Ruirside Developments Limited **Parkgate Street Development** Transport Statement

PGATE-ARUP-ZZ-XX-RP-YT-0001

Issue 3 | 23 January 2020

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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Appendix A

DMURS Statement of Consistency

1 Introduction

This report supports the planning application submission to An Bord Pleanála for the construction of a mixed-use building of approximately 42,000m² ranging in height from 8 to 29 storeys on the site of the former Hickeys warehouse on Parkgate street. The development to which this submission relates involves a proposal for 481 no. apartment units, along with approximately 3,700m² of office space, and approximately 450m² of Food & Beverage units.

As this is a transport-oriented development, the design will focus on encouraging sustainable transport trips such as walking, cycling, rail, Luas and bus trips. As such, a very low number of car parking spaces will be provided. The expected effect on the surrounding traffic network is therefore minimal, and thus it was agreed with DCC that a full Transport Impact Assessment was not required.

2 Existing Receiving Environment

2.1 Overview

The site of the proposed development is located in the west of Dublin City Centre and occupies 0.82 hectares of land along north edge of the River Liffey.

The site is bounded by Parkgate Street to the north, Parkgate Business Centre to the west, and the River Liffey to the south. Heuston Station lies directly across the river to the south, and the main entrance to Phoenix Park lies approximately 250m to the west of the site. The site had previously been in use by Hickeys as its wholesale warehouse.

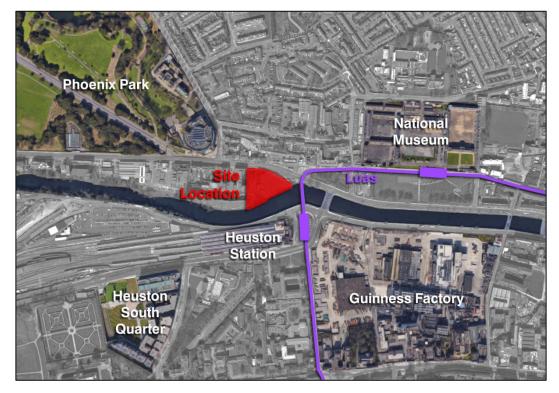


Figure 2.1: Site Location

2.2 Pedestrian Accessibility

A pedestrian footpath runs along the northern end of the site which runs along Parkgate Street connecting to Phoenix Park and Conyngham road to the west, and along the northern bank of the Liffey into the city to the east. Sean Heuston Bridge provides a connection across the Liffey to Heuston Station and Heuston South Quarter to the southwest.

This site lies within the city, so there is naturally a very high degree of walkability to/from the surrounding area. **Figure 2.2** shows the walking catchment of the site, this shows that areas such as Temple Bar, The Liberties, Grangegorman, and Kilmainham are within a 20-minute walk of the site.

Despite the generally good quality of the pedestrian network in the wider vicinity of the site, it has been noted that there is limited capacity for pedestrian movements along Sean Heuston Bridge.

A pedestrian survey was undertaken on Thursday 5th December at the bridge to ascertain the actual volumes of pedestrians using it during the day. Results show that 1,065 pedestrians use Sean Heuston Bridge between 9.00 and 10.00 in the morning and 1,181 between 18.00 and 19.00 in the evening, equating to about 18 and 20 movements per minute in average, respectively. These were found to be the periods of most activity on the bridge.

