the development.

5.1.1 Objective 1

To encourage/increase the use of public transport, walking and cycling for residents and visitors and to facilitate travel by bicycle, bus, light rail, and train.

The encouragement and increased use of other modes of transport which are less damaging to the environment in terms of congestion and emissions is directly linked to the reduction in car use. Through the encouragement of these alternatives to the car it is hoped that their mode share will increase. Public transport, pedestrian, and cycling facilities are present in the vicinity of the development site; these include frequent Dublin Bus services that offer a viable alternative to the private car for many journeys. Facilities are constantly improving with the ongoing implementation of different strategies and projects such as the LUAS Cross-City service connection (completed in 2017), the Metrolink, and the DART Underground.

Apart from the environmental benefits, the use of more sustainable modes of transport affords the following benefits to individuals:

- Savings in personal costs. Walking is free, cycling does not incur any fuel costs and buying a bicycle or using public transport is cheaper and can benefit from Government's tax incentives.
- Health benefits. Levels of fitness and wellbeing increase with the practice of exercise, which is directly related to walking and

cycling. The use of public transport avoids the stress of driving, traffic congestion, seeking parking spaces, etc.

5.1.2 Objective 2

To reduce the overall number of single-occupant vehicles trips.

The reduction in vehicle use is a key objective of the RTP. Car use reduces air quality and local amenity while impacting on road safety, which in turn has social and economic disadvantages.

This objective is targeted specifically at the reduction of car use to and from the development. The objective is achievable through measures designed at reducing the need for travel and encouraging a modal shift away from the private car.

5.1.3 Objective 3

To integrate mobility management into the development decisions, policies, and practices, and to work closely with governing bodies on means and use of transport services near the development site.

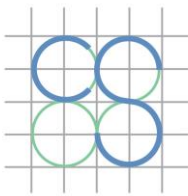
Mobility management and sustainable transport cannot be addressed in isolation, but as part of a more general approach towards the development of a sustainable organisation whose functions deliver significant benefits to the community and the environment together with economic savings. Regular communication with the local authorities on further improving facilities in and around the vicinity of the development can establish good policies and practices when developing decisions within the RTP.

In addition, the Local Authorities require Residential Travel Plans for developments which the planning authority may consider generate significant trip demand.

5.1.4 Objective 4

To provide information and have resources readily available to increase awareness and continue education on sustainable modes of travel for residents and visitors to the development.

The RTP has a significant role to play in the provision of information and resources to people both within the development and the wider community. Information should be made readily available, and the benefits of sustainable travel should be widely promoted throughout the development when completed. Information positioned correctly can influence attitudes, which in turn can influence behaviour.



6.0 INITIAL TARGETS OF THE RESIDENTIAL TRAVEL PLAN

6.1 Population Groups

Journeys to and from the development shall be made primarily by two distinct population groups: residents and visitors. The targets set under the RTP shall be limited to residents, as this is the only group that is expected to make both frequent and regular trips to and from the site. While the travel habits of visitors are expected also to be influenced by measures adopted under the Plan, these are more difficult to monitor.

6.2 Census Data

To establish indicative baseline modal splits for the development site, reference has been made to CSO data derived from the 2016 census. These data are in the form of Small Area Population Statistics (SAPS), which give modal splits for overnight residents' trips to places of work or study.

Table 2 – CSO 2016 Census Data – Existing Modal Splits

Transport Mode	Small Areas	
	SA 268040005 only	SA 268040005 + adjacent
Driving a Car or Van	44%	34%
Passenger in a Car	12%	16%
Bicycle	4%	4%
Motorcycle	1%	1%
Bus	10%	16%
Train or Tram	10%	4%
Walking	14%	19%
Other / Work from Home	2%	1%
Not Stated	3%	5%

The development site is located in census Small Area no. 268040005. The census modal splits for this Small Area, as well as for the adjacent areas, are given in **Table 2**.

