

## TECHNICAL NOTE

MHL Project Number:	20068TT
Project Title:	Proposed Mixed Use Development, Blackpool, Cork City
Author:	David Murphy B.Eng (Hons), M.A., MIEI
Date:	22/06/2021
Subject:	Transport Impact Assessment Review
Application Ref:	ABP-308537-20 Redforge Road
MHL Document Ref:	MHL-20068TT-RED-DOC01-STS



### ***ABP-308537-20 Pre- Application Consultation Opinion.***

"A sustainable transport strategy for the development, which shall include a Transport Impact Assessment and site-specific Mobility Management Plan, identifying specific measures to be implemented to achieve identified targets in respect of modal split.

Having regard to the lack of car parking provision within the proposed development, the application should demonstrate how the development will not give rise to over-spill parking in the surrounding area."

### **Introduction**

M.H.L. & Associates Ltd. Consulting Engineers have been engaged by McCutcheon Halley Planning Consultants on behalf of Bellmount Developments to prepare a Mobility Management Plan (MMP) to supplement a SHD housing planning application process for a proposed mixed use (residential and commercial) complex on an existing brown field site, located adjacent to Blackpool Retail Park. The site is currently operating as fuel station and is located to the north of the Commons Road. The location is well served by public transport, along with pedestrian facilities readily available in the vicinity.

The current planning application ABP-308537-20 is to consist of the construction a 114no. build to rent apartments (comprising a mix of 1 and 2 bed apartments) in 2no. blocks, ranging in height from 4 to 9 storey. Delivery and maintenance access to the proposed development was via modified entrances to the back of the site. The provision of public realm improvements on Redforge Road and the access road to Blackpool Retail Park includes widened footpaths and pavement improvements, pedestrian crossing, tree planting, raised tables/planters and seating areas.

This traffic impact assessment review was prepared taking into account the requirements of TII's 2014 publication "Traffic and Transport Assessment Guidelines" and the "Guidelines for Traffic Impact Assessments" as published by the Institution of Highways & Transportation U.K. in 1994. The purpose of a Traffic impact assessment is to assess the traffic impact of this development on the existing road network and propose any necessary mitigation measures to best accommodate the expected traffic volumes generated by the proposed development.

It was deemed that due to the low volumes a traffic generated by this development and the fact the existing roads also have moderate levels of traffic that a full traffic analysis was not required. In this case it was more appropriate to prepare a Traffic Report dealing with the sustainable transport strategy and traffic issues.

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### Traffic Impact Thresholds

The thresholds for undertaking Traffic and Transport Assessments are outlined in the Traffic and Transport Assessment Guidelines PE-PDV-02045 May 2014. Table 1.4 of the Traffic Management Guidelines (DoT/DoEHLG/DTO, 2003) gives the thresholds above which a Transport Assessment is automatically required. The thresholds concerned are reproduced in below.

- Traffic to and from the development exceeds 10% of the traffic flow on the adjoining road.
- Traffic to and from the development exceeds 5% of the traffic flow on the adjoining road where congestion exists, or the location is sensitive.\*

*\* In locations that experience particularly heavy congestion and when traffic flows from a proposed development are less than 5% of the traffic flows on the adjoining road, a Transport Assessment may still be required. When in doubt, the requirement for a Transport Assessment should always be scoped with the relevant local authority.*

The proposed development is a very low generator of traffic and falls well below the traffic flow threshold limits required for a full TTA report and analysis. This Transport Impact Assessment Review will address all traffic issues relating to existing conditions, proposed improvements and parking for the proposed development.

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### Existing Conditions

The development is located off Redforge Road. The existing development is a former fuel forecourt. The existing site streetscape consists of a wide, open carriageway whose main focus is on vehicle movements. The Redforge Road is not DMURS compliant, with unsafe and deteriorated pedestrian connections to existing public transport services.



Figure 1: Existing Redforge Road

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### Proposed Improvements

The proposed public urban realm improvements with the inclusion of raised tables, improved pedestrian crossing facilities, wider public footpath concourse areas and reduced road widths along Redforge Road reverses the car dominant design currently on site and presents a pedestrian friendly streetscape which will ensure that the safety of road users is greatly improved and sustainability/ modal shift targets are achieved through an appealing street scape, enticing commuters to select sustainable transport methods.

