

LA04/2019/0683/F - TQ LOGISTICS CENTRE, TITANIC QUARTER, BELFAST

Introduction

This Technical Note has been prepared by RPS to address the DfI Roads consultation response (dated 27th September 2019) which raised 5no. points, a copy of which is provided in Appendix A. Each of the 5no. points are addressed below;

1. *DfI Roads has concerns regarding the trip generation and travel profile of this site which, if unresolved, would lead to capacity issues at the major junctions carrying traffic to and from this site within Belfast Harbour Estate.*

A trip profile and traffic generation provided by the Potential Future Operator (PFO) was presented in RPS submission dated 5th July 2019 (Appendix B of 16/08/2019 submission). On 26th July 2019 RPS proposed an additional sensitivity assessment in relation to vehicle trips (Appendix C of 16/08/2019 submission) and on 29th July 2019 DfI Roads requested a further sensitivity assessment of an additional 10% generated trips on top of the RPS sensitivity (Appendix E of 16/08/2019 submission) plus a 5% increase in background traffic levels.

At a meeting on 25th July 2019 with BCC Planning DfI Roads confirmed that the arrival / departure profile provided by RPS in the 5th July 2019 submission addressed their queries in relation to this.

On the basis of the requested DfI Roads sensitivity assessment RPS provided detailed junction modelling of the Queens Road / Sydenham Road / M3 off-slip junction (Table 5 – RPS submission 16/08/2019) which clearly indicated that the junction would operate well within capacity and would therefore not result in capacity issues within the Harbour Estate.

Based on the DfI Roads sensitivity assessment the 5% threshold is not exceeded on Sydenham Road or M3 off-slip and therefore no other junctions required assessment as part of this proposal. It can be concluded that the proposed development will not result in any capacity issues at the major junctions carrying traffic to and from the site within the Belfast Harbour Estate.

2. *Specifically, DfI Roads would be particularly concerned with regard to the impacts on the Queens Road/Sydenham Road/M3 Off-Slip junction during the morning peak period, especially 0800-0900.*

As indicated in Point 1 above, detailed junction modelling of the Queens Road / Sydenham Road / M3 off-slip was provided in RPS submission 16th August 2019 (Table 5). This detailed modelling analysis indicated that the junction continues to operate well within capacity during both the AM and PM peak hour periods with the proposed development constructed and operational. The detailed junction modelling was undertaken for the DfI Roads sensitivity assessment traffic generation.

Therefore the junction has been assessed and shown to operate well within capacity during the AM and PM peak hour periods for the most onerous sensitivity assessment requested by DfI Roads.

In respect of concerns regarding the morning peak period. Information contained in Page 6 Table 5 in the previous submission (16/08/2019) is relevant and this note sets out further sensitivity testing which assumes that all 342no. small vans depart the site, during the AM Peak hour of 0800 - 0900. The information below and in Table 1 considers 88no. arrivals (based on the DfI further sensitivity assessment) and 342no. departures (assuming all vans exit during the AM peak hour) as well as the additional 5% increase in background traffic.

Considering the extant approval on the site (as set out in RPS response dated 16/08/2019 and accepted by BCC Planning and DfI Roads), this results in minus 2no. arrivals and 307no. departures during the AM Peak hour period and the junction modelling results (optimised due to the changes in traffic volumes) are presented in Table 1.

Table 1: AM Sensitivity Test (Dfl Arrivals & 342no. Departures) – LINSIG Modelling Results

Further Sensitivity – Dfl Roads Sensitivity Arrivals and 342no. Departures

Link	AM Peak	
	DOS	Q
Abercorn Cres L	29.7	1.0
Abercorn Cres A&R	81.3	8.2
Abercorn Cres R	77.7	7.8
Sydenham Road A&L	59.8	9.1
Sydenham Road A	61.6	10.2
Sydenham Road R	79.1	9.4
M3 off slip L	67.0	5.0
M3 off slip A	82.4	11.3
M3 off slip A&R	81.1	10.6
M3 off slip R	80.5	10.2
Queens Quay A&L	80.1	9.7
Queens Quay A	53.3	6.2
Queens Quay R	62.8	2.4
PRC	9.3%	

As the results in Table 1 indicate the Sydenham Road / Queens Road / M3 off-slip will continue to operate within capacity with this further sensitivity assessment under the absolute worst case scenario (which assumes all vans leave the site between 0800 – 0900 hours).