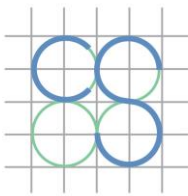


Figure 10 – CSO Census Small Areas
(map data & imagery: CSO, OSM Contributors, Yandex)

6.3 Development Modal Splits

Table 3 gives both the assumed starting modal splits and the suggested initial Residential Travel Plan targets to be set in pursuance of the objectives defined in Section 6. The assumed starting modal splits have been informed primarily by CSO census data from the year 2016, as previously described, as well as by the proposed car parking provision within the subject development.

Once the development is completed and occupied, the true initial modal splits should be established by means of a travel survey and the initial



Residential Travel Plan targets should be amended by the Travel Plan Coordinator, if appropriate. These targets should be reappraised at regular intervals thereafter as part of the periodic Plan review process.

Table 3 – Initial Target Modal Splits for Development Occupants

Mode	Assumed Starting Proportion of Trips	Suggested Initial RTP Targets
Driving a Car	41%	35%
Passenger in a Car	14%	11%
Bicycle	5%	7%
Motorcycle	1%	1%
Bus	14%	17%
Train or Tram	7%	9%
Walking	18%	20%
TOTAL	100%	100%

6.4 Implementation Timeframe

The duration of the first phase of the Residential Travel Plan, during which the initial target modal splits shall be pursued, will be decided by the Travel Plan Coordinator once the development is operational. A phase duration of 2 years is suggested, after which time the first Plan review may be conducted and the initial targets revised, if appropriate.

6.5 Plan Monitoring and Review

As part of on-going monitoring and review, the percentage shares of individual modes such as walking, cycling and public transport will be monitored to understand how successful implementation of targeted programs have been.

The targets set will require ongoing work and commitment from the development as a whole, without which they will not be achieved. It is recognised that some people will be easier to convert to alternative modes of transport than others, and that the more that is done to facilitate the use of those alternatives, the more they will be used. As it has already been noted, a Residential Travel Plan is an ongoing process and targets that are achieved should be replaced by further targets.

7.0 MOBILITY MANAGEMENT MEASURES

The measures identified are a mixture of policies and incentives designed to both encourage changes in travel behaviour and restrict the use of private cars. The measures are designed to be implemented over a period of time, allowing costs to be spread and ensuring policies and incentives are implemented together.

While little may be observed in terms of travel behaviour in the short term, as implementation gains momentum, so will the impact in terms of travel behaviour.

The mobility management measures in the plan can be grouped under the following headings:

- Implementation / Consultation / Monitoring
- Marketing and Communications
- Walking and Cycling
- Residential Car Sharing
- Public Transport

7.1 Implementation / Consultation / Monitoring

The Residential Travel Plan is a document that evolves over time and depends upon ongoing implementation, management, and monitoring. Its successful implementation requires community support, an internal Travel Plan Coordinator, and financial resourcing.

To implement the Residential Travel Plan, the following are required:

- A Travel Plan Coordinator to oversee the Plan.
- Financial support and commitment from a Management Company or Residents' Committee.

- A residents' Steering Group to assist in implementing the Plan and to form ad-hoc Working Groups on specific issues.
- Consultations with development users and external organisations.

To secure effective results from any initial sustainable travel investment, it is imperative to obtain the agreement of all stakeholders and the support of external partners, such as the Local Authority, public transport operators, etc.

The Residential Travel Plan will be managed by a Travel Plan Coordinator with the clear mandate to implement and evolve the Plan. The Travel Plan Coordinator will also be best suited to monitor the results of the Plan. This role may for example be performed by a member of the development's Management Company or Residents' Committee.

Travel surveys of development occupants (and of visitors, if practicable) should be repeated annually, to monitor the initial success of the Residential Travel Plan and to gain a better understanding of travel habits. These survey results can also serve as a sustainable travel performance benchmark to indicate how the Residential Travel Plan is performing in comparison to previous years and against the sustainable travel targets initially outlined in the Plan.

7.2 Marketing and Communications

The education of residents and visitors on the RTP initiatives and the importance of contribution are extremely important. The services available must be communicated in a consistent and continuous manner to sustain behavioural change.

