

Proposed Strategic Housing
Development at the
Former Doyle's Nursery and
Garden Centre and Benoni,
Brennanstown Road,
Cabinteely, Dublin 18

Mobility Management Plan

Quality information

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1. Introduction

1.1 Background

AECOM have been commissioned by Vimovo Doyles Limited to prepare a Mobility Management Plan (MMP) to accompany a planning application to Dun Laoghaire Rathdown County Council (DLRCC) for a proposed strategic housing development at the former Doyle's nursery site on Brennanstown Road, Cabinteely, Dublin 18.

The site currently comprises of Doyle's Nursery and Garden Centre and is accessed via an existing uncontrolled junction off Brennanstown Road. The proposed development will comprise of the construction of 115 no. residential units. Figure 1.1 below indicates the site location.



Figure 1.1 Site Location Brennanstown Road (Source: Google Maps)

1.2 Overview

AECOM have prepared this MMP for the subject development in accordance with the Dun Laoghaire Rathdown County Council (DLRCC) Development Plan (2016 – 2022). Objective 8.2.4.3 of the Plan notes that planning applications for new and significantly extended developments shall include a Travel Plan Statement for the following circumstances:

- a) The proposed development has the potential to employ more than 100 employees;
- b) The proposed development is a school; and/or
- c) The proposed development has 100 dwellings or more.

The aim will be for reducing car use and the need for car use where possible. This MMP will set targets into the future which will be flexible of maximum achievable modal split at any time dependent on actual public transport provision and other facilities available. The measures compiled within this MMP will focus on residents of the development. The initiatives set out within this report are predominately for residents of the site; however there is also reference made to the visitors of the development and staff associated with the interlinked apartment blocks.

2. Methodology

2.1 Introduction

The environmental and congestion impacts of road transport have led to policy changes by officials of the industry. These changes have led to increasing the priority of more sustainable modes of transport. The aim of a MMP is to encourage modes of travel other than the car, whilst recognising that some residents, visitors and staff (of the apartment blocks) to the development would still need to use the car.

2.2 Aims

A MMP will help reduce motorised journeys, which in turn help to reduce the environmental impact of the car. In order to achieve these aims a two-stage approach has been adopted. These stages are summarised below:

- Stage 1: To provide a number of measures from the outset as part of the development to provide residents and visitors with safe and viable transport alternatives to the car for accessing the site; and
- Stage 2: To continually monitor the travel patterns of the residents of the site to ensure that the most sustainable travel patterns to and from the development are encouraged.

2.3 Benefits

Mobility Management Plans are intended to bring the following benefits:

- A partnership approach between residents to influence travel behaviour;
- Widen accessibility of the site and buildings;
- Encourage safe and viable alternatives for accessing the site;
- Pragmatic initiatives based on a continual appraisal of resident travel patterns;
- A benchmark from which future developments can be assessed;
- Improvement to the amenity of the area around their buildings;
- Reduction in overall vehicle mileage;
- Reduction in congestion and air pollution;
- Fewer vehicular trips than would otherwise be the case;
- Improved road safety on and near the site;
- Accommodate those journeys, which need to be made by car;
- Preserve valuable land and avoiding the costs of providing too much parking;

2.4 Policy Guidance

Fundamentally a MMP is a suitable mechanism by which new developments can support the objectives of sustainability and the achievement of reduced car dependency. The following documents have been taken into account when considering accessibility options for the proposed development:

- The DLRCC Development Plan (2016 – 2022);
- Smarter Travel, A Sustainable Transport Future (2009 – 2020); and
- Achieving Effective Workplace Travel Plans Guidance for Local Authorities (2012).

3. Receiving Environment

3.1 Introduction

This chapter includes a review of the existing baseline conditions of the site including public transport, walking and cycling facilities and the current operation of the surrounding public road network. AECOM undertook numerous sit audits in 2017 and 2018 to identify the existing conditions in the vicinity of the site. The findings from AECOM's analysis are presented within this chapter.

3.2 Existing Access

An existing vehicular access is available to the site off Brennanstown Road. The access road is approximately 6.5m wide which permits two-way vehicular traffic. Access onto Brennanstown Road is via an uncontrolled priority based junction as shown on Figure 3.1 below.