Therefore the modelling undertaken to date (as presented within the 16th August 2019 submission) and additional sensitivity assessment presented above clearly demonstrates that the proposed development can be accommodated at the Queens Road / Sydenham Road / M3 off-slip junction during the AM peak hour period without significantly impacting upon capacity.

- 3. The applicant proposes that the majority of traffic to and from the site will occur before this morning peak. However the data provided from the other 142 sites run by the same operator in Europe clearly shows that the peak period for these site falls after 0800, in which case there would be traffic flow concerns and especially safety concerns for the safe exit of traffic off the M3 into the Harbour Estate.*

The information presented within the RPS submission dated 16th August 2019 Appendix C indicates the traffic generation and profile associated with the RPS sensitivity assessment. The detailed junction modelling focuses on the 0800 – 0900 peak hour, which Dfl have identified as the peak period in Point 2 above.

The detailed junction modelling presented within Table 5 of RPS submission 16/08/2019 assesses the Dfl Roads requested sensitivity assessment (additional 10% increase in generated traffic over the proposed RPS sensitivity and 5% increase in background traffic volumes) without changing cycle time or green time at the Queens Road / Sydenham Road / M3 off-slip junction and the junction continues to operate well within capacity. Therefore it can be concluded that this proposal will not compromise the safety of traffic travelling off the M3 into the Harbour Estate.

- 4. Secondly, Dfl Roads would question the proposed modal split for staff travelling to the site. Although the TA references the 2011 census data for Sydenham ward this may not be regarded as appropriate for a site 2.5 km from the nearest residential area. The Department would regard the NISRA Travel to Work Survey (2016-2018) as more up to date and relevant and indicates that 80% of journeys to work are by car.*

The RPS submission dated 16th August 2019 indicated (Page 4 Point b) that the modal split for the proposed development is based on the Method of Travel to work data (from the 2011 census) for Sydenham Ward. The data indicates ~40% of persons travel to work by private car. For convenience the AM peak period is reproduced in Table 2 below.

Table 2: AM Peak Period – RPS Schedule 26th July 2019 – Appendix C of 16/08/19 Submission

AM Peak Period Analysis						
Vehicle movements	Arriving / Departing	0600 - 0700	0700 - 0800	0800 - 0900	0900 - 1000	Totals
Employees	Arriving	27	38	24	0	89
	Departing	36*	0	0	0	36
RPS Sensitivity	Arriving	36	50	31	0	117
	Departing	29	0	0	0	29
Small Vans	Arriving	13	39	25	0	77
	Departing	0	81	122	36	239
Totals	Arriving	76	127	80	0	283
	Departing	65	81	122	36	304

* - 36no. vehicles exiting the site from the 10pm shift previous evening.

Therefore, based on the information presented above, the original number of employee vehicles arriving during the morning period was 89no, based on ~40% modal split (from census data). The RPS Sensitivity Assessment (Appendix C of submission 16/08/19) added an additional 117no. employee vehicles arriving to the site, a total of 206no (89 + 117). This equates to a modal split, based on the addition of the RPS Sensitivity Assessment of 92.6% car based trips to the site, calculated as follows;

- $(89/40)*100 = 223$ $206 / 223 = 92.6\%$.

In addition to the information presented above, DfI Roads requested that the applicant consider a further 10% generated traffic on top of the sensitivity analysis, which took the vehicular modal shift to ~100%, DfI also requested a 5% increase in background traffic levels, which (based on the AM Peak Hour) equates to an additional 63no. vehicles on Queens Road on top of this again.

On the basis of the information presented in Table 2 above and the additional sensitivity analysis requested by DfI Roads (on 29/07/2019), detailed junction modelling of the Sydenham Road / Queens Road / M3 off-slip junction was provided in the response dated 16th August 2019 and indicated that the junction operated within capacity (based on existing timings with no optimisation of the green times). The model had a Practical Reserved Capacity (PRC) of 7.7% and 12.6% during the AM and PM peak hour periods respectively.