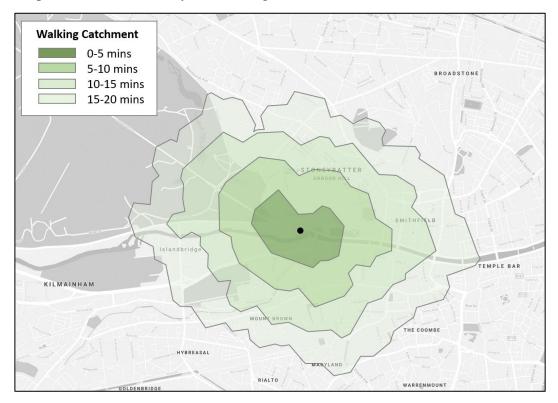


Figure 2.2: Walking Catchment

2.3 Cyclist Accessibility

There are no cycle facilities immediately adjacent to the site along Parkgate street. To the west, an advisory cycle lane is provided on the westbound side of Conyngham Road, starting at the entrance to Phoenix Park, with cycle facilities provided within the bus lane for the eastbound direction. Mandatory cycle lanes are provided along both sides of Chesterfield Avenue within Phoenix park. To the east, an advisory cycle lane is provided within the bus lane along Wolfe Tone Quay on the northern side of the River Liffey. To the south, advisory cycle lanes are provided on St John's Road West in both directions. This site lies along primary route '5' in the GDA Cycle Network Plan¹, which runs from Blanchardstown through Castleknock, along Chesterfield Avenue through Phoenix park, and along the River Liffey as far as the East Link Bridge. The recently announced plans for the Liffey Cycle Route propose to create segregated cycle facilities on either side of the Liffey along the entirety of the River from Heuston Station/Parkgate Street to the East Link Bridge.

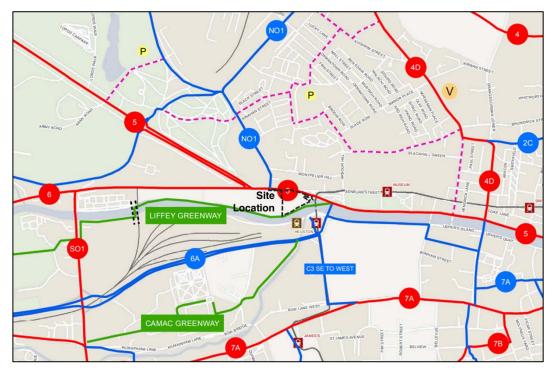


Figure 2.3 presents the cycle network in the vicinity of the site.

¹ NTA, 2013. GDA Cycle Network Plan. Available at https://www.nationaltransport.ie/publications/strategic-planning/gda-cycle-network-plan/. Accessed 04/12/2019.

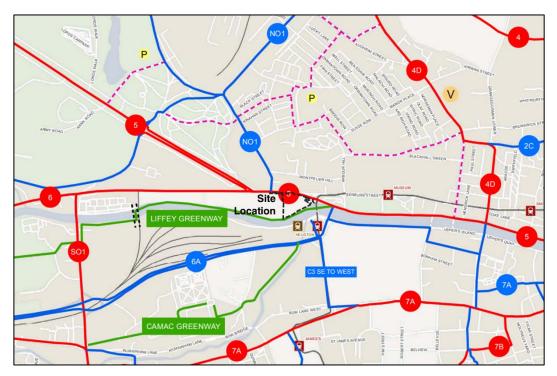


Figure 2.3: Extract from the GDA Cycle Network Plan

The site is easily accessible by bike, with the 20-minute catchment stretching as far as Ballymun to the north, Liffey Valley to the west, and Rathfarnham to the South. Trinity College and the TU Dublin Grangegorman campus are both accessible within 10 minutes, while UCD Belfield and DCU both are both within a 30-minute cycle. The 10-minute, 20-minute and 30-minute cycle catchment zones are shown in **Figure 2.4**.

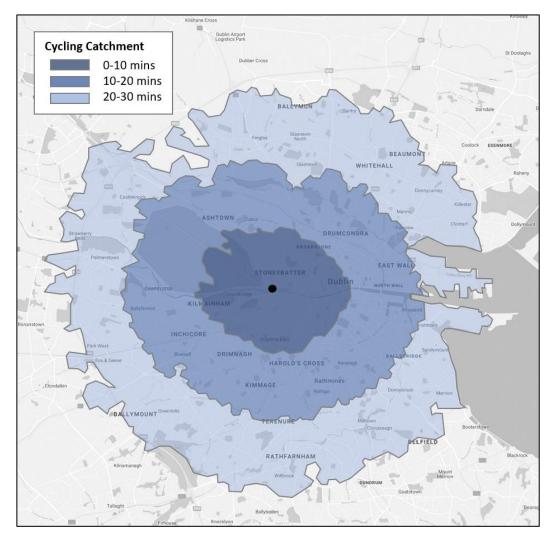


Figure 2.4: Cycling Catchment

There are a number of Dublin Bikes stands in the vicinity of the proposed development. Station no. 92 lies directly in front of the site along Parkgate St, with Station 86 directly across the road. Station 100 is located at Heuston Station, just across the Sean Heuston Bridge. In addition, there are five other stations within ~600m of the site. The site location in the context of nearby bike stations is presented in **Figure 2.5**.