Figure 3.1 Existing Entrance



Figure 3.2 Existing Access Lane

3.3 Brennanstown Road

Brennanstown Road connects Glenamuck Road to the west, with Bray Road (Cabinteely Village) to the north east. The road is approx. 5.5 - 6.5m wide, and is single lane in both directions. Existing residential units situated off both sides of the carriageway. A solid white line marking is situated along the majority of the road to restrict vehicles overtaking.

On the opposite side of the site entrance, an existing public footway is situated on the western side of Brennanstown Road. The footway is approximately 1.3 – 1.5m wide, with lighting columns situated along the footway.

The speed limit along Brennanstown Road is 50km/h, which is denoted by traffic signs. 'SLOW' markings are situated on the carriageway on approach to the site access, as illustrated in the figures overleaf.

A large grass verge is situated on the western side of Brennanstown Road, immediately opposite the site entrance.



Figure 3.3 Slow Road Markings



Figure 3.4 Existing Footpath

3.4 Lambourne Wood

Lambourne Wood is an existing residential road, which serves approximately 130 existing residential houses. Lambourne Wood connects onto Brennanstown Road via a priority controlled junction. The access road is approximately 7m wide, with footways situated on either side of the carriageway.

Double yellow lines are situated along Lambourne Wood for a distance of approximately 20m from Brennanstown Road. During AECOMs site visit on a weekday morning, approximately 10 commuter cars arrived to park along Lambourne Wood, and walk towards Cabinteely Village.

3.5 Base Traffic Flows

Traffic surveys were undertaken on Wednesday 3rd May 2017 during the morning (07:00hrs – 10:00hrs) and evening (16:00hrs – 19:00hrs) peak periods to understand the existing conditions at the following junctions in the vicinity of the site. The following three junctions were surveyed:

- Junction 1 – Site Access / Lambourne Wood / Brennanstown Road;
- Junction 2 – Bray Road / Johnstown Road / Brennanstown Road; and
- Junction 3 – Glenamuck Road / Cournelscourt Road / Brighton Road / Brennanstown Road.

Figure 3.5 illustrates the count locations in the context of the development site.



Figure 3.5 Location of Survey Junctions

The review of the traffic survey results identified the AM and PM peak hours as being 08:00 – 09:00hrs and 17:00 – 18:00hrs respectively, when base traffic volumes were greatest along Brennanstown Road, Bray Road and Glenamuck Road.

3.6 Public Transport

3.6.1 Bus Facilities

An existing footpath situated along Brennanstown Road from the site entrance to Cabinteely village provides access to a number of bus stops located along Old Bray Road (Cabinteely Village), Johnstown Road and the N11 (Quality Bus Corridor), which are served by Dublin Bus.

The stops at Cabinteely Village are situated approximately 400m from the proposed site (approximately 5 minute walk), whilst the stop along the N11 is approximately 550m from the site entrance (approximately 7 minute walk). The IHTs ‘Guidelines for providing Journeys on Foot’ identify that acceptable walking distance for commuting purposes is 1,000m, as illustrated in Figure 3.6 below. The bus stops situated along Old Bray Road, Johnstown Road and the N11 are within an acceptable walking distance.

	Town centres (m)	Commuting/School Sight-seeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred maximum	800	2000	1200

Figure 3.6 Acceptable Walking Distances (IHT, ‘Guidelines for Providing Journeys on Foot’)

The services available from bus stops along Old Bray Road (Cabinteely Village), Johnstown Road and the N11 are illustrated in Table 3.1. The services provide a good level of bus service linking the development to the surrounding area and also interconnecting with various radial bus routes, and rail/light rail stops in Dublin City.

Table 3.1 Dublin Bus Services

Service No.	Route	Typical Service Frequency	
		Peak	Off-Peak
145	Ballywaltrim – Bray – Cabinteely – Donnybrook – City Centre – Heuston Station	10 mins	15 mins
84A	Blackrock – Deans Grange – Cabinteely – Bray - Newcastle	30 mins	60 mins
63	Dun Laoghaire – Baker’s Corner – Cabinteely – Old Bray Road - Kilternan	30 mins	45 mins

The available facilities at the N11 stops include road markings, raised kerbs, shelter and real time information. The bus stop also provides express coach services from Greystones/Bray to Dublin Airport.