Communications will include promotional initiatives and activities aimed at informing the residents and visitors of the existing and proposed transport networks. Such initiatives and activities will include:



- Promoting the RTP through both internal communication and external avenues.
- Developing an Access Map to show public transport facility locations and to highlight safe walking and cycling routes.
- Providing Travel Information Points at dedicated on-site locations to make residents and visitors aware of the mode choices available in and around the development site. These should be conspicuously located at reception areas and should provide travel and mobility information such as maps, public transport routes and timetables, leaflets, etc.
- Preparing a formalised Sustainable Travel Information Pack, which is to be provided to all new development residents. The Pack will contain all the information relating to the Residential Travel Plan, including the Mobility Access Map and the locations of cycle parking, etc.
- Developing a digital Travel Information Point for the development to provide details of travel options to the site, linking to appropriate external websites for visitors to the development.

7.3 Walking and Cycling

7.3.1 Safe Walking and Cycling Routes

All pertinent safe walking and cycling routes should be identified within a radius of at least 5km around the development site. These routes will be selected with regard to:

- Availability of footpaths and cycle paths
- Safety at crossings
- Signage
- Lighting

7.3.2 Bicycle Parking, Umbrellas, and Bicycle Repair Kit Facility

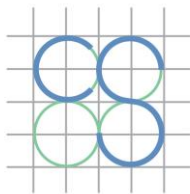
- It should be ensured that bicycle parking for development residents and visitors is secure, easily accessible, and sufficiently sheltered.
- Loan umbrellas should be provided at apartment reception areas for visitors.
- A bicycle toolkit (containing puncture repair equipment, pump, etc. for use in emergencies) should be maintained at each apartment reception area and made available to all bicycle users.

7.4 **Residential Car Sharing**

A residential car sharing club shall be established within the development, allowing residents the exclusive use of 14no. shared cars based permanently within the site. These vehicles may be owned and operated by the development's Management Company, or an external car share operator may be engaged to supply and maintain these vehicles.

A recent study of car clubs in Scotland, commissioned and published by CoMoUK ⁴, concluded that a single shared car may replace 14 private cars. On this basis, the 14no. shared car parking spaces may therefore be considered to reduce residential parking demand within the development by approximately 182no. spaces.

⁴ *Car Club Annual Survey for Scotland 2019/2020*, available from <https://como.org.uk/shared-mobility/shared-cars/why/>



7.5 Public Transport

The following measures are intended to promote the use of public transport.

7.5.1 Service Information

It must be ensured that the information supplied in the development's Access Map, Sustainable Travel Pack, and Travel Information Points includes the location of stops, routes, timetables, walking times to main public transport facilities, etc. Changes and improvements to public transport provision must be publicised as well.

7.5.2 Promotion of Tickets and Passes

Residents should be provided with information on advantageous public transport fare options, including the Taxsaver scheme and the TfL Leap Card.

7.5.3 Multi-Modal Trip Support

Development users should be offered specific advice on combining public transport with other modes of transport, for instance travelling by bicycle between a bus stop or railway station and their home or workplace. In particular, information should be provided on the conditions under which standard or folding bicycles may be carried on bus and train services.

8.0 SUMMARY

The proposed SHD is located on a site at Park West Avenue and Park West Road, Park West, Dublin 12. The development site is located in close proximity to existing high-quality railway and bus services that connect it to Dublin city centre and is within convenient cycling distance of the city centre. The development site also stands to benefit from future improvements to public transport services under the NTA's BusConnects proposals. It is therefore an objective under this Residential Travel Plan that a reduced proportion of the trips generated by this development be made by private car.

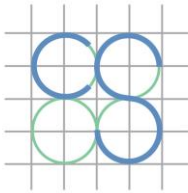
The following Mobility Management measures are suggested for implementation under the Residential Travel Plan:

8.1.1 General

- Put in place a formal Residential Travel Plan.
- Appoint a Travel Plan Coordinator.
- Create an Access Map.
- Provide travel information to development occupants and visitors, in the form of Travel Information Points, Sustainable Travel Welcome Packs, and a travel hub website.
- Monitor the operation of the plan by development occupants, through travel surveys.
- Regularly revise and update the plan as required.