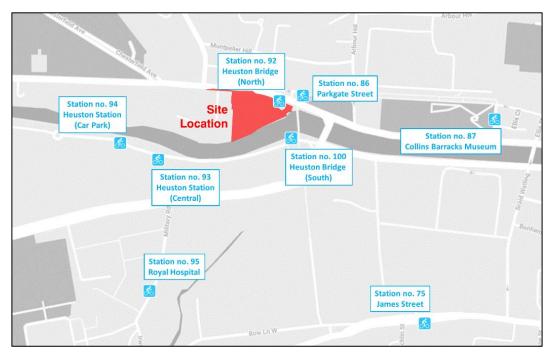


Figure 2.5: Nearby Dublin Bikes Stations

2.4 **Public Transport Facilities**

This site is very well served by public transport. Heuston Station lies directly across the River Liffey to the south, which provides regional rail connections to the west and south. The area in front of the station acts as a transport hub, with a Luas red line station, a number of local and regional bus route stops, and a Dublin bikes stand all located in this area.

The Luas red line provides connections to Tallaght and Saggart in the west, and Connolly and The Point to the east.

The 25, 26, 66/a/b, 67, and 69 bus routes all pass through Parkgate street, with the westbound bus stop located directly in front of the site, and the eastbound stop located across the road. The 25a/b and the 79/a pass along St Johns Rd W with stops just south of Heuston Station. The 145 and the 747 Airport Bus both terminate at Heuston station.

The public transport routes in the vicinity of the sire are shown in Figure 2.6.

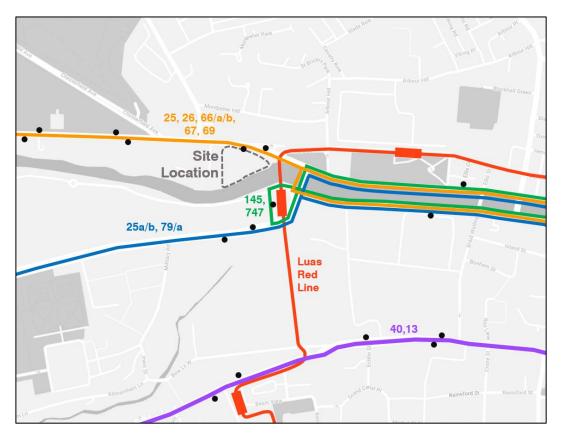


Figure 2.6: Public Transport Options in the Vicinity of the Site

The area is well connected to the rest of Dublin by public transport, with the 60minute catchment spreading to Ashbourne, Balbriggan, and Skerries to the north of the city, Enfield, Kilcock, Clane, and Sallins to the west of the city, and Dalkey, Bray, Stepaside, and Knocklyon to the south. The 45-minute zone covers the majority of Dublin within the M50 to the north and south, stretching to Maynooth, Celbridge and Rathcoole to the west.

The public transport catchments are presented in Figure 2.7.

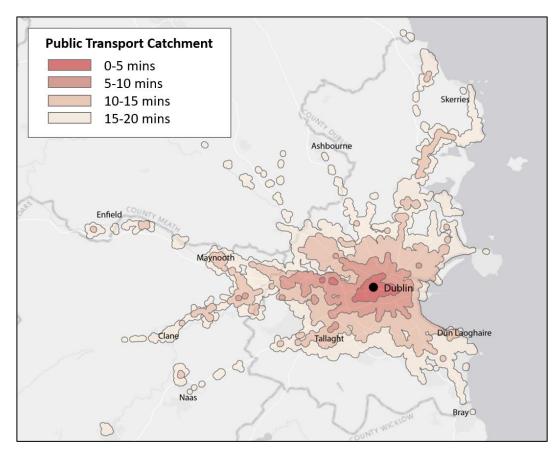


Figure 2.7: Public Transport Accessibility

Under the draft Dublin Area Revised Bus Network proposals as part of BusConnects, Heuston Station would act as a major transport interchange and terminus for a number of key routes.

The inner orbital 'O', which would run in both directions in a loop around the North Circular Road and the South Circular Road would have its terminus located at Heuston Station. The N2 northern orbital would run from Heuston Station through Stoneybatter, Cabra, Glasnevin, and on to Clontarf, and the S2 orbital would run from Heuston through Rialto, Kimmage, Rathmines, Ranelagh, Ballsbridge, and on to Sandymount.

