CS CONSULTING

GROUP

DUBLIN | LONDON | LIMERICK

Mobility Management Plan

Proposed Mixed-Use Development

Belgard Square East, Belgard Road and Blessington Road, Dublin 24

Client: Ravensbrook Limited

Job No. Q003

June 2022

CS CONSULTING

GROUP

CS CONSULTING GROUP

MOBILITY MANAGEMENT PLAN

PROPOSED MIXED-USE DEVELOPMENT, BELGARD SQUARE EAST, BELGARD ROAD AND BLESSINGTON ROAD, DUBLIN 24

CONTENTS

Appendix A: Links to relevant guidance documents concerning Mobility Management

File Location: j:\q_jobs\job-q002\b_documents\2_civil\reports\traffic\q002-csc-zz-xx-rp-c-0004 Mobility Management Plan.docx

BS 1192 FIELD	**Q003-CSC-ZZ-XX-RP-C-0004 Mobility Management Plan**

Job Ref.	Author	Reviewed By	Authorised By	Issue Date	Rev. No.
Q003	FB	NB	NB	02.06.2022	P4
Q003	FB	NB	NB	20.05.2022	P3
Q003	FB	NB	NB	06.05.2022	P2
Q003	FB	NB	NB	27.10.2021	P1
Q003	FB	NB	NB	08.10.2021	

CS CONSULTING

GROUP

1.0 INTRODUCTION

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by Ravensbrook Limited to prepare a Mobility Management Plan to accompany a planning application for a proposed mixed-use development located on Belgard Square East, Belgard Road and Blessington Road, Dublin 24.

In preparing this report, CS Consulting has made reference to the following:

- South Dublin County Development Plan 2016-2022;
- Draft South Dublin County Development Plan 2022-2028;
- Greater Dublin Area Cycle Network Plan 2015;
- National Cycle Manual (2011);
- Smarter Travel, A Sustainable Transport Future (STASTF) – A New Transport Policy for Ireland, 2009 – 2020;
- Dublin Transportation Office, A Platform for Change (2001); and
- National Transport Authority, Transport Strategy for the Greater Dublin Area 2016-2035.

This Mobility Management Plan (MMP) shall be read in conjunction with the engineering drawings and planning reports submitted by CS Consulting and with the various additional information submitted by the other members of the design team, as part of the planning submission.

The Mobility Management Plan (MMP) shall also be read in conjunction with the accompanying Traffic and Transport Assessment (TTA) which reviews the potential transport impacts of the proposed development with respect to vehicular traffic and sets out the existing and proposed public transport, walking, and cycling infrastructure in the area.

2.0 SITE LOCATION AND PROPOSED DEVELOPMENT

2.1 Site Location

The proposed development site is located on Belgard Square East, Belgard Road and Blessington Road, Dublin 24. The site is in the administrative jurisdiction of South Dublin County Council (SDCC) and has a total area of circa 1.26ha.

Figure 1 – Site Location
(map data: EPA, NTA, OSM Contributors)

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

The development site is bound by Belgard Square East to the west, Blessington Road to the north, Belgard Road to the east and existing commercial developments to the south.