8.1.2 Walking and Cycling

- Identify safe walking and cycling routes.
- Provide secure and attractive cycle parking and ancillary facilities for cyclists and pedestrians.

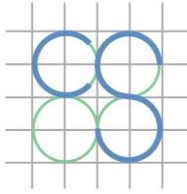


8.1.3 Residential Car Sharing

- Establish a residential car sharing club within the development, for the exclusive use of residents.

8.1.4 Public Transport

- Provide information on locations of stops, routes, timetables, walking times to main public transport facilities, etc.
- Provide specific advice on multi-modal trip planning.



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Appendix A

Links to relevant Mobility Management guidance documents

Appendix 15 – Useful Links and Resources

Please note that the National Transport is not making recommendations for any of the suppliers listed below, and your organisation will find other suppliers beyond the list given below. The links listed are just to give a flavour of the type of products/ services that are available.

Workplace Travel Plans

www.smartertravelworkplaces.ie
www.ways2work.bitc.org.uk

Sustainable Travel

www.smartertravel.ie
www.sustrans.org.uk
www.nationaltransport.ie
www.dttas.ie
www.eltis.org
www.mobilityweek.eu

Getting Active

www.getirelandactive.ie

Public Transport Information

www.transportforireland.ie
www.taxesaver.ie

Cycle to Work Scheme

www.revenue.ie

Walking challenges

www.pedometerchallenge.ie
www.irishheart.ie

Cycling

www.cyclechallenge.ie
www.dublinbikes.ie
www.irishcycling.com

Cycle to Work scheme

www.revenue.ie
www.bikescheme.ie

Designing and Planning for Cycling

www.cyclemanual.ie
 Transport for London Workplace Cycle Parking Guide
 See p16 for technical guidance on space allocations for cycle parking
<http://www.tfl.gov.uk/assets/downloads/businessandpartners/Workplace-Cycle-Parking-Guide.pdf>

Walking/ Cycling Routes

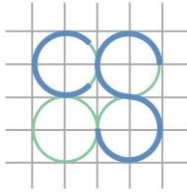
www.mapmyride.com
www.mapmyrun.com

Car Sharing

www.carsharing.ie

Misc.

