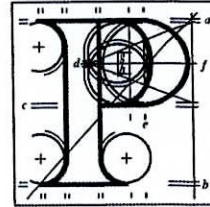


**Our Case Number:** ABP-316828-23  
**Planning Authority Reference Number:**  
**Your Reference:** Blackwin Limited



**An  
Bord  
Pleanála**

DBFL Consulting Engineers  
c/o Thomas Jennings  
Ormond House  
Upper Ormond Quay  
Dublin 7  
D07W704

**Date:** 19 July 2023

**Re:** Tallaght/Clondalkin to City Centre BusConnect Core Bus Corridor Scheme.  
Tallaght/Clondalkin to Dublin City.

Dear Sir / Madam,

An Bord Pleanála has received your recent submission in relation to the above-mentioned proposed road development and will take it into consideration in its determination of the matter. Please accept this letter as a receipt for the fee of €50 that you have paid.

Please note that the proposed road development shall not be carried out unless the Board has approved it or approved it with modifications.

The Board has also received an application for confirmation of a compulsory purchase order which relates to this proposed road development. The Board has absolute discretion to hold an oral hearing in respect of any application before it, in accordance with section 218 of the Planning and Development Act 2000, as amended. Accordingly, the Board will inform you in due course on this matter. The Board shall also make a decision on both applications at the same time.

If you have any queries in relation to this matter please contact the undersigned officer of the Board.

Please quote the above-mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Niamh Thornton  
Executive Officer  
Direct Line: 01-8737247

HA02A

**Tel**  
**Glaó Áitiúil**  
**Facs**  
**Láithreán Gréasáin**  
**Ríomhphost**

**Tel** (01) 858 8100  
**LoCall** 1890 275 175  
**Fax** (01) 872 2684  
**Website** www.pleanala.ie  
**Email** bord@pleanala.ie

64 Sráid Maoilbhríde  
Baile Átha Cliath 1  
D01 V902

64 Marlborough Street  
Dublin 1  
D01 V902



An Bord Pleanála

### SID Online Observation

Online Reference  
SID-OBS-000957

### Online Observation Details

**Contact Name**  
Thomas Jennings

**Lodgement Date**  
04/07/2023 15:44:05

**Case Number / Description**  
Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme by the NTA

### Payment Details

**Payment Method**  
Online Payment

**Cardholder Name**  
Noreen Brady

**Payment Amount**  
€50.00

### Fee Refund Requisition

Please Arrange a Refund of Fee of

€

Lodgement No

LDG—

Reason for Refund

Documents Returned to Observer

Yes  No

Request Emailed to Senior Executive Officer for Approval

Yes  No

Signed

Date

EO

### Finance Section

Payment Reference

ch\_3NQASXB1CW0EN5FC1j9fnZZ9

Checked Against Fee Income Online

EO/AA (Accounts Section)

Amount

€

Refund Date

Authorised By (1)

SEO (Finance)

Authorised By (2)

Chief Officer/Director of Corporate Affairs/SAO/Board Member

Date

Date

Dear Sir / Madam,

DBFL Consulting Engineers which is make this submission to ABP in regard to the NTA's proposals for the Tallaght / Clondalkin to City Centre Core Bus Corridor (CBC) Scheme.

The submission is being made on behalf of our client Blackwin Limited. Blackwin Limited own lands immediately adjoining the proposed CBC scheme in Ballymount, Dublin 12. Blackwin Limited have recently (February 2023) received planning permission (SDCC Planning Ref no. SD22A/0099) to develop their lands at Calmount Rd and Ballymount Avenue.

The contact details of our client are as follows;

***Blackwin Limited***

***Address : The Herbert Building, The Park, Carrickmines, Dublin 18***

***Contact: David Murphy***

***Email; [DMurphy@parkdevelopments.ie](mailto:DMurphy@parkdevelopments.ie)***

***Telephone: 01 213 6000***

Kind Regards

Thomas Jennings

Director – Transportation

DBFL Consulting Engineers

Ormond House

Upper Ormond Quay

Dublin 7

D07 W704



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Waterford Ireland  
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info@dbfl.ie  
www.dbfl.ie

## Technical Note 210175-DBFL-TR-XX-TN-C-0004

<b>Project:</b>	Site at Calmount Road, Ballymount	<b>Prepared by:</b>	DG
<b>Title:</b>	Junction Performance Analysis	<b>Checked by:</b>	TJ
<b>Client:</b>	Blackwin Limited	<b>Date:</b>	4 <sup>th</sup> June 2023
<b>Job No:</b>	210175	<b>Revision:</b>	P02

### 1. INTRODUCTION

#### 1.1 Overview

DBFL Consulting Engineers have been commissioned by Blackwin Limited to compile a submission in regard to the proposed **Tallaght / Clondalkin to City Centre Core Bus Corridor** (CBC) Scheme. The submission is focused upon the predicted impact that the proposed CBC project will have upon the operational performance of the Calmont Road / Ballymount Avenue Junction. The NTA's CBC scheme proposals advocate replacing the existing roundabout arrangement at this junction to a traffic signal controlled CYCLOPS layout with dedicated continuous bus lanes provided along the length of its southern and eastern arms.

Blackwin Limited have recently (February 2023) received planning permission (SDCC Planning Ref no. SD22A/0099) to develop their lands at Calmount Rd and Ballymount Avenue, Dublin 12. As illustrated in Figure 1-1 the Blackwin Limited lands are located immediately to the northwest of and front directly onto the subject Calmont Road / Ballymount Avenue junction. Blackwin Limited wish to express their support for the emerging Core Bus Corridor (CBC) scheme which will deliver significance accessibility and road safety benefits along the scheme corridor and across the general Ballymount area.