It can be concluded that the travel profile of the site and associated trip generations has, in the information submitted during the course of the application, been considered to a worst case scenario with more than an 80% car modal split assessed.

5. *DfI Roads therefore requires that the applicant reviews the modal split and arrival and departure peaks and updates the Transport Assessment accordingly.*

The information presented above in Points 1 – 4 addresses in detail the aspects of DfI Roads concerns and demonstrates that the detailed analysis has been provided by both junction analysis and modal split considerations. A Transport Assessment does not form part of the application documentation, however, this technical submission and that of 16th August 2019 can be read in conjunction with the original Transport Statement dated 5th March 2019.

Summary

In summary, the information already submitted by RPS (submission dated 16/08/2019) has assessed both the modal split as identified by the Potential Future Occupier (PFO), and provided an additional sensitivity assessment which considered a car based modal split of 92.6% in the AM peak period. In addition to these

previous assessments RPS has also considered the DfI Roads sensitivity assessment, which represented a further 10% development traffic, and resulted in a car based modal split of ~100% during the AM peak periods respectively. Therefore it can be concluded that the information already submitted (16/08/2019) has assessed a greater modal split analysis than that requested by DfI Roads in their most recent consultation response of 27th September 2019.

As further consideration to the points raised by DfI Roads, RPS has considered the impact of all 342no. vans leaving the site in the AM peak hour and LINSIG modelling has indicated that the junction will continue to operate well within capacity.

RPS trust that this will allow a positive consultation response with a recommendation to approve to be forwarded to Belfast City Council Planning to allow this proposal to go forward to the October Planning Committee meeting.



Appendix A

DFI Roads Consultation Response (27/09/2019)



Department for

Infrastructure

An Roinn

Bonneagair

www.infrastructure-ni.gov.uk

**Network Planning
Eastern Division**

Belfast City Council
Belfast Planning Service
Cecil Ward Building
4-10 Linenhall Street
Belfast
BT2 8BP

Annex 6
Castle Buildings
Stormont Estate
Belfast
BT4 3SQ

Tel: 0300 200 7893

Planning Authority Case Officer: Charles Dickinson
Planning Application Ref: LA04/2019/0683/F
Date consultation received: 21/08/2019
Date of Reply: 27/09/2019

Proposal: Demolition of existing industrial warehouse buildings and erection of warehouse distribution facility, associated ancillary office, van storage, yards, car parking and accesses.

Location: Lands at Kings Works, Channel Commercial Park, Queens Road, Titanic Quarter, Belfast.

DfI Roads considers this application unacceptable as submitted. Should Planning Service be minded to progress the application towards an approval then DfI Roads require the following points to be addressed.

1. DfI Roads has concerns regarding the trip generation and travel profile of this site which, if unresolved, would lead to capacity issues at the major junctions carrying traffic to and from this site within Belfast Harbour Estate.
2. Specifically, DfI Roads would be particularly concerned with regard to the impacts on the Queens Road/Sydenham Road/M3 Off-Slip junction during the morning peak period, especially 0800-0900.
3. The applicant proposes that the majority of traffic to and from the site will occur before this morning peak. However the data provided from the other 142 sites run by the same operator in Europe clearly shows that the peak period for these site falls after 0800, in which case there would be traffic flow concerns and especially safety concerns for the safe exit of traffic off the M3 into the Harbour Estate.
4. Secondly, DfI Roads would question the proposed modal split for staff travelling to the site. Although the TA references the 2011 census data for Sydenham ward this may not be regarded as appropriate for a site 2.5 km from the nearest residential area. The Department would regard the NISRA Travel to Work Survey (2016-2018) as more up to date and relevant and indicates that 80% of journeys to work are by car.
5. DfI Roads therefore requires that the applicant reviews the modal split and arrival and departure peaks and updates the Transport Assessment accordingly.

Please advise the agent accordingly.

DfI Roads Case Officer:

Charles Dickinson, Network Planning

Issued on behalf of the Divisional Manager