Proposed Residential Development, Milltown Park, Sandford Road, Dublin 6

Report Title

Parking Management Strategy

Client

Sandford Living Ltd







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1.0 INTRODUCTION

1.1 BACKGROUND

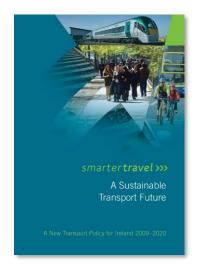
- 1.1.1 This Parking Management Strategy document has been prepared by DBFL Consulting Engineers (DBFL) in support of a planning application for a proposed residential development on a site at Sandford Road, Milltown, Dublin 6.
- 1.1.2 The development will principally consist of: the demolition of 4,883.9 m² of existing structures on site, the retention, refurbishment and reuse of Tabor House and the Chapel, and the provision of a 671 No. unit residential development comprising 604 No. Build-to-Rent apartment units (88 No. studios, 262 No. 1 bed units, 242 No. two bed units and 12 No. three bed units) and 67 No. Build-to Sell apartments and duplex unit (11 No. studios, 9 No. one bed units, 32 No. 2 bed units and 15 No. three bed units) and one 400m² creche.
- 1.1.3 The development also provides a new access from Milltown Road (which will be the principal vehicular entrance to the site) in addition to utilising the existing access from Sandford Road as a secondary access for emergencies and deliveries; for example new pedestrian access points; pedestrian/bicycle connections through the site; 344 No. car parking spaces (295 No. at basement level and 49 No. at surface level); bicycle parking; bin storage; and all other associated site works above and below ground.
- 1.1.4 This document presents the rationale behind the identification of the quantum of vehicle parking, including mobility impaired parking, and cycle parking that is being proposed as part of the subject site development proposals. The document also sets out the management measures that will be deployed to allocate the use and control of parking provided at the proposed development site.
- 1.1.5 This document will set out the principles of the parking management strategy proposed at the Sandford Road development and should be read in conjunction with the following complementary reports:
 - Traffic and Transport Assessment (TTA)
 - Mobility Management Plan (MMP)
- 1.1.6 The TTA and MMP, in particular, set out the excellent alternative modes of travel which will be available to residents of the proposed development as well as providing details on existing conditions surrounding the site.



1.2 POLICY CONTEXT/RELEVANT STANDARDS

SMARTER TRAVEL – A SUSTAINABLE TRANSPORT FUTURE

1.2.1 Smarter Travel was published in 2009 by the Department of Transport which represents the national policy documentation outlining a broad vision for the future and establishes objectives and targets for transport. The document examines past trends in population and economic growth and transport concluding that these trends are unsustainable into the future.

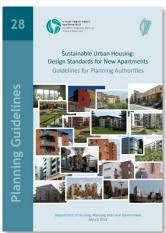


- 1.2.2 In order to address the unsustainable nature of current travel behaviour, Smarter Travel sets down a number of key goals and targets for 2020 including:
 - Total vehicle km travelled by car will not significantly increase;
 - Work-related commuting by car will be reduced from 65% to 45%;
 - 10% of all trips will be by cycling;
 - The efficiency of the transport system will be significantly improved.
- 1.2.3 The document recognises that these are ambitious targets, and outlines a suite of 49 actions required to achieve these targets summarised under the following four main headings:
 - Actions aimed at reducing distances travelled by car and the use of fiscal measures to discourage use of the car;
 - Actions aimed at ensuring that alternatives to the car are more widely available;
 - Actions aimed at improving fuel efficiency of motorised travel; and
 - Actions aimed at strengthening institutional arrangements to deliver the targets.



SUSTAINABLE URBAN HOUSING: DESIGN STANDARDS FOR NEW APARTMENTS – DECEMBER 2020

1.2.4 This guideline document was produced by the Department of Housing, Planning and Local Government and was updated with the latest version in December 2020. The purpose of this document is to set out standards for apartment development, mainly in response to circumstances that had arisen whereby some local authority standards were at odds with national guidance.



- 1.2.5 With the demand for housing increasing, this means that there is a need for an absolute minimum of 275,000 new homes in Ireland's cities by 2040. It is therefore critical to ensure that apartment living is an increasingly attractive and desirable housing option for a range of household types and tenures.
- 1.2.6 These Guidelines apply to all housing developments that include apartments that may be made available for sale, whether for owner occupation or for individual lease. They also apply to housing developments that include apartments that are built specifically for rental purposes, whether as 'build to rent' or as 'shared accommodation'.
- 1.2.7 Cycling provides a flexible, efficient and attractive transport option for urban living and these guidelines require that this transport mode is fully integrated into the design and operation of all new apartment development schemes.
- 1.2.8 The quantum of car parking or the requirement for any such provision for apartment developments will vary, having regard to the types of location in cities and towns that may be suitable for apartment development, broadly based on proximity and accessibility criteria. There are three types of locations set out that will determine the level of parking provided. The **Central and/or Accessible Urban Locations** comprise of apartments in more central locations that are well served by public transport. These locations have a default policy for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances. The **Intermediate Urban Locations** comprise of apartments in suburban/urban locations served by public transport or close to town centres or employments areas. These locations require that planning authorities must

consider a reduced overall car parking standard and apply an appropriate maximum cap parking standard. The **Peripheral and/or Less Accessible Urban Locations** comprise of apartments located in relatively peripheral or less accessible urban locations, one car parking space per unit, together with an element of visitor parking should generally be required.

- 1.2.9 It is considered that the subject development site is located within an "*Central Urban Location*" as designated within the DHPLG standards, on the basis of proximity to high capacity urban public transport stops.
- 1.2.10 The subject site is considered to be within walking distance (i.e. up to 10 minutes or 800-1,000m) to/from high capacity urban public transport stops (with the Beechwood Luas Stop only 1km away); and within easy walking distance (i.e. up to 5 minutes or 400-500m) to/from high frequency (i.e. min 10 minute peak hour frequency) urban bus services.
- 1.2.11 For all types of locations, where it is sought to eliminate or reduce car parking provision, it is necessary to ensure, where possible, the provision of an appropriate number of drop off service, visitor parking spaces and parking for the mobility impaired. Provision is also to be made for alternative mobility solutions including facilities for car sharing club vehicles and cycle parking and secure storage.

DUBLIN CITY DEVELOPMENT PLAN 2016-2022

- 1.2.12 The Dublin City Development Plan sets out a new approach to meet the needs and aspirations of citizens of Dublin and the country, not only for the 6-year life of the plan, but for the long term. This approach is based on the principles of sustainability and resilience on the social, economic and environmental fronts.
- 1.2.13 The Development Plan's Strategic Approach in response to the challenges facing the economy of the city and its role as the national and regional economic engine are as follows:
 - Developing enterprise, particularly the services sector which is the critical sector for the city;
 - Developing academic medical centres providing excellence in research, care and teaching in the medical and health sectors;
 - Promoting the development of the three innovation corridors identified in the Economic Development Action Plan for the Dublin City Region;

- Improving the general attractiveness of a city for people and investors as a key part of maintaining competitiveness and creating a vibrant place that attracts and retains creative people within the city; and
- Providing appropriate office and commercial spaces as the workplaces for the new knowledge and services economy and enables the city to compete as an attractive location internationally.
- 1.2.14 The Dublin City Council Development Plan 2016-2022 states that it is the policy of Dublin City Council:
 - "To promote and enhance the city's competitiveness and address deficits, to improve the business environment so that existing jobs are supported and employment generated, and be creative and practical in its responses to present economic challenges."
 - "To recognise the crucial need for the planning and sustainable development system to be agile and responsive in the face of challenging and rapidly changing circumstances."
 - "Dublin City Council will promote sustainable development by balancing complex sets of economic, environmental or social goals in planning decisions."
- 1.2.15 The Dublin City Council Development Plan 2016 2022 states the following objectives:
 - "To examine the need and opportunity for new development and financing models that will allow desirable developments to go ahead in the shortterm while ensuring that the optimum development of the site will be achieved in stages."
 - "To examine how key economic generators could have greater spin-off benefits for their surrounding areas and to actively promote their development."
- 1.2.16 According to the Dublin City Council Development Plan 2016 2022, the proposed development site is zoned under "Zone Z15 To protect and provide for institutional and community uses." The development plan states that "residential uses are 'open for consideration' in this zoning", with a creche being another permissible use. (Figure 1.1)