### Traffic Generation

The TRICS database was used to calculate the trip generation for the proposed Development. TRICS is a well-established UK and Irish national database which holds in excess of 2,100 site locations and 4,700 survey counts with over 98 separate land use sub-categories. The TRICS database program was used to estimate the number of car trips which would be generated by this development during the morning and evening peak hours. The figure below shows the total number of trips generated during the peak hours for a similar sized urban apartment development. The relatively low trips rates are indicative of the site's parking proposals and the use of set down only, with onward connectivity provided by sustainable urban transportation modes.

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	94	0.028	3	94	0.028	3	94	0.056
08:00 - 09:00	3	94	0.021	3	94	0.036	3	94	0.057
09:00 - 10:00	3	94	0.039	3	94	0.032	3	94	0.071
10:00 - 11:00	3	94	0.046	3	94	0.039	3	94	0.085
11:00 - 12:00	<b>3</b>	<b>94</b>	<b>0.075</b>	3	94	0.057	<b>3</b>	<b>94</b>	<b>0.132</b>
12:00 - 13:00	3	94	0.036	3	94	0.050	3	94	0.086
13:00 - 14:00	3	94	0.046	<b>3</b>	<b>94</b>	<b>0.060</b>	3	94	0.106
14:00 - 15:00	3	94	0.039	3	94	0.043	3	94	0.082
15:00 - 16:00	3	94	0.036	3	94	0.036	3	94	0.072
16:00 - 17:00	3	94	0.057	3	94	0.057	3	94	0.114
17:00 - 18:00	3	94	0.046	3	94	0.046	3	94	0.092
18:00 - 19:00	3	94	0.050	3	94	0.050	3	94	0.100
19:00 - 20:00	2	115	0.035	2	115	0.022	2	115	0.057
20:00 - 21:00	2	115	0.022	2	115	0.022	2	115	0.044
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.576			0.578			1.154

Figure 2: Apartment trip generation from Trics

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**Parking**

Given the provision of parking is for set down spaces only, it is necessary that substantial efforts be made to encourage the use of sustainable travel modes. The quality of pedestrian and cycle facilities, coupled with the level of public transport available to resident students and staff means that achieving an appropriate, sustainable modal split is entirely achievable.

- Ensure that parking is controlled and monitored at all times and that illegal parking, in inappropriate locations is not permitted.
- Ensure no parking associated with the complex occurs on the adjoining streets by referencing same in tenant agreements.

**Smarter Travel 2020**

In the context of national policies, strategies and guidelines, in particular the Department of Transport Tourism and Sport's Planning Guidelines for Spatial Planning and National Roads 2012 and the Department of Transport, Tourism and Sport's Smarter Travel: A Sustainable Transport Future, A New Policy for Ireland 2009-2020 one of the key aims of any development plan is to secure more sustainable development that reduces overall demand for transport and encourages modal shift towards sustainable travel modes (e.g. walking, cycling and public transport), whilst also ensuring the strategic traffic function of national roads is maintained."

Smarter Travel is "designed to show how Ireland can reverse current unsustainable transport and travel patterns and reduce the health and environmental impacts of current trends and improve our quality of life". The plan outlines the current transport trends and statistics in Ireland and focuses on policies which aim to increase transport sustainability by 2020.

Key goals of the policy include:

- Improve quality of life and accessibility to transport for all and, in particular, people with reduced mobility and those who may experience isolation due to lack of transport.
- Improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructure bottlenecks.
- Minimising the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions.
- Reduce overall travel demand and commuting distances travelled by the private car.
- Improve security of energy supply by reducing dependency on imported fossil fuels.

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### Conclusions

The proposed development is a low generator of traffic and will have very little, if any impact on peak hour traffic volumes 08:00 – 09:00 and 17:00-18:00 in the vicinity of the proposed. The total volumes of traffic generated during the morning peak hour 08:00-09:00 will be within volumes that are well below the 5% threshold requirement for a full TTA.

The applicant has made significant efforts to address the sustainable traffic and parking queried presented in this SHD application.

This assessment determined that the impact of the development on the local road network will be low and will not significantly affect the operation or capacity of the local road network. This is a function of the very low traffic trip generation expected from the low parking provision provided, coupled with the full implementation of the recommendations of the submitted MMP. These sustainable transport measures are highlighted in Quality Audit Report and reaffirmed in the submitted in the DMURS Statement of Compliance/Consistency These transport measures will ensure that sustainable transport objectives can be realised.

Your Sincerely,

A handwritten signature of the name "David Murphy".

**David Murphy,**

*B.Eng. (Hons), MA, MIEI*