3.6.2 Rail Services

The Luas Green Line passes the subject site at Laughanstown Luas Station, approx. 1.2 km south of the site (approximately 5 minutes drive), whilst Killiney DART Station is also located 5.4 km (11 minute drive) east of the subject site. Both stations provide access to commuter rail services within Dublin City Centre.

3.7 Pedestrian/Cycle Facilities

At present, pedestrian facility is situated on the western side of Brennanstown Road along the proposed site frontage, which connects into Lambourne Wood and continues north towards Bray Road, linking pedestrian movement from Brennanstown Road to Cabinteely Village and the N11. There is currently however, no crossing facilities from the subject site access to the Brennanstown Road footpath or the neighbouring private property accesses adjacent to the site.

Cycle markings, dropped kerbs and cycle lanes are provided along Bray Road, Glenamuck Road and the N11 to support two-way traffic and cycle flows. Figure 3.7 illustrates the NTA Cycle Network Plan within the immediate vicinity

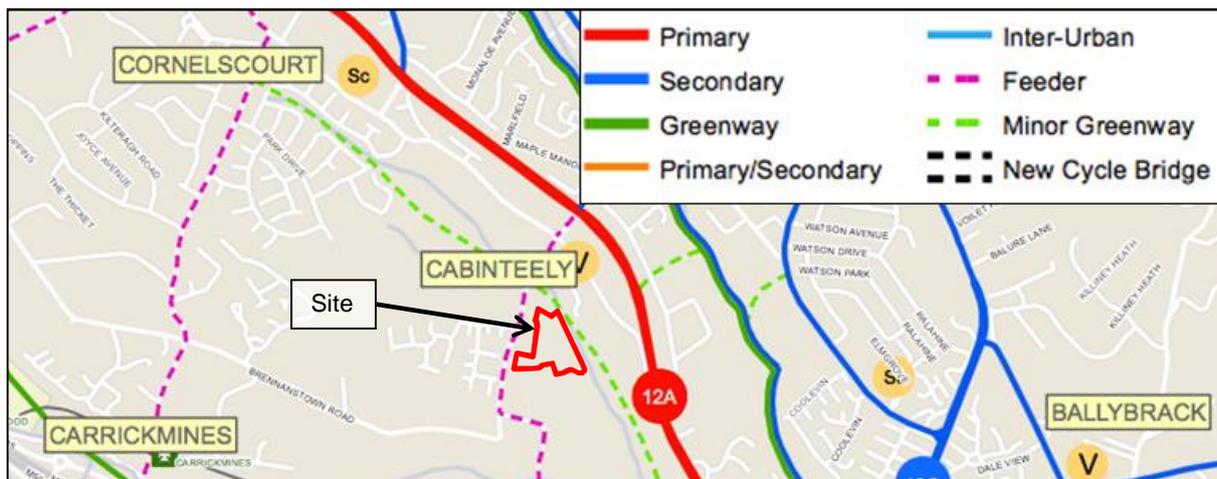


Figure 3.7 NTA Cycle Network Plan (Source: National Transport Authority GDA Cycle Network Plan)

3.8 Accident Analysis

A review of the Road Safety Authority (RSA) traffic collision database has been undertaken for the road network in the vicinity of the proposed site to identify any collision trends. This review will assist to identify any potential safety concerns in relation to the existing road network.

Traffic collision data was obtained for the period 2005 – 2013, which is the most recent data available from the RSA website. The incidents are categorised into class of severity, which includes minor, serious or fatal collisions. The analysis is shown in Figure 3.8.