Figure 1.1: Dublin City Development Plan – Land Use Zoning (Extract of Mapsel

A range of multimodal policies and objectives are outlined in the development plan to achieve these targets and includes the following;

- "MT7: To improve the city's environment for walking and cycling through the implementation of improvements to thoroughfares and junctions and also through the development of new and safe routes, including the provision of foot and cycle bridges. Routes within the network will be planned in conjunction with Green Infrastructure Objectives and on foot of (inter alia) the NTA's Cycle Network Plan for the Greater Dublin Area, and the National Cycle Manual having regard to policy GI5 and objective GIO18."
- "MT8: To work with, and actively promote, initiatives by relevant agencies and stakeholders such as An Taisce's 'Green Schools' initiative and the NTAs Smarter Travel Unit, to promote active travel in schools and communities, recognising the health and social benefits of walking and cycling as well as the environmental benefits."
- "MT9: To promote Bike and Ride at public transport hubs by providing secure, dry, bike parking facilities."
- "MT10: To provide 30kph speed limits and traffic calmed areas at appropriate locations throughout the city and subject to stakeholder

1.2.17

consultation."

- "MT11: To continue to promote improved permeability for both cyclists and pedestrians in existing urban areas in line with the National Transport Authority's document "Permeability a best practice guide". Also, to carry out a permeability and accessibility study of appropriate areas in the vicinity of all Luas, Rail and BRT routes and stations, in cooperation with Transport Infrastructure Ireland and the National Transport Authority."
- 1.2.18 The DCC Development Plan outlines the cycle and car parking standards required for residential units and childcare facilities. Table 1.1 below outlines the DCC maximum car parking requirement for residential developments and childcare facilities. The subject site is located within DCC Zone 2 for car parking.

Land Use	No. of Units	DCC Parking Standards (Zone 2)		
Description	/ GFA	Long Stay	Short Stay	
Apartment	671	1 space per unit	_	
Crèche	400m ²	1 space per class		

Table 1.1 DCC Car Parking Standards

1.2.19 The DCC Development Plan also outlines the provision for cycle parking for residential uses and crèches. These are outlined in **Table 1.2** below.

Land Use	DCC Parking Requirements (Zone 2)		
Description	Long Stay		
Apartments	1 space per unit		
Crèche	1 per 3 children		

Table 1.2 DCC Cycle Parking Standards

2.0 MANAGEMENT OF ON-SITE PARKING FACILITIES

2.1 INTRODUCTION

- 2.1.1 A key component in the effective operation of on site car parking is an active and enforced parking management strategy. This strategy will be managed by the management company who will be responsible for the control of the parking and access arrangements as well as the allocation of the parking spaces.
- 2.1.2 It is intended that the proposed development will be 'Car-Lite'. Consequently, all marketing material for the development will make it clear that the Sandford Road Development operates a 'Car-Lite' approach to parking and that the ownership or signing of a rental agreement for a Build-to-Rent residential apartment will NOT include access to a designated on-site parking space.
- 2.1.3 Accordingly, the proposed development's on-site car parking spaces will remain within the control of the appointed management company. A management regime will be implemented by the development's management company to control access to these on-site apartment car parking bays thereby actively managing the availability of on-site car parking for each of the following user profiles;
 - Residents of the proposed development,
 - Staff based at the proposed development (reception, crèche etc), and
 - Visitors to the residential activities on site (deliveries, taxi etc.).

2.2 VEHICULAR SITE ACCESS STRATEGY

- 2.2.1 The subject site will benefit from one principal vehicle access location which will be provided on the R117 Milltown Road on the southeastern boundary of the site and an additional access on the R117 Sandford Road on the northeastern boundary of the site, which will principally be used for deliveries, emergencies and taxis with a small element of mobility impaired parking and thus will have very minimal traffic movements.
- 2.2.2 Considering the large scale of this residential development, it was deemed appropriate to provide two vehicular access junctions. These two access junctions will increase permeability for pedestrians and cyclists as well as reducing traffic issues of queuing and delay within the development.

Milltown Road Site Access

- 2.2.3 A new site access junction is proposed on the R117 Milltown Road to service the proposed development. A signalised toucan crossing has also been designed adjacent to the site access.
- 2.2.4 The Milltown Road access will act as the primary vehicular site access which leads to the basement car park and to the duplex units along the western boundary. This site access will accommodate general vehicular traffic accessing and egressing from the subject site, with the exception of delivery vehicles, taxis and set/down pick up for Block A1.
- 2.2.5 The basement vehicular ramp access will connect with the internal street network via a priority junction immediately east of the Milltown Road site access thereby decreasing the volume of traffic using the internal street network and creating an environment that is highly accessible, safe and attractive for pedestrians rather than being dominated by vehicular movements.
- 2.2.6 A number of surface level car parking spaces are accessible via the Milltown Road site access; 34 no. of these car parking spaces are located within a shared surface area to the west of the site to service residents of Block E of the development (duplexes) and 8 no. car parking spaces (including 1 mobility impaired space) are located adjacent to Tabor House.

Of the car parking spaces located adjacent to Tabor House, 3 no. spaces will be designated for creche use.

Sandford Road Site Access

- 2.2.7 The Sandford Road access is a secondary access in terms of vehicular movement connecting to the proposed northern plaza area (no vehicular access will be facilitated through the plaza). The access will prioritize the movement of pedestrians and cyclists and will provide a key link between Sandford Road and the development for sustainable modes.
- 2.2.8 It is anticipated that the Sandford access will be of limited use for deliveries to Block A1, taxi/visitor drop off, deliveries and emergency access. A small number of mobility impaired car parking spaces will be accessible via the Sandford Road access. Controlled bollards will prevent vehicles from accessing the plaza area and the central courtyard.

- 2.2.9 The Sandford Road access will perform a significant role in conveying pedestrians and cyclists to and from the site. As such, it is proposed to upgrade the controlled crossing point across Sandford Road to a toucan crossing as part of the development proposals. A dedicated two-way cyclist ramp will be accessible from the Sandford Road access, leading cyclists to the cycle parking areas within the development basement car park.
- 2.2.10 Both site accesses and the internal road layout allow for fire tender access and maneuverability throughout the plaza areas of the subject site. There shall be no through route for general or service vehicles between the Sandford Road and Milltown Road accesses.
- 2.2.11 Detailed site access junction drawings for both site accesses are presented within this planning application package within the proposed roads layout, an extract of which is shown in Figure 2.1 below. Refer to Drawing No. 190226-DBFL-RD-SP-DR-C-1001.

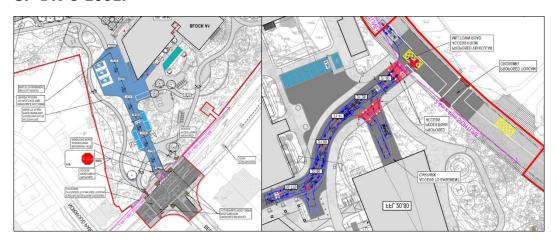


Figure 2.1: Extract of Subject Site Road Layout [Left: Sandford Road,

Right: Milltown Road]

Taxi/Delivery Vehicles

- 2.2.12 A small number of taxi and set-down/collection vehicle spaces have been assigned within the development, as shown in **Figure 2.2** below. The set-down/collection spaces will be available for use by delivery vehicles with those accessible via Sandford Road serving only Block A1. The set-down spaces accessible via Milltown Road will serve the remainder of the development due to their proximity to the Block B reception, Blocks C and D as well as Tabor House.
- 2.2.13 Signage at each site access will indicate to development visitors which car parking spaces are permissible for use by delivery personnel, with site maps aiding in leading visitors to reception areas within the development.



Figure 2.2: Taxi/Set-down Spaces at Subject Site

Service Vehicles

- 2.2.14 Figure 2.3 below shows the swept path analysis and access route for ESB service vehicles to the subject site's ESB sub stations (Ref. DBFL Drawing 190226-DBFL-RD-SP-DR-C-1007).
- 2.2.15 All servicing requirements can be accommodated via the principal site access on Milltown Road. Two ESB sub stations are located in the vicinity of the site access, thereby requiring minimal vehicle movements to reach them, with another ESB sub

station located in Block C of the development and another ESB station located nearby to the Block B reception area.