In addition to these orbital routes, the 'C' radial spine would run east/west through Heuston, which would run from Poolbeg and Sandymount in the East, to Liffey Valley, Lucan and on to Maynooth and Celbridge in the West. Other radial spines which pass close to the site include the 'B' Spine which would run between Blanchardstown and UCD/Dun Laoghaire, and the 'G' Spine which would run between Liffey Valley/Red Cow and Spencer Dock.

Two of the minor radial routes would also pass along Parkgate Street, the 14, which would run from Liffey Valley through Chapelizod into the City Centre, and then south through Rathmines to Ballinteer, and the 93 which would run from Rathcoole into the city centre and terminate in Dublin Port. The planned routes in the vicinity of the development are presented in **Figure 2.8**.

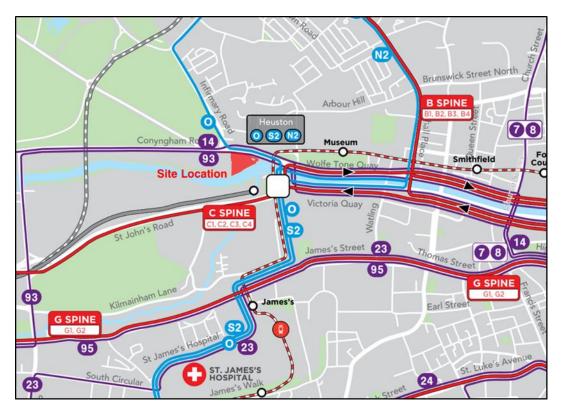


Figure 2.8: Extract from the Draft BusConnects Bus Network Redesign Proposals

3 Proposed Development

3.1 Description of Development

The proposed development consists of a mixed-use building of approximately 42,000m² ranging in height from 8 to 29 storeys on the site of the former Hickeys warehouse on Parkgate street.

The development to which this submission relates involves a proposal for 481 no. apartment units, along with approximately $3,700m^2$ of office space, and approximately $450m^2$ of Food & Beverage units.

A loading bay is proposed to be included along Parkgate street in front of the development. To facilitate this, it is necessary to move the existing Dublin Bikes station to a location to be decided by DCC. The existing road layout will remain unchanged. The existing kerb line will remain mostly unchanged, except for the addition of a dropped kerb to facilitate emergency access to the courtyard.

3.2 Pedestrian Accessibility

Pedestrian facilities and the public realm will be enhanced with this proposed development.

The eastern courtyard will be accessible to the public, allowing through access for pedestrians and providing a new public plaza with outdoor seating, landscaping, and entrances to the retail units.

A public river walk will be provided along the southern edge of the site, providing a view of the River Liffey and Heuston Station. The eastern end of the river walk will connect to the external footpath, providing more space for pedestrians at what is currently a constrained area of the footpath.

3.3 Cycle Parking

Cycle parking will be accessed via safe dedicated stairwells with wheeling ramps to facilitate access and egress. There will also be dedicated storage for bicycles at ground level, basement and in the gateway entrance spaces. As required by the Dublin City Development Plan and in accordance with the sustainability objectives of the project, bicycle parking spaces for the office accommodation with appropriate changing shower and drying room facilities are also provided in the basement. A total of 551 bicycle parking spaces will be provided.

As part of the proposed development it will be necessary to permanently re-locate Dublin Bikes Station No. 92 on Parkgate due to the provision of a loading bay in the current location of the station. The new location for the Dublin Bikes Station will be confirmed by DCC.

3.4 Car Parking

As per the *Dublin City Development Plan*² the maximum permissible number of car parking spaces for this development would be 491 spaces, with 481 for the residential component of the development (1 per unit), 9 for the office component (1 per 400sq.m) and 1 for the retail (1 per 350sq.m).

On the basis of the excellent sustainable transport conditions available, the proposals include the provision of very limited car parking. It is proposed that only 26 car parking spaces will be provided as part of the development.

Nine will be provided for office use, made up of eight standard spaces and one disabled space. The remaining 17 will be provided for residential use, made up of 15 standard spaces and two disabled spaces.