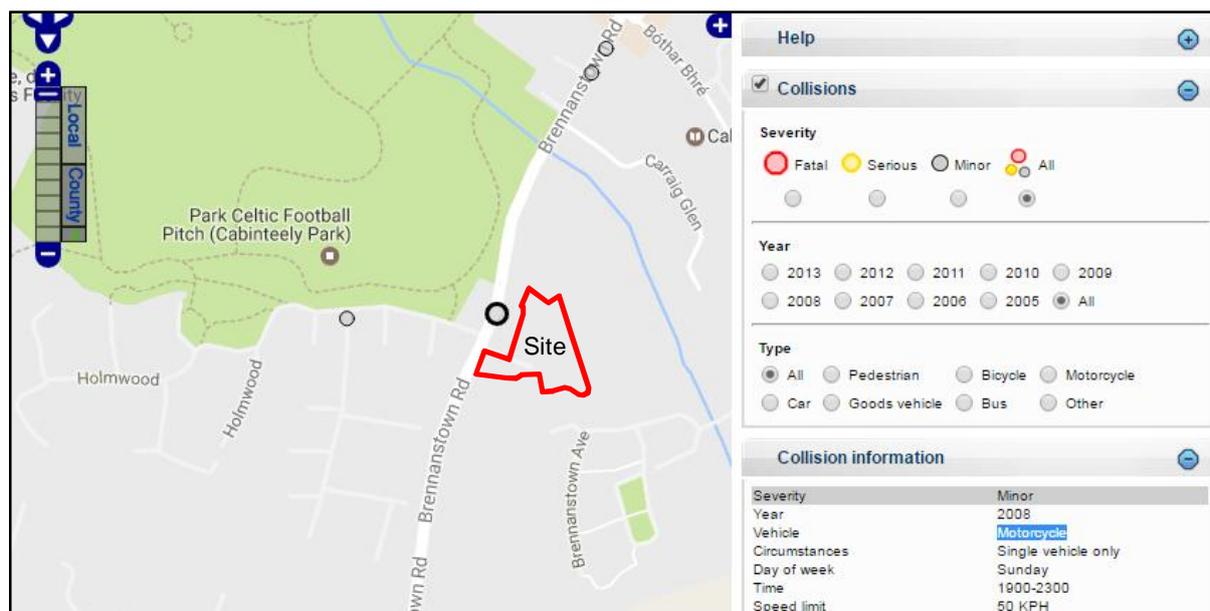


Figure 3.8 Road Collisions (Source: RSA website)

The results of the analysis identify several minor incidents recorded along Brennanstown Road within the vicinity of the site. Only one minor collision was recorded at the site access during the period examined. Only 1 minor incident is recorded within the immediate vicinity of the site entrance, which involved a single motorcycle vehicle only during the time period of 19:00 and 23:00 PM.

4. Mobility Management Plan Objectives

4.1 General

This section will present an overview of the Mobility Management Measures for the proposed development. A review of the key measures and policies outlined in the existing DLRCC Development Plan (2016 – 2022) has been undertaken.

Upon completion of the development, when the scheme is occupied it is recommended that an updated Mobility Management Plan is undertaken in unison with travel surveys for residents, staff and visitors, which will inform travel targets for site users.

4.2 Objectives

The objectives of this section are as follows:

- To discourage private car as a means of travel to and from the development;
- To increase and facilitate the number of people choosing to walk, cycle or travel by public transport to the development;
- To work with DLRCC, the National Transport Authority and public transport providers to support and encourage resident and staff up take;
- To develop an integrated and unified public transport, private vehicle, business fleet management and suppliers of commercial services to the development; and
- To liaise and co-operate with adjacent developments in relation to a coordinated approach to Mobility Management between the various employment areas.
- To achieve the above targets, measures have been proposed for the specific modes of transport. These are based on existing infrastructure and public transport systems. These objectives are preliminary and will be further developed in the light of ongoing monitoring as the proposed development is occupied and information becomes available on future travel behaviour of residents and staff.

It is recommended that an Action Plan Coordinator is appointed, as someone who will take ownership of implementing the measures. Table 4.1 overleaf presents a list of recommended measures and actions.

Table 4.1 Recommended Mobility Management Measures and Actions

<i>Walking</i>		
Initiatives	Responsibility / Ownership	Timescale
<p>Provision of details on how to access the site on foot. Details would include safe walking routes and location of the nearest bus stops/rail station.</p> <p>Promote walking events / lunchtime walks for residents</p> <p>Annual Team Walking Events for residents i.e. Pedometer Challenge</p> <p>Provide umbrella for employees of development on wet days</p> <p>Offer in house health checks for staff of development interested in getting more active</p>	<p>The Action Plan Co-ordinator</p>	<p>This will be established within 3 months of occupation.</p>
<i>Cycling</i>		
Initiatives	Responsibility / Ownership	Timescale
<p>Establish a Resident Bicycle User Group</p> <p>Advertising the Bike to Work scheme</p> <p>Encourage establishment of a cycling club / society</p> <p>Provision for cyclist equipment i.e. pump, allen keys, lights, puncture repairs</p> <p>Display maps of local cycle network on notice boards</p> <p>Participate in national cycle week</p> <p>Survey and monitor cycle parking occupancy</p> <p>Install and or upgrade cycle lockers, showers and drying rooms for staff of the apartment blocks</p> <p>Promote the use of changing facilities for cyclists</p>	<p>The Action Plan Co-ordinator</p>	<p>This will be established within 3 months of occupation.</p>