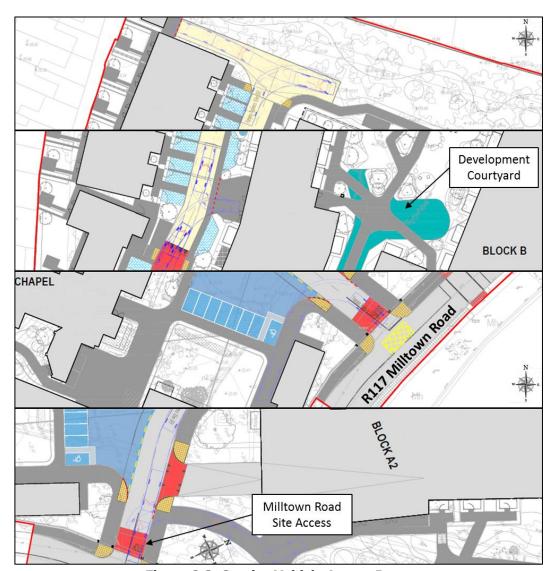


Figure 2.3: Service Vehicle Access Route

2.2.16 Figure 2.4 below shows the fire tender access route throughout the subject site which connects the Sandford Road and Milltown Road accesses and permeates into the shared surface area as well as the internal development courtyard. The swept path analysis for the fire tender route has been shown on DBFL Drawing 190226-DBFL-RD-SP-DR-C-1002. The controlled bollards blocking the through route between the two accesses will be lowered by the appointed management company in the event of an emergency in order to allow fire tender accessibility for the entire development.



Figure 2.4: Fire Tender Access Route

Refuse Vehicles

- 2.2.17 Waste storage and collection arrangements at the proposed development have been prepared with due consideration of the proposed site layout and location as well as best practice standards, local and national waste management requirements including those of DCC.
- 2.2.18 Residential bin holding areas have been designated within the basement car park and at surface level, immediately south of the Milltown Road site access to facilitate servicing of the proposed development. All wastes will be collected on at least a weekly basis.

- 2.2.19 The residential waste rooms are located in the development's basement level. A total of 4 No. waste rooms are provided throughout the basement, adjacent to the site cores. The residential waste room locations have been selected to minimise the required distances the tenants must travel from the building cores. In addition to the basement waste rooms, 5 No. residential waste rooms are located on the ground level of the development (Figure 2.5).
- 2.2.20 Waste generated by the development creche will be disposed of in the nearby waste rooms, adjacent to the Milltown Road site access.



Figure 2.5: Surface Level Residential Waste Collection Areas

2.2.21 Signage as well as development personnel will indicate the permissible routes throughout the site for refuse vehicles. A swept path analysis for the refuse vehicle route through the site has been provided in **DBFL Drawing 190226-DBFL-RD-SP-DR-C-1003**. Access can be granted on a 'controlled' basis to the basement car park for servicing of the residential elements of the development.

2.3 BASEMENT CAR PARK ACCESS

- 2.3.1 Access to the basement parking area will be controlled by a combination of barriers and shutters to ensure unpermitted vehicles cannot gain entry. The barrier will be located on the basement ramp, set back a sufficient distance to ensure queued vehicles do not obstruct either the footpath or internal road network.
- 2.3.2 Access for this area will be facilitated by coded entry and/or Automatic Number Plate Recognition (ANPR) system which will permit only registered vehicles with parking permits to enter.
- 2.3.3 As mentioned, access can be granted on a 'controlled' basis to the basement, by the development management company, for any servicing requirements through the basement car park.
- 2.3.4 As with vehicle spaces at surface level, any designated vehicle spaces will be demarcated using road markings and signage to prevent misuse of mobility impaired spaces or electric vehicle charging spaces. These measures will be further enforced by the development Parking Officer.

2.4 CAR PARKING ALLOCATION

General Parking

- 2.4.1 As introduced above, all prospective residents will be notified that the proposed scheme is a 'low car allocation' or 'Car Lite' development with **no guarantee of** access to the on-site residents' car parking provision.
- 2.4.2 Nevertheless, all residents of the proposed residential development apartment scheme will have the opportunity to apply to the on-site management company for both a:

- (i) Residents car parking permit (updated weekly, fortnightly, monthly, quarterly or annually) and subsequently access to a dedicated (assigned) on-site basement or surface level car parking space or
- (ii) A visitor's car parking permit for a short period of time.
- 2.4.3 The building management team will be responsible for the day-to-day management of car parking operations. Residents who request a private car parking space will be allocated on a 'first come, first served' basis.
- 2.4.4 A charge will be applied to obtain a permit with the objective of covering the associated management costs, discouraging long term usage of the car parking space and encouraging travel by sustainable modes of travels such as walking, cycling and public transport for which there are excellent opportunities within and directly adjacent to the development site, such as the Beechwood LUAS stop 1km from the subject site and a bus stop immediately opposite the site on the Sandford Road serving several frequent bus routes.
- 2.4.5 This relatively short rental period (which can be continued as a rolling contract) and the limited number of spaces will ensure that residents are only assigned a space when one becomes available from time to time, thereby underpinning the 'Car Lite' ethos of the development. Visitor car parking permits will have a shorter rental period of one day, for which residents will be able to apply for through the development management company.
- 2.4.6 The car parking spaces available at the proposed development will be heavily managed with a clamping enforcement regime being a key component for the effective delivery of the Parking Management Strategy.
- 2.4.7 Misuse of designated vehicle spaces, parking without an up-to-date paid permit and illegal parking practices will all be responded to with vehicle clamping to ensure that parking restrictions are adhered to at surface and basement level.
- 2.4.8 A development Parking Officer will be appointed as part of the Parking Management Strategy in order to enforce the aforementioned measures.

Car Sharing

2.4.9 Approx. 10 no. car parking spaces have been allocated to car sharing for residents,5 no. of which will be operated by GoCar and a further 5 no. spaces will be available for the development's own car share club, using development-owned vehicles. The

- location of the 5 no. surface level and 5 no. basement level parking spaces are shown in **Figure 2.6** below.
- 2.4.10 The Management Company will engage with GoCar as part of its role as Mobility Manager for the development. The management company will also ensure that the 5 spaces are used by GoCar only; all 5 GoCar spaces will be at surface level. A Letter of Intent from GoCar has been provided to support this planning application and is included within **Appendix A**.
- 2.4.11 Carsharing is a sustainable service, by allowing multiple people to use the same vehicle at different times, car sharing reduces car ownership, car dependency, congestion, noise and air pollution. Every GoCar has the potential to replace up to 15 private cars.
- 2.4.12 Road markings will indicate the dedicated car share spaces at surface and basement level. Adherence to the appropriate use of the car share spaces will be enforced by the development Parking Officer.



Figure 2.6: Car Share Parking Spaces at Subject Site

3.0 VEHICLE PARKING

3.1 PARKING OVERVIEW

3.1.1 The development vehicle parking proposals include the provision of a total 344 no. car parking spaces of which 295 will be provided within the basement car park and 49 no. spaces will be at surface level.

Car Parking Provision

- 3.1.2 The provision of a total of 344 no. car parking spaces on-site have been allocated as follows (**Table 3.1**): -
 - The 671 no. apartment units have been allocated a car parking ratio of 0.50 spaces per unit (excluding creche, taxi and set-down spaces). This provision is in accordance with the SUHD Design Standards for New Apartments as referenced in **Section 1** of this report.
 - 3 no. Crèche parking spaces at surface level (complying with DCC maximum standard of 5 no. car parking spaces);
 - 18 no. Mobility Impaired Parking spaces (5% of total parking spaces);
 - 14 no. Motorcycle spaces (4% of total parking spaces);
 - 35 no. spaces for electric vehicles with charging points (10% of total parking spaces), 3 of which are mobility impaired spaces;
 - 10 no. car share parking spaces (5 no. GoCar spaces and 5 no. development managed car share);
 - 4 no. drop-off/collection parking spaces; and
 - 2 no. taxi parking spaces.