The standard residential car parking spaces will be operated as a bespoke car club for the purpose of non-commuting trips for the residents of the apartments. These cars will be available for residents to use for trips where a car is required such as a shopping trip, weekend needs (family/day trips), occasional transport of bulky items, etc. This facility would be managed centrally and would operate on the basis of online bookings.

3.5 Vehicular Access

3.5.1 Car Access

Car drivers will access the site off of Parkgate St in the north-western corner of the site. From there they can proceed straight to access the 17 ground level parking spaces, or they can turn left to utilise either of the two car-lifts in order to access the 9 spaces in the basement car park.

The quantum of car parking within the basement does not give rise to concerns regarding queuing. There will be two lifts available (one for access and one for egress), which provide the necessary redundancy. The design also includes sufficient waiting space to ensure that the movements to and from the ground level car parking are not impacted.

3.5.2 Waste Collection

Waste collection will be centrally controlled, with two storage areas within the development. Waste collection vehicle will reverse into the western entrance and park on the flat surface within the site.

3.5.3 Deliveries

The limited provision of car parking will bring about additional pressure on activities such as deliveries.

² DCC, 2016. Dublin City Development Plan 2016-2022. Available at

https://www.dublincity.ie/sites/default/files/content/Planning/DublinCityDevelopmentPlan/Written %20Statement%20Volume%201.pdf. Accessed 03/01/2020.

This refers to shopping deliveries and online shopping, potentially including bulky items. In order for these activities to operate without any significant impact on the internal courtyards and the external public realm, it is proposed that one lay-by is provided on Parkgate Street.

This, in tandem with ensuring that the courtyards are also accessible to vehicles, will provide the capacity and flexibility to accommodate the requirements associated with deliveries.

3.5.4 Emergency

The courtyards are designed to be driveable by emergency vehicles such as fire tenders, thus ensuring that at least 50% of the building frontages avail of direct vehicular access.

Emergency access will be provided through the entrances into each of the courtyards. Additionally, an emergency access route is provided between the two courtyards. Figure 6.8 shows the proposed emergency access route.

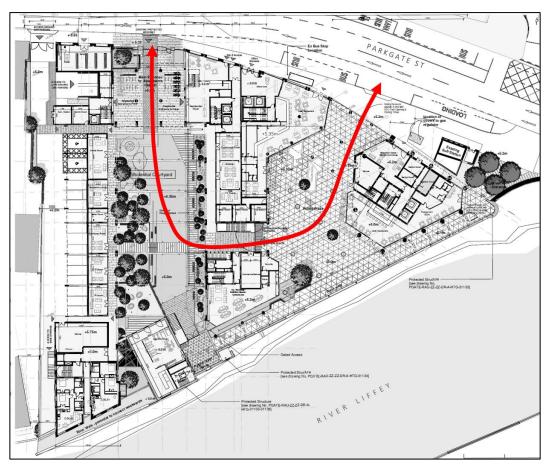


Figure 3.9: Proposed Emergency Access Route

4 Transport Impacts

4.1 Impact on Pedestrian and Cycle Networks

Pedestrian facilities and the public realm will be enhanced with this proposed development.

The eastern courtyard will be accessible to the public, allowing through access for pedestrians and providing a new public plaza with outdoor seating, landscaping, and entrances to the retail units.

A public river walk will be provided along the southern edge of the site, providing a view of the River Liffey and Heuston Station. The eastern end of the river walk will connect to the external footpath, providing more space for pedestrians at what is currently a constrained area of the footpath.

The issues pertaining to pedestrian movements across the nearby Sean Heuston Bridge have been raised by Transport Infrastructure Ireland with regards to the potential interactions with Luas movements. In this context, the applicant has commissioned surveys to enable the identification of potential impacts of additional pedestrian movements at this location.

The survey results show that 1,065 pedestrians use Sean Heuston Bridge between 9.00 and 10.00 in the morning and 1,181 between 18.00 and 19.00 in the evening, equating to about 18 and 20 movements per minute in average, respectively.

The likely person trips generated by the development during the identified busiest periods at the bridge (as above) have been calculated using the TRICS trip rate database. It is predicted that the development will generate a total of 230 and 302 person trips in the morning (9.00-10.00) and the evening (18.00-19.00) respectively.