Public Transport		
Initiatives	Responsibility / Ownership	Timescale
<p>Provision of public transport maps and timetables in prominent locations on site. Information should be kept up to date. This information could also be available online.</p> <p>Provision of information to residents on savings that can be made by using Leap Card and details on where Leap Cards can be purchased.</p> <p>Re-advertise and promote the Tax saver monthly and annual commuter tickets for public transport to staff of the development.</p> <p>Include a one month trial ticket for public transport and timetable information.</p> <p>Display a local area map with public transport stops / route numbers marked.</p> <p>Publicise real time passenger information apps and websites where relevant.</p> <p>Discuss with public transport operators fare structures and ticketing options.</p> <p>Publicise door-to-door multi modal journey planner website</p> <p>Liaise with public transport operators regarding service frequencies to the residential development.</p> <p>Provide attractive, good quality waiting areas.</p>	<p>The Action Plan Co-ordinator</p>	<p>This will be established within 3 months of occupation.</p>
Car Sharing		
Initiatives	Responsibility / Ownership	Timescale
<p>Encouragement of residents and visitors of the development to use other modes of travel other than private car.</p> <p>Where it is necessary for car use to travel to and from work, residents and staff (of the apartment blocks) should be made aware of other people who are either within close proximity of their homes (for staff) or on their route into work (for residents).</p> <p>Hold a coffee morning / launch event for potential car sharers</p> <p>Offer a guaranteed ride home in emergencies</p>	<p>The Action Plan Co-ordinator</p>	<p>This will be established within 3 months of occupation.</p>

<i>Construction Phase</i>		
Initiatives	Responsibility / Ownership	Timescale
Provide a preliminary Construction Traffic Management Plan to provide detailed mitigation of construction traffic associated with the proposed development.	The Contractor / DLRCC Roads & Traffic Department	This will be established and agreed prior to construction.
<i>Other Measures</i>		
Initiatives	Responsibility / Ownership	Timescale
<p>Residents to be informed of the health and fitness benefits of cycling and walking through posters and notice boards.</p> <p>Include travel information to employee induction packs.</p> <p>Hold a launch event of the travel plan.</p> <p>Develop a marketing and communication plan.</p> <p>Distribute travel maps, leaflets and timetables, ensuring consistent accessible formats, health information for walking routes, signposting to website / apps.</p> <p>Provide quarterly 'How to Travel' newsletter via email to residents.</p> <p>Example parking policies to ensure access to parking for those most in need, and for those who could use alternative modes</p>	The Action Plan Co-ordinator	This will be established within 3 months occupation.

5. Monitoring

5.1 Monitoring

A critical part of any MMP is ongoing monitoring. It is proposed that an initial evaluation of the operation of the plan will take place one year into the operation.

On occupation of the development it would be proposed to undertake travel attitude surveys to establish baseline modal split of residents and staff. This would assist considerably in the setting of appropriate trip rate and modal share targets for the development.

An after study should then be undertaken following the operation of the MMP for a reasonable period of time. The two datasets could then be compared to review what changes are necessary after implementation of the various infrastructural measures and initiatives.

Campaigns and promotions would be run throughout the year to maintain public awareness of modes of travel other than the car and the benefits accrued to both the individual and the environment.

The occupiers of the proposed development will be encouraged to continually monitor the MMP initiatives in order to maximise on their success. Monitoring results could be included in the annual report or a separate environmental report. The results will also be forwarded to DLRCC at intervals to be determined by agreement.

6. Conclusions

6.1 Summary

The development forming the subject of this application accords with the principles of sustainable development as it utilises pragmatic measures that encourage safe and viable alternatives for accessing and availing of the proposed development.

Measures and opportunities have been presented within this MMP to promote sustainable travel associated with the proposed development from the onset.

The opportunity exists to monitor and update measures and initiatives in accordance with residents/staff feedback.