The enhanced accessibility for sustainable modes of travel, such as active modes and public transport bus based services, is very much welcomed by Blackwin Limited particularly as it will be a direct benefit to staff and visitors traveling to/from their proposed development upon its completion. Nevertheless Blackwin Limited retain reservations in regard to the scale of impact predicted to be generated by the CBC scheme proposals upon the operational performance of the Calmont Road / Ballymount Avenue Junction. These concerns are influenced by their need for an appropriate level of vehicle accessibility in this area considering the land use characteristics (Warehouse & Logistics) of their permitted development and the associated number of heavy commercial vehicles that their development is predicted to generate across the local road network.



**Figure 1-1: Existing Calmount Road Roundabout Junction Layout**

### 1.2 Permitted Blackwin Development

In summary, the permitted Blackwin Limited development on the lands adjoining the Calmount Road / Ballymount Avenue Junction include:

- Construction of 5 no. warehouse / logistics units (Units 1, 2, 3, 4 and 6), including ancillary office use and entrance / reception areas, car parking to the front, and rear service yards (GFA 18,002 sq.m);
- Construction of 3 no. 3 storey own-door office buildings (Block 5A, 5B and 5C – a combined GFA of 4,194 sq.m) to the southeast of the site with internal car parking spaces and cycle parking spaces;
- Construction of a café/restaurant unit (GFA of 213 sq.m) located in the southwestern section of the site with outdoor seating, car and bicycle parking spaces
- The development is to be accessed off Ballymount Avenue and Calmount Road and includes for alterations and upgrades to the public footpaths and road. The development provides for internal access roads, circulation areas and footpaths in parallel with comprehensive landscaping and planting, new boundary treatments, lighting, PV panels, green roofs, underground foul and storm water drainage network, including connections to the foul and surface water drainage network on the public roads, attenuation areas and all associated site works and development.

In reference to Figure 1-2 the permitted scheme includes the delivery of the following off-site transportation infrastructure;

- New 'southern' site access junction on Calmount Road incorporating a three arm 'ghost island' arrangement with dedicated right turning (inbound) lane on Calmount Road. This junction leads to/from the developments 5 no. warehouse / logistics units and the café/restaurant unit.
- New 'eastern' site access junction on Ballymount Avenue incorporating a three arm 'ghost island' arrangement with dedicated right turning (inbound) lane on Ballymount Avenue. This junction leads to/from the developments 3 no. 3 storey own-door office buildings.
- The implementation of two number signal controlled TOUCAN crossings with one on Calmount Road and one on Ballymount Avenue (adjoining each site access junction), and
- The implementation of a new footpath and segregated two-way cycle lane along the northern side of Calmount Road between the Calmount Road / Ballymount Avenue Junction (to the northeast) and the Ballymount Road Upper / Calmount Road Junction (to the southwest) as per local planning authorities planning conditions.