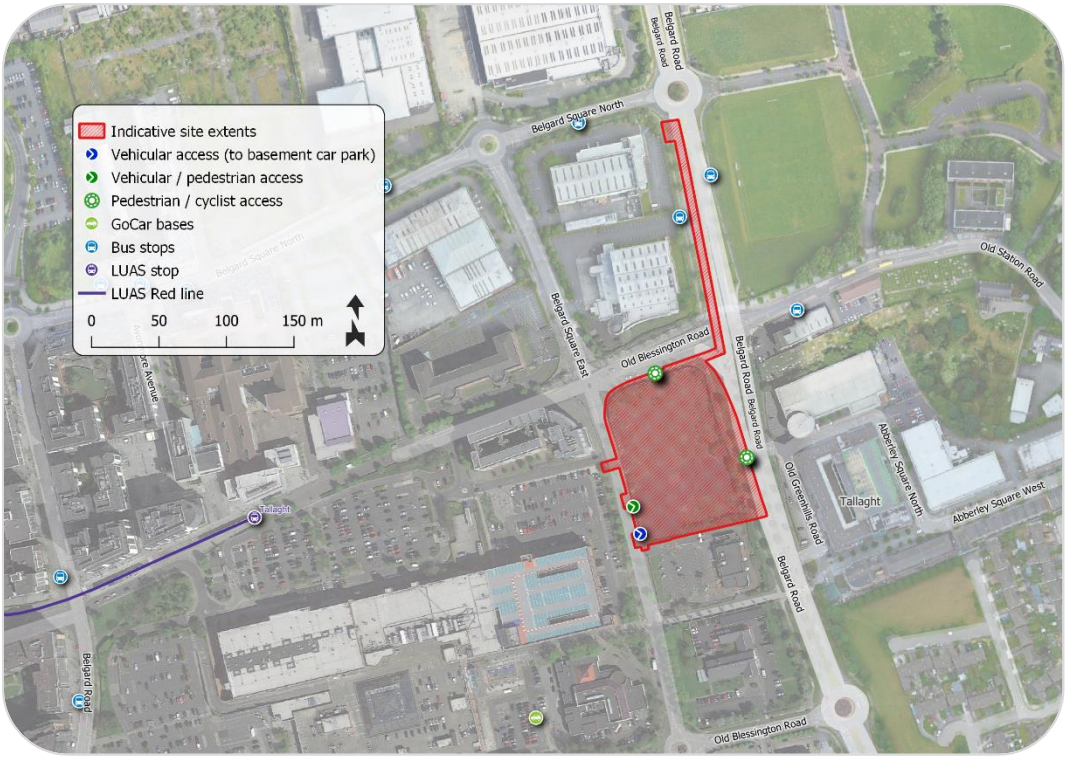

Figure 2 – Site Environs
(map data: NTA, OSM Contributors, Google)

2.2 Existing Land Use

The site is currently a brownfield site consisting primarily of hardstanding surfacing. No existing buildings are present on site. The site does not currently generate any vehicular traffic.

2.3 Proposed Development

The proposed development will consist of the demolition of existing boundary wall and construction of:

c. 2,289 sqm of retail/commercial floor space across 10 no. units including retail, restaurant/café and Class 2 financial/professional services and office use, and a crèche (257sqm) at ground and first floor levels;

310 no. build to rent residential apartments including 99 no. one bedroom units, 203 no. 2 bedroom units and 8 no. three bedroom units within a part 6 to part 12 no. storey development across 3 blocks over partial basement;

c. 2,223 sqm of communal external amenity space provided in the form of a ground floor garden and external terraces at fifth, sixth, seventh and eighth floor levels; c. 1,026 sqm of public open space provided in the form of a central courtyard with landscaped areas at site perimeters;

c. 1,785 sqm of resident support facilities and services and amenities provided at basement, ground and first floor levels;

Vehicular access to the basement development from a new access point at Belgard Square East;

A new tertiary route will be provided in the southern part of the site linking Belgard Square East and Belgard Road;

Provision of 130 no. car parking spaces (including 8 no. club car spaces and 6 no. disabled access spaces) at basement level in addition to 5 no. set down spaces (4 no. serving creche) and 1 no. disabled access space at ground level, layby on Belgard Square East, 6 no. motorcycle spaces and a total of 763 no. bicycle parking spaces;

Provision of 4 no. Ø0.3m microwave link dishes to be mounted on 2 no. steel support pole affixed to lift shaft overrun, all enclosed in radio friendly GRP shrouds, together with associated equipment at roof level at Block B;

Provision of 3 no. ESB substations with switch rooms and plant rooms at basement level, hard and soft landscaped areas, bin and bicycle stores, public lighting, attenuation, green roof, plant at roof level, service connections and all ancillary site development works.

3.0 MOBILITY MANAGEMENT PLAN PURPOSE

Mobility Management Plans 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 Mobility Management Plan also includes references to proposed future improvements to the existing transport options currently available.

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

The MMP 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.