Copenhagen Cycle Chic - Bikes, style and Copenhagen



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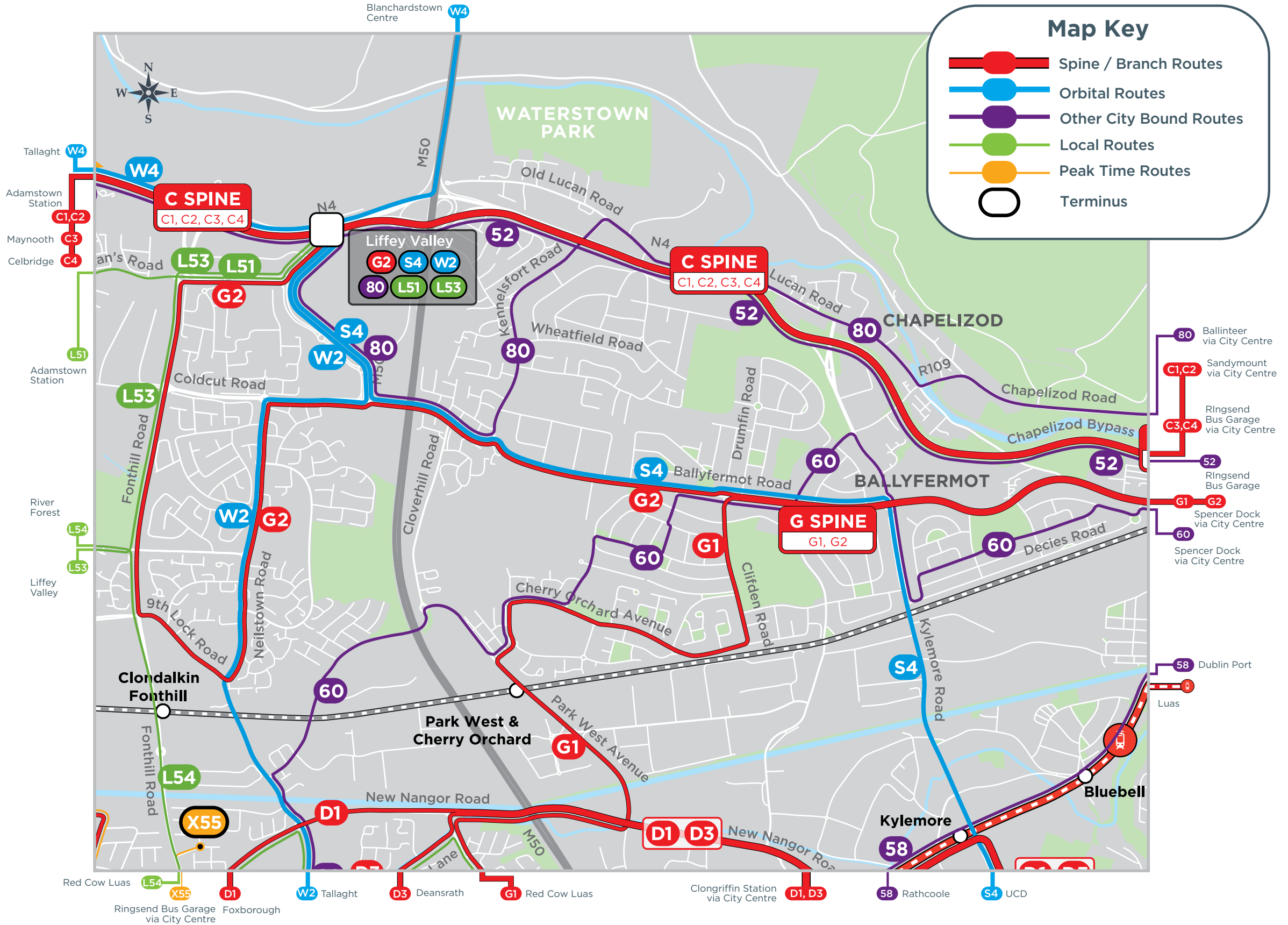
Appendix B

Proposed public transport and infrastructure improvements

Your local area map

How BusConnects gets you where you want to go.