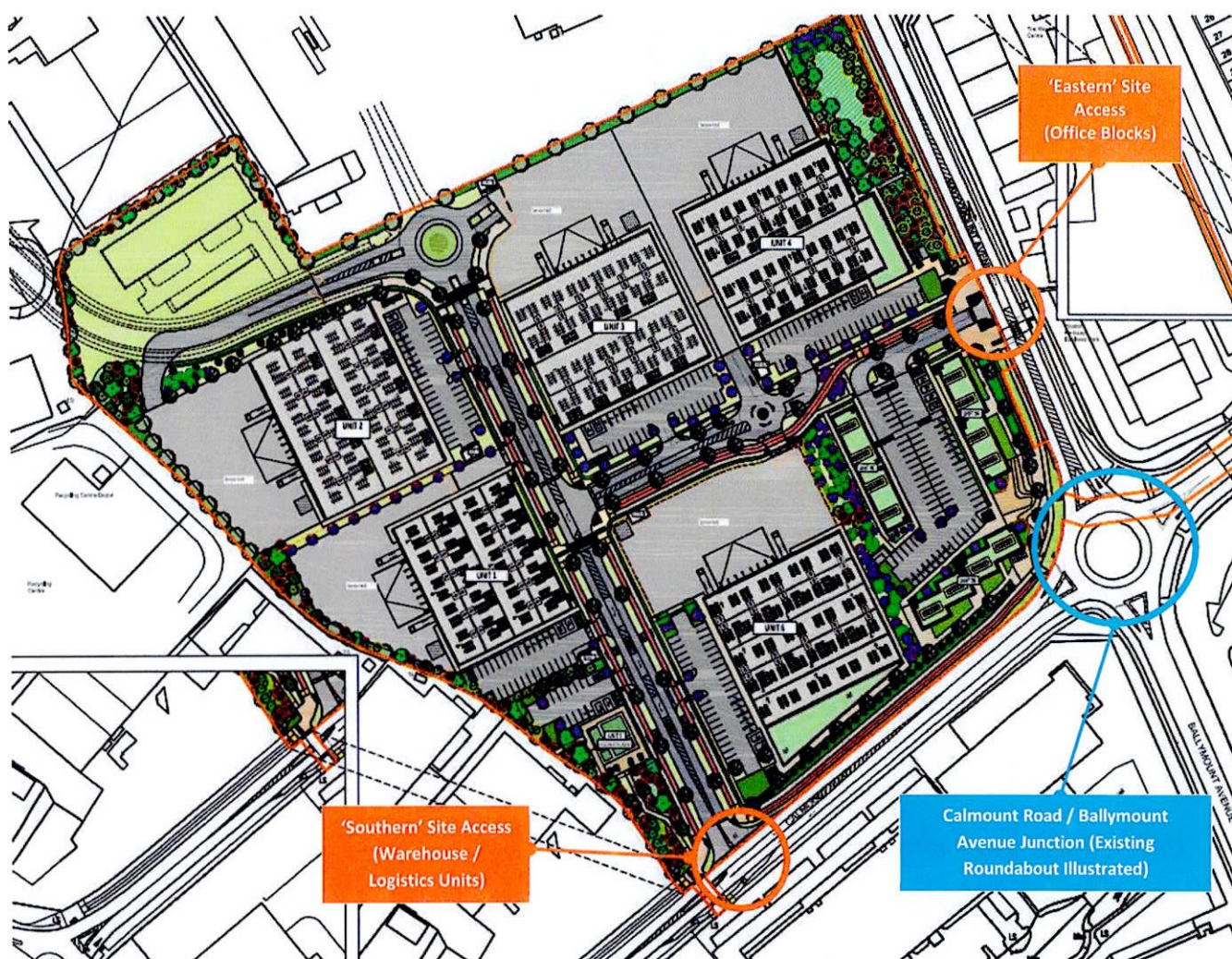


Figure 1-2: Permitted Commercial Development Layout and Access Points

During the planning process for the Blackwin Limited development careful coordination has been undertaken in the design of the commercial development proposals to ensure its full integration with the proposed **Tallaght / Clondalkin to City Centre Core Bus Corridor** (CBC) Scheme. This has been facilitated through the liaison with SDCC Transportation Department and the NTA CBC design team who kindly provided the emerging scheme design proposals prior to submission of the applicant planning documentation.

### **1.3 Submission Objective**

The objective of this submission is twofold;

- First of all to express Blackwin Limited's support for the **Tallaght / Clondalkin to City Centre Core Bus Corridor** (CBC) Scheme, and
- To provide evidence that would encourage the NTA's designers to re-examine the detail design for the Calmount Road / Ballymount Avenue junction subsequently resulting in a slight tweak to the northern and western arms of this junction. This suggested amendment, which is deliverable within the existing roads boundary; is considered appropriate to achieve a better balance in terms of the junctions capacity, offers a greater level of mitigation (upon vehicle capacity compared to the existing roundabouts performance); whilst still maintaining the very same accessibility benefits being delivered by the CBC scheme for sustainable modes of travel.

## **2. PROPOSED CBC JUNCTON DESIGN**

### **2.1 Existing Junction Layout**

The existing Calmount Road / Ballymount Avenue Junction incorporates a 40m ICD roundabout layout. This junction type is acknowledged as being vehicle dominated offering reasonable peak period performance for motor vehicles at the expense of active travel users with both pedestrians and cyclists encountering challenges when trying to travel through the existing junction layout. Furthermore, this type of junction offers limited opportunities to provide priority for public transport bus services.

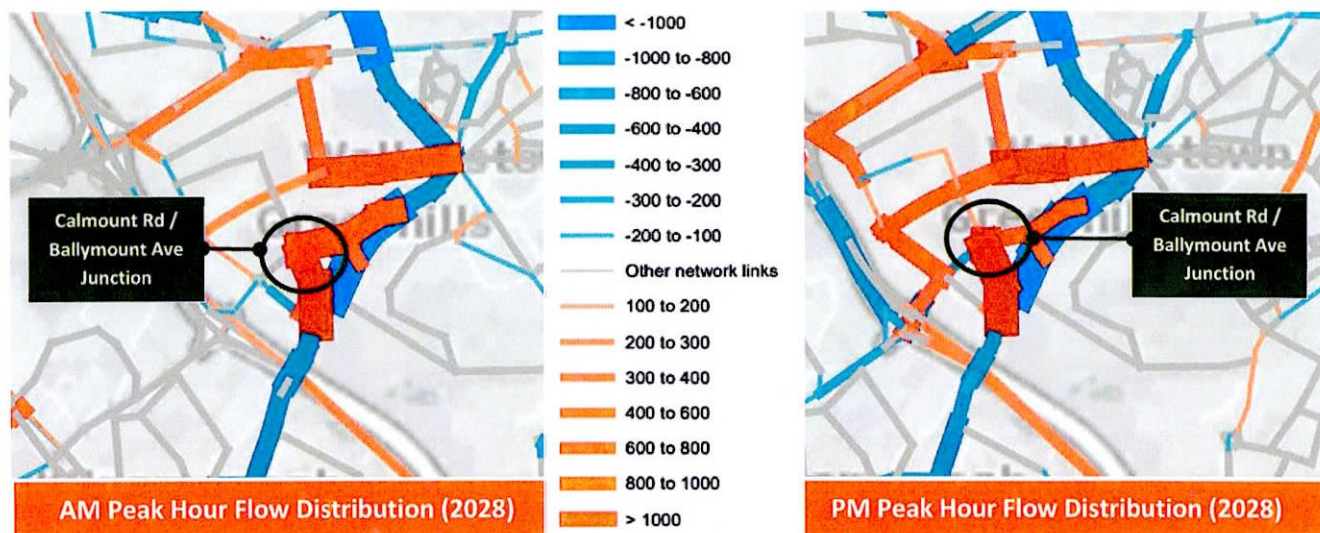
Accordingly, whilst the existing roundabout junction currently offers good accessibility levels for motor vehicles its retention in its current layout does not offer a long term sustainable solution in regards to the management of the local road network, the need to accommodate additional long term travel demands in part influence by the City Edge aspirations, and the need to maximise opportunities for alternate more sustainable forms of travel such as walking, cycling and public transport bus services.

## 2.2 Impact of CBC Proposals

The proposed CBC is predicted to generate a significant impact upon the operational performance of the Calmount Road / Ballymount Avenue Junction. The impact upon the junctions performance is twofold as follows;

- The alteration of the junction layout with the introduction of traffic signal controls whilst beneficial for sustainable mode of travel is achieved at the expense of existing vehicle capacity. Accordingly, the conversion along to traffic signals has an adverse impact upon motor vehicle capacity.
- The CBC proposals include the closure of Greenhills Road (as located to the southeast of Calmount Road corridor) to through vehicles and the rerouting of existing Greenhills Road motorised traffic with its reassignment through the subject Calmount Road / Ballymount Avenue Junction.