Land Use	No. of Units / GFA	Development Parking Provision			
Description		No. Spaces	Combined	Surface Level Parking	Basement Car Parking
Apartment	671	325		36 (4 Mobility Impaired Spaces)	290 (14 Mobility Impaired Spaces)
Crèche	400m ²	3		3	-
Car Share		10 13 (5 GoCar + 5 Development Car Share)	5	5	
Collection/ Drop-Off	- 4		4	-	
Taxi		2	6	2	-
	Total 344			49	295
Total Car Parking Ratio* = 0.50 Spaces/Unit					

^{*}Ratio excludes drop-off, taxi and creche spaces

Table 3.1: Car Parking Provision & Allocation

Milltown Road Site Access

- 3.1.3 The Milltown Road access will act as the primary vehicular site access which leads to the basement car park, the shared surface area to the west of the site and the car parking adjacent to Tabor House. This site access will accommodate general vehicular traffic accessing and egressing from the subject site, with the exception of delivery vehicles, taxis and set/down pick up for Block A1 which will be served by the Sandford Road access.
- 3.1.4 The following car parking spaces are accessible via the Milltown Road access (**Figure 3.1**):
 - 295 no. Basement Car Parking Spaces including;
 - o 14 no. mobility impaired spaces;
 - o 5 no. car sharing spaces (development managed spaces);
 - 35 no. electric vehicle charging spaces (3 of which are mobility impaired spaces);
 - 8 no. Tabor House Car Parking Spaces;
 - 3 no. crèche spaces;

- 2 no. visitor spaces;
- 2 no. set-down spaces;
- o 1 no. mobility impaired space;
- 34 no. Shared Surface Area Parking Spaces including;
 - o 5 no. GoCar spaces;
 - o 1 no. visitor spaces; and
 - o 28 no. residential spaces (Block E).



Figure 3.1: Vehicle Parking Areas Accessible via Milltown Road

Tabor House Car Parking Spaces

3.1.5 The 3 no. designated crèche car parking spaces immediately north of Block F and the 400m² crèche would accommodate the car parking demand generated by the crèche. This provision is deemed sufficient to accommodate the crèche parking

demands and is compliant with the DCC maximum of 5 no. spaces. The Tabor House car parking spaces (**Figure 3.2**) can be utilized by parking permit holding visitors to the site's residential units at the times which the crèche is not operational.

- 3.1.6 An internal trip generation exercise has been conducted to estimate the number of vehicle trips the 400m² development crèche could generate. It was demonstrated that a crèche of this size would not generate more than 8 two-way vehicle trips in the worst case peak hour scenario. The majority of these trips would be attributed to drop-off / collection parking, rather than long-term parking.
- 3.1.7 Crèche employees are expected to use sustainable modes of transport (walking, cycling and public transport). The available crèche spaces will be available for use by any parents for drop-off / collection parking.
- 3.1.8 The 2 no. drop-off spaces provided at Tabor House are anticipated to serve delivery vehicles to the site. The 2 no. visitor spaces located at Tabor House will be available to rent on a short-term basis, using permits, to residents at the Sandford Road development. The management of the Tabor House spaces and their use will be managed by the development's management company as outlined in **Section 2**.

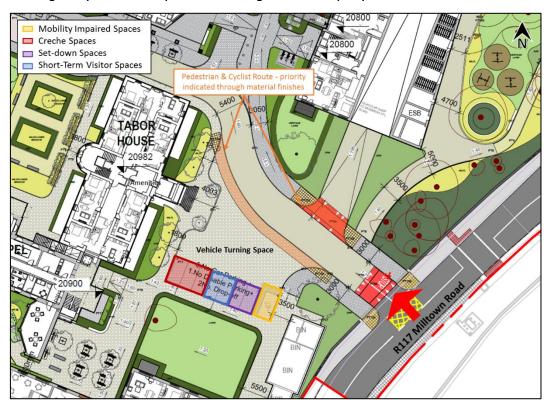


Figure 3.2: Tabor House Parking Area

Shared Surface Car Parking Spaces

- 3.1.9 The proposed shared surface (**Figure 3.3**), accessible via Milltown Road, contains residential parking for Block E of the development, which contains 28 no. duplex apartment units. As such this area will only be accessed by vehicles belonging to residents of these apartments and vehicles servicing this part of the development.
- 3.1.10 A ratio of 1 car parking space to every residential apartment has been provided for these units, resulting in 28 no. spaces for Block E. An additional 5 no. GoCar spaces have been provided and 1 no. visitor spaces, giving a total of 34 no. car parking spaces in the shared space.
- 3.1.11 The 1 no. visitor spaces, not dedicated to particular residential units, will be available to rent using short-term permits to residents of the development. Parking permits for the short-term visitor spaces will be managed by the development management company; this is further explained in Section 2.4 of this report.
- 3.1.12 Residents of Block E will avail of residential parking permits to allow them use of these spaces. The 5 no. GoCar spaces will be demarcated using road markings to ensure only the car share vehicles use these spaces.
- 3.1.13 The correct use of these shared surface area spaces by permit-holding residents will be managed by the development's management company.



Figure 3.3: Shared Surface Area

Basement Car Park

- 3.1.14 The basement car park will be accessible via the Milltown Road site access through a two-way vehicular ramp. The basement vehicular ramp access will connect with the internal street network via a priority junction immediately east of the Milltown Road site access thereby decreasing the volume of traffic using the internal street network.
- 3.1.15 **Figure 3.4** below shows the layout of the basement car park and the location of the designated mobility impaired spaces (14), car share spaces (5), electric vehicle

charging spaces (35) within the layout of the car park providing a total of 295 no. spaces.

3.1.16 The remaining on-site car parking will benefit from being future proofed in order to facilitate the addition of EV infrastructure if required, thereby enabling easy retro fitting of charge points in the future.

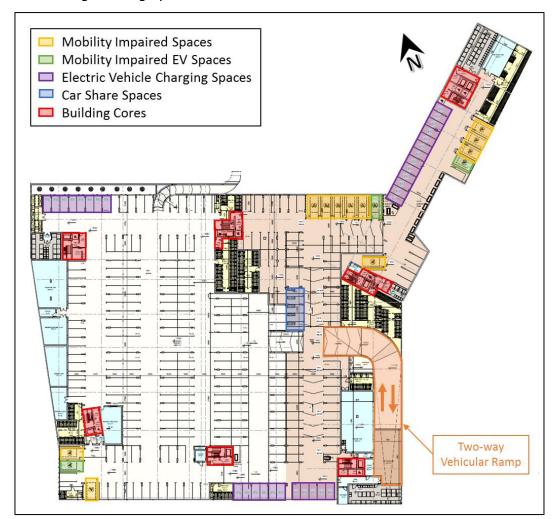


Figure 3.4: Basement Car Park Layout

Sandford Road Site Access

- 3.1.17 The Sandford Road site access will be of limited use for deliveries to Block A1, taxi/visitor drop off, deliveries and emergency access in addition to a small element of mobility impaired parking and thus will have very minimal traffic movements. As shown in **Figure 3.5** below 7 no. car parking spaces will be accessible via this access:
 - 3 no. mobility impaired spaces;
 - 2 no. taxi spaces; and



- 2 no. set-down/collection spaces.
- 3.1.18 Signage and road markings will clarify the intended use for each parking space at the Sandford Road site entrance. In addition, the use of these spaces will be strictly managed by the appointed management company to ensure residents do not use allocated taxi and set-down spaces and adhere to the parking restrictions.