These trips were then assigned to the various modes, of which the relevant ones were pedestrian (22%) and public transport (40%). The latter is relevant as it is considered that half of these will use the bridge as a connection to trains, Luas and buses. The pedestrian volumes were assigned to the local pedestrian network, with 20% of them using Sean Heuston Bridge.

The total flows on the bridge are therefore robustly estimated to be in the order of 59 in the morning (9.00-10.00) and 77 in the evening (18.00-19.00), equating to 5.5% and 6.5% of the present total peak hour flows, respectively. This is not considered to be significant in the context of an urban setting and the fact that the present proposals aim to encourage sustainable travel.

With regards to the impacts on the cycle network, this is envisaged to be negligible, as the capacity of the network is considered sufficient to accommodate the estimated cycle trips.

As part of the proposed development it will be necessary to permanently re-locate Dublin Bikes Station No. 92 on Parkgate due to the provision of a loading bay in the current location of the station. The new location for the Dublin Bikes Station will be confirmed by DCC.

4.2 Impacts on the Public Transport Network

It is not envisaged that there will be any impact on public transport infrastructure as part of this development. The introduction of a large number of residential units, along with the minimal amount of car parking provided means that public transport usage will increase, which is a sustainable outcome supported by transport policy.

The wide availability of public transport options in the area, both in terms of the frequencies and the variety of areas directly served, means that the there is ample capacity to serve the expected increase in demand arising from the development.

4.3 Traffic Impact

4.3.1 Operational Traffic Impact

As described in Section 3.4, the development will provide very limited car parking by means of a Car Club, which does not cater for peak time trips. These can be almost entirely undertaken on sustainable modes of transport such as walk, cycle and public transport.

On this basis, it is concluded that the peak time car trips generated by the development will be negligible in the context of the traffic volumes and road capacity in the wider area.

4.3.2 Construction Traffic Impact

Similarly, the volumes of traffic associated with the construction activities is not envisaged to be notable in the context of the wider area road network.

Construction activities, including the necessary trips in and out of the site, will be managed to ensure that the impact on the surrounding environment is minimised. A Construction Stage Mobility Management Plan will be prepared by the Contractor with the aim to encourage staff to avail of the excellent sustainable transport opportunities provided by the site location.

5 Travel Plan

5.1 Introduction

A key objective of the development will be to promote sustainable access by all modes of transport. To achieve this goal, Travel Plans should be created for both the residential and the employment portions of the development with separate measures for each.

The proposed development should have Travel Plans prepared as and when the occupiers are known. At this stage, it is not possible to prepare full Travel Plans, but it is important to set out the aims and potential contents of such plans.

The primary objective of the Travel Plans should be to contribute to sustainable transport by optimising the existing transportation infrastructure, reducing car dependency, and creating awareness of alternative modes of transport.

5.2 Employment Travel Plan

The primary aim of the Employment Travel Plan should be to emphasise and promote sustainable travel options through the development of planning and operational stages for the benefit of all end users and thereby to achieve the modal split targets for the building and support a limited provision of car parking.

The Travel Plan should set-out the methodology and approach that each commercial occupier will take in order to promote sustainable travel options amongst their workforce.

5.3 Residential Travel Plan

The main objective of the Residential Travel Plan will be to influence the residents' travel habits from the outset of the development's occupation. Life events such as moving to a new apartment are the moments at which sustainable behavioural changes can be achieved, and so the moment the new residents move into the development is the best moment to influence the existing behavioural (or travel) patterns.

It is intended that, as a lease/sale condition, all occupants are required to adhere to the principles of sustainable travel as described in the Travel Plan.

5.4 Travel Plan Management

5.4.1 Travel Plan Coordinators

It is recommended that Travel Plan Coordinators are nominated for both the employment and residential elements to oversee the development and implementation of their respective Travel Plans. These coordinators should liaise on a regular basis to review the progress of the plan, and co-ordinate events. A key objective of the Travel Plan should be co-ordinating with the occupiers to ensure that they are striving towards the targets set in the Travel Plan.