The accumulated impact of reducing the existing levels of vehicle capacity (by converting the junction to traffic signals) in parallel with loading a substantial quantum of additional vehicle traffic movements (away from Greenhills Road) through the subject Calmount Road / Ballymount Avenue Junction is predicated to have a material impact upon the junctions operation resulting in additional delays for vehicle drivers and an associated increase in vehicle queues back along the approach arms. Figure 2-1 below (extract from NTA CBC documentation Chapter 6 entitled Traffic & Transport) reveals the scale of additional traffic that is predicated to travel through the Calmount Road / Ballymount Avenue Junction in the 2028 Opening Year peak hour periods.



**Figure 2-1: Additional Motorised Traffic (PCU's) Through Calmount Rd Junction**  
(Source: NTA CBC Documentation Chapter 6 Figure 6.13 & 6.14)

Furthermore the active management of the junctions traffic controls, the application of which will ensure that priority is afforded to the junctions southern and eastern arms (the arms for which the BusConnects bus services will operate along whilst travelling through the amended Calmount Road / Ballymount Avenue



junction) has the potential for further delay vehicle movements on the northern (Ballymount Avenue) and western (Calmount Rd) approach arms to the junction.

Whilst the reduced capacity at the Calmount Road / Ballymount Avenue junction is a concern for Blackwin Limited, the potential for excessive vehicle queues to be generated back along the new junction layouts northern (Ballymount Ave) and western (Calmount Rd) arms is a particular concern as it has the potential to block the two site access junctions to Blackwin Limited permitted lands thereby restricting access to/from their recently permitted commercial warehouse / logistics / office development on the adjoining lands to the northwest of the Calmount Road / Ballymount Avenue junction.

### **2.3 Proposed CBC Junction Layout**

The NTA proposed design for the new traffic signal controlled 'CYCLOPS' arrangement for the Calmount Road / Ballymount Avenue Junction is illustrated in **Figure 2-2** below. In addition to new pedestrian and cycle infrastructure the CBC scheme proposals include the provision of dedicated bus lanes in both directions along the eastern (Calmount Rd) and southern (Ballymount Ave) arms of the junction.

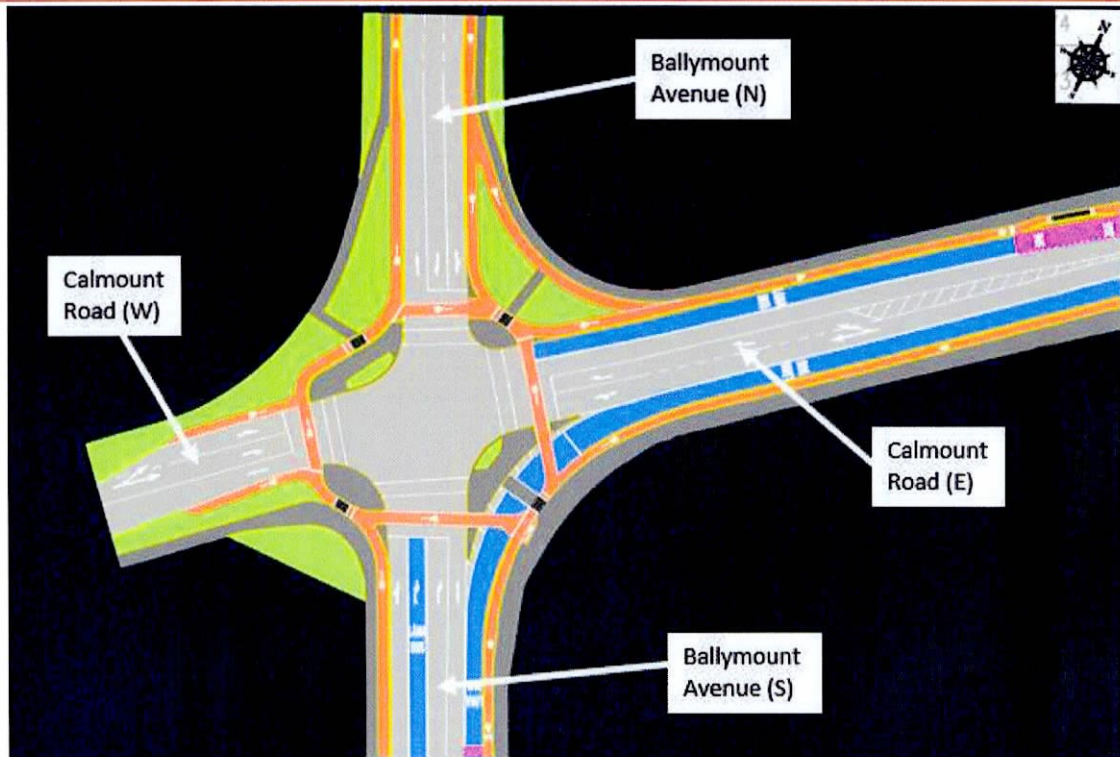
The predicted operational performance of the new NTA junction layout is summarised in Appendix A6.3 (Junction Design Report) of the **Tallaght / Clondalkin to City Centre Core Bus Corridor** schemes planning documentation.

In addition Figures 6.9 and 6.10 (Volume / Capacity Ratios) of Chapter 10 (Traffic & Transport) reveal that junction assigned ID number 1642 (Calmount Road / Ballymount Avenue junction) is predicted to have the following operating characteristics in the CBC schemes 2028 Do-Something Opening Year scenarios;

- AM peak hour - Operating over capacity in the range of '100% - 115%'
- PM peak hour - Operating over capacity in the range of '>115%'

Such capacity results reveal a significant deterioration in the junctions operational performance as a result of the CBC proposals compared to that currently experienced at the existing junction.

Blackwin Limited are concerned that in addition to the impact on vehicle accessibility to/from their proposed commercial development (particularly the warehouse / logistics units) the capacity limitations at the Calmount Road / Ballymount Avenue junction when converted to signal controls could result in the generation of vehicle queues back along its northern and western approach arms subsequently having a negative impact upon the operations of their commercial development two site access junctions.