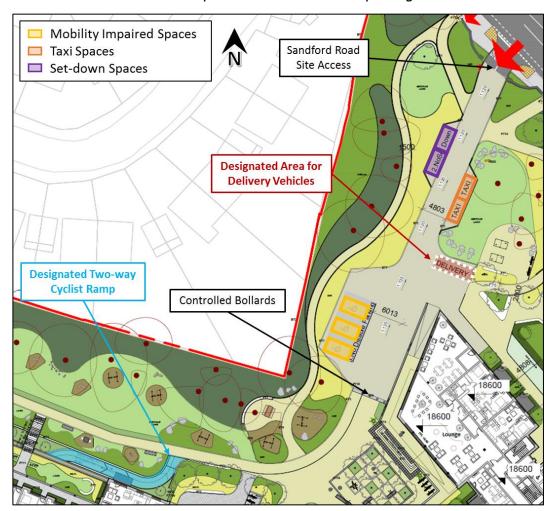


Figure 3.5: Sandford Road Site Access

Car Share Parking Spaces (GoCar)

- 3.1.19 The building management company will engage with a car club operator (such as GoCar). As **Figure 3.6** shows, there are already several GoCar bases in the immediate vicinity of the Sandford Road development.
- 3.1.20 Further provision of an additional 5 no. bases within the proposed development (**Appendix A**) site will benefit residents of the Sandford Road development in addition to enhancing access and availability of car sharing vehicles. All 5 no. GoCar spaces will be located at surface level. These car share spaces will be located so

- as to ensure that they are highly accessible and visible to residents of the subject development.
- 3.1.21 The scheme will be managed by the appointed car sharing service, with all residents having the option to become members of the car share service. The proposed development's MMP will both encourage and facilitate residents to become members of this service.

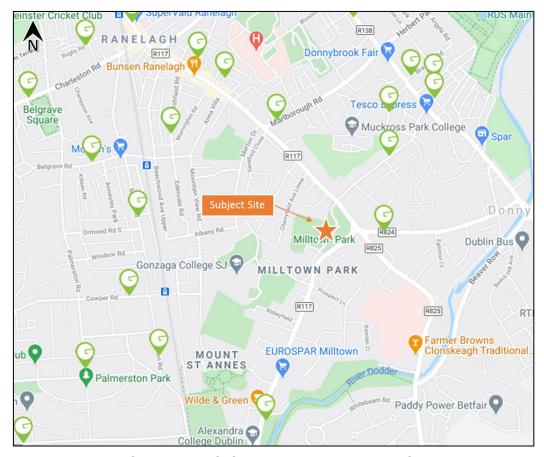


Figure 3.6: Existing GoCar On-Street Locations

- 3.1.22 On becoming members of schemes such as GoCar, residents can then book cars either online or via the app for as little as an hour, then unlock the vehicle with their phone. The keys are in the car, with fuel, insurance and city parking all included. The benefits of such car sharing services include:
 - reduction in the need to own a private motor vehicle;
 - the reduction of the number of cars on the road and therefore traffic congestion, noise and air pollution;
 - minimised demand for car parking and frees up land traditionally used for private parking spaces;

- increased use of public transport, walking and cycling as the need for car ownership is reduced; and
- car sharing allows those who cannot afford a car the opportunity to drive, thereby encouraging social inclusivity.
- 3.1.23 GoCar is Ireland's leading car sharing service with 40,000 members and over 600 cars and vans across 18 counties in Ireland. Each GoCar which is placed in a community has the potential to replace the journeys of up to 15 private cars. Accordingly, it could be argued that the provision of 5 dedicated on-site GoCar vehicles for the use of residents has the potential to negate the need for 75 private car parking spaces.
- 3.1.24 In addition to the provision of GoCar spaces, the development will provide a supplementary 5 no. development owned and managed car sharing vehicles, resulting in a total of 10 no. car sharing spaces provided throughout the scheme for resident use.

Motorcycle Parking Spaces

- 3.1.25 The appropriate level of motorcycle parking provision for the proposed development will also be provided in accordance with Dublin City Council Development Plan requirements. The Development Plan states:-
 - 'New developments shall include provision for motorcycle parking in designated, signposted areas at a rate of 4% of the number of car parking spaces provided.'
- 3.1.26 The subject development site provides 14 no. motorcycle parking spaces within the development basement (**Figure 3.7**) and therefore complies with the Development Plan requirements.

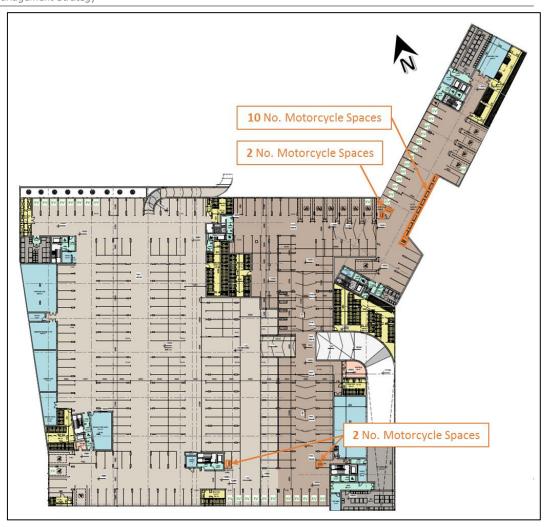


Figure 3.7: Motorcycle Parking Spaces at Subject Site

4.0 CAR PARKING PROVISION FOR APARTMENTS

- 4.1.1 The parking provision for the 671 no. apartment units within the development has been allocated at a reduced parking rate of 0.50 spaces per unit. This is based on the standards provided within the Sustainable Urban Housing Design Standards for New Apartments. This is based on good site location as well as the availability of travel alternatives such as public transport (the subject site is within 1km of the Beechwood LUAS stop), bus stops, walking and cycle links, and as such the quantum of vehicle parking provided on site should be 'minimised, substantially reduced or wholly eliminated'.
- 4.1.2 With the objective of establishing whether this parking ratio (approximately 0.50/unit) would be appropriate to accommodate the likely demand generated for car parking at the subject Sandford Road development, DBFL have reviewed the following data sources; -
 - Review of trends in BTR schemes in terms of demographics and car ownership;
 - Review of 2016 Census Data Car Ownership trends;
 - Review of 2016 Census Data Existing Modal Split trends;
 - Review of 2016 Census Data Property Rental trends;
 - Review of 2016 Census Data Age Demographics and Accommodation Type;
 and
 - Review of National Transport Authority

 National Household Survey 2017.
- 4.1.3 It is an objective for this development to reduce the need for commuters to travel by car and instead to avail of more sustainable modes of travel in line with current and future travel requirements as set out in recent policy documents within Ireland. It is noted that the concept for car parking reduction in apartments is relatively new in Ireland, and therefore, proposals to implement a more sustainable approach for car parking may take time.

4.2 BUILD TO RENT (BTR) SCHEMES

4.2.1 The proposed Sandford Road development will be comprised of 671 no. apartments, 90% (604) of which will be Build to Rent apartment units. As such the development will be heavily managed as a BTR scheme.

- 4.2.2 Although considered a relatively new feature within Ireland and the UK property market the Build to Rent (BTR) scheme is being increasingly recognised as an exciting opportunity for investors, local authorities and developers. Significant research has been undertaken, in particular within the UK, with regard to this emerging concept. The research affirms the value of BTR to the property industry as it seeks to accelerate new developments to help address the housing crisis whilst also delivering broader social and economic benefits to local communities.
- 4.2.3 By delivering high quality and well managed homes and creating new, sustainable communities, BTR will enhance the overall quality of housing and become woven into the residential landscape.
- 4.2.4 From a number of surveys undertaken in the UK regarding BTR schemes, the surveys suggest that the main age demographic interested in the BTR schemes are the 25 35 year age bracket. This is likely due to a number of factors including the difficulty of procuring a mortgage and getting on to the property ladder in this current property climate. Also a consideration for this is that renting properties tends to suit this age demographic as many people of this age may wish to move around and travel and may not wish to buy at that time.

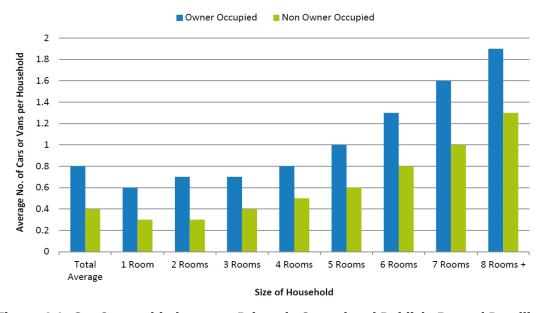


Figure 4.1: Car Ownership between Privately Owned and Publicly Rented Dwellings

(Source: Unlocking the Benefits and Potential of Build to Rent by British Property Federation)

4.2.5 The UK reference document 'Unlocking the Benefits and Potential of Build to Rent' identifies a link, from the UK Census 2011, between car ownership and the tenure of a residence, ie, whether a resident is renting in the public domain or privately owns their residence. The graph in **Figure 4.1** shows that residents who own their

residence are more likely to own a car than residents who rent their property. It shows that the total average of car ownership for privately owned residences is 0.8 cars per residential unit, this is compared with a car ownership of just 0.4 cars per residential unit for residences that are publicly rented. This suggests that car parking demand for the rental market may well be lower than traditional build to sell schemes.