4.0 EXISTING SITE CONDITIONS

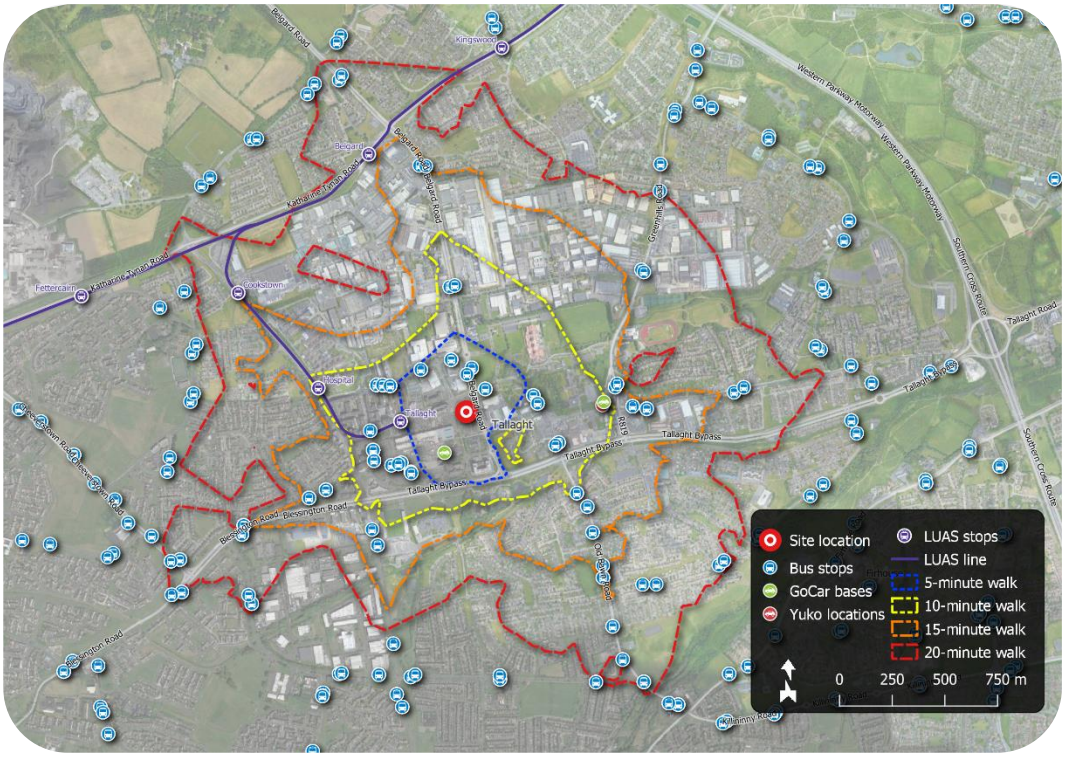

Figure 3 – Walking isochrones and public/shared transport accessibility
(map data and imagery: NTA, OSi, DCC, GoCar, OSM Contributors)

4.1 Public Transport Services

4.1.1 Light Rail Services

The Luas light rail network consists of two principal lines as shown in Table 1, which connect to one another at Abbey Street/Marlborough Street/O'Connell Street in Dublin City Centre.

- LUAS Red Line (E-W) Dublin Docklands to Tallaght/Saggart
- LUAS Green Line (N-S) Broombridge to Bride's Glen

Table 1 – Luas Red Line Light Rail Services adjacent to Site

Direction	Destinations	Peak Interval
Northbound	Dublin Docklands	3-4 min
Southbound	Tallaght/Saggart	3-4 min

The subject development site is located within a 5-minute walk of the Tallaght stop on the Luas Red Line. Light rail services operating to and from these stops connect it directly to Dublin city centre, interchange with the Luas Green Line is possible at Abbey Street. Trams serve the Tallaght stop at intervals of approximately 3-4 minutes at peak times.

4.1.2 Light rail capacity

The Luas Red Line is operated using Alstom Citadis 401 trams (70% low-floor configuration), each with a maximum capacity of 358no. passengers. On average, a tram serves the Tallaght Luas stop every 8 minutes in either direction between 07:00 and 10:00, and every 9 minutes in either direction between 16:00 and 19:00.

As shown in Table 2, the average peak period capacities of the Luas Red Line are therefore:

- 2,685 passengers per hour (in either direction) during the AM peak period
- 2,387 passengers per hour (in either direction) during the PM peak period

Table 2 – Luas Red Line Light Rail Peak Capacity

Direction	**Destinations**	**Average Peak Interval**	**Average Peak Capacity** (passengers/hour)
AM Peak Period (07:00-10:00)			
Eastbound	Dublin Docklands	8 min	2,685
Westbound	Tallaght/Saggart	8 min	2,685
PM Peak Period (16:00-19:00)			
Eastbound	Dublin Docklands	9 min	2,387
Westbound	Tallaght/Saggart	9 min	2,387

These are the average peak capacities, each applicable to a 3-hour period. Luas frequencies (and therefore hourly capacities) are higher still at the times of greatest Luas demand: 08:00-09:00 in the morning and 17:00-18:00 in the evening. As the exact number of trams serving a given stop during these two hourly periods is not specified, however, the true peak capacity cannot be determined.

4.1.3 Bus Services

Bus stops within a 5-minute walk of the development site are served by 9no. bus routes, which connect it to Dublin city centre, to Blessington, and to Dún Laoghaire and other Dublin suburbs. Details of this bus can be seen in Table 3 below.

Table 3 – Bus Services within 5-minute Walk of Site

Route No.	Operator	Destinations	Weekday Services [1]	Peak Interval
27	Dublin Bus	Clare Hall / Jobstown	100	10 mins
54a	Dublin Bus	Pearse Street / Ellensborough	33	30 mins
65	Dublin Bus	Poolbeg Street / Blessington	15	1 hour
75 / 75a	Go-Ahead	Dún Laoghaire / Tallaght	35	30 mins
76 / 76a	Go-Ahead	Chapelizod / Tallaght	51	15 mins
77a	Dublin Bus	Ringsend Road / Citywest	52	10 mins
175	Go-Ahead	UCD / Citywest	18	1 hour

4.1.4 Bus capacity

Bus capacity depends upon bus model, which in turn varies according to the bus route, the time of day, and other operational factors.

The most common bus model currently used by Dublin Bus is the Volvo B5TL double-decker (comprising approx. 50% of its fleet), with a capacity of 95no. passengers. The majority of other buses in the Dublin Bus fleet have capacities ranging between 78no. passengers and 91no. passengers. Go-Ahead Ireland operates a bus fleet comprising

[1] Average number of services per day in each direction, Monday-Friday

principally Volvo B5TL double-deckers (approx. 65% of its fleet) and Wright StreetLite single-deckers (approx. 30% of its fleet); these have capacities of 95no. passengers and 45no. passengers, respectively. For the purposes of estimating bus service capacity, it is therefore assumed that:

- each bus on a Dublin Bus route has a capacity of 90no. passengers; and
- each bus on a Go-Ahead route has a capacity of 80no. passengers.

Table 4 and Table 5 present the resultant estimated bus service capacities during the AM peak hour (08:00-09:00) and the PM peak hour (17:00-18:00), respectively. These have been calculated on the basis of the timetabled number of buses serving stops within a 5-minute walk of the subject site, in each of these peak hours.

Table 4 – Local Bus Service Capacities – AM Peak (08:00-09:00)

Route No.	**Operator**	**Destination**	**Peak Hour Services** (buses)	**Approx. Peak Hour Capacity** (passengers)
27	Dublin Bus	Clare Hall	7	630
		Jobstown	7	630
54a	Dublin Bus	Pearse Street	2	180
		Ellensborough	3	270
65	Dublin Bus	Poolbeg Street	1	90
		Blessington	1	90
75 / 75a	Go-Ahead	Dún Laoghaire	1	80
		Tallaght	3	240
76 / 76a	Go-Ahead	Chapelizod	3	240
		Tallaght	2	160
77a	Dublin Bus	Ringsend Road	6	540
		Citywest	1	90
175	Go-Ahead	UCD	2	160
		Citywest	1	80

Table 5 – Local Bus Service Capacities – PM Peak (17:00-18:00)

Route No.	**Operator**	**Destination**	**Peak Hour Services** (buses)	**Approx. Peak Hour Capacity** (passengers)
27	Dublin Bus	Clare Hall	7	630
		Jobstown	7	630
54a	Dublin Bus	Pearse Street	2	180
		Ellensborough	3	270
65	Dublin Bus	Poolbeg Street	0	0
		Blessington	1	90
75 / 75a	Go-Ahead	Dún Laoghaire	2	160
		Tallaght	2	160
76 / 76a	Go-Ahead	Chapelizod	4	320
		Tallaght	2	160
77a	Dublin Bus	Ringsend Road	4	360
		Citywest	3	270
175	Go-Ahead	UCD	2	160
		Citywest	2	160

4.2 Bicycle Infrastructure

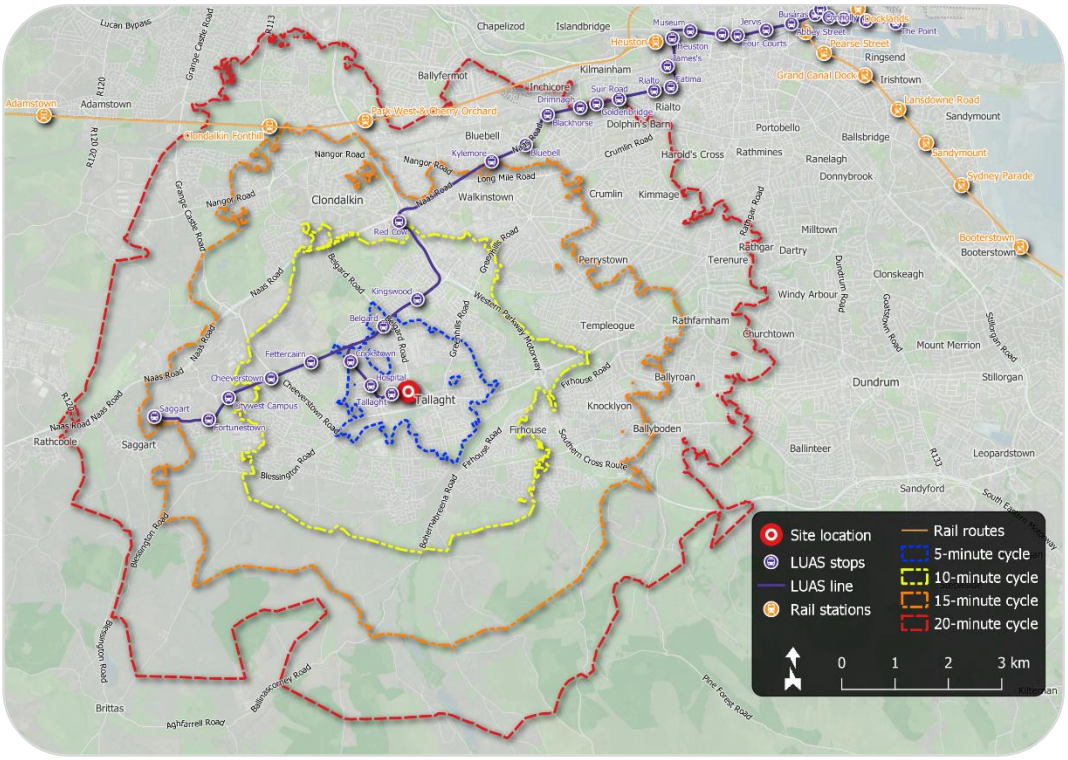

Figure 4 – Cycling times to/from development location
(map data sources: EPA, NTA, OSi, OSM Contributors)

Cycle lanes are present on Belgard Road in the vicinity of the subject development site. There is no other existing cycle infrastructure in the immediate vicinity of the subject development site.

Figure 4 illustrates the cycling times to and from the development location.

4.3 Future Public Transport Infrastructure

4.3.1 Cycle Network Plan for the Greater Dublin Area

As part of the *Cycle Network Plan for the Greater Dublin Area*, administered by the National Transport Authority, it is proposed that primary cycle route 9A be implemented along Belgard Square North on the northern boundary of the subject development site. Furthermore, it is proposed that secondary

cycle route 9C be implemented along Belgard Road on the eastern boundary of the development site. Please refer to Figure 5. Cycle lanes are currently present along Belgard Road to the east of the subject development site. No information is publicly available yet on the proposed design or delivery timeframe of cycle route 9A.

Figure 5 – Proposed Cycle Network in the vicinity of the development site
(Source: Greater Dublin Area Cycle Network Plan)

4.3.2 BusConnects Core Bus Corridors

Under the BusConnects Core Bus Corridor (CBC) project, it is proposed to implement Core Bus Corridor no. 9 (Greenhills to City Centre) along Belgard Square North, Belgard Square East, and Blessington Road, passing along the western boundary of the subject development site. These BusConnects proposals do not require any land take from the development site but do include the following elements that will affect existing local traffic flows:

- implementation of a bus gate at the southern arm of the Belgard Square East / Belgard Square North junction, prohibiting all vehicle

movements except buses between Belgard Square East and Belgard Square North.

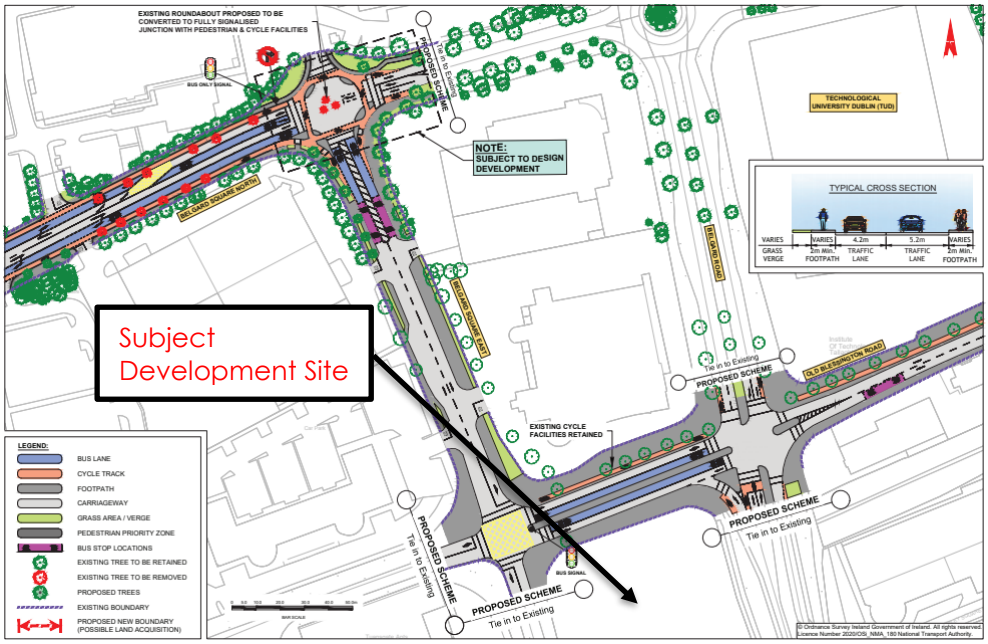

Figure 6 – Core Bus Corridor no.9 Greenhills / City Centre
(background imagery source: NTA)

Please refer to CS Consulting drawing no. **Q003-CSC-ZZ-XX-DR-C-0020** for details of how the project aligns with the preferred route option of BusConnects Core Bus Corridor no. 9.

4.4 Future Transport Infrastructure

4.4.1 Bicycle facilities

Within the development, secure indoor cycle parking for residents has been provided in accordance with the *South Dublin County Council Development Plan 2016-2022* to promote cycling as a mode of sustainable transport for residents.

Cycle lanes are present on Belgard Road in the vicinity of the subject development site. There is no other existing cycle infrastructure in the immediate vicinity of the subject development site.

4.4.2 Pedestrian facilities

One of the specific objectives of the South Dublin County Council Development Plan is to implement, at appropriate locations, pedestrian permeability schemes and enhancements.

Existing pedestrian facilities along Belgard Road and other neighbouring streets in the vicinity of the proposed development site are generally in good condition. Raised footpaths and public lighting are in place along all streets in the vicinity of the subject development site.

4.5 Residential Car-shared Club

A residential car sharing club shall be established within the development, allowing residents the common use of a vehicle pool based permanently within the site. Private cars are parked for the vast majority of the time, whereas shared cars are in use far more frequently and therefore make more efficient use of parking spaces.

Within the proposed development, 8no. shared cars shall be provided for the sole use of the development's residents. These shall be under the control of the development's Management Company, which shall either own and maintain the vehicles directly, or shall contract an established car-sharing provider to operate the residential car club on its behalf.

A recent study of car clubs in Scotland, commissioned and published by CoMoUK, concluded that a single shared car may replace 14 private cars. On this basis, the 8no. shared car parking spaces may therefore be considered to reduce residential parking demand within the development by approximately 104no. spaces.

The development's car club vehicles shall not be open to use by the wider public and shall not be integrated with the wider fleet of an external car-

share provider. The provision of the car club service to development residents shall therefore not be influenced by the external operational or commercial strategy of a third party

5.0 CONTENT OF THE MOBILITY MANAGEMENT PLAN

The Mobility Management Plan is a management tool that brings together transport, development staff and residents and site management issues in a coordinated manner. This report sets out the objectives and specific measures required to establish an effective Mobility Management 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. Regular monitoring will be carried out to ensure effective implementation of mobility management measure, such as sustainable travel, reducing the proportion of journey to/from the site made by single-occupant private cars.

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 Mobility Management Plan 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 MMP for the subject development follows the above guidelines. The success of the MMP 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.

5.1.1 Implementation of an MMP

A Mobility Management Plan is a document that evolves over time and depends upon ongoing implementation, management and monitoring. Its successful implementation requires organisational support, an internal Mobility Management Plan Coordinator and financial resourcing.

The Mobility Management Plan Coordinator will be responsible for the following:

- Overseeing the development and implementing the Mobility Management Plan;
- Obtaining and maintaining commitment and support;
- Acting as a point of contact for all residents requiring information;
- Organising data collection between residents and visitors so the Mobility Management Plan can be monitored and targets set;
- Liaising with external organisations (e.g. local authorities, transport operators, etc.) to update information on infrastructure and service improvements in Dublin.
- Co-ordinating all aspects of the Mobility Management Plan.

The nominated interim Mobility Management Plan Coordinator is Mr. Simon Reader of Ravensbrook Ltd. (the applicant).

Name:	Simon Reader
Organisation:	Ravensbrook Ltd. 8 Parnell Square East, Dublin 1.
Email address:	sreader@quinlangroup.co.uk
Telephone:	+44 7946 381 833

It is expected that the role of Mobility Management Plan Coordinator shall transfer to another suitably placed individual (appointed by the management company) following occupation of the subject development. Their details will be communicated to South Dublin County Council at that time.

This MMP will need to be reviewed on a regular basis by a 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 MMP for the proposed development are as follows:

- To encourage/increase the use of public transport, walking and cycling for residents, workers and visitors and to facilitate travel by bicycle, bus and train;
- To reduce the overall number of single occupant vehicles trips for journeys to work and work-related travel;
- To integrate mobility management into the development decisions, policies and practices to work closely with governing bodies on means and use of transport services around the vicinity of 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.

Objective 1

To encourage/increase the use of public transport, walking and cycling for residents, workers and visitors and to facilitate travel by bicycle, bus 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 area of the site such as the DART, frequent Dublin Bus Route services and the GoCar car sharing scheme offer an alternative to the private car in many cases. 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 reports the following benefits to the 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.

Objective 2

To reduce the overall number of single occupant vehicles trips.

The reduction in vehicle use is a key objective of the MMP. 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 by promoting car share between residents for commuting and promoting car clubs.

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 around the vicinity of 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 MMP.
In addition, the Local Authorities require MMPs for developments which the planning authority may consider generate significant trip demand.

Objective 4

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

The MMP 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 attitude which in turn can influence behaviour.

Objective 5

Manage Private Car Availability for Residents (Work and Non-Work Purposes).

A residential car sharing club shall be established within the development, allowing residents the common use of a vehicle pool based permanently within the site. Private cars are parked for the vast majority of the time, whereas shared cars are in use far more frequently and therefore make more efficient use of parking spaces.

A recent study of car clubs in Scotland, commissioned and published by CoMoUK, concluded that a single shared car may replace 14 private cars. Within the proposed development, 8no. shared cars shall be provided for the sole use of the development's residents. On this basis, the 8no. shared

car parking spaces may therefore be considered to reduce residential parking demand within the development by approximately 104no. spaces.

Objective 6

Encourage more residents to cycle to work.

Within the development, 529no. secure indoor cycle parking for residents has been provided in accordance with the South Dublin County Council Development Plan 2016-2022 to promote cycling as a mode of sustainable transport for residents. Cycle lanes are present on Belgard Road in the vicinity of the subject development site. There is no other existing cycle infrastructure in the immediate vicinity of the subject development site.

6.0 INITIAL TARGETS OF THE MOBILITY MANAGEMENT PLAN

6.1 Population Groups

Journeys to and from the development shall be made primarily by three distinct population groups: residents, workers and visitors. The targets set under the Mobility Management Plan shall be limited to residents and workers, as these are the principal groups that are 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

Table 6 – CSO 2016 Census Data – Existing Modal Splits

Transport Mode	Small Areas (overnight residents)	
	SA 267148002 only	SA 267148002 + adjacent
Driving a Car or Van	28%	29%
Passenger in a Car	10%	9%
Bicycle	1%	2%
Motorcycle	0%	0%
Bus	15%	13%
Train or Tram	19%	12%
Walking	23%	24%
Other / Work from Home	1%	1%
Not Stated	4%	10%

it is not possible to determine the existing modal splits of journeys made to and from the site, however, to establish indicative baseline modal splits for the development site, reference has therefore been made to CSO data

derived from the 2016 census. This data is in the form of Small Area Population Statistics (SAPS), which give modal splits for overnight residents' trips to places of work or study.

The CSO Census data from 2016 may not be wholly accurate due to high number of individuals working from home post-covid crises. It may not be feasible to get more up to data, but it is anticipated that people working from home shall be significantly higher than that 1% model split given in the table above.

The development site is located in census Small Area no. 267148002. The census modal splits for this Small Area, as well as for the adjacent areas, are given in Table 6.

6.3 Development Modal Splits

Table 7 gives both the assumed starting modal splits and the suggested initial Mobility Management Plan targets to be set in pursuance of the objectives defined in Section 5. The assumed starting modal splits have been informed primarily by CSO census data from the year 2016, as previously described.

Table 7 – Initial Target Modal Splits for Development Occupants

Mode	Assumed Starting Proportion of Trips	Suggested Initial MMP Targets
Driving a Car	23%	20%
Passenger in a Car	10%	7%
Bicycle	8%	10%
Motorcycle	0%	0%
Bus	15%	16%
Train or Tram	19%	22%
Walking	23%	25%
TOTAL	100%	100%

Once the development is completed and occupied, the true initial modal splits will be established by means of a travel survey and the initial MMP targets will be amended by the MMP Coordinator, if appropriate. These targets should be reappraised at regular intervals thereafter as part of the periodic Plan review process.

6.4 Implementation Timeframe

The duration of the first phase of the Mobility Management Plan, during which the initial target modal splits shall be pursued, will be decided by the MMP 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 which will be carried out by MMP Coordinator, the percentage shares of individual modes such as walking, cycling and public transport will be monitored by means of surveys, talking

to the residents on the ways of commuting, etc., 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 note, a Mobility Management 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:

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

7.1 Marketing & Communications

The education of residents, workers and visitors on the mobility plan initiatives and the importance of contribution is extremely important. The services available must be communicated in a consistent and continuous manner to sustain behaviour change.

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

- Promoting the MMP through internal communication between the residents and workers, and external avenues such as providing

information on public transport in the vicinity of the development in the reception area, promoting sustainable travel.

- Develop an Access Map to show public transport facility locations and highlight safe walking and cycling routes. In addition to this the establishment of 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. The travel information points should be conspicuously located at the reception areas and 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 Mobility Management Plan, including the Mobility Access Map and the locations of cycle parking, etc.
- Develop a digital Travel Information Point for the development to provide details of travel choice to the site linking to appropriate external websites for visitors to the development.

7.2 Walking & Cycling

7.2.1 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 specific regard to:

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

7.2.2 Bicycle Parking, Umbrellas, and Bicycle Repair Kit Facility

- It will be ensured that bicycle parking for development residents, workers and visitors is secure, easily accessible, and sufficiently sheltered.
- Loan umbrellas will 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. A note shall be placed on the reception to make the bicycle users aware of this facility.

7.3 Public Transport

The proposed measures intend to promote the use of public transport.

7.3.1 Service Information

It must be ensured that the information supplied in the development 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.

7.3.2 Promotion of Tickets and Passes

Residents should be provided with information on advantageous public transport fare options, including the TaxSaver scheme and the Transport for Ireland (TfI) Leap Card.

7.3.3 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.

7.4 Car Sharing

A residential car sharing club shall be established within the development, allowing residents the common use of a vehicle pool based permanently within the site. Private cars are parked for the vast majority of the time, whereas shared cars are in use far more frequently and therefore make more efficient use of parking spaces.

A recent study of car clubs in Scotland, commissioned and published by CoMoUK, concluded that a single shared car may replace 14 private cars. On this basis, the 8no. shared car parking spaces may therefore be considered to reduce residential parking demand within the development by approximately 104no. spaces

7.5 Implementation / Consultation / Monitoring

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

To implement the MMP, the following inputs are required:

- Management support and commitment;
- A Mobility Management Plan Coordinator to oversee the Plan;
- A Steering Group to oversee the Plan;
- Working Groups on various related 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 the stakeholders and the support of external partners, such as the Local Authority, public transport operators, etc.

The MMP will be managed by a MMP Coordinator with the clear mandate to implement and evolve the Plan. The MMP 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 owner's management team.

Travel surveys of development occupants (and of visitors, if practicable) will be repeated annually, to monitor the initial success of the Mobility Management 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 Mobility Management Plan is performing in comparison to previous years and against the sustainable travel targets initially outlined in the plan.

8.0 SUMMARY

The proposed development site is located on Belgard Square East, Belgard Road and Blessington Road, Dublin 24. The proposed development site is located in close proximity to existing high-quality bus and rail services that connect the subject site to Dublin city centre. It is therefore an objective under this MMP that a reduced proportion of the trips generated by this Proposed development be made by private car.

8.1 Mobility Management Measures

The following Mobility Management measures that will be under the MMP include:

8.1.1 General

- Put in place a formal Mobility Management Plan.
- Appoint a Mobility Management Plan Coordinator.
- Create an Access Map.
- Provide travel information to development occupants, in the form of Sustainable Travel Welcome Packs and a travel hub website.
- Monitor the operation of the plan by development occupants, by carrying out travel surveys.
- 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 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.

Appendix A

Links to relevant guidance documents concerning Mobility Management

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.taxsaver.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