- To develop and support a culture of sustainable travel into and within the building;
- To raise awareness of sustainable transport issues in the building;
- To act as a single point of contact for all queries relating to the Travel Plan and transport issues in the area and to centrally coordinate the Travel Plan initiatives;
- To coordinate the development and implementation of the Travel Plan;
- To liaise with the National Transport Authority programme and channel learning and resources from the national Smarter Travel Workplace programme to the Area;
- To liaise with external bodies and local public transport operators on transport issues in the area;
- To liaise with car-sharing, and bike-sharing operators;
- To promote smarter travel events in the area in conjunction with the Steering Group; and
- To coordinate the monitoring and reporting of the Travel Plan progress towards achieving targets, setting clear dates for actions to ensure that the Travel Plan makes progress.

5.4.2 Communication and Marketing

An on-going communication strategy will ensure that the initiatives being implemented are promoted to residents and throughout each organisation and all of the residents within the building. Events and initiatives will be promoted through a range of marketing means:

- Posters in breakout/common areas within office buildings and retail areas;
- Circulation of emails to notify staff and residents of specific events;
- Induction Manual containing information on all travel options available to staff and residents;
- Organise and participate in wellness programmes (i.e. group walks, sponsored cycles, Pilate/yoga classes, etc.) to create a culture of wellbeing within the workplace which can also be extended to commuting patterns (i.e. walk/cycle);
- Organisation intranet will contain a section on travel to work which will be maintained and updated with relevant initiatives; and
- Quarterly newsletters will notify staff of any transport related changes coming up (additional bus routes/stops, new cycle parking locations etc.) and promote upcoming events. It will also report on events held in the previous quarter.

5.5 Travel Survey

Within three months of occupation of the proposed development a travel survey should be undertaken to determine a baseline transport modal split. This will allow baseline travel patterns to be established and targets to be set and will also be a forum for staff to comment on any issues relating to their commute. Following this, a travel survey will be carried out annually.

5.6 Action Plan

The Travel Plan Coordinators will oversee the promotion and implementation of promotional measures as outlined in the non-exhaustive list below. The Travel Plan Coordinators will set a timeline and targets for the actions.

The Travel Plans should set-out a number of mobility management measures that are relevant to the development. **Table 5.1**, **Table 5.2** below list a selection of employment and residential measures that are considered applicable to the development.

Cycling				
Conduct a site audit to gauge ease of access for cyclists coming on-site.				
Survey and improve cycle parking to encourage cycling and cater for increase in demand.				
Survey and improve cyclist' (and walkers') changing/storage/locker facilities to encourage cycling and cater for demand.				
Install showers to cater for cyclists travelling longer distances by bike.				
Provide a drying room for cyclists to air cycling clothes.				
Introduce a Cycle to Work scheme and promote through in-house bike displays from suppliers.				
Organise a Bike Maintenance class and provide cyclists' equipment (pump, repair kit etc.)				
Display local area maps for cyclists/walkers interested in local routes.				
Participate in National Bike Week events.				
Provide fleet bikes for employees for business purposes.				
Arrange tours of cycling facilities for interested / new employees.				
Public Transport				
Introduce & promote Tax Saver monthly & annual commuter tickets for public transport. Highlight potential savings to employees.				
Walking				
Promote walking through organised walking events / lunchtime walks.				
Participate in an annual Pedometer Challenge.				
Offer in-house health checks for people interested in getting more active.				
Leave umbrellas at reception for employees to borrow on wet days.				

 Table 5.1: Action Plan - Promotional Measures for Office occupiers

Business Travel

Introduce a Travel Allowance that includes modes other than the car e.g. walking, cycling, public transport, car-sharing, drive-alone car.

Publicise Dublin Bikes registration for people interested in cycling (if applicable).

Re-examine overall business travel policy to incentivise alternatives to the single occupancy vehicle.

Make Smart Cards for public transport available for people to borrow when doing business travel (if applicable).

Technology-Assisted Trip Reduction

Offer and highlight teleconferencing or video-conferencing facilities.

Publicise sustainable transport options on the company website.

Promote homeworking policies.

Other

Develop and brand a marketing & communications plan.

Introduce an incentive scheme for commuters.

Include travel information in employee induction packs and online in an easily accessible location on your organisation's intranet.

Introduce parking management measures, e.g. permit parking, paid parking, or needs-based parking policies

Table 5.2: Action Plan - Promotional Measures for Residents

Car-Club

Implementation of a bespoke residential car-club.

Cycling

Organise a Bike Maintenance class.

Provide Cyclists' equipment (pump, puncture repair kit etc.).