4.3 CAR OWNERSHIP & USAGE

4.3.1 In order to determine an appropriate parking provision for the subject development the current demand for car parking within the surrounding area of the proposed development site was researched using the 2016 CSO data and in particular the level of current car ownership. The 2016 CSO small area map has been reviewed. Apartment blocks within seven small areas similar to the proposed development were assessed, as detailed in the map in **Figure 4.2**. These Small Areas represent similar attributes to the proposed apartment units in terms of being located within an urban environment, similar distance from the City Centre as well as having good availability of Dublin Bus routes and their proximity to the Green Line LUAS.

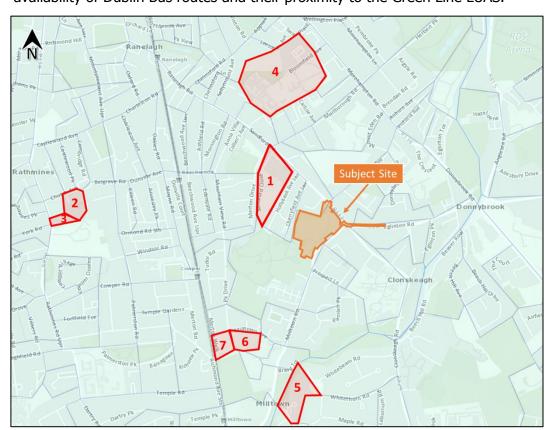


Figure 4.2: 2016 CSO Small Areas containing apartments near the site

4.3.2 A total of 684 units were included in this assessment. The CSO data for Apartments who do not own a car in this area is presented in **Table 4.1** below.

Small Area	No. Apts	No. Houses	No. Households with No Car	% of Households with No Car	Equivalent Rate of Parking Ownership (Space/Unit)
1	89	10	27	27%	0.73
2	60	20	22	28%	0.73
3	53	14	21	31%	0.69
4	141	30	34	20%	0.80
5	78	5	8	10%	0.90
6	105	0	18	17%	0.83
7	65	14	9	11%	0.89
				Average	0.79

Table 4.1: 2016 CSO Car Ownership Data

- 4.3.3 **Table 4.1** highlights that the level of households that do not own a car within the particular census small area varies between a low 10% in Area 5 to a higher 31% in Area 3. The overall average level of car parking ownership within these locations is 0.79 spaces per unit. It is noted that these apartments are typically based on past development standards that adhered to the 1 car space per unit for apartment blocks and also based on a different commercial model with parking spaces designated to units as part of the sale agreement.
- 4.3.4 It should also be considered that whilst many households own a car, they may not avail of their car for commuting purposes and may use their vehicle infrequently. Using a vehicle for commuting purposes could also be hindered by a commuter's destination, for example, does their place of work have restricted car parking allocation in force. Therefore, in order to assess the level of daily use for commuters who drive their vehicle to work, the 2016 CSO data was again reviewed for the modal split for people travelling to Work, School or College. This was assessed for the same 7 small areas as previously discussed. The results of this assessment are detailed in **Table 4.2** below.

Small Area	No. Commuters	% Households with No Car	No. Commuters that Drive	% Commuters that Drive
1	170	27%	47	28%
2	129	28%	39	30%
3	109	31%	28	26%
4	273	20%	78	29%
5	111	10%	43	39%
6	140	17%	48	34%
7	135	11%	46	34%
			Average	31%

Table 4.2: 2016 CSO Data - Percentage of Commuters that use their Vehicle

- 4.3.5 **Table 4.2** above, outlines that although car ownership within these locations is at an average 79%, the percentage of commuters that use their vehicle to drive to work, college or school is lower at an average of 31% over all areas assessed. This highlights that although commuters may own vehicles within these areas, a high proportion of them avail of other, more sustainable, modes of travel for commuting purposes. The proposed development is located adjacent to the Sandford Road and Milltown Road with close proximity to good public transport routes and stops, with the Beechwood LUAS stop being 1km from the subject site.
- 4.3.6 The level of car ownership (0.79) with reduced **car usage for commuting (0.31)** within the CSO small areas indicates that the development proposal of parking provision 0.50 per residential unit is reasonable.

4.4 MODAL SPLIT FOR SMALL AREAS

4.4.1 The same seven Census Small Areas were assessed to identify the modal split within the subject area. The assessment reveals that car is the predominant mode of transport with 31% driving and 4% as car passengers. Walking and cycling is the second most prominent mode of transport with a modal share of 27% and 11% respectively. All commuting journeys made by Luas and Bus within the assessed areas, forms modal share of 13% and 7% respectively. **Figure 4.3** below depicts the modal split within the area.

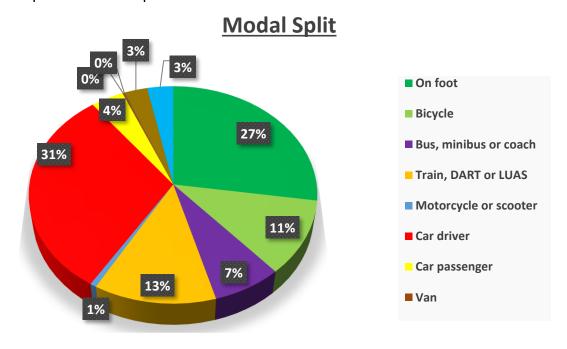


Figure 4.3: Existing Modal Split (Source: CSO)

4.4.2 In summary, existing levels of car usage would indicate a trend towards the use of sustainable travel modes by residents of apartment developments in the Dublin area. It is imperative that viable travel alternatives are provided and encouraged. This will have the impact of reducing demand for use of the private vehicle and subsequent requirements for car parking. To this end a Mobility Management Plan has been produced for the development and should be read in conjunction with this report.

4.5 PROPERTY RENTAL TREND

- 4.5.1 The Census of Population 2016- Profile 1 Housing in Ireland shows that Rented accommodation has continued its upward trend with 497,111 households renting. This is approaching the half million mark which is an increase of 4.7% from the 2011 Census.
- 4.5.2 This is likely due to a number of factors including the difficulty of procuring a mortgage and getting on to the property ladder in this current property climate. Also, it is considered that renting properties tends to suit a younger age demographic as many people of this age may wish to move around and travel and may not wish to buy at that time. **Figure 4.4** below illustrates Census data of Householders who rent by age dating from 1991-2016.

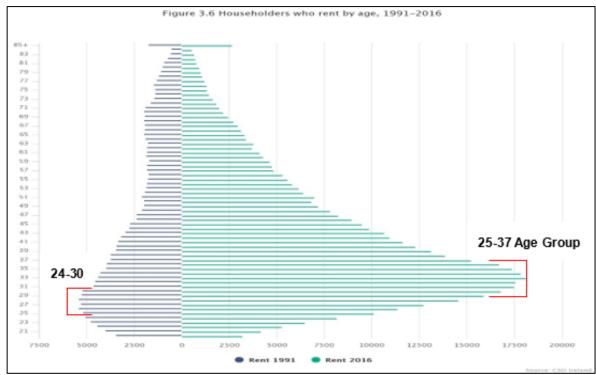


Figure 4.4: Households Renting by Age, 1991-2016

4.5.3 The main age demographic of households renting in Ireland in 2016 was 25-37. This is compared with the 1991 age demographics of 24-30 year old demographic renting.