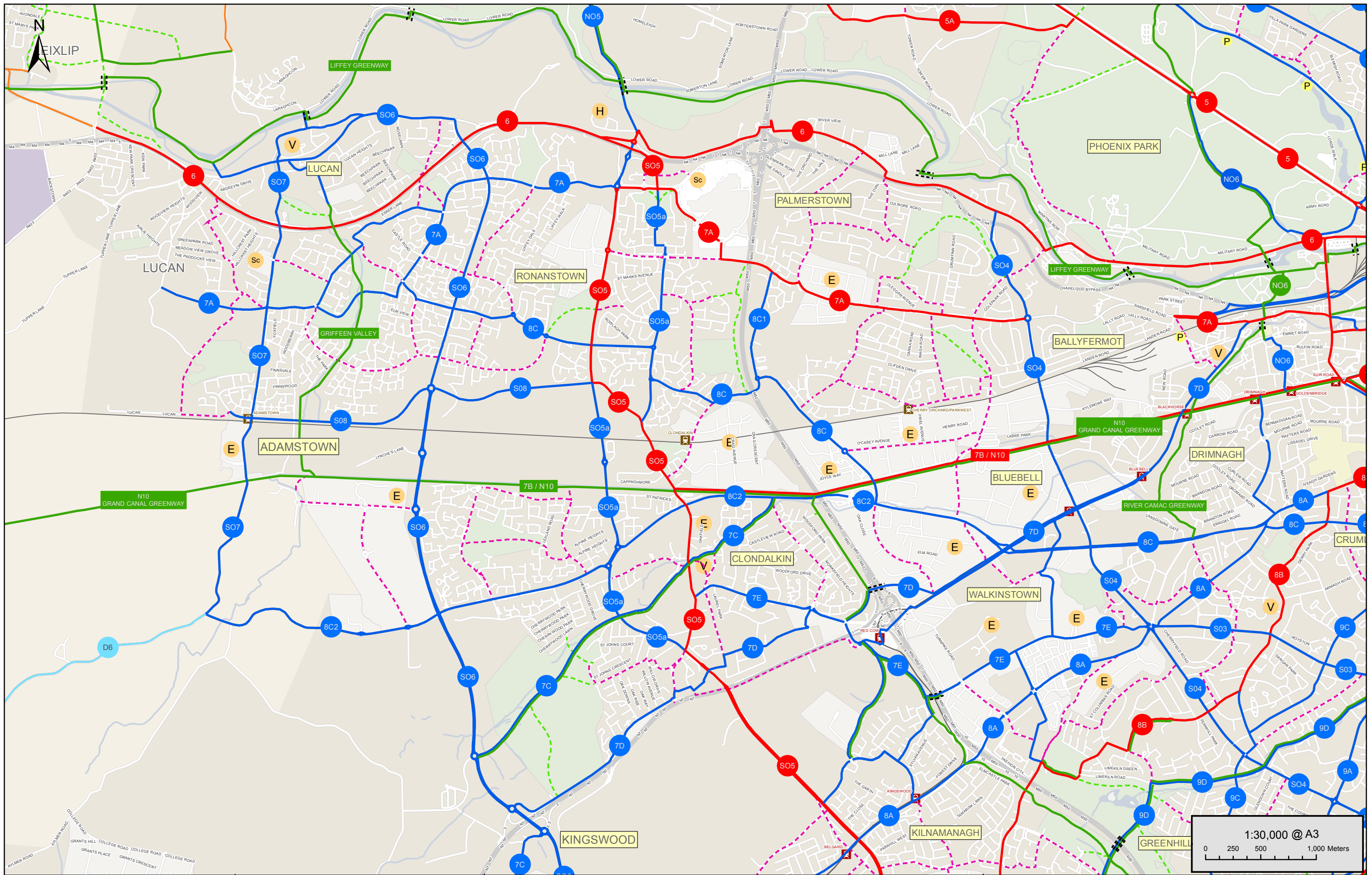
• Ballyfermot • Chapelizod • Liffey Valley • Palmerstown



Spine frequency tables

The number in each box is the expected time in minutes between buses. It is subject to adjustment in line with future passenger numbers.

