



**Swords to City
Centre Core
Bus Corridor Scheme**

**NTA Observations on
the Proposed Scheme
Submissions**

November 2023

**BUS
CONNECTS**

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

Table of Contents

1.	Introduction	6
1.1	Introduction	6
1.2	Overview of Submissions Received	6
2.	Response to Submissions on Proposed Scheme	10
2.1	Proposed Scheme at Seven Oaks / Griffith Downs	10
2.1.1	Description of Proposed Scheme at this Location.....	10
2.1.2	Overview of Submissions Received	10
2.1.3	Common Issues Raised and Responses	11
2.1.4	Non-common Issues Raised	15
2.2	Proposed Scheme at Santry	33
2.2.1	Description of Proposed Scheme at this Location.....	33
2.2.2	Overview of Submissions Received	37
2.2.3	Common Issues Raised and Responses	38
2.2.4	Other Issues Raised and Responses.....	45
2.3	Proposed Scheme at Drumcondra	65
2.3.1	Description of Proposed Scheme at this Location.....	65
2.3.2	Overview of Submissions Received	68
2.3.3	Common Issues Raised and Responses	69
2.3.4	Other Issues Raised and Responses.....	82
2.4	Proposed Scheme at Dorset Street	102
2.4.1	Description of Proposed Scheme at this Location.....	102
2.4.2	Overview of Submissions Received	104
2.4.3	Common Issues Raised and Responses	104
2.4.4	Other Issues Raised and Responses.....	113
2.5	Proposed Scheme at Fosterstown / Pinnock Hill	116
2.5.1	Description of Proposed Scheme at this Location.....	116
2.5.2	Overview of Submissions Received	119
2.5.3	Common Issues Raised and Responses	119
2.5.4	Other Issues Raised and Responses.....	119
2.6	Whole Scheme	123
2.6.1	Overview of Submissions Received	123
2.6.2	03 – Bob Laird.....	125
2.6.3	05 – Brendan Heneghan	128
2.6.4	08 – Carmel Sherry and Celine Byrne	145
2.6.5	14 – Development Applications Unit	153
2.6.6	16 – Donal O’Brolchain	154
2.6.7	18 – Dublin Commuter Coalition	160
2.6.8	19 – Dublin Cycling Campaign.....	171
2.6.9	20 – Fingal County Council	181
2.6.10	39 – Neasa Hourigan TD	195
2.6.11	48 – Stephen Hall	206
2.6.12	51 – Transport Infrastructure Ireland.....	215
2.7	Individual Properties	230
2.7.1	Overview of Submissions.....	230
2.7.2	4 – Brendan Collins.....	230
2.7.3	9 – Clondev Properties Limited	238
2.7.4	10 – Collinstown Caravans Limited	239
2.7.5	11 – Conor O’Scanail, O’Scanail Veterinary Surgeons.....	243
2.7.6	13 – Deirdre and Pamela Scully.....	245
2.7.7	17 – Dublin Airport Authority.....	254
2.7.8	27 – JJ Breen.....	255

2.7.9	28 – Julia Boland and Others.....	257
2.7.10	30 – Kathleen McKee.....	261
2.7.11	31 – Kealy’s of Cloghran.....	274
2.7.12	34 – Lesley Henderson.....	279
2.7.13	35 – Maxol.....	290
2.7.14	40 – Nesta Limited.....	292
2.7.15	42 – O’Scanail Veterinary Hospital.....	295
2.7.16	43 – Patrick Fitzsimons and Parfit.....	299
2.7.17	49 – Tesco Ireland.....	311
3.	Reponses to Individual Submissions on the Proposed Scheme.....	314
3.1	01 – Alan and Fiona Fitzpatrick.....	314
3.1.1	Submission – Seven Oaks/Griffith Downs.....	314
3.1.2	Response to issues raised.....	314
3.2	02 – All Hallows Area Association.....	314
3.2.1	Submission – Seven Oaks/Griffith Downs.....	314
3.2.2	Response to issues raised.....	315
3.3	03 – Bob Laird.....	315
3.3.1	Submission – Whole Scheme.....	315
3.3.2	Response to issues raised.....	315
3.4	04 – Brendan Collins.....	315
3.4.1	Submission – Collinstown Business Park.....	315
3.4.2	Response to issues raised.....	315
3.5	05 – Brendan Heneghan.....	315
3.5.1	Submission – Whole Scheme.....	315
3.5.2	Response to issues raised.....	315
3.6	06 – Brian O’Rourke.....	315
3.6.1	Submission – Drumcondra.....	315
3.6.2	Response to issues raised.....	315
3.7	07 – Brittney Bennett.....	315
3.7.1	Submission – Drumcondra.....	315
3.7.2	Response to issues raised.....	316
3.8	08 – Carmel Sherry and Celine Byrne.....	316
3.8.1	Submission – Whole Scheme.....	316
3.8.2	Response to issues raised.....	316
3.9	09 – Clondev Properties Limited.....	316
3.9.1	Submission – Hollytree House.....	316
3.9.2	Response to issues raised.....	316
3.10	10 – Collinstown Caravans Limited.....	316
3.10.1	Submission – Collinstown Business Park.....	316
3.10.2	Response to issues raised.....	316
3.11	11 – Conor O’Scanail, O’Scanail Veterinary Surgeons.....	316
3.11.1	Submission – Pinnock Hill.....	316
3.11.2	Response to issues raised.....	316
3.12	12 – Deirdre and Aidan O’Callaghan.....	317
3.12.1	Submission – Santry.....	317
3.12.2	Response to issues raised.....	317
3.13	13 – Deirdre and Pamela Scully.....	317
3.13.1	Submission – Santry.....	317
3.13.2	Response to issues raised.....	317
3.14	14 – Development Applications Unit.....	317
3.14.1	Submission – Whole Scheme.....	317
3.14.2	Response to issues raised.....	317
3.15	15 – District 7 Community Alliance.....	317

3.15.1	Submission – Dorset Street	317
3.15.2	Response to issues raised	318
3.16	16 – Donal O’Brolchain	318
3.16.1	Submission – Whole Scheme	318
3.16.2	Response to issues raised	318
3.17	17 – Dublin Airport Authority	318
3.17.1	Submission – Dublin Airport	318
3.17.2	Response to issues raised	318
3.18	18 – Dublin Commuter Coalition	318
3.18.1	Submission – Whole Scheme	318
3.18.2	Response to issues raised	318
3.19	19 – Dublin Cycling Campaign	318
3.19.1	Submission – Whole Scheme	318
3.19.2	Response to issues raised	318
3.20	20 – Fingal County Council	319
3.20.1	Submission – Whole Scheme	319
3.20.2	Response to issues raised	319
3.21	21 – Greater Dorset Street Together	319
3.21.1	Submission – Dorset Street	319
3.21.2	Response to issues raised	319
3.22	22 – Ian Croft	319
3.22.1	Submission – Santry	319
3.22.2	Response to issues raised	319
3.23	23 – Iona and District Residents Association (IDRA) C/O Carol Lynch	319
3.23.1	Submission – Drumcondra	319
3.23.2	Response to issues raised	320
3.24	24 – Iona and District Residents Association C/O Rory Flynn	320
3.24.1	Submission – Drumcondra	320
3.24.2	Response to issues raised	320
3.25	25 – J. Murphy Developments Limited	320
3.25.1	Submission – Fosterstown / Pinnock Hill	320
3.25.2	Response to issues raised	320
3.26	26 – Jerry and Lorraine Crowley	321
3.26.1	Submission – Santry	321
3.26.2	Response to issues raised	321
3.27	27 – JJ Breen	321
3.27.1	Submission – Santry	321
3.27.2	Response to issues raised	321
3.28	28 – Juliana Boland and Others	321
3.28.1	Submission – Nevinstown	321
3.28.2	Response to issues raised	321
3.29	29 – Karen Wade	321
3.29.1	Submission – Santry	321
3.29.2	Response to issues raised	321
3.30	30 – Kathleen McKee	322
3.30.1	Submission – Santry	322
3.30.2	Response to issues raised	322
3.31	31 – Kealy’s of Cloghran	322
3.31.1	Submission – Cloghran	322
3.31.2	Response to issues raised	322
3.32	32 – Leo McNamee	322
3.32.1	Submission – Drumcondra	322
3.32.2	Response to issues raised	322

3.33	33 – Leo Street and District Residents Association and Lower Dorset Street Community	
Group	322	
	3.33.1 Submission – Dorset Street	322
	3.33.2 Response to issues raised	322
3.34	34 – Lesley Henderson	323
	3.34.1 Submission – Santry	323
	3.34.2 Response to issues raised	323
3.35	35 – Maxol Limited	323
	3.35.1 Submission – Santry	323
	3.35.2 Response to issues raised	323
3.36	36 – Michelle Bannon and Ranjith Techell	323
	3.36.1 Submission – Santry	323
	3.36.2 Response to issues raised	323
3.37	37 – MKN Properties Limited	323
	3.37.1 Submission – Fosterstown / Pinnock Hill	323
	3.37.2 Response to issues raised	323
3.38	38 – MPM Residents Association	323
	3.38.1 Submission – Dorset Street	323
	3.38.2 Response to issues raised	324
3.39	39 – Neasa Hourigan TD	324
	3.39.1 Submission – Whole Scheme	324
	3.39.2 Response to issues raised	324
3.40	40 – Nesta Limited	324
	3.40.1 Submission – Old Airport Road	324
	3.40.2 Response to issues raised	324
3.41	41 – Oak View Residents Association	324
	3.41.1 Submission – Santry	324
	3.41.2 Response to issues raised	324
3.42	42 – O'Scanaill Veterinary Surgeons	324
	3.42.1 Submission – Pinnock Hill	324
	3.42.2 Response to issues raised	324
3.43	43 – Patrick Fitzsimons and Parfit	325
	3.43.1 Submission – Cloghran	325
	3.43.2 Response to issues raised	325
3.44	44 – Residents of Griffith Downs	325
	3.44.1 Submission – Seven Oaks / Griffith Downs	325
	3.44.2 Response to issues raised	325
3.45	45 – Residents of Seven Oaks	325
	3.45.1 Submission – Seven Oaks / Griffith Downs	325
	3.45.2 Response to issues raised	325
3.46	46 – Róisín Shorthall	325
	3.46.1 Submission – Santry	325
	3.46.2 Response to issues raised	326
3.47	47 – Santry Forum	326
	3.47.1 Submission – Santry	326
	3.47.2 Response to issues raised	326
3.48	48 – Stephen Hall	326
	3.48.1 Submission – Whole Scheme	326
	3.48.2 Response to issues raised	326
3.49	49 – Tesco Ireland	326
	3.49.1 Submission – Various	326
	3.49.2 Response to issues raised	326
3.50	50 – TII	326

3.50.1	Submission – Whole Scheme	326
3.50.2	Response to issues raised	326
3.51	51 – MKN Investments Limited	327
3.51.1	Submission – Santry	327
3.51.2	Response to issues raised	327
Appendix A		328

1. Introduction

1.1 Introduction

This report provides a response to the submissions made to An Bord Pleanála ('the Board') in response to the application under Section 51 of the Roads Act 1993, as amended, for approval of the Swords to City Centre Core Bus Corridor Scheme ('the Proposed Scheme').

An overview of the submissions is provided in Section 1.2 below. The issues raised in the submissions on the Proposed Scheme, together with responses thereto are provided in Section 2 while responses to individual submissions on the Proposed Scheme are provided in Section 3.

Where the same issue is raised in a number of submissions, this report identifies the individuals who raised those issues and provides a composite response to each issue raised.

1.2 Overview of Submissions Received

A total of 51 submissions in response to the Proposed Scheme were received by the Board.

Each submission was individually numbered by the Board and this numbering system has been retained for ease of reference in this report.

In Table 1.1 to Table 1.4 the 51 submissions in response to Proposed Scheme are broken down into groups either associated with a particular location along the Corridor or of a more general nature below.

There were five locations referenced by more than one submission and sixteen locations that were referenced by a single submission. Eleven submissions raised various issues along the route of the whole scheme.

Table 1.1 Summary of Locations Referenced by more than One Submissions

Location	No. of submissions on the Proposed Scheme referencing this Location	Key Issues Raised
Seven Oaks / Griffith Downs	4	Conservation of green areas
Santry	9	Tree removal, bus terminus development, Omni Park integration, demolition, Swords Road quiet street cycle lane
Drumcondra	5	Support for the Proposed Scheme, rat runs, cycle infrastructure, pedestrian infrastructure, enforcement, parking, noise, air pollution, and vibrations, bus lanes and bus stops, discouraging heavy vehicles
Dorset Street	4	Removal of the central median, lack of consultation, lack of community / sense of place, drawing inconsistencies, turn bans, bus stop relocation, loading
Fosterstown / Pinnock Hill	2	Support for the Proposed Scheme
Whole Scheme	12	Various
Individual Properties	16	Various

Table 1.2 Summary of Submissions Covering Scheme Wide Issues

Location	Key Issues Raised
Member of the Public	Support for the Proposed Scheme, impact to buses in Swords area, bus priority, bus stop location.
Member of the Public	Fees and timescales, public consultation, scheme design, need for scheme, buses, environment, administrative discrepancy.
Member of the Public	Our Lady's Park, Frank Flood Bridge, relocation of parking and bus stops, land acquisition, traffic, pedestrian and cycle facilities.
Development Applications Unit	Archaeology and cultural heritage.
Local Resident	Need for scheme, missing information, removal of trees/hedges
Dublin Commuter Coalition	Support for scheme, camera enforcement, bus lanes, junction design, pedestrian and cyclist facilities, Dorset Street public realm.
Dublin Cycling Campaign	Support for scheme, cycling and pedestrian facilities, junction design, quiet street, Dorset Street, health assessment.
Fingal County Council	Support for the scheme, policy, architectural and archaeological heritage, junction design, Fosterstown Link Road, flooding.
TD	Parking enforcement, Our Lady's Park, turning bans, loading bays, pedestrian and cycling facilities, disability review, Dorset Street, Frank Flood Bridge, Richmond Road, Trees and Shrubs
Local Resident	Trees and greening, public realm, Dorset Street, expedite delivery.
Transport Infrastructure Ireland	EIAR, CEMP, Interactions with Proposed Scheme

Table 1.3 Submissions Made in Respect of Individual Properties

Submission No	Name	Address
4	Brendan Collins	Collins House, Collinstown Business Park, Swords Road
9	Clondev Properties Limited	Hollytree House, Fosterstown, Swords Pinnock Hill SHD, R132
10	Collinstown Caravans Limited	Airport Road, Dardistown, Cloghran
11	Conor O'Scanaill, O'Scanaill Veterinary Surgeons	Milton Field, Pinnock Hill, Swords
13	Deirdre and Pamela Scully	255 Swords Road, Santry
17	Dublin Airport Authority	Dublin Airport, Corbalis Way
27	JJ Breen	Magner's Pharmacy, Old Swiss Cottage Building, Swords Road

Submission No	Name	Address
28	Julia Boland and Others	Nevinstown Lodge and Joe Boland Motor Salvage, Nevinstown, Pinnock Hill, Swords
30	Kathleen McKee	300 Swords Road
31	Kealy's of Cloghran	Kealy's of Cloghran, Swords Road
34	Lesley Henderson	298 Swords Road
35	Maxol Limited	309 Swords Road
40	Nesta Limited	Nesta Ltd., Swords Road
42	O'Scanaill Veterinary Surgeons	Milton Field, Pinnock Hill, Swords
43	Patrick Fitzsimons and Parfit	Old School House, Cloghran
49	Tesco Ireland	Various

Table 1.4 Location(s) Referred to by each Submission on the Proposed Scheme (by ABP Reference Number)

No	Location	No	Location	No	Location	No	Location
1	Seven Oaks / Griffith Downs	14	Whole Scheme	27	Santry	40	Old Airport Road
2	Seven Oaks / Griffith Downs	15	Dorset Street	28	Nevinstown	41	Santry
3	Whole Scheme	16	Whole Scheme	29	Santry	42	Pinnock Hill
4	Collinstown Business Park	17	Dublin Airport	30	Santry	43	Cloghran
5	Whole Scheme	18	Whole Scheme	31	Cloghran	44	Seven Oaks / Griffith Downs
6	Drumcondra	19	Whole Scheme	32	Drumcondra	45	Seven Oaks / Griffith Downs
7	Drumcondra	20	Whole Scheme	33	Dorset Street	46	Santry
8	Whole Scheme	21	Dorset Street	34	Santry	47	Santry

No	Location	No	Location	No	Location	No	Location
9	Hollytree House	22	Santry	35	Santry	48	Whole Scheme
10	Collinstown Business Park	23	Drumcondra	36	Santry	49	Various
11	Pinnock Hill	24	Drumcondra	37	Fosterstown / Pinnock Hill	50	Whole Scheme
12	Santry	25	Fosterstown / Pinnock Hill	38	Dorset Street	51	Santry
13	Santry	26	Santry	39	Whole Scheme		

2. Response to Submissions on Proposed Scheme

2.1 Proposed Scheme at Seven Oaks / Griffith Downs

2.1.1 Description of Proposed Scheme at this Location

As stated in Section 4.5.5.1 of Chapter 4 of the Proposed Scheme Description of Volume 2 of the EIAR:

'From Shantalla Road to the Botanic Avenue, a continuous bus lane will be provided in both directions. It is proposed to retain the existing bus lanes and provide a segregated cycle track and footpath between Shantalla Road and Millmount Avenue in both directions. Between Shantalla Road and Collins Avenue the main north/south cycle route and pedestrian route will continue via a Quiet Street Treatment along the Swords Road. An additional south bound segregated cycle track will be provided adjacent to the south bound slip lane of the Shantalla Road junction. A short section of this cycle track is reduced to 1.5m wide in front of the Church of the Holy Child in addition to a reduction of the existing 3.5m wide footpath to 2m wide.

An extract from General Arrangement Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR are included in Figure 2.1.

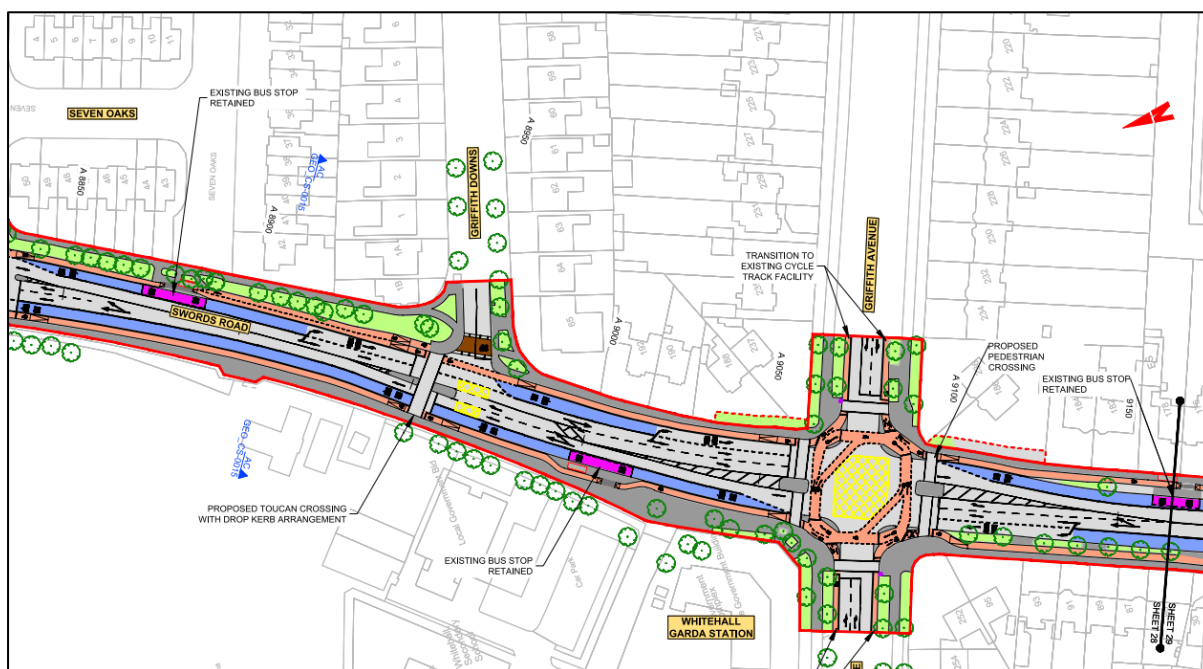


Figure 2.1 Extract from General Arrangement Drawing (Sheet 28)

2.1.2 Overview of Submissions Received

Table 2.1 below lists the 4 individual submissions made in respect of the Proposed Scheme at Seven Oaks / Griffith Downs.

Table 2.1 Submissions Made in Respect of Seven Oaks / Griffith Downs

No	Name	No	Name
1	Alan and Fiona Fitzpatrick	44	Residents of Griffith Downs
2	Allow Hallows Area Association	45	Residents of Seven Oaks

A number of issues were raised, and these are listed below and described in Section 2.1.3 and 2.1.4 below.

Common Issues Raised

1. Request for green area to be protected and conserved.

Other Issues Raised

The following issues relating to Seven Oaks / Griffith Downs were raised by one other submission only and the responses are provided under the relevant response in Section 3 of this report.

1. Inadequate information has been provided regarding noise mitigation measures
2. Proximity of scheme to houses
3. Inadequate details have been provided regarding speed bumps/traffic calming measures
4. Privacy and property safety
5. Objection to road closures and disruption this would cause
6. Clarification has not been made as to whether the existing pedestrian entrance will be affected to Seven Oaks
7. Insufficient detail has been provided to address health and safety
8. Inadequate screening and planting proposed
9. Inadequate detail provided regarding type of boundary to be provided along CPO lines
10. Insufficient detail has been provided regarding lighting proposals along the scheme
11. Setback distances for buildings have not been clarified
12. Insufficient detail has been provided to deal with impact on services
13. Proposed development will have significant adverse effects on environment
14. Clarification has not been given regarding the demolition of trees
15. No communication from parties to inform us of the plan
16. Temporary Accommodation
17. Impact on viability and obstruction to home
18. Route selection could be more suitable located elsewhere

2.1.3 Common Issues Raised and Responses

2.1.3.1 *Request for green area to be protected and conserved*

Summary of issue raised

A number of submissions oppose the proposal to make a two-way cycle path between Seven Oaks and Griffith Downs on the basis that there are adequate cycle paths in existence at these locations that operate very well at present.

It is noted that the green area and mature trees are well maintained for the last forty years by the local residents and should be retained, as it complements current government and wider society aspirations in advancing a general green agenda.

It is claimed that this proposal was never referenced during the public presentations on BusConnects over recent years.

Response to issue raised

A two-way cycle track has been provided as part of the Proposed Scheme between Seven Oaks and Griffith Downs to allow cyclists travelling in a northbound direction to access the existing pedestrian/cyclist access into Seven Oaks. Cyclists will be able to cross the road at Griffith Downs

using the proposed toucan crossing. Once the road is crossed, they can use the short section of two-way cycle track to safely access Seven Oaks without conflicting with southbound cyclists.

The existing flowers and 'Griffith Downs' signage will remain unaffected. The proposed cycle lane will encroach on the carriageway (Swords Road) side of this green area by a maximum of 2m, the remainder of the green area will remain unaffected.

As indicated in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 05 Landscape General Arrangement drawings, Sheet 28, two trees will be removed as part of the Proposed Scheme as shown in Figure 2.2. An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4 of the EIAR. As per the Tree Schedule in that report, the two trees to be removed are:

- An oak tree (Tree Number T0591) which has been assessed as a Category C tree (low value and conservation); and
- A Norway maple (Tree Number T0602) which has been assessed as a Category U tree (not suitable for retention). This tree is recommended for felling and replacement due to its condition, rather than as a result of the Proposed Scheme.

As shown in the Landscape General Arrangement drawings, there are four new trees (*Prunus Serrula*) and an area of species rich grassland proposed at the corner of the Bonnington Hotel site adjacent to the Seven Oaks entrance in close proximity to the two trees proposed to be removed.

Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. With respect specifically to the impacts on "scattered trees and parkland" the Chapter states that there are no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.19 and Table 12.20 respectively. Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact as a result of the removal of trees and vegetation on the streetscape, with the Construction Phase impact across the Proposed Scheme assessed as Negative, Moderate / Significant, Temporary / Short-Term (Section 17.4.3.2.9 and Table 17.7). The Chapter assesses the residual impact of tree and vegetation loss at 15 years post-construction in order to allow for the establishment of the proposed landscaping measures, with the residual Operational Phase impact reducing to Negative, Slight / Moderate, Long-Term over time.

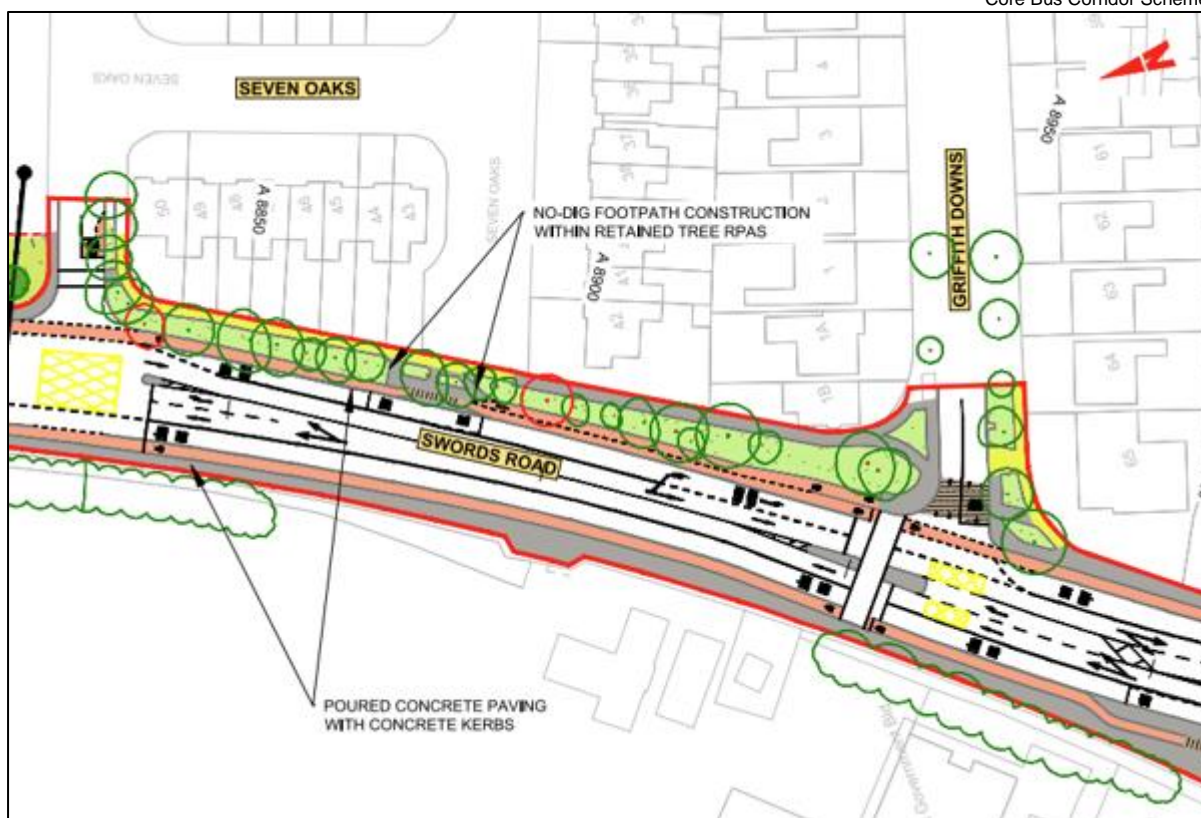


Figure 2.2 Extract from Landscape General Arrangement Drawing (Sheet 28) which indicates existing trees to be removed in red

Regarding claims that this proposal was never referenced during the public presentations on BusConnects over recent years, this two-way cycle track was implemented following feedback received during the non-statutory public consultations of the Proposed Scheme. A suggestion was made to create a cycle route through The Cloisters/Hampton Lodge and Griffith Downs as this may take cyclists off Gracepark Road, which is described as unsuitable for cyclists. This suggestion is documented in Appendix C Public Consultation Submissions Reports – 2nd and 3rd Non-Statutory Public Consultation of the Preliminary Design Report provided as part of the supplementary information.

Whilst the short section of two-way cycle track was introduced following feedback from the latest Public Consultation in November 2020, the plans prior to the introduction of this two-way cycle track indicated that there would be an impact on this green area. Figure 2.3 and Figure 2.4 below indicate an impact on trees and potential relocation/upgrade of the existing bus stop.



Figure 2.3 Extract from Draft Preferred Route Public Consultation March 2020 (Map 29)

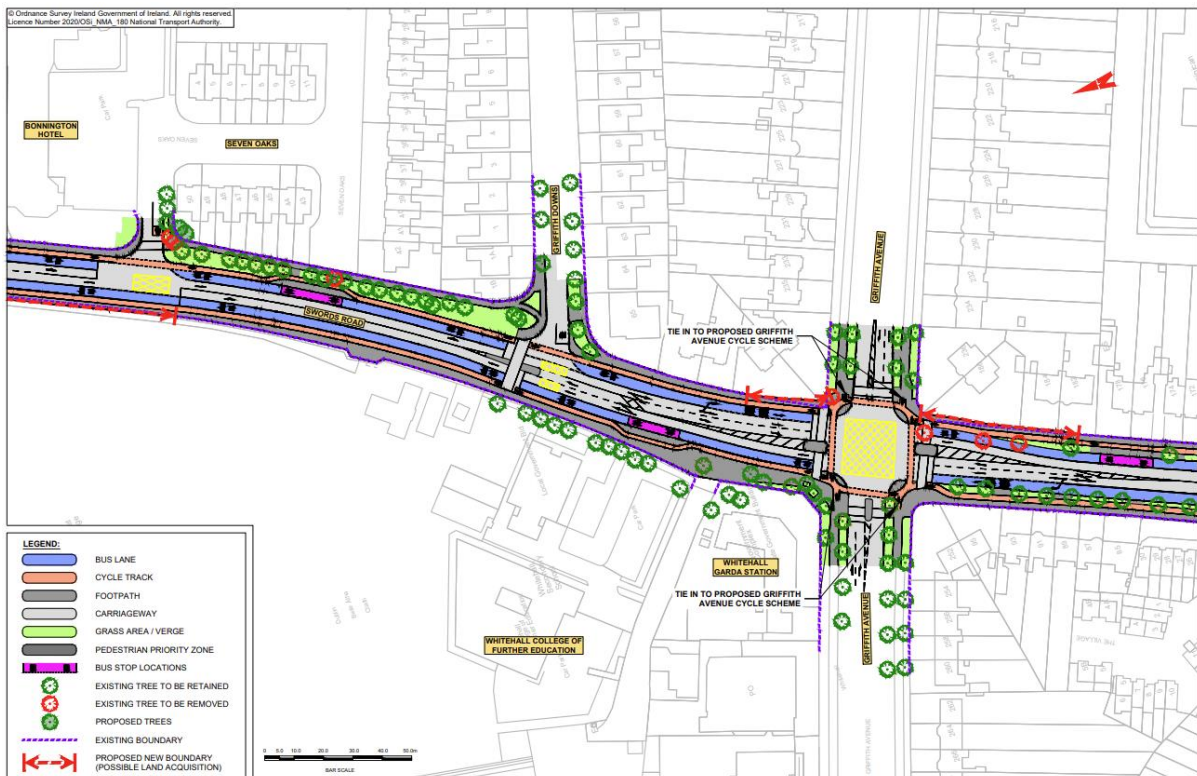


Figure 2.4 Extract from Preferred Route Third Round of Public Consultation November 2020 (Map 29)

2.1.4 Non-common Issues Raised

2.1.4.1 Inadequate information has been provided regarding noise mitigation measures

Summary of issue raised

One submission contended that inadequate information had been provided regarding the mitigation measures that are proposed to control noise pollution, especially as it contended that the Proposed Scheme brings noise pollution closer to the road on Seven Oaks.

Response to issue raised

There is a stretch of approximately 20m from Ch 8930 to 8950, where the kerb line will be moved a maximum of 0.6m closer to the existing properties. The impacts of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme with potential to alter traffic noise levels; this can be positive or negative.

The study area for potential noise and vibration impacts during both Construction and Operational Phases relate to areas of potentially impacted noise sensitive locations (NSLs), which include areas where people spend significant periods of time and where concentration, sleep and amenity are important considerations. The key noise and vibration sensitive receptors in the vicinity of the Swords Road are predominantly residential dwellings lining the road and within 50m to 100m of the road. There are also some educational and health facilities in the area. It should also be noted that there were three attended monitoring locations in the area for the noise survey undertaken to inform the EIAR, namely near the entrance to Seven Oaks (Monitoring Reference CBC0002ANML015), at Plunkett College (Monitoring Reference CBC0002ANML014), and on the corner of R132 Drumcondra Road Upper and R102 Griffith Avenue (Monitoring Reference CBC0002ANML016). These locations are shown in Figure 9.2 Sheet 7 in Volume 3 of the EIAR, as shown below.



Figure 2.5 Extract from Figure 9.2 Noise Monitoring Locations (Sheet 7) which shows local noise monitoring locations

Section 9.5 of Chapter 9 of the EIAR describes all proposed mitigation measures for the control of noise impacts during both the Construction and Operational Phases. The mitigation measures are also described in Chapter 22 (Summary of Mitigation and Monitoring Measures) in Volume 2 of the EIAR, and in Appendix A5.1 (Construction Environmental Management Plan) in Volume 4 of the EIAR. As the impact assessment concluded that the Operational Phase noise impacts will not be significant (Negative, Moderate to Positive, Imperceptible), there are no specific mitigation measures required during the Operational Phase. Mitigation measures during the Construction Phase include:

- Selection of quiet plant;
- Noise control at source;
- Screening;
- Restrictions on hours of work;
- Liaison with the public; and
- Monitoring.

In terms of construction, Section 9.5.1 of the EIAR describes the predicted Construction Phase impacts following the implementation of those mitigation measures. All Construction Phase impacts will be temporary. The significance of the predicted impacts is mapped in Figure 9.3 in Volume 3 of the EIAR, with the area around Seven Oaks shown on Sheet 4. Figure 9.3 shows the impact in that area as being Imperceptible to Moderate.

In terms of operational impact, Section 9.5.2 of Chapter 9 of the EIAR provides an overall description of the impact of the Proposed Scheme, with the Seven Oaks area specifically being Imperceptible / Positive to Not Significant as shown in Sheet 4 of Figure 9.4 (Opening Year 2028 Traffic Noise Impact Summary) and Figure 9.5 (Design Year 2043 Traffic Noise Impact Summary) in Volume 3 of the EIAR. Therefore, as outlined above, no specific noise mitigation measures have been proposed for this location given that the noise impacts were not determined to be sufficient to require further mitigation.

As previously stated, the move towards electric and hybrid city bus fleets limits the long-term noise of buses, reducing noise pollution within the area at Seven Oaks. The impact assessment as described in Chapter 9 of the EIAR concludes that *'There are no significant residual Operational Phase noise or vibration impacts associated with the Proposed Scheme'*.

2.1.4.2 Proximity of the scheme to houses

Summary of issue raised

One submission contends that the proposed road layout near Seven Oaks runs very close to private property, impacting the residents' ability to reside in the home as originally intended.

Response to issue raised

The proposed road layout near Seven Oaks (bus lanes and traffic lanes) for the most part will be located in the exact same position as the existing situation and therefore will not be located any closer to private property. There is a stretch of approximately 20m from Ch 8930 to 8950, see Figure 2.6, where the kerb line will be moved a maximum of 0.6m closer to the existing properties. The existing cycle track is being widened from a one-way cycle track approximately 2.5m wide, to a two-way cycle track 3-4m wide. In the worst case the cycle track will be located approximately 1.5m closer to the properties. The existing boundary wall outside the properties is retained as part of the Proposed Scheme.

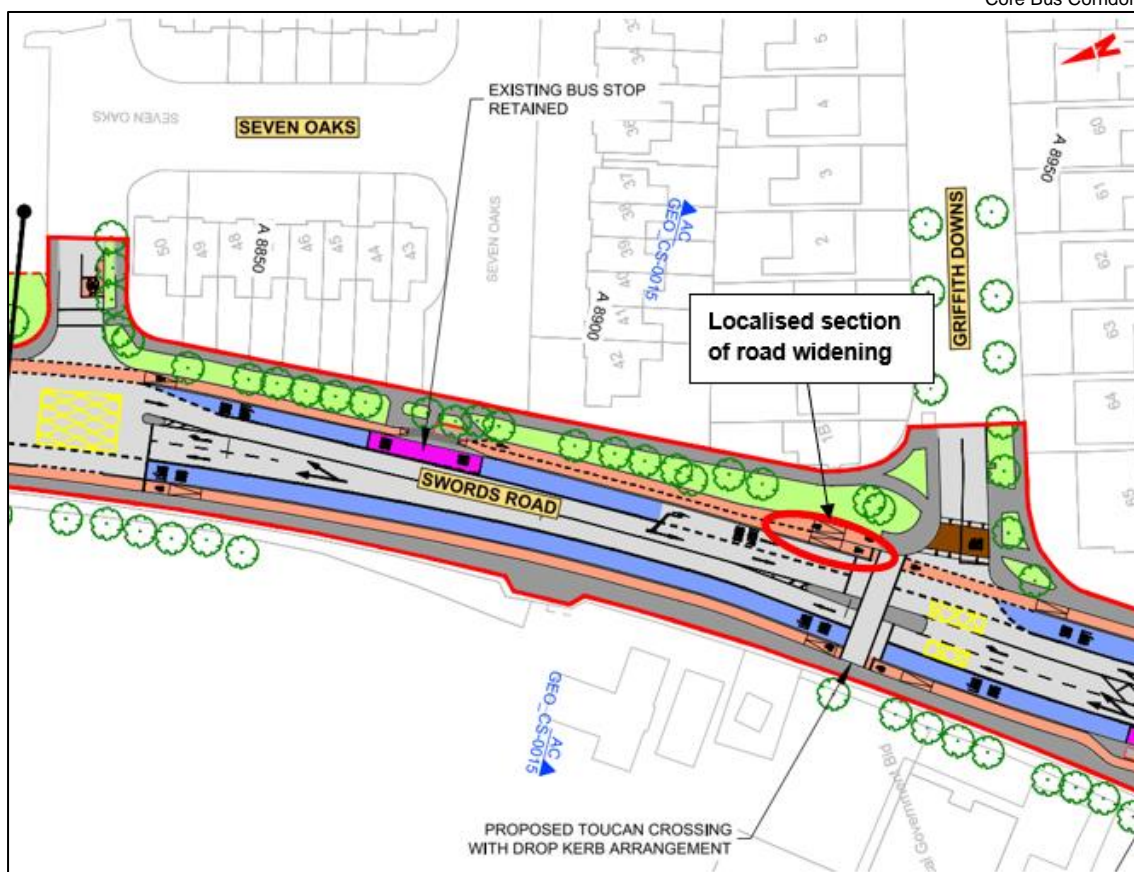


Figure 2.6 Extract from General Arrangement indicating localised section of road widening (Sheet 28)

2.1.4.3 Inadequate details provided regarding speed bumps/traffic calming measures

Summary of issue raised

One submission is concerned that inadequate information has been provided regarding traffic calming measures. Concern that the speed of traffic near Seven Oaks is dangerous without the measures.

Response to issue raised

The NTA acknowledges the comments raised in relation to the speed of traffic near Seven Oaks. The enforcement of road traffic laws is a matter for An Garda Síochána.

2.1.4.4 Privacy and property safety

Summary of issue raised

One submission is concerned that privacy will be lost at this location on Seven Oaks, due to proximity to the road and the existing trees.

Response to issue raised

As shown in Figure 2.7, there is an existing boundary wall between the houses and the road. Reference to the EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, Typical Cross Section drawings, see extract in Figure 2.8, shows that the boundary wall is to remain at this location.



Figure 2.7 Existing Road Green Area and Boundary Wall at Seven Oaks (Image Source: Google)

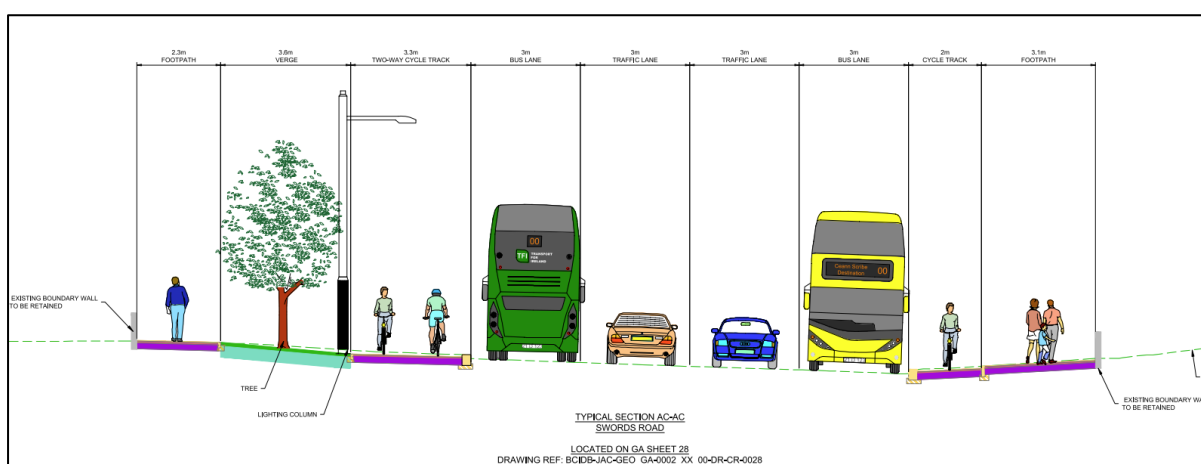


Figure 2.8 Extract from Typical Cross Section Drawing showing boundary wall retained

2.1.4.5 Objection to road closures and disruption this would cause

Summary of issue raised

One submission is objecting to the road closures on Seven Oaks due to the severe traffic currently and the issue with access and egress. The submission is concerned that the traffic will get worse with closures.

Response to issue raised

There are no road closures proposed at Seven Oaks during the construction phase or operational phase. The anticipated lane closures, road closures, and diversions that may be required during the Construction Phase are identified in Section 5.8.4 of Chapter 5 Construction Table 5.7. As indicated on this table, there are no road closures proposed at Seven Oaks.

2.1.4.6 Clarification has not been made as to whether the existing pedestrian entrance will be affected to Seven Oaks

Summary of issue raised

One submission has requested clarification on whether the existing pedestrian entrance will be affected to Seven Oaks due to the proximity to the new road, and safety for pedestrians.

Response to issue raised

The existing pedestrian entrance will not be impacted by the scheme.

2.1.4.7 *Insufficient detail has been provided to address health and safety*

Summary of issue raised

One submission is concerned that insufficient detail has been provided to assess the impact of the health and safety of the individual and their family and other access hazards that affect the property on Seven Oaks

Response to issue raised

As described in paragraph 5.5.3.1 of Chapter 5 of Volume 2 of the EIAR, details regarding temporary access provisions will be discussed with homes and businesses prior to construction starting in the area. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. The duration of the works will vary from property to property, however access and egress will be maintained at all times.

Similarly, as outlined in Section 5.1.6 of Appendix A5.1 Construction Environmental Management Plan (CEMP) of the EIAR, a Communications Plan in accordance with the NTA's requirements will be put in place by the contractor. This Plan will provide a mechanism for members of the public to communicate with the NTA and the appointed contractor, and for the NTA and the appointed contractor to communicate important information on various aspects of the Proposed Scheme to the public. The Plan will include procedures to inform members of the community directly affected by the Construction Phase on schedules for any activity of a particularly disruptive nature which is likely to impinge on their property such as boundary works, road closures and diversions, and any mitigating actions that are being taken to minimise such disruption.

As noted in Section 5.10.5 of Chapter 5 of the EIAR, the requirements of the Safety, Health and Welfare at Work Act 2005, the Safety, Health and Welfare at Work (Construction) Regulations, 2013 and other relevant Irish and EU safety legislation will be complied with at all times. As required by the Regulations, a Safety and Health Plan will be formulated which will address health and safety issues from the design stages through to the completion of the Construction Phase. This plan will help to ensure that all works are undertaken in a safe manner.

2.1.4.8 *Inadequate screening and planting proposed*

Summary of issue raised

One submission is concerned that inadequate screening and planting is proposed at Seven Oaks.

Response to issue raised

As indicated in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 05 Landscape General Arrangement drawings, Sheet 28 two trees will be removed as part of the Proposed Scheme as shown in Figure 2.2. An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4 of the EIAR. As per the Tree Schedule in that report, the two trees to be removed are:

- An oak tree (Tree Number T0591) which has been assessed as a Category C tree (low value and conservation); and
- A Norway maple (Tree Number T0602) which has been assessed as a Category U tree (not suitable for retention). This tree has been recommended for felling and replacement due to its condition, rather than as a result of the Proposed Scheme.

As shown in the Landscape General Arrangement drawings, there are four new trees (*Prunus Serrula*) and an area of species rich grassland proposed at the corner of the Bonnington Hotel site adjacent to the Seven Oaks entrance in close proximity to the two trees proposed to be removed.

Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. With respect specifically to the impacts on "scattered trees and parkland" the

Chapter states that there are no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.19 and Table 12.20 respectively. Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact as a result of the removal of trees and vegetation on the streetscape, with the Construction Phase impact across the Proposed Scheme assessed as Negative, Moderate / Significant, Temporary / Short-Term (Section 17.4.3.2.9 and Table 17.7). The Chapter assesses the residual impact of tree and vegetation loss at 15 years post-construction in order to allow for the establishment of the proposed landscaping measures, with the residual Operational Phase impact reducing to Negative, Slight / Moderate, Long-Term over time.

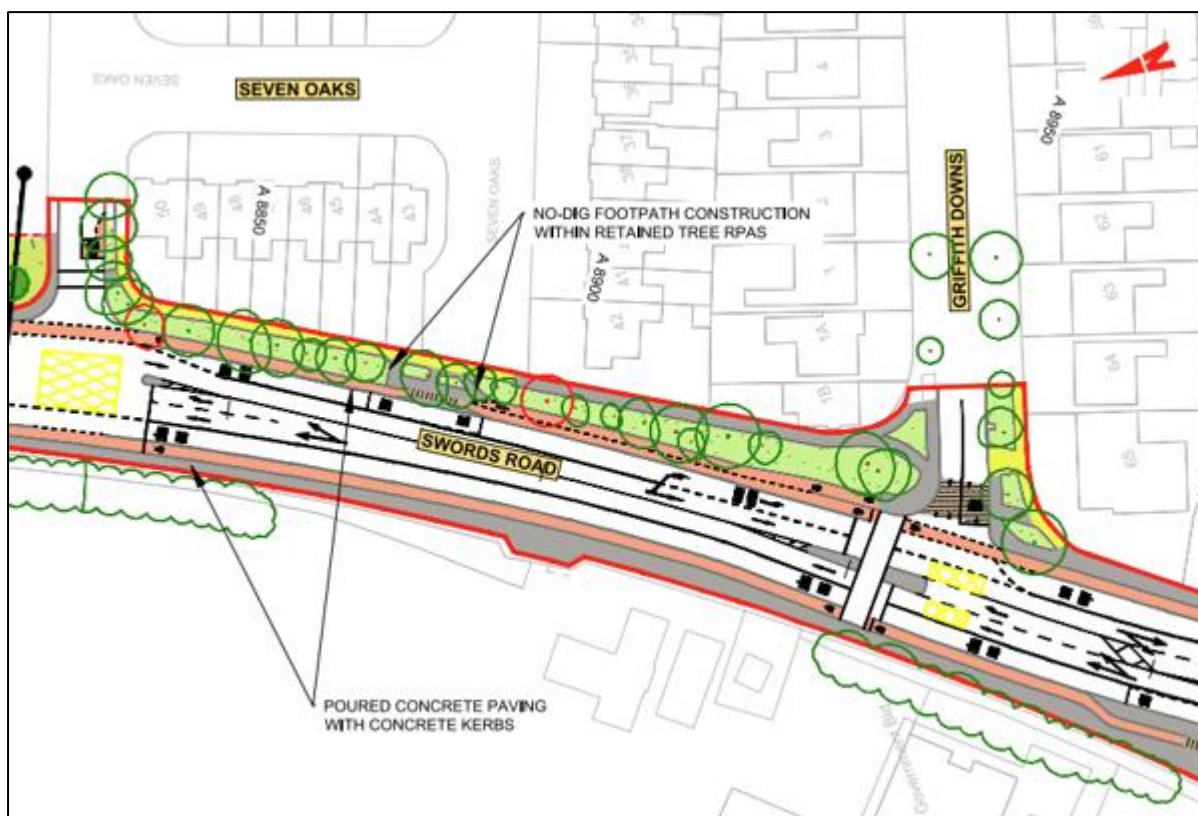


Figure 2.9 Extract from Landscape General Arrangement Drawing (Sheet 28) which indicates existing trees to be removed in red

2.1.4.9 *Inadequate detail provided regarding type of boundary to be provided along CPO lines*

Summary of issue raised

One submission considers that there has been inadequate detail provided regarding the type of boundary proposed along the new CPO lines at Seven Oaks.

Response to issue raised

As mentioned in Section 2.1.4.4 above, there will be no change to the existing boundary treatment at Seven Oaks.

2.1.4.10 *Insufficient detail has been provided regarding lighting proposals along the scheme*

Summary of issue raised

One submission considers that insufficient detail has been provided in the plans regarding the artificial lighting proposals along the new Seven Oaks Road.

Response to issue raised

The Street Lighting drawing series in Volume 3 Figures in the EIAR provides information in relation to street lighting. Figure 2.10 indicates the street lighting proposals at Seven Oaks/Griffith Downs. Section 4.6.13 of Chapter 4 Proposed Scheme Description describes the approach taken for street lighting.



Figure 2.10 Extract from Street Lighting Drawing (Sheet 28)

2.1.4.11 Setback distances for buildings have not been clarified

Summary of issue raised

One submission considers that the setback distances for buildings from the new roadway have not been clarified. The submission requests that this is agreed as part of the design requirements as this could cause potential damage to the boundary wall and existing buildings of the respondents on Seven Oaks.

Response to issue raised

As noted in Section 2.1.4.2, the proposed road layout near Seven Oaks (bus lanes and traffic lanes) for the most part will be located in the exact same position as the existing situation and therefore will not be located any closer to private property. There is a short stretch of approximately 20m, from Ch 8930 to 8950, see Figure 2.6, where the kerb line will be moved a maximum of 0.6m closer to the existing properties.

Section 9.5.1.2 of Chapter 9 Noise and Vibration of Volume 2 of the EIAR describes the likely vibration levels associated with construction activities, it is considered that the construction of the Proposed Scheme is not expected to give rise to vibration that is either significantly intrusive or capable of giving rise to structural or cosmetic damage to buildings or walls. Vibration from construction activities will be limited to the values set out in Table 9.10 to avoid any form of potential cosmetic damage to buildings and structures. Monitoring will be undertaken at identified sensitive buildings, where vibration from the proposed works have the potential to be at or exceed the limit values in Table 9.10 - Recommended Construction Vibration Thresholds for Buildings.

2.1.4.12 Insufficient detail has been provided to deal with impact on services

Summary of issue raised

One submission considers there has not been adequate detail to deal with impact on services within the vicinity of Seven Oaks.

Response to issue raised

Impacts on services are identified on EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 11 Proposed Surface Water Drainage Works, Sheet 28; 12 Irish Water Foul Sewer Asset Alterations, Sheet 28; 13 ESB Asset Alterations, Sheet 28; 14 GNI Asset Alterations, Sheet 28; 15 Irish Water Asset Alterations, Sheet 28; and 17 Telecommunications Asset Alterations, Sheet 28.

Chapter 19 Material Assets of the EIAR assesses the potential impact of construction works on major infrastructure and utilities. Section 19.5.1.1 states that the Proposed Scheme has been designed to minimise the impact on major infrastructure. This includes the avoidance of interactions with major utility infrastructure as far as possible. Where there are interfaces with existing utility infrastructure, protection in place or diversion as necessary is proposed to prevent long-term interruption to the provision of the affected services.

All possible precautions will be taken by the appointed contractor to avoid unplanned interruptions to any services during the Construction Phase of the Proposed Scheme. This will include appropriate investigation by the appointed contractor to identify the precise location of all utility infrastructure within the working areas prior to the commencement of excavation works. Where works are required in and around known utility infrastructure, precautions will be implemented by the appointed contractor to protect the infrastructure from damage, in accordance with best practice methodologies and the requirements of the utility companies, where practicable. Protection measures during construction will include warning signs and markings indicating the location of utility infrastructure, safe digging techniques in the vicinity of known utilities, and in certain circumstances where possible, isolation of the section of infrastructure during works in the immediate vicinity.

Consultation has been undertaken with the major utility companies regarding the design, potential interfaces and measures required to protect or divert the infrastructure which is interfacing with the Proposed Scheme design. All utility companies for which diversions are proposed will continue to be consulted with NTA oversight when designing any diversions to ensure that proposed diversions conform to the utility provider's requirements, where practicable, and acceptable to the NTA, and to ensure that service interruptions are kept to a minimum. Where diversions, or modifications, are required to utility infrastructure (as listed in section 19.4.3 of Chapter 19), service interruptions and disturbance to the surrounding residential, commercial and/or community property may be unavoidable. Where this is the case, it will be planned by the appointed contractor. Required service interruptions will generally only occur for a set period of time per day (a set number of hours not exceeding eight hours where reasonably practicable) and will generally not be continuous for full days at a time. Prior notification will be given to all impacted properties. This notification will include information on when interruptions and works are scheduled to occur and the duration of such interruption. Any required works will be carefully planned by the appointed contractor to ensure that the duration of interruption is minimised in so far as is practicable.

2.1.4.13 Proposed development will have significant adverse effects on environment.

Summary of issue raised

One submission is concerned that the Proposed Scheme will have a significant adverse effect on the environment, including humans, fauna, flora, soil water, air, climate and the landscape (with a severe lack of greenspace), as to cause irreparable damage to the local environment within the Seven Oaks area.

Response to issue raised

The EIAR describes the comprehensive assessment of the impacts on the environment as a result of both the construction and operation of the Proposed Scheme, with specific chapters for each of the topics as listed above, and as outlined here.

Chapter 10 (Population) and Chapter 11 (Human Health) in Volume 2 of the EIAR assesses the impacts on humans as a result of the Proposed Scheme. Seven Oaks is located within the Marino community area for the purposes of the population assessment, while the boundary with the community area of Drumcondra follows the Swords Road in front of Seven Oaks. As laid out in Table 10.14 of Chapter 10, the population assessment did not identify any potential significant impacts within the Marino community area, or the adjacent Drumcondra community area during the Construction Phase. Table 10.15 of Chapter 10 similarly states no significant negative impacts in

either community area, and with respect to community and commercial accessibility there are positive impacts recorded for pedestrians, cyclists, bus users and private vehicles. Similarly, with respect to the human health assessment (Chapter 11), while there are some potential temporary to short-term negative impacts associated with the Construction Phase summarised in Table 11.6 (ranging from Not Significant to Moderate), the Operational Phase impacts of the Proposed Scheme on human health are generally positive as summarised in Table 11.7 of Chapter 11.

Chapter 12 (Biodiversity) in Volume 2 of the EIAR presents the impact assessment with respect to flora and fauna. The assessment considered the impact of the Proposed Scheme on designated areas for nature conservation, habitats, rare / protected plant species, and fauna species as a result of both the Construction and Operational Phases. Section 12.4 of Chapter 12 describes the potential impacts as a result of the Construction and Operational Phases of the Proposed Scheme, with Section 12.5 describing the mitigation measures required to reduce impacts. The Chapter concludes by stating that *'Following the implementation of the mitigation measures outlined in Section 12.5, the Proposed Scheme will not result in any significant residual effects above the local scale on the KERs [Key Ecological Receptors] identified (see Table 12.19) on its own, or cumulatively together with other proposed developments during the Construction Phase'* and *'Following the implementation of the mitigation measures outlined in Section 12.5, the Proposed Scheme will not result in any significant residual effects during the Operational Phase above the local scale on the KERs identified'*.

Chapter 14 (Land, Soils, Geology and Hydrogeology) in Volume 2 of the EIAR presents the impact assessment with respect to soil, and specifically loss or damage of topsoil. The assessment concludes that the potential impact on topsoil during the Construction Phase will be Slight, which will reduce to Imperceptible with the implementation of mitigation measures as described in Section 14.5.1.1, specifically *'Excavated topsoils will be stockpiled by the appointed contractor using appropriate methods to minimise the effects of weathering. Care will be taken in reworking this material to minimise dust generation, groundwater infiltration and generation of runoff'* and *'All topsoil or subsoil shall be assessed for re-use within the Proposed Scheme by the appointed contractor ensuring the appropriate handling, processing and segregation of the material. Where practical the removal of topsoil from the Proposed Scheme will be avoided. All earthworks will be undertaken in accordance with TII Specification for Works (SPW) Series 600 Earthworks (TII 2013) and project-specific earthworks specifications ensuring that all excavated material and imported material is classified using the same methodology to allow maximum opportunity for the reuse of materials on site'*.

Chapter 13 (Water) in Volume 2 of the EIAR presents the impact assessment with respect to water. As can be seen in Figure 13.1 in Volume 3 of the EIAR, there are no watercourse crossings in the vicinity of the Seven Oaks area, therefore there are no potential impacts to water identified within that area. Across the Proposed Scheme as a whole, the Construction and Operational Phase impacts on water bodies will be Imperceptible following the implementation of the mitigation measures described in Section 13.5 of Chapter 13.

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases at the nearest sensitive receptors to the Proposed Scheme. Figures 7.3 to 7.8 in Volume 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the modelled change in annual mean concentration of NO₂ and particulate matter (PM₁₀ and PM_{2.5}) during the Construction Phase (Figures 7.6 to 7.8) and Operational Phase (Figures 7.3 to 7.5). For the area at Seven Oaks (Sheet 3 in each Figure), the significance of the change is minimal to beneficial, specifically Slight to Substantial Beneficial for NO₂, and Negligible for PM₁₀ and PM_{2.5}.

Chapter 8 (Climate) in Volume 2 of the EIAR assesses the climate impact of the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the climate assessment is described in Section 8.3, with the assessment looking at both the impact of the project on the climate and the vulnerability of the project to climate change as per the guidance from Highways England's (2021) Design Manual for Roads and Bridges (DMRB) LA 114 Climate. The assessment included both the direct Operational Phase carbon emissions from the Proposed Scheme (Section 8.5.2.4), as well as the indirect Operational Phase carbon emissions (Section 8.5.2.5). The assessment concludes that:

'The Proposed Scheme has the potential to reduce CO₂e emissions equivalent to the removal of approximately 21,130 and 22,150 car trips per weekday from the road network in 2028 and 2043 respectively.'

In addition to the climate assessment, Chapter 13 (Water) Appendix A13.2 (Flood Risk Assessment) in Volume 4 Part 3 of the EIAR describes the Flood Risk Assessment (FRA) undertaken for the Proposed Scheme. This FRA includes an assessment of the flood risk due to climate change (Section 5.6) which considers mean sea level rise, river flows, and extreme rainfall depths.

In addition to the FRA undertaken, Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the drainage design for the Proposed Scheme (Section 4.6.15), while the Proposed Surface Water Drainage Works figure in Volume 3 of the EIAR shows the design in more detail. In order to ensure that the increase in impermeable area from the Proposed Scheme does not increase the potential for flooding into the future as a result of climate change, Sustainable Drainage Systems (SuDS) have been included in the Drainage Design and:

'All drainage structures for newly paved areas are designed with a minimum return period of no flooding in 1:30 years with a 20% climate change allowance.'

In Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR, Section 17.4.3.1.4 discusses the Construction Phase impact on the townscape and streetscape character of the scheme section in which Seven Oaks is located, stating *'The potential townscape/streetscape impact of the Construction Phase on this section is assessed to be Negative, Significant and Temporary/Short-Term'*, while Section 17.4.4.1.4 discusses the Operational Phase impact on the townscape and streetscape character of that scheme section, stating *'The potential townscape/streetscape impact of the Operational Phase is assessed to be Negative, Moderate and Short-Term becoming Positive, Moderate, Long-Term'*. The impact ratings reduce for the Operational Phase with the passage of time as recorded in Table 17.10 of the Chapter, with the impact on the character of the section changing from Negative, Moderate and Short-Term at one year post-completion to Positive, Moderate and Long-Term at 15 years post-completion.

2.1.4.14 Clarification has not been given regarding the demolition of trees

Summary of issue raised

One submission requests clarification regarding the demolition of trees and the effect this will have on the environment within the Seven Oaks area.

Response to issue raised

A two-way cycle track has been provided as part of the Proposed Scheme between Seven Oaks and Griffith Downs to allow cyclists travelling in a northbound direction to access the existing pedestrian/cyclist access into Seven Oaks. Cyclists will be able to cross the road at Griffith Downs using the proposed toucan crossing, once the road is crossed, they can use the short section of two-way cycle track to safely access Seven Oaks without conflicting with southbound cyclists.

The existing flowers and 'Griffith Downs' signage will remain unaffected. The proposed cycle lane will encroach on the road side of this green area by a maximum of 2m, the remainder of the green area will remain unaffected.

As indicated in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 05 Landscape General Arrangement drawings, Sheet 28 two trees will be removed as part of the Proposed Scheme as shown in Figure 2.2. An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4 of the EIAR. As per the Tree Schedule in that report, the two trees to be removed are:

- An oak tree (Tree Number T0591) which has been assessed as a Category C tree (low value and conservation); and
- A Norway maple (Tree Number T0602) which has been assessed as a Category U tree (not suitable for retention). This tree has been recommended for felling and replacement due to its condition, rather than as a result of the Proposed Scheme.

As shown in the Landscape General Arrangement drawings, there are four new trees (*Prunus Serrula*) and an area of species rich grassland proposed at the corner of the Bonnington Hotel site adjacent to the Seven Oaks entrance in close proximity to the two trees proposed to be removed.

Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. With respect specifically to the impacts on “scattered trees and parkland” the Chapter states that there is no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.19 and Table 12.20 respectively. Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact as a result of the removal of trees and vegetation on the streetscape, with the Construction Phase impact across the Proposed Scheme assessed as Negative, Moderate / Significant, Temporary / Short-Term (Section 17.4.3.2.9 and Table 17.7). The Chapter assesses the residual impact of tree and vegetation loss at 15 years post-construction in order to allow for the establishment of the proposed landscaping measures, with the residual Operational Phase impact reducing to Negative, Slight / Moderate, Long-Term over time.

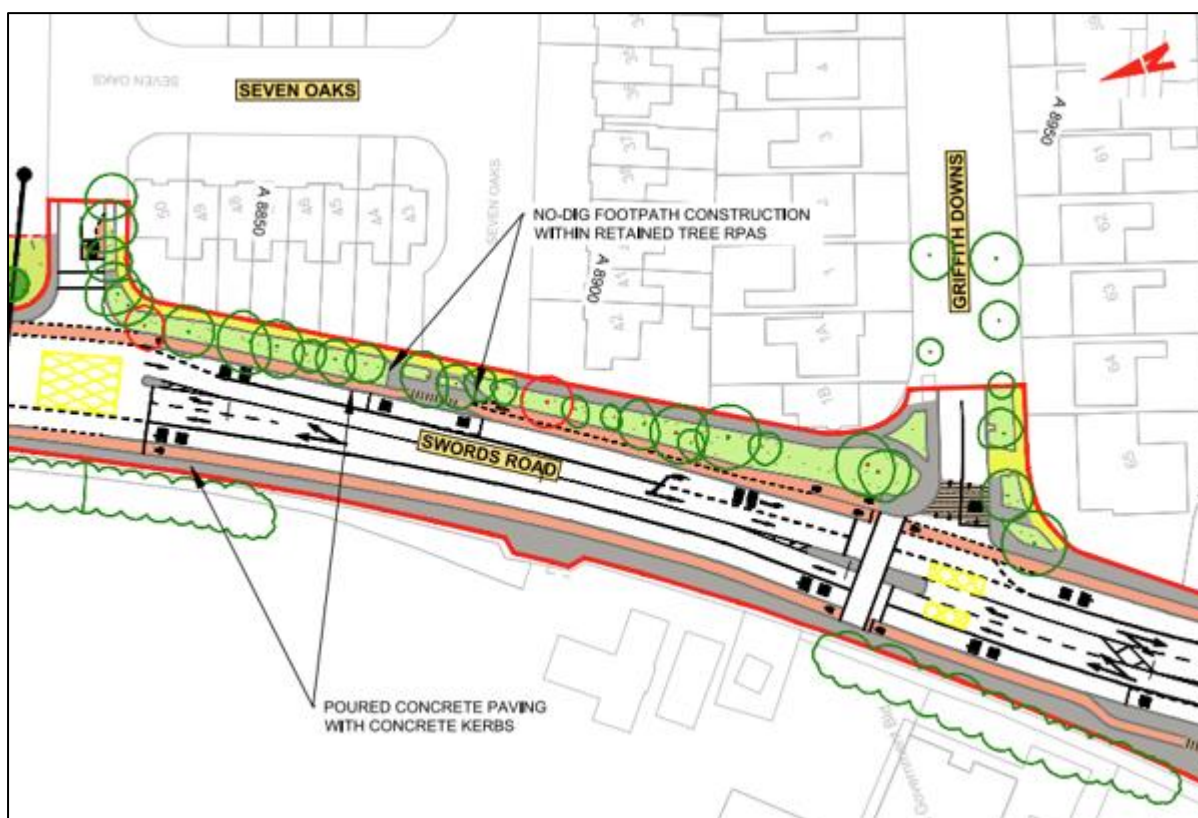


Figure 2.11 Extract from Landscape General Arrangement Drawing (Sheet 28) which indicates existing trees to be removed in red

2.1.4.15 No communication from parties to inform us of the plan

Summary of issue raised

One submission states that there has been lack of communication about the plans with the local community at Seven Oaks and that this demonstrates a lack of consideration.

Response to issue raised

Section 1.6.2 Emerging Preferred Route Option Consultation of Chapter 1 Introduction of Volume 2 of the EIAR states the following:

‘The EPR consultation phase for the Proposed Scheme occurred from 14 November 2018 to 29 March 2019.

The public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post. One consultation event was held in which the public were able to view the proposals and discuss them directly with members of the BusConnects Infrastructure team. It was held at the Carnegie Court Hotel on the 11 January 2019.

In addition to the open public consultation, a Community Forum was established with the aim of facilitating two-way communication between local communities and the BusConnects Infrastructure team.

Two Community Forum meetings took place, on the 8 January 2019 in Swords and 28 January 2019 in Whitehall, where the Community Forum was provided with an update on the design for the Proposed Scheme and given the opportunity to ask questions of the project team and provide feedback.

In addition, there have been meetings held with residents' groups to provide updates on aspects of the Proposed Scheme. The BusConnects Infrastructure team has made the presentations given at the Community Forum and Residents Group meetings available to the public on the BusConnects website (www.busconnects.ie).

Letters were delivered to each individual potentially impacted property affected by the Proposed Scheme that, in addition to providing information about the Proposed Scheme, offered a one-to-one meeting to discuss the likely impact, issues and concerns. Each potentially impacted property was also sent a copy of the Emerging Preferred Route brochure for the Swords to City Centre Core Bus Corridor. In total, 253 letters were delivered, with 17 property owners availing of the one-to-one meetings.

There were a total of 767 submissions made in respect of the Proposed Scheme during the Emerging Preferred Route consultation phase.'

Section 1.6.3 Preferred Route Option Consultations of Chapter 1 of the EIAR states:

'A Community Forum meeting took place in Whitehall on the 17 September 2019 for community representatives and public representatives. This Community Forum was held in advance of the launch of a second round of public consultation, with the aim of keeping the public and their representatives updated on the design process between the first and second consultation. The meeting involved the presentation of an updated overview of the design for the Proposed Scheme, outlining several new design options being developed for consideration in specific areas where issues were identified following review of the submissions from the first non-statutory public consultation. Again with the use of an independent chairperson, the community and public representatives were given the opportunity to ask questions of the BusConnects Infrastructure team and provide feedback.

1.6.3.2 Preferred Route Option Consultation Overview

The PRO, or second round, of public consultation took place from 4 March 2020 to 30 April 2020. The public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post. There was one consultation event held at Whitehall on 11 March 2020 for CBC01 Clongriffin to City Centre and CBC02 Swords to City Centre. Public submissions were accepted until 17 April 2020 in which the public were able to view the proposals and discuss them directly with members of the BusConnects Infrastructure team. Due to the COVID-19 pandemic, this event had to end earlier than scheduled and all further planned consultation events scheduled after 12 March 2020 were postponed. In deference to the submissions which had already been received, the decision was made not to cancel the consultation. However, due to the introduction of COVID-19 public health restrictions, further on-site or face-to-face public engagement was restricted.

Following the EPR submissions review of the proposals, there were some changes to the number of properties that were potentially impacted. In total, 298 letters were prepared and delivered on 2 March 2020 to properties either continuing to be potentially impacted; newly potentially impacted; or no longer potentially impacted, with recipients invited to schedule meetings with the BusConnects Infrastructure team if they wished to discuss the proposals on an individual basis.

Consequently, presumably due to the COVID-19 impacts, there were just 31 submissions received relating to the Proposed Scheme, and no landowner meetings were requested. The submissions ranged from individual submissions by residents, commuters and local representatives, to detailed proposals from various associations and private sector businesses.

Design development and planning for the Proposed Scheme continued, and the BusConnects Infrastructure team determined to run an additional round of public consultation in November 2020 to

complete the non-statutory public engagement prior to finalising the PRO. The third round of public consultation took place from 4 November 2020 to 16 December 2020.

With the continuing effect of the COVID-19 pandemic and associated restrictions, the third Public Consultation was held largely virtually. A virtual consultation room for the Proposed Scheme was developed and virtual access to the room was facilitated. Along with offering a call back facility, the room provided a description of the Preferred Route from start to finish with supporting maps and included information of all revisions made since the previous rounds of public consultation, as well as other supporting documents. Over the six weeks of the consultation, 234 unique users visited the virtual information room for the Proposed Scheme. A third Community Forum virtual consultation call was also held on 16 November 2020, as part of the third round of non-statutory consultation.

As per the previous rounds, those properties continuing to be either potentially impacted; newly potentially impacted; or no-longer potentially impacted were written to directly to receive information on the consultation in advance of any wider publication of the proposals. One-to-one meetings were offered via Zoom or over the phone for those who wished to discuss the proposals further in relation to their own property with the minutes being recorded as part of the consultation process. In total, 243 letters were sent between 1 and 3 November.

As per previous rounds the public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post.

In addition, virtual meetings were resumed with residents' groups to provide updates on aspects of the Proposed Scheme.

There were 231 submissions over the second and third phase of public consultation (March / April 2020 and November / December 2020). Key issues raised are presented in the following sections.'

The issues raised during the third public consultation were considered in the further development of the PRO. This two-way cycle track was implemented following feedback received during the non-statutory public consultations of the Proposed Scheme. A suggestion was made to create a cycle route through The Cloisters/Hampton Lodge and Griffith Downs as this may take cyclists off Gracepark Road, which is described as unsuitable for cyclists. This suggestion is documented in Appendix C Public Consultation Submissions Reports – 2nd and 3rd Non-Statutory Public Consultation of the Preliminary Design Report provided as part of the supplementary information.

2.1.4.16 Temporary Accommodation

Summary of issue raised

One submission states that no attempt has been made to assist the residents with relocation to an alternative site away from Seven Oaks during the works. The respondents are concerned that the works will affect their ability to get to the hospital for emergency on call work and shift work. Without relocation they are worried that there will be sleep disruption effecting their ability to perform in a safe manner.

Response to issue raised

As mentioned in Section 2.1.4.5, no road closures are proposed in the vicinity of Seven Oaks for the duration of the works so access and egress from their home will not be impacted by the proposed Scheme. With regards to construction duration at this location, Section 5.3.4 of Chapter 5 Construction of Volume 2 of the EIAR describes the construction works in the various sub-sections of Section 4 of the Proposed Scheme between Shantalla Road to Botanic Avenue. Section 4a: Shantalla Road to Griffith Avenue has an expected construction duration of approximately 18months. *'The construction activities at Section 4a will comprise pavement reconstruction, widening, resurfacing of the roads, and construction of new footpaths, and cycle tracks, and new kerbs. Construction activities will also consist of additional signage, new road markings, new and amended traffic signal infrastructure, new street furniture and landscaping works. A principal retaining wall (RW029), will be constructed along Swords Road, at Highfield Hospital, approximately 80m in length and maximum 2m in retained height. A minor retaining wall (RW019) will be constructed at the Church of the Holy Child carpark, north of Collins Avenue Junction, approximately 140m in length. A minor retaining wall (RW020) approximately 150m in length will be constructed at opposite Iveragh Road. A minor*

retaining wall (RW021) will be constructed at Plunket College, approximately 35m in length. Boundary walls, and fencing will be constructed along Swords Road, and multiple gates will be relocated. The Construction Compound (SW4) will be located at Collins Avenue Junction. Various utility diversions and/or protections will be required; including electricity overhead lines and underground cables, water distribution, gas mains and telecommunications infrastructure.'

Regarding noise impacts, the study area for potential noise and vibration impacts during both Construction and Operational Phases relate to areas of potentially impacted noise sensitive locations (NSLs), which include areas where people spend significant periods of time and where concentration, sleep and amenity are important considerations. The key noise and vibration sensitive receptors in the vicinity of the Swords Road through Santry and Whitehall are predominantly residential dwellings lining the road and within 50m to 100m of the road. There are also some educational and health facilities in the area. It should also be noted that there were three attended monitoring locations in the area for the noise survey undertaken to inform the EIAR, namely near the entrance to Seven Oaks (Monitoring Reference CBC0002ANML015), at Plunkett College (Monitoring Reference CBC0002ANML014), and on the corner of R132 Drumcondra Road Upper and R102 Griffith Avenue (Monitoring Reference CBC0002ANML016). These locations are shown in Figure 9.2 Sheet 7 in Volume 3 of the EIAR, as shown below.



Figure 2.12 Extract from Figure 9.2 Noise Monitoring Locations (Sheet 7) which shows local noise monitoring locations

Section 9.5 of Chapter 9 of the EIAR describes all proposed mitigation measures for the control of noise impacts during both the Construction and Operational Phases. The mitigation measures are also described in Chapter 22 (Summary of Mitigation and Monitoring Measures) in Volume 2 of the EIAR, and in Appendix A5.1 (Construction Environmental Management Plan) in Volume 4 of the EIAR. As the impact assessment concluded that the Operational Phase noise impacts will not be significant (Negative, Moderate to Positive, Imperceptible), there are no specific mitigation measures required during the Operational Phase. Mitigation measures during the Construction Phase include:

- Selection of quiet plant;
- Noise control at source;

- Screening;
- Restrictions on hours of work;
- Liaison with the public; and
- Monitoring.

In terms of construction, Section 9.5.1 of the EIAR describes the predicted Construction Phase impacts following the implementation of those mitigation measures. All Construction Phase impacts will be temporary. The significance of the predicted impacts is mapped in Figure 9.3 in Volume 3 of the EIAR, with the area around Seven Oaks shown on Sheet 4. Figure 9.3 shows the impact in that area as being Imperceptible to Moderate.

In terms of operational impact, Section 9.5.2 of Chapter 9 of the EIAR states that once operational, there will be a Negative, Moderate to Positive, Imperceptible impact along the Proposed Scheme, with the Seven Oaks area specifically being Imperceptible / Positive to Not Significant as shown in Sheet 4 of Figure 9.4 (Opening Year 2028 Traffic Noise Impact Summary) and Figure 9.5 (Design Year 2043 Traffic Noise Impact Summary) in Volume 3 of the EIAR. Therefore, as outlined above, no further noise mitigation measures have been proposed.

As previously stated, the move towards electric and hybrid city bus fleets limits the long-term noise of buses, reducing noise pollution within the Santry – Whitehall area at Seven Oaks. The impact assessment as described in Chapter 9 of the EIAR concludes that *'There are no significant residual Operational Phase noise or vibration impacts associated with the Proposed Scheme'*.

2.1.4.17 Impact on viability and obtrusion to home

Summary of issue raised

One submission is concerned that the designs will cause a severe negative impact on the viability and obtrusion of the respondent's home. Comment that no amount of money can compensate for the loss and damages to them. The submission is concerned there has been no reassurance regarding works that may be required to the home such as sound insulation, erections required to maintain privacy and safety or damages.

Response to issue raised

As mentioned in Sections 2.1.4.2 and 212.1.4.11 of this report, the proposed road layout near Seven Oaks (bus lanes and traffic lanes) will be located in the exact same position as the existing situation for the most part and therefore will not be located any closer to private property. There is a stretch of approximately 20m from Ch 8930 to 8950, see Figure 2.6, where the kerb line will be moved a maximum of 0.6m closer to the existing properties. The existing boundary wall outside the properties is retained as part of the Proposed Scheme.

Regarding the noise impact of the Proposed Scheme, Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration provides details of the assessment undertaken for the Operational Phase of the Proposed Scheme in respect of the potential noise and vibration impacts associated with altered traffic flows, realigned traffic lanes and displaced traffic flows.

Section 9.4.4.1.1.5 states that *'Along the majority of roads of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to be Indirect, Positive, Imperceptible to Slight to Moderate, and Short to Medium Term to Negative, Moderate, and Short to Medium term once the Proposed Scheme becomes operational.'* It goes on to state that *'There are a small number of roads in the overall study area where there are potential initial significant impacts. These are defined as roads with a traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.'* Table 9.45 lists these roads and Swords Road is not included in Table 9.45.

Section 9.5.2.1 summarises the change in road traffic noise in the operation phase as follows: *'The impact assessment has determined that there are no calculated significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme. The range of noise level changes and overall noise levels calculated do not require any specific noise mitigation measures to be incorporated into the Proposed Scheme.'*

In respect of electric buses, as discussed in Section 9.4.4.1.1.4 of Chapter 9, during the proposed Opening Year (2028), the NTA forecast is for 94% of the city bus fleet to be EVs or HEVs. For the Design Year (2043), the city bus fleet is forecast to be 100% electric. The operation of electric and hybrid buses will eliminate ICE noise from buses accelerating, decelerating and idling at bus stops which is the dominant noise source.

In addition, the characteristic of noise from EVs is subjectively less intrusive compared to those with ICE's and is masked to a much greater extent by surrounding road traffic. It is noted the bus stops along the Proposed Scheme will be used by other bus operators which may not transition to EV and HEVs over the same period as the city bus fleet. The volume of these buses along the Proposed Scheme will, however, be significantly less than the city bus fleet and hence, noise levels associated with these areas will not generate significant noise levels over the prevailing noise environment.

With respect to Opening Year and Design Year traffic noise impacts, as noted in Figures 9.4 and 9.5 in Volume 3 of the EIAR, an Imperceptible / Positive noise impact is forecast along Seven Oaks and along Swords Road adjacent to Seven Oaks and Griffith Downs.

With respect to construction traffic noise impacts, as noted in Figure 9.3 in Volume 3 of the EIAR, a Moderate noise impact is forecast along Seven Oaks, while an Imperceptible / Positive noise impact is forecast along Swords Road adjacent to Seven Oaks and Griffith Downs.

The EIAR contains a comprehensive set of mitigation measures to minimise construction phase impacts, including noise impacts. Construction noise mitigation measures are set out in Chapter 9 in Volume 2 of the EIAR (and are also summarised in Appendix 5.1 (Construction Environmental Management Plan) in Volume 4 of the EIAR).

Section 9.5.1.1 of EIAR Volume 2 Chapter 9 states that: *'The appointed contractor will be required to take specific noise abatement measures to the extent required and comply with the recommendations of BS 5228-1 (BSI 2014a) and S.I. No. 241/2006 - European Communities (Noise Emissions by Equipment for Use Outdoors) (Amendment) Regulations 2006.'* It also states that *'During the Construction Phase, the appointed contractor will be required to manage the works to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228-1 (BSI 2014a).'*

Section 9.5.1.1 also states that *'BS 5228-1 includes guidance on several aspects of construction site practices, which include, but are not limited to:*

- *Selection of quiet plant;*
- *Control of noise sources;*
- *Screening;*
- *Hours of work;*
- *Liaison with the public; and*
- *Monitoring.'*

Specifically, Section 9.5.1.1. states that *'The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas (i.e. based on the construction threshold values for noise and vibration set out in Table 9.8: and Table 9.11).'* [Note - Table 9.8 of Section 9.2.4.1 of EIAR Chapter 9 sets out the Construction Noise Threshold (CNT) Levels for the Proposed Scheme].

Section 9.5.1.1.4 of Chapter 9 sets out the proposed working hours and states: *'It is envisaged that generally construction working hours will be between 07:00hrs and 23:00hrs on weekdays, and between 08:00hrs and 16.30hrs on Saturdays. Night-time and Sunday working will be required during certain periods to facilitate street works that cannot be undertaken under daytime / evening time conditions.'*

However, the contractor will also have to take account of sensitive receptors (in particular any nearby residential areas). Section 9.5.1.1.4 goes on to state: *'The planning of such works will take consideration of sensitive receptors, in particular any nearby residential areas. Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant items will be considered with respect to their potential to*

exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g. road widening and utility diversions or activities with similar noise levels identified in Table 9.42), other construction activities will be scheduled to not result in significant cumulative noise levels'.

In summary the noise abatement measures set out in the EIAR that the appointed contractor will be required to put in place to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228-1 will result in appropriate and adequate mitigation measures in respect of construction noise impact at this location during construction.

2.1.4.18 Route selection could be more suitable located elsewhere

Summary of issue raised

One submission has suggested that the proposed road selection could be more suitably located elsewhere, where services could be more adequately provided to protect the health and safety and environment along Seven Oaks. The submission contended that the proposed plans will not supply adequate relief for traffic in comparison to the level of disruption. Concern that other solutions have not been explored. A simple solution is proposed in the submission of priority traffic lights for buses over cars to avoid the need to widen the road.

Response to issue raised

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 of EIAR Chapter 3 Reasonable Alternatives provides a detailed summary of this, with further details provided in the Preferred Route Option Report, including Appendix H (the Swords CBC Feasibility and Options Assessment, February 2018), provided in the Supplementary Information submitted with the application for the Proposed Scheme.

The Proposed Scheme reallocates road space for bus priority and cycling infrastructure. It will provide the infrastructure to deliver a modal shift from private car usage to sustainable transport. The Proposed Scheme also provides infrastructure that will support sustainable transport and will improve the safety of road users through junction improvement and the segregation of road vehicles and active travel modes, where possible. The design of each junction has given priority to pedestrian, cycle and bus movements. Junctions have been designed to ensure a high level of comfort and priority for sustainable modes of travel e.g. walking, cycling and public transport by prioritising the space and time allocated to these modes within the operation of a junction.

In terms of alternative solutions, Chapter 3 of the EIAR sets out the reasonable alternatives studied and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route.

'For urban transport systems, bus-based transport is the appropriate public transport mode for passenger demand levels of up to 4,000 passengers per hour per direction. (UITP 2009). Light rail provision would generally be appropriate to cater for passenger demand of between 3,500 and about 7,000 passengers per hour per direction. Passenger demand levels above 7,000 passengers per hour per direction would generally be catered for by heavy rail or metro modes, which would usually be expected to serve a number of major origins or destinations along a Particular corridor. In the case of both the bus and light rail modes, higher levels of passenger demand than the above stated figures can be accommodated under specific conditions.

The development of the prior GDA Transport Strategy considered the likely public transport passenger demand levels across the region using the NTA's transport model and took into account the other studies referenced above, in addition to studies that had been carried out to investigate a potential light rail scheme within the area of this corridor. Likely passenger flows were identified to be within the capacity of bus transport, without reaching the quantum of passenger demand which would support the provision of a higher capacity rail solutions in addition to a Metrolink. Section 3.2.1 set out various studies undertaken for the prior GDA Transport Strategy. Arising from these studies and the specific assessment and transport modelling work undertaken for the prior Strategy, it was concluded that a

bus-based transport system would be the proposed public transport solution in the corridor of the Proposed Scheme. The proposed transport solution would be supplemented by Metro, to provide more passenger capacity and enhanced interchange between the Luas Red and Green Line Services, proposed Metrolink Station at Fosterstown, Sligo/Maynooth Line Heavy Rail Services at Drumcondra Station and the Suburban Interchange between the Orbital and Radial Routes at Coolock Lane. It was considered that there would be insufficient demand to justify the provision of an additional light rail alternative beyond what is proposed above, particularly given the low to medium density nature of development in this corridor.

Similar to BRT, the light rail option would be worse for the environment in terms of construction impacts, including flora and fauna, heritage, air and noise, compared to the CBC proposal. Light rail requires continuous unbroken physical lane infrastructure to achieve high-priority. This would involve significantly more land take and potentially involve demolition of buildings at pinch-points. In the case of the CBC proposals, bus-priority can be achieved through short lengths at pinch-points by the use of signal controlled priority.

Given the consideration of light rail provision, and the level of likely public passenger use along this overall corridor assessed in the transport modelling work, the development of the prior GDA Transport Strategy identified that a Metro solution would be economically justified within the area covered by this corridor. Therefore, it is intended to develop the light rail Metro system along this corridor through the implementation of MetroLink.

Arising from the various studies and analysis that had been carried out, and the specific assessment and transport modelling work undertaken for the prior GDA Transport Strategy, it was concluded that a high quality bus-based transport system, supplemented by the implementation of MetroLink, would be part of the proposed public transport solution in the corridor of the Proposed Scheme. This is because the development of an underground Metro would not remove the need for additional infrastructure to serve the residual bus needs of the area covered by the Proposed Scheme, nor would it obviate the need to develop the cycling infrastructure required along the route of the Proposed Scheme.'

With respect to congestion charging, Section 3.2.8 of the EIAR states that a key success factor of demand management is greater use of alternative travel modes, in particular public transport. In the case of Dublin, the existing public transport system does not currently have sufficient capacity to cater for larger volumes of additional users.

'In advance of a significant uplift in overall public transport capacity in the Dublin metropolitan area, the implementation of major demand management measures across that area would be unsuccessful. Effectively constraining people from making journeys by car and requiring them to use other modes, without those modes having the necessary capacity to cater for such transfer, would not deliver an effective overall transport system. Instead, the capacity of the public transport system needs to be built up in advance of, or in conjunction with, the introduction of major demand management measures in the Dublin metropolitan area. This is especially true in the case of the bus system where a major increase in bus capacity through measures such as the Proposed Scheme would be required for the successful implementation of large scale demand management initiatives.

While the foregoing addresses the dependency of demand management measures on public transport capacity, it is equally correct that the provision of greatly enhanced cycling facilities will also be required to cater for the anticipated increase in cycling numbers, both in the absence of demand management measures and, even more so, with the implementation of such measures. Demand management initiatives by themselves will not deliver the level of segregated cycling infrastructure required to support the growth in that mode. Consequently, the progression of demand management proposals will not secure the enhanced safe cycling infrastructure envisaged under the Proposed Scheme.'

Finally it is noted that park and ride and cashless fares both form part of the broader BusConnects programme and may be implemented to complement improvements to the overall bus system, including the Proposed Scheme infrastructure.

2.2 Proposed Scheme at Santry

2.2.1 Description of Proposed Scheme at this Location

As stated in Section 4.5.3.1 of Chapter 4 of the Proposed Scheme Description of Volume 2 of the EIA:

'Signal Controlled Bus Priority as well as localised narrowing of the cycle track will be provided between Northwood Avenue and Coolock Lane to mitigate impact on properties and the Santry Demesne historical wall and proposed National Heritage Area. A new bus terminus will be provided in the green space opposite the group of retail premises at the junction of the Swords Road and Coolock Lane.

Between Coolock Lane and the entrance to Omni Park Shopping Centre, it is proposed to extend continuous bus lanes and cycle tracks in both directions. This will require some limited land take from adjacent properties on both sides of the existing road and the removal of existing on-street car parking.

Between the Omni Park Shopping Centre entrance and the Shantalla Road junction it is proposed to maintain the two-way general traffic lanes and introduce continuous bus lanes in both directions. A segregated footpath will be maintained on either side. This will require some land take from adjacent properties on both sides of the existing road in Santry Village and the removal of existing on-street car parking. Off street parking is proposed at residential properties between the shopping centre and Shanowen Road to offset the loss of on-street parking.

It is proposed to redirect cyclists through Lorcan Road and Shanrath Road as a Quiet Street. This cycle route commences at the junction with Omni Park Shopping Centre and connects with the Swords Road at the junction with Shantalla Road. A two-way cycle track is proposed to connect the Quiet Street from Shanrath Road through the Shanrath junction, connecting to the existing Quiet Street west of the off-slip.

A dedicated bus lane is proposed inbound along the Shantalla Road Bridge and a general traffic lane is maintained in both directions. The Shantalla Road junction will be upgraded to accommodate the bus lane and cycle and pedestrian movements.'

An extract from General Arrangement Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIA are included in Figure 2.13 to Figure 2.19.

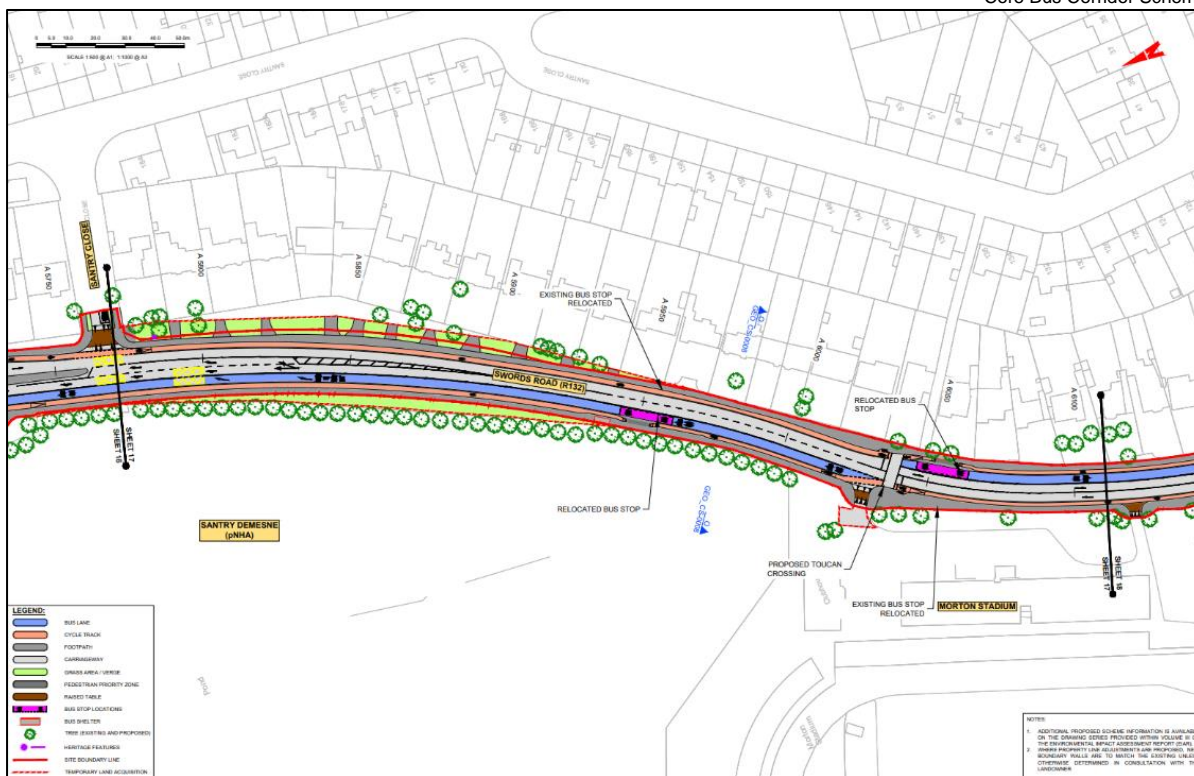


Figure 2.13 Extract from General Arrangement Drawing (Sheet 17)

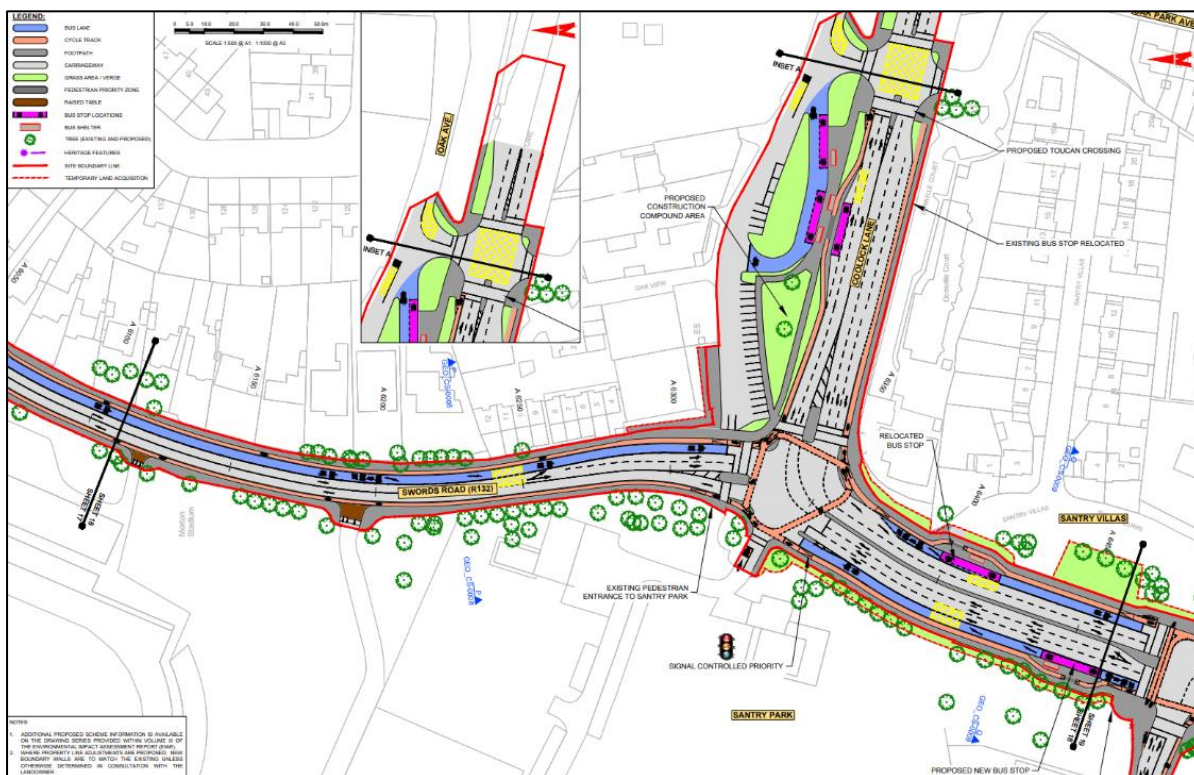


Figure 2.14 Extract from General Arrangement Drawing (Sheet 18)

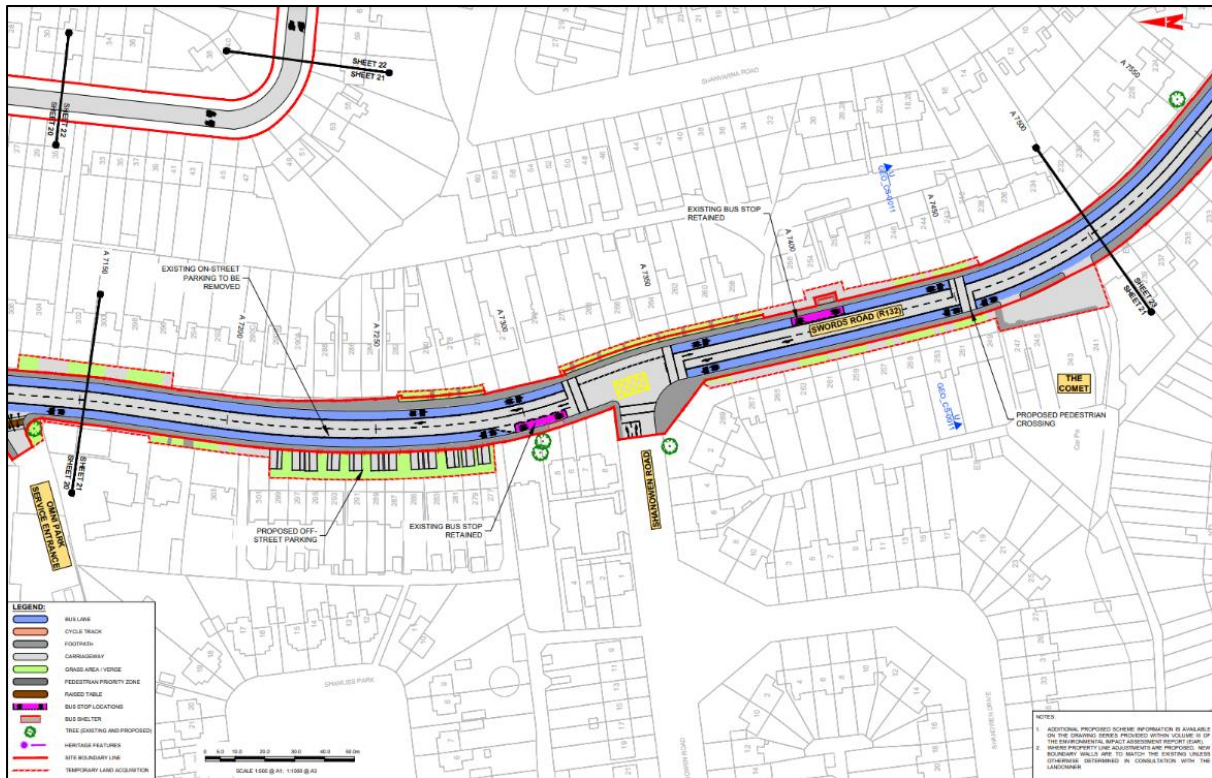


Figure 2.17 Extract from General Arrangement Drawing (Sheet 21)