**Figure 2-2: Proposed NTA CBC Calmount Rd / Ballymount Ave Junction Layout**

#### **2.4 Opportunity's to Fine Tune NTA's CBC Junction Layout**

The eastern (Calmount Rd) and southern (Ballymount Ave) arms of the Calmount Road / Ballymount Avenue junction have limited opportunities to further increase the new junction layouts capacity beyond that already proposed by the NTA design as it has utilised the full extent of the available public controlled roads boundary / reservation. The utilisation of further privately controlled areas along the eastern and southern arms of the junction is not viable / practical as these areas are currently in use by the adjoining businesses.

Following DBFL's review it has been established that there is an opportunity to potentially tweak the NTA's proposed junction design on the northern and western arms of the junction thereby minimising the extent / length of vehicle queues generated back along these two specific arms of the junction. This opportunity focuses upon using the verge areas (as located within the road boundary) on the northern and western arms of the Calmount Road / Ballymount Avenue junction to a greater extent to that proposed by the NTA's junction design.

The incorporation of these potential tweaks will address Blackwin Limited's concerns in regard to the potential generation of vehicle queues back from the Calmount Road / Ballymount Avenue junction and extending bank through one or both of the recently permitted commercial developments site access junctions (as located a short distance upstream from the Calmount Road / Ballymount Avenue junction).

In addition to addressing concerns regarding the extend of vehicle queues on the northern and western arms of the Calmount Road / Ballymount Avenue junction, the following potential tweaks on the northern and western arms could also offer the opportunity to reassign the signal controls green time thereby enhancing

capacity, reducing delays for all road users and / or offering greater priority to bus services by enabling additional green time to the eastern and southern arms of the junction (as and when a bus approaches the junctions stop lines).

## **2.5 Potential Alternative Junction Layout**

The following tweaks to the design of the northern and western arms of the Calmount Road / Ballymount Avenue retain the same signal controlled CYCLOPS arrangement proposed by the NTA and importantly the dedicated bus lanes in both directions along the route of the CBC through the junction. Accordingly the following suggested modifications have no adverse impact upon the accessibility levels for sustainable modes of travel through the junction which remain unchanged to that being promoted by the NTA with its junction design. The tweaks to the NTA's junction arrangement, as illustrated in **Figure 2-3** can be summarised as follows;

- **Northern Arm (Ballymount Avenue)** - Increasing the numbers of approach lanes and flare lengths to provide (i) additional queuing capacity and (ii) greater level of discharge for the same quantum of assigned green time. The NTA designs provide two flared lanes (at the stop line) along the approach over a distance of approximately 52m. The alternative tweaked design would provide three flared lanes (at the stop line) along its approach over a distance of approximately 42m and two lanes for a further 10m.
- **Western Arm (Calmount Road)** – Again increasing the numbers of approach lanes and flare lengths to provide (i) additional queuing capacity and (ii) greater level of discharge for the same quantum of assigned green time. The NTA designs provide two flared lanes back along the approach for a distance of only approximately 20m. The alternative tweaked design would provide three flared lanes at the back from the stop line over a distance of approximately 55m and then two lanes for a further 30m before returning to a single eastbound lane prior to the position of the proposed site access junction serving Blackwin Limited's commercial development (Warehouse / Logistics Units).

The alternative CYCLOPS junction design at the Calmount Road / Ballymount Avenue Junction with the above tweaks to the northern and western arms is illustrated in **Figure 2-2** below. Further details of the alternative junction layout are also detail in the following DBFL drawings which accompany this submission note;

- **Drawing 210175-DBFL-RD-SP-SK-C-1011** : This DBFL drawing illustrates our alternative enhanced NTA layout tied into Blackwin Limited's permitted development and associated off-site infrastructure (e.g. two way cycle lane along Calmount Road and two site access junctions).
- **Drawing 210175-DBFL-RD-SP-SK-C-1012** : This DBFL drawing illustrates our alternative enhanced NTA layout in isolation of the Blackwin Limited's permitted development to enable stakeholders undertake a like for like comparison with the NTA's proposed layout.



**Figure 2-3: Proposed Alternative CYCLOPS Junction Design**

(Extract of DBFL drawing 210175-DBFL-RD-SP-SK-C-1011)

### 3. JUNCTION ANALYSIS

With the objective of establishing the potential benefit of the alternative DBFL junction layout for the Calmount Road / Ballymount Avenue Junction an operational assessment has been undertaken using the Transport Research Laboratory (TRL) computer package TRANSYT for signal-controlled junctions. When considering signal-controlled junctions, a Ratio of Flow to Capacity (RFC) of greater than 85% (0.85) would indicate a junction to be approaching capacity, as operation above this RFC value is poor and deteriorates quickly.

Whilst DBFL do not have access to the NTA's traffic data, including the impact of the closure of Greenhills Road amongst others; the following analysis has been based upon the traffic data collected as part of the Traffic & Transportation Assessment (TTA) Report which accompanied the planning application for Blackwin Limited's recently permitted commercial development (SDCC Planning Ref no. SD22A/0099). Based upon that TTA's 2025 Opening Year (e.g. prior to CBC Opening year of 2028) that analysis still allows for a comparison of the operational performance of the two junction layouts under consideration.

A 60-minute AM and PM period has been simulated, from 08:00 to 09:00 and 17:00 to 18:00 respectively. Traffic flows were entered using an Origin-Destination table for the peak hours. The TRANSYT simulation

results of the proposed NTA's CBC CYCLOPS junction arrangement are summarised in **Table 3-1** below while the results of the potential alternative junction layout are illustrated in **Table 3-2**.

			AM Peak Hour			PM Peak Hour		
			DoS (%)	Delay (s)	Queue (PCUs)	DoS (%)	Delay (s)	Queue (PCUs)
A	Calmount Road (W)	Left and Straight	110	223.75	52.20	74	52.12	7.91
		Right	13	44.68	0.50	13	44.56	0.47
B	Ballymount Ave (N)	Left and Straight	37	47.60	1.92	33	45.39	1.87
		Right	103	193.50	12.64	73	48.14	8.34
C	Calmount Road (E)	Left (Bus)	0	0	0	0	0	0
		Left and Straight	6	23.84	0.67	32	37.33	2.65
		Right	17	45.45	0.64	29	48.48	1.16
D	Ballymount Ave (S)	Straight	97	144.20	10.19	69	61.34	4.55
		Right (Bus)	0	0	0	0	0	0
		Right	21	44.05	0.99	1	30.87	0.11

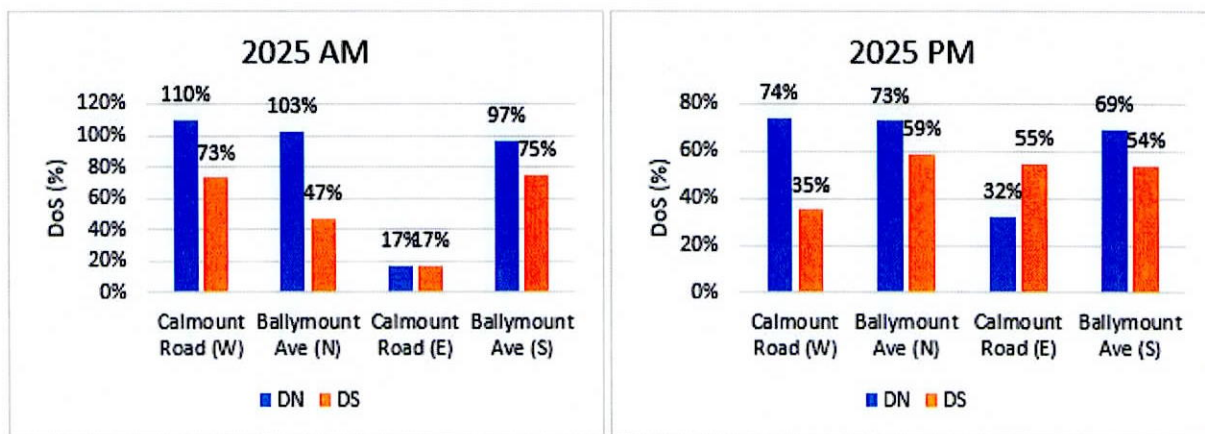
**Table 3-1: Proposed NTA CYCLOPS Junction Design Analysis**

	Arm		AM Peak Hour			PM Peak Hour		
			DoS (%)	Delay (s)	Queue (PCUs)	DoS (%)	Delay (s)	Queue (PCUs)
A	Calmount Road (W)	Left	73	20.52	8.83	35	13.35	3.20
		Straight	40	40.40	3.59	11	41.17	0.53
		Right	13	44.68	0.50	13	44.56	0.47
B	Ballymount Ave (N)	Left	8	27.55	0.78	1	26.31	0.10
		Straight	14	39.81	0.79	26	40.86	1.65
		Right	47	37.87	4.62	59	37.12	7.34
C	Calmount Road (E)	Left (Bus)	0	0	0	0	0	0
		Left and Straight	11	35.94	0.82	55	52.85	3.14
		Right	17	45.45	0.64	29	48.48	1.16
D	Ballymount Ave (S)	Straight	75	62.23	5.98	54	47.97	4.01
		Right (Bus)	0	0	0	0	0	0
		Right	10	31.61	0.84	1	27.05	0.10

**Table 3-2: Potential Alternative CYCLOPS Junction Design Analysis**

**Degree of Saturation**

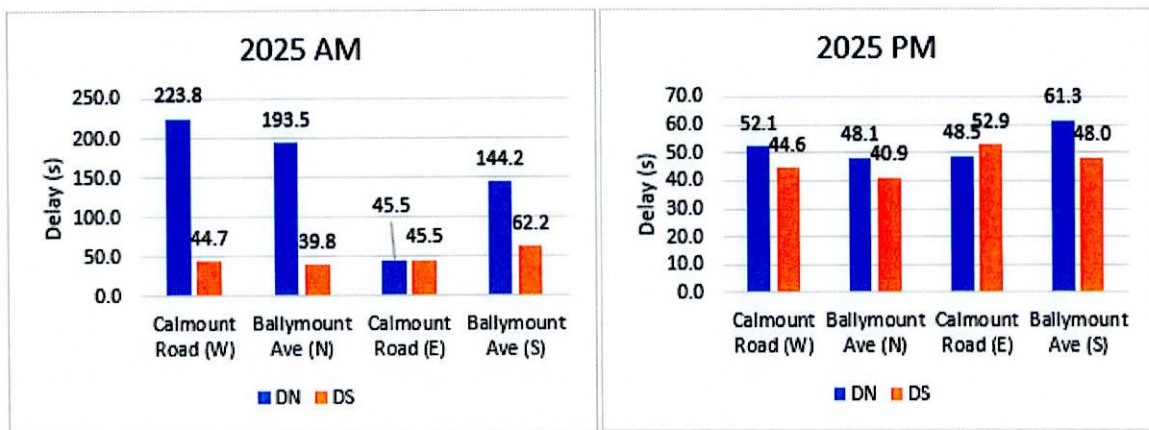
The results in the above tables and **Figure 3-1** below indicate that the Degree of Saturation (DoS) is significantly reduced with the alternative junction design. Whilst the NTA layout is found to be operating over capacity in the AM period the alternative junction layout is established as operating within capacity on all arms of the junction for both the AM and PM peak hour periods. To enable a direct comparison of the TRANSYT results between the 'Do Nothing' (DN) scenario (which is the proposed NTA CYCLOPS Junction Design) and the alternative 'Do Something (DS)' scenario (which is the potential DBFL alternative CYCLOPS Junction Design) the DoS values are presented in **Figure 3-1**. The comparison of the DoS results demonstrate benefits are achieved on all four arms of the junctions (due to the reassignment of available green time) even though physical enhancement are only being suggested for the northern and western arms of the Calmount Road / Ballymount Avenue Junction.



**Figure 3-1: Degree of Saturation at the Calmount Road/Ballymount Avenue Junction**

### Vehicle Delays

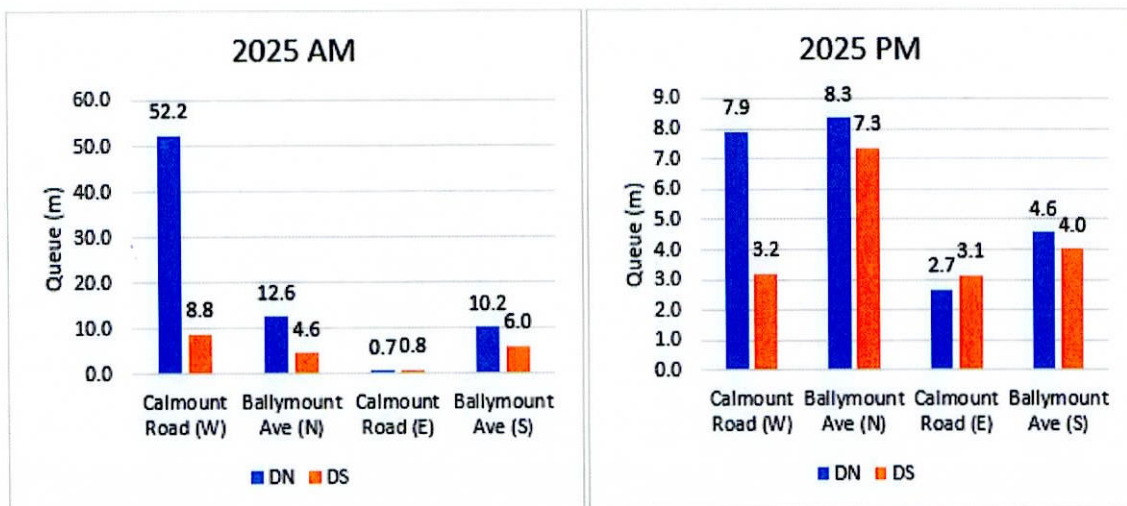
The results in **Figure 3-2** indicate that the mean delays per vehicle are significantly reduced during both the AM and PM peak hours in the 'Do Something (DS)' Scenario which is the potential alternative CYCLOPS Junction Design. The 'Do Nothing' (DN) scenario which is the proposed NTA CYCLOPS Junction Design experiences much higher delays particularly in the AM peak hour.



**Figure 3-2: Comparison of Vehicle Delays at the Calmount Road/Ballymount Avenue Junction**

### Vehicle Queues

The results in **Figure 3-3** indicate that the mean max queues are significantly reduced for both the AM and PM peak hours in the 'Do Something' (DS) Scenario (potential alternative CYCLOPS Junction Design) when compared to the 'Do Nothing' (DN) scenario (proposed NTA CYCLOPS Junction Design) which experiences much higher levels of queueing particularly on the western arm of the junction.



**Figure 3-3: Comparison of Queues at the Calmount Road/Ballymount Avenue Junction**

## 4. SUMMARY AND CONCLUSION

DBFL Consulting Engineers have been commissioned by Blackwin Limited to compile a submission in regard to the proposed **Tallaght / Clondalkin to City Centre Core Bus Corridor** (CBC) Scheme. The submission is focused upon the predicted impact that the proposed CBC scheme will have upon the operational

performance of the Calmount Road / Ballymount Avenue Junction which is proposed to be converted from the existing roundabout arrangement to a traffic signal controlled CYCLOPS layout (with dedicated continuous bus lanes provided along the length of its southern and eastern arms).

Blackwin Limited have recently (February 2023) received planning permission (SDCC Planning Ref no. SD22A/0099) to develop their lands at Calmount Rd and Ballymount Avenue, Dublin 12. As illustrated in **Figure 1-1** the Blackwin Limited lands are located immediately to the northwest of and front directly onto the subject Calmount Road / Ballymount Avenue junction. The emerging commercial development (Warehouse / Logistics / Office units) will benefit from new site access junctions on both Calmount Road and Ballymount Avenue. These new site access junctions to/from the Blackwin Limited development are located a short distance from the subject Calmount Road / Ballymount Avenue Junction.

Blackwin Limited wish to express their support for the emerging Core Bus Corridor (CBC) scheme which will deliver significance accessibility and road safety benefits along the scheme corridor and across the general Ballymount area. Nevertheless Blackwin Limited retain reservations in regard to the scale of impact predicted to be generated by the CBC scheme proposals upon the operational performance of the Calmount Road / Ballymount Avenue Junction which is predicted by the NTA to be operating over capacity in the CBC scheme adopted 2028 opening year.

Blackwin Limited are concerned that in addition to the impact on vehicle accessibility to/from their proposed commercial development (particularly the warehouse / logistics units) the capacity limitations at the proposed Calmount Road / Ballymount Avenue junction when converted to traffic signal controls could result in the generation of vehicle queues back along both its northern and western approach arms. The generation of such vehicle queues back along the southbound and eastbound approaches to the new Calmount Road / Ballymount Avenue Junction could have a negative impact upon the operations of their commercial development two site access junctions.

Following DBFL's review it has been established that there is an opportunity to potentially tweak the NTA's proposed junction design on the northern and western arms of the junction thereby minimising the potential extent / length of vehicle queues generated back along these two specific arms of the junction. This opportunity focuses upon using the existing verge / back of footpath areas (as located within the road boundary) on the northern and western arms of the Calmount Road / Ballymount Avenue junction to a greater extent to that proposed by the NTA's junction design.

In addition to addressing Blackwin Limited's concerns regarding the extend of vehicle queues on the northern and western arms of the Calmount Road / Ballymount Avenue junction, the identified tweaks (as detailed in the accompanying DBFL drawings) could also offer the opportunity to reassign the signal controls green times thereby enhancing overall junction capacity, reducing delays for all road users and / or offering greater

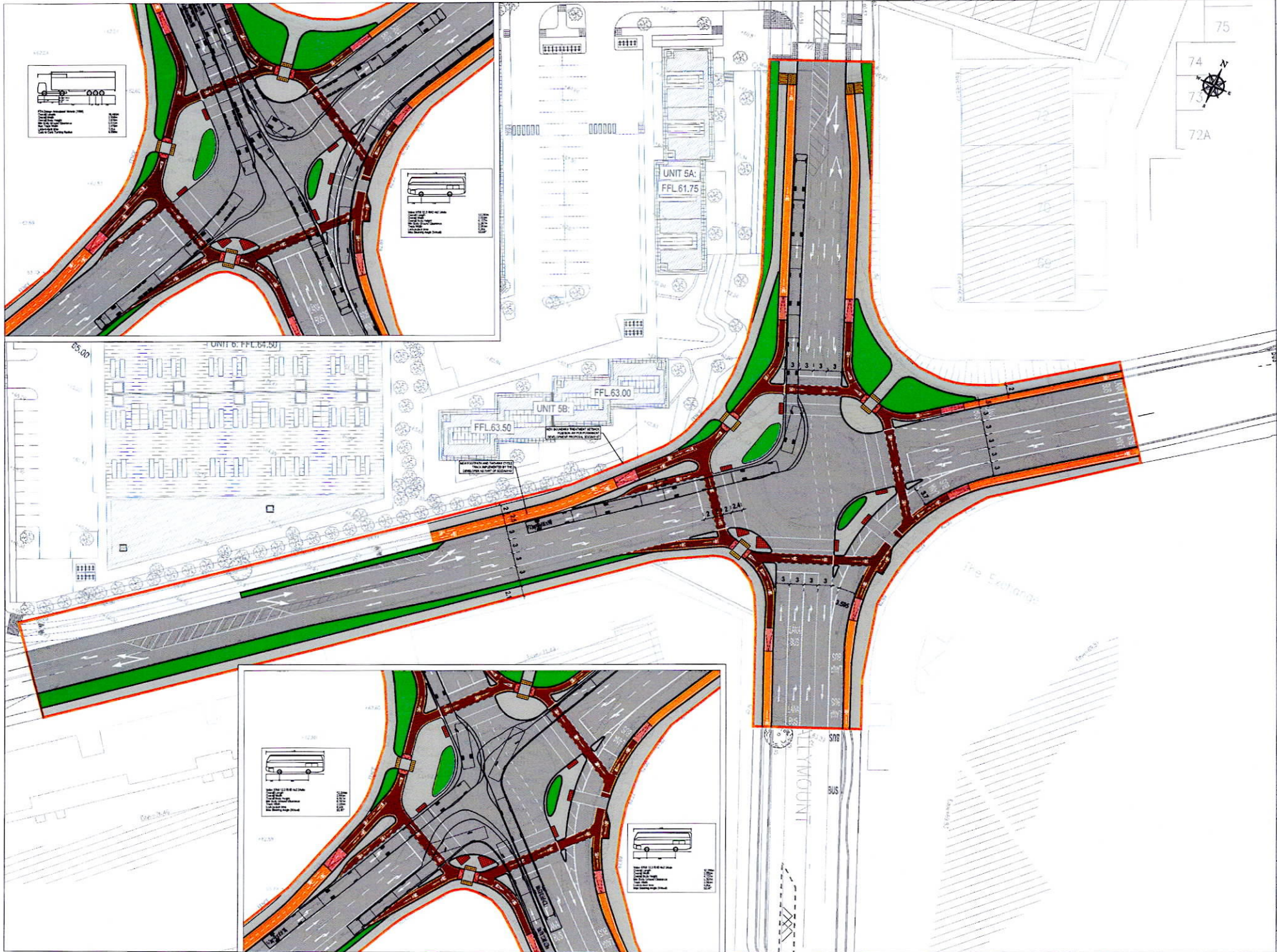


priority to bus services by enabling additional green time to the eastern and southern arms of the junction (as and when a bus approaches the junctions stop lines).

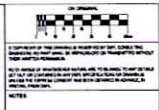
The TRANSYT analysis undertaken utilising the Blackwin Limited's 2025 opening year traffic data demonstrates that the identified tweaks to the junctions northern and western arms reduces the length of vehicle queues generated back along both of these arms of the Calmount Road / Ballymount Avenue junction thereby addressing Blackwin Limited's concerns and maintaining the safe operation of their two permitted site access junctions.

The objective of this submission is first of all to express Blackwin Limited's support for the **Tallaght / Clondalkin to City Centre Core Bus Corridor** (CBC) Scheme, to provide evidence that would encourage the NTA's designers to re-examine the detail design for northern and western arms of the proposed Calmount Road / Ballymount Avenue junction layout.

The analysis reported herein (and in the accompanying drawings) demonstrates that the suggested tweaks to the NTA's junction design (only the northern and western arms) is deliverable within the existing roads boundary; is considered appropriate to achieve a better balance in terms of the junctions capacity, offers a greater level of mitigation (limiting the impact upon the Blackwin Limited's permitted two site access junctions to ); whilst still maintaining the very same accessibility benefits being delivered by the CBC scheme for sustainable modes of travel. Accordingly Blackwin Limited's request that the NTA incorporate the identified tweaks to the northern and western arms of the junction during their detailed design stage of the CBC scheme proposals.



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DESIGNED BY: SHAW & BELLAS LECTICE  
 IN CHARGE: SHAW & BELLAS LECTICE  
 ORDNANCE SURVEY IRELAND  
 GOVERNMENT OF IRELAND

DATE	DESCRIPTION	BY	CHECKED
12/05/2024	ISSUED FOR TENDERS	DMFL	DMFL
12/05/2024	REVISED	DMFL	DMFL

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1	12/05/2024	DMFL	ISSUED FOR TENDERS

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