Display local area maps for cyclists/walkers interested in local routes.

Publicise Dublin Bikes registration for people interested in cycling

Arrange tours of cycling facilities for residents.

Public Transport

Introduce & promote Tax Saver monthly & annual commuter tickets for public transport. Highlight potential savings to employees.

Offer in-house health checks for people interested in getting more active.

Leave umbrellas in lobbies for residents to borrow on wet days.

5.7 Monitoring and Review

An annual review will be carried out on each of the Travel Plans targets and action plan to assess progress.

Travel pattern data will be obtained by undertaking a survey of existing travel patterns (including at participating occupiers). A fundamental part of the Plans is monitoring to determine progress, identify problem areas and initiate corrective measures to ensure targets are achieved. This monitoring programme will be carried out on an on-going basis.

The basic procedure will consist of:

- Reviewing the implementation of the different Travel Plan measures;
- Carrying out a travel survey;
- Controlling the achievement of the different targets;
- Proposing corrective measures if needed; and
- Informing Dublin City Council about the implementation and progress on the Travel Plans.

6 Conclusion

It has been clearly demonstrated that this site avails of excellent conditions with regards to sustainable transport, which provides an opportunity to propose a transport strategy that is based upon walk, cycle and public transport, rather than the use of private car, especially for commuting purposes.

It is therefore proposed that a limited car parking provision is based upon the innovative proposal for a bespoke car club, catering for the occasional needs of residents for car trips.

In addition, significant provision of cycle parking and proactive soft measures as part of a Travel Plan, will further encourage residents and employees alike to choose sustainable modes of transport for their journeys.

The transport strategy associated with the development also means that the traffic impact associated with the proposals is negligible.

Appendix A

DMURS Statement of Consistency

Introduction

The Design Manual for Urban Roads and Streets (DMURS), published by Department of Transport, Tourism and Sport and the Department of Environment, Community and Local Government in 2013 and updated in 2015 and 2019, provides guidance relating to the design of urban roads and streets. It presents a series of principles, approaches and standards that are necessary to achieve balanced, best practice design outcomes with regard to networks and individual streets.

DMURS promotes and encourages four Key Design Principles which are:

- **Connected networks:** To support the creation of integrated street networks which promote higher levels of permeability and legibility for all users, and in particular more sustainable forms of transport.
- **Multi-function areas:** The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment.
- **Pedestrian focus:** The quality of the street is measured by the quality of the pedestrian environment.
- **Multidisciplinary approach:** Greater communication and co-operation between design professionals through the promotion of a plan-led, multidisciplinary approach to design.

Appraisal of Proposals

The internal courtyards for the development were designed in compliance with DMURS principles and requirements. Key design elements ensuring this compliance are the following:

Connected networks:

• The internal courtyard and public plaza areas are connected to the external network of footpaths, cycle facilities, public transport nodes and roads which ensures integration, connectivity and continuity for all transport networks for the development, including pedestrians, cyclists and public transport. This is enhanced with the help of the open nature of the public realm elements of the site.

Multi-function areas:

• The internal courtyard and public plaza are designed to ensure safe and comfortable co-existence of different users. These areas are predominantly pedestrian focused; however, they accommodate the occasional movement of service vehicles through the site in order to access.

Pedestrian focus:

• The public plaza will provide a new public space for all pedestrians in the area, providing a new public space in a key area of the city.

It will link seamlessly with the surrounding pedestrian footways, providing a more open feeling and increasing effective width of the footpaths.

Multidisciplinary approach:

• All design elements of the courtyard and public plaza were developed in line with requirements and limitations associated with other design elements of the Parkgate Street development such as drainage, structures, utilities, landscape etc.

Overall, the public realm has been designed as an uncluttered environment, with only the strictly necessary signage, both vertical and horizontal, so as to ensure a comfortable and attractive environment for all users. The dimensions of vehicular infrastructure are such that, whilst adequately enabling all the necessary circulation and manoeuvring, also ensure that this is done at low speeds and in a safe manner. These features ensure legibility and comfort of the public realm within the development.

With the above features in place, the development re-balances the use of transport modes and places the pedestrian and cyclist ahead of the vehicle. With very little car parking spaces, the development is intended to further promote sustainable modes of transport and provide a new high quality public space in a key transport node of the city.