4.6 PROPERTY OWNERSHIP TREND

- 4.6.1 The Central Statistics Office (CSO) data was reviewed to establish home ownership by age group. **Figure 4.5** below is CSO "*Figure 3.5 Tenure Status by Age of Householder, 2016*" which illustrates the changing tenure status according to the age of the head of household in 2016.
- 4.6.2 CSO data shows that home ownership rises quickly among householders from age 32 onwards and continues to climb at a steady pace until reaching a plateau of close to 90 per cent near age 70. The point at which two-thirds of householders owned their own homes (with or without a loan) occurred at age 41 in 2016. This home ownership trend has coincided with a significant increase in the young age population who are in rented accommodation in 2016. There is a large demand for housing, an absolute minimum of 275,000 new homes in Ireland's cities are required by 2040 (as per SUHDS 2018).

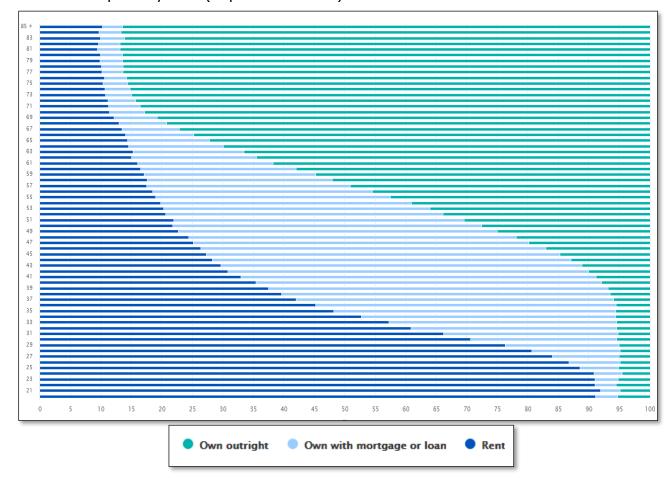


Figure 4.5: Tenure Status by Age of Householder, 2016 (Source: CSO Ireland)

4.7 AGE DEMOGRAPHIC AND TYPE OF ACCOMMODATION

- 4.7.1 Considering the type of development proposed, i.e. a majority Build to Rent scheme, as well as the type of demand that these developments tend to attract (25- 35 years old tenants), it was considered necessary to establish the general age demographic for rental properties within the area surrounding the proposed development site.
- 4.7.2 The overall age profile for the same 7 CSO Small Areas as previously discussed, were assessed and are outlined in the **Figure 4.6** below. The results indicate that there is a young age demographic within these areas with the highest number of residents within the 30-34 age bracket followed by 25-29 age profile.

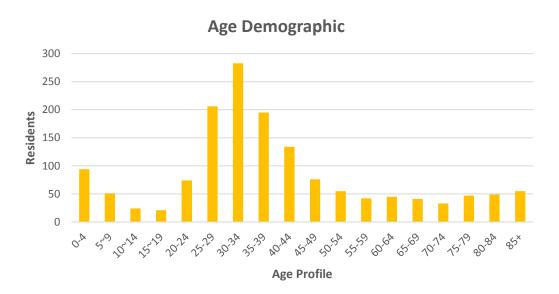


Figure 4.6: CSO 2016 Age Profile for Small Areas

4.8 NATIONAL HOUSEHOLD SURVEY 2017

- 4.8.1 The National Transport Authority (NTA) has undertaken National Household Travel Survey (2017) which is a representative study of Ireland's travel habits. The main aim of this study is to obtain accurate data describing the typical travel habits of the representative sample of the Irish population throughout the week, across all regions of the country and including number of trips made daily, the mode and time of travel, the distance travelled and the journey purpose.
- 4.8.2 This intensive study reveals that within the Dublin City region, there is an upsurge in cycling for the 18-34-year age group which indicates that cycling is a more popular mode of transport for this age group with approximately 15% modal share.

Walking is also popular mode of transport for the same age group with approximately 30% modal share. The study also reveals that travel by car is about 0.34 for the 25-34-year age group. This has a strong correlation with the CSO data analysis for car usage 0.31 and age demographics which indicated that the main age group in the Ranelagh area is 25-34.

4.8.3 **Figure 4.7** below illustrates Mode of Transport by Age within Dublin City Region.

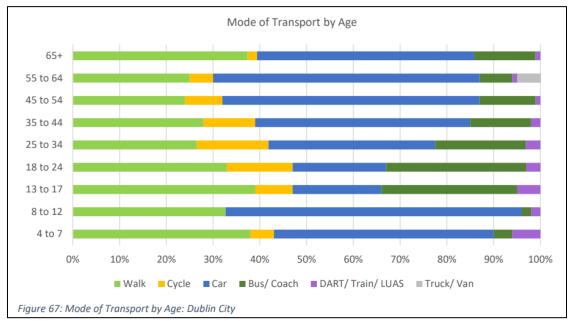


Figure 4.7: Mode of Transport by Age-GDA (National Household Travel Survey 2017)

4.8.4 Similarly, the proposed parking of 0.50 per residential apartment unit, is deemed appropriate considering access to sustainable modes of travel in the area. Further, provisions made in this subject development such as an excess in the provision of cycle parking, GoCar availability within the subject site, Parking Management and an MMP to govern the development when operated, all contribute to the suitability of the 0.50 spaces per apartment unit parking proposal.

5.0 CYCLE PARKING

5.1 CYCLE PARKING PROVISION

- 5.1.1 In order to determine the appropriate level of cycle parking provision for the proposed development reference shall be made to both (i) Dublin County Council (DCC) requirements; and (ii) the Department of Housing, Planning and Local Government (DHPLG) Sustainable Urban Housing Design Standards (SUHDS) for New Apartments.
- 5.1.2 The DCC cycle parking standards are detailed in **Table 5.1** below: -

Land Use	DCC Parking Requirements (Zone 2)	DHPLG Requirements		
Description	Long Stay	Long Stay Short Stay		
Apartments	1 space per unit	1 space per bedroom	1 space per 2 units	
Crèche	1 per 3 children	N/A	N/A	

Table 5.1: Cycle Parking Requirements

5.1.3 In total, there are 671 residential apartment units being proposed and one 400m² crèche. **Table 5.2** below outlines the requirement for the development for cycle parking spaces based on the DCC cycle parking standards.

Land Use	No. Units (Beds) /GFA	DCC Parking Requirements	DHPLG Requirements	
Description		Long Stay	Long Stay	Short Stay
Apartments	671 (999)	671	999	336
Crèche	400m ²	26	-	-
	Total	697	1335	

Table 5.2: Cycle Parking Requirements Provision

- 5.1.4 With reference to **Table 5.2** above, the development is required to provide 671 no. cycle spaces for the residential units of the development and 26 no. cycle parking spaces for the five-classroom crèche (78 children). This equates to a total cycle parking provision requirement of **697** cycle parking spaces in accordance with the DCC Development standards.
- 5.1.5 The Sustainable Urban Housing Design Standards (SUHDS) for New Apartments was also reviewed for cycle parking standards. These standards state the following requirements for cycle parking:

- 1 cycle storage space per bedroom
- 1 cycle storage space for studio units;
- 1 cycle space per two residential units for visitor parking
- 5.1.6 As noted, there are a total of 671 residential apartment units. Of these, there are 99 no. studios, 271 no. 1-bedroom apartments, 274 no. 2-bedroom apartments and 27 no. 3-bedroom apartments. Therefore, in accordance with the SUHDS guidelines, there is a requirement to provide a total of 999 residential cycle spaces as well as 336 visitor cycle parking spaces. This equates to a total of **1,335** cycle parking spaces required based on DHPLG guidelines.
- 5.1.7 The DCC bicycle parking standards are considered to be 'minimum' standards, whereas the DHPLG requirements are considered to be the substantial level of provision in situations where on-site car parking has been substantially or completely removed as permitted in certain situations by the corresponding DHPLG car parking guidance.
- 5.1.8 The development proposes 0.5/unit **visitor** parking (**336 spaces**) and **1.5/unit**Long term (**999 spaces**) to be provided in secure lockup area within the development. Long stay cycle parking spaces are provided at a quantum just exceeding the number of bedrooms at the development as per the DHPLG requirements. In addition, **26** cycle spaces will be provided for crèche employees and visitors complying with DCC standards. Of the total cycle parking provision, 9 no. spaces will be cargo bicycle spaces provided throughout the site layout (5 no. at basement level and 4 no. at surface level).
- 5.1.9 This equates to a total of **1361 cycle parking spaces** which surpasses the DHPLG guidelines thereby providing extensive active travel opportunities for not only future residents of the development but also any staff and visitors to the Sandford Road site. The proposed increased level of cycle parking is a key facet of the mobility management strategy to encourage and support modal shift away from private cars towards more sustainable modes of travel in accessing the development.
- 5.1.10 In reference to **Table 5.3**, it can be established that the proposed on-site bicycle parking provision of 1361 no. spaces is deemed appropriate and in excess of the DHPLG guidelines. This provision of cycle facilities within the development is 95% in excess of the required standard within the DCC Development Plan. This



increased level of cycle parking is intended to further facilitate a positive modal shift away from a dependency on car travel.