Spines & Branches		Weekday											Sunday											Sunday																																	
Route no.	To and From	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11			
A-SPINE	Swords Rd - City Centre - Terenure	8	4	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	8	5	5	5	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	8	8	8	5	5	5	5	5	5	5	5	5	8	8	8	8	8	8	8
A1	Beaumont - City Centre - Knocklyon	30	15	12	12	12	12	12	12	12	12	12	12	12	12	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30
A2	Airport - City Centre - Ballinteer - Dundrum	30	15	12	12	12	12	12	12	12	12	12	12	12	12	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
A3	DCU - City Centre - Tallaght	30	15	12	12	12	12	12	12	12	12	12	12	12	12	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
A4	Swords - City Centre - Dundrum	30	15	12	12	12	12	12	12	12	12	12	12	12	12	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
B-SPINE	Blanchardstown SC - City Centre - UCD	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8	5	5	5	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	8	8	8	5	5	5	5	5	5	5	5	5	8	8	8	8	8	8	8
B1	Ongar - City Centre - UCD	30	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
B2	Ongar North - Clonsilla - City Centre - UCD	30	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
B3	Tyrrelstown - City Centre - Dún Laoghaire	30	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
B4	Blanchardstown SC - City Centre - Sallynoggin	30	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
C-SPINE	Lucan - City Centre - Ringsend	15	8	4	5	8	8	8	8	8	8	5	4	5	8	8	8	8	8	15	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	15	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	15
C1	Adamstown - City Centre - Sandymount	60	30	8	8	30	30	30	30	30	30	8	8	8	30	30	30	30	30	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60
C2	Adamstown - City Centre - Sandymount	60	30	8	15	30	30	30	30	30	30	15	8	15	30	30	30	30	30	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60
C3	Maynooth - City Centre - Ringsend	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60
C4	Celbridge - City Centre - Ringsend	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60
D-SPINE	Malahide Rd - City Centre - Crumlin	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8	5	5	5	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	8	8	8	5	5	5	5	5	5	5	5	5	8	8	8	8	8	8	8	
D1	Clongriffin - City Centre - Grange Castle	30	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
D2	Clare Hall - City Centre - Citywest	30	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
D3	Clongriffin - City Centre - Clondalkin	30	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	
D4	Swords Road - City Centre - Killinarden	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60	40	40	40	30	30	30	30	30	30	30	30	30	30	40	40	40	40	60	60	60	40	40	40	40	40	40	40	40	40	60	60	60	60	60	60	60	
D5	Edenmore - City Centre - Tallaght	60	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	60	40	40	40	30	30	30	30	30	30	30	30	30	30	40	40	40	40	60	60	60	40	40	40	40	40	40	40	40	40	60	60	60	60	60	60	60	
E-SPINE	Ballymun - City Centre - Foxrock Church	10	5	4	4	5	5	5	5	5	5	4	4	4	5	5	5	5	10	8	8	8	5	5	5	5	5	5	5	5	5	8	8	8	8	10	10	10	8	8	8	8	8	8	8	8	8	10	10	10	10	10	10	10			
E1	Northwood - City Centre - Bray Main St. - Ballywaltrim	20	10	8	8	10	10	10	10	10	10	8	8	8	10	10	10	10	10	20	15	15	15	10	10	10	10	10	10	10	10	10	10	10	10	10	20	20	20	15	15	15	15	15	15	15	15	15	20	20	20	20	20	20	20		
E2	Charlestown - City Centre - Dún Laoghaire	20	10	8	8	10	10	10	10	10	10	8	8	8	10	10	10	10	10	20	15	15	15	10	10	10	10	10	10	10	10	10	10	10	10	10	10	20	20	20	15	15	15	15	15	15	15	15	15	20	20	20	20	20	20	20	
F-SPINE	Finglas - City Centre - Kimmage	10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	10	7	7	7	5	5	5	5	5	5	5	5	5	7	7	7	7	10	10	10	7	7	7	7	7	7	7	7	7	10	10	10	10	10	10	10			
F1	Charlestown - Finglas Bypass - City Centre - Tallaght	30	15	10	10	15	15	15	15	15	15	10	10	10	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30		
F2	Charlestown - Finglas NW - City Centre - Templeogue	30	15	10	10	15	15	15	15	15	15	10	10	10	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30		
F3	Charlestown - Finglas SW - City Centre - Greenhills	30	15	10	10	15	15	15	15	15	15	10	10	10	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30		
G-SPINE	Ballyfermot - City Centre - Docklands	15	8	6	6	8	8	8	8	8	8	6	6	6	8	8	8	8	15	10	10	10	8	8	8	8	8	8	8	8	8	10	10	10	10	15	15	15	10	10	10	10															



Project:
**CYCLE NETWORK PLAN FOR
 THE GREATER DUBLIN AREA**

Title:
**PROPOSED CYCLE NETWORK
 DUBLIN MID WEST
 SHEET N5**

Legend:

Primary	Inter-Urban	Greenline Tram Stops
Secondary	Feeder	Redline Tram Stops
Greenway	Minor Greenway	Stations
Primary/Secondary	New Cycle Bridge	Permeability Link
	Gateway	Shopping Centre
Employment Zones	Town Centre	University
Hospitals	Village Centre	

Udarás
Náisiúnta Iompair
 National Transport Authority

AECOM

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