Standard/Proposed	Туре	Apartments	Crèche
	Short	-	-
DCC Standards	Long	671	26
	Total	697	
	Short	336	-
SUHDS Standards	Long	999	-
	Total	1335	
	Short	336	26
Proposed	Long	999	26
	Total	1361	

Table 5.3: Comparison of Bicycle Parking Provision

5.1.11 The **Figures 5.1** and **5.2** illustrate the layout of on-site proposed cycle parking spaces both on surface and within the basement.



Figure 5.1: Bicycle Parking Layout at Surface Level

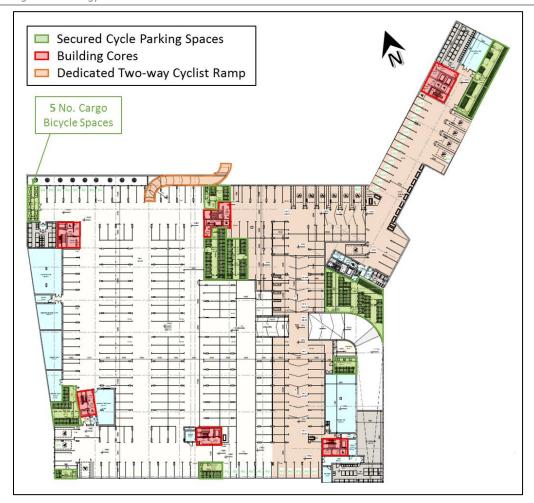


Figure 5.2: Bicycle Parking Layout within Basement



6.0 INITIATIVES FOR SUSTAINABLE TRAVEL

6.1 OVERVIEW

- 6.1.1 It is acknowledged that homeowners may require a vehicle of some sort for purposes other than commuting on an everyday basis and simply reducing car parking would not be realistic without implementing alternative measures to accommodate residents and visitors alike. Therefore, the following alternative arrangements are proposed as car parking and car ownership have been reduced within the development:
 - Parking Management Strategy;
 - Car Club including GoCar;
 - Mobility Management Plan; and
 - Increased Cycle Parking (including initiatives such a Bleeper Bike and dedicated cargo cycle spaces).

Parking Management Strategy

- 6.1.2 A key component in the continued efficiency of on-site car parking is an active and enforced parking management strategy. This strategy will be managed by the management company and specific details of these proposals are provided in Section 2 of this report.
- 6.1.3 In summary, the Parking Management Strategy will be founded on the principles that discourage the use of the private vehicle unless necessary and to encourage the uptake of more sustainable modes such as walking, cycling and public transport for which there are excellent opportunities within and directly adjacent to the development site.

Car Club

6.1.4 A car club provides its members with quick and easy access to a vehicle for short term hire. The GoCar is a well-established and successful car club operator in Dublin. This service has been recommended in recent developments as a means for car sharing where car parking is reduced. GoCar would provide a number of permanent vehicles within the development which residents would have the ability to avail of. A recent survey undertaken by GoCar indicated that the main uses of

- the service was for day trips, family trips and big shopping trips. The survey also highlighted that the average use of a car was for 1 hour a day.
- 6.1.5 A total of 10 no. car parking spaces have been allocated to car sharing for residents, of which 5 no. will be operated by GoCar and a further 5 spaces will be available for the development's own car share club.

Mobility Management Plan

6.1.6 An outline Mobility Management Plan (MMP) has been prepared, within a separate document, and should be read in conjunction with this document. The MMP will be developed further at operation stage by the management company who will have a much more active role than a management company from a traditional apartment development. MMP is a set of initiatives which are undertaken to influence a sustainable modal shift for future residents that will reduce demand for car usage and increase the use of the high quality public transport available immediately in the vicinity of the subject site, such as the Green Line LUAS and the bus services on the R117 Sandford Road and the R138 Stillorgan Road.

Increased Cycle Parking

- 6.1.7 Increasing cycle parking is an alternative measure when reducing car parking spaces. A total of 1361 no. bicycle spaces are proposed for this development which includes provision for residents, visitors and creche use. This provision is 95% in excess of the DCC Development Plan requirement of 1 space per residential unit, in addition to exceeding the DHPLG guidelines for bicycle parking provision. This increased level of cycle parking is intended to further facilitate a positive modal shift away from a dependency on car travel.
- 6.1.8 Included within the generous cycle parking provision within the development, are bicycle parking spaces in the form of the 'BLEEPER bike' scheme. Approx. 10 no. BLEEPER bikes have been positioned within the proposed development ground for use by residents. This scheme allows for a stationless bike sharing scheme. This scheme uses a phone application and bikes can be picked up and left anywhere that traditional bicycle parking is permitted. They do not require custom built docking bays.



7.0 SUMMARY & CONCLUSION

- 7.1.1 Taking all of the above factors, such as the characteristics of the development, the baseline low levels of car use (0.31) in apartment developments in the area, the proposed mobility measures, the level of car ownership & usage as well the requirement for reduced car parking as set out in the 'Sustainable Urban Housing: Design Standards for New Apartments, into account it is considered appropriate that a parking provision of 344 no. car parking spaces (0.50 spaces per unit) for 671 no. apartment units. Of these car parking spaces, 295 will be provided within the basement car park and 49 on the surface. The provision will include 3 crèche parking spaces, 18 disabled spaces (5%), 5 GoCar spaces and 5 development car sharing spaces. Also, 35 no. e-Car parking spaces will be provided in accordance within the development (10%).
- 7.1.2 The development provides 1361 no. bicycle parking spaces on site which is in excess of the DCC development management standard. This increased level of cycle parking is intended to encourage and support a positive modal shift away from a dependency on car travel, in addition to the excellent public transport alternatives located within close proximity to the subject site, such as the Beechwood LUAS stop within 1km of the subject site.

APPENDIX A

GoCar Letter of Intent





Sandford Living Limited, Riverside One, Sir John Rogerson's Quay, Dublin 2

To Whom It May Concern,

This is a letter to confirm that GoCar intends to provide 5 (five) shared car club vehicles in the proposed residential development at Sandford Road in Milltown, Dublin 6. GoCar representatives have discussed the project with representatives of DBFL who are the Engineers for the Project, and are excited to provide a car sharing service at this location.

It is understood that these vehicles will be exclusively used by residents of the development. GoCar will work with the eventual managers of the development to promote the service to the residents therein.

GoCar is Ireland's leading car sharing service with over 60,000 members and over 800 cars and vans on fleet. Each GoCar which is placed in a community has the potential to replace the journeys of up to 15 private cars. The Department of Housing's Design Standards for New Apartments - Guidelines for Planning Authorities 2018 outline: "For all types of location, where it is sought to eliminate or reduce car parking provision, it is necessary to ensure... provision is also to be made for alternative mobility solutions including facilities for car sharing club vehicles."

Carsharing is a sustainable service. By allowing multiple people to use the same vehicle at different times, car sharing reduces car ownership, car dependency, congestion, noise and air pollution. It frees up land which would otherwise be used for additional parking spaces. Most GoCar users only use a car when necessary, and walk and use public transport more often than car owners.

By having GoCar car sharing vehicles in a development such as this, the residents and businesses will have access to pay-as-you-go driving, in close proximity to their homes and workplaces, which will increase usership of the service.

I trust that this information is satisfactory. For any queries, please do not hesitate to contact me.

Rob Kearns

Head of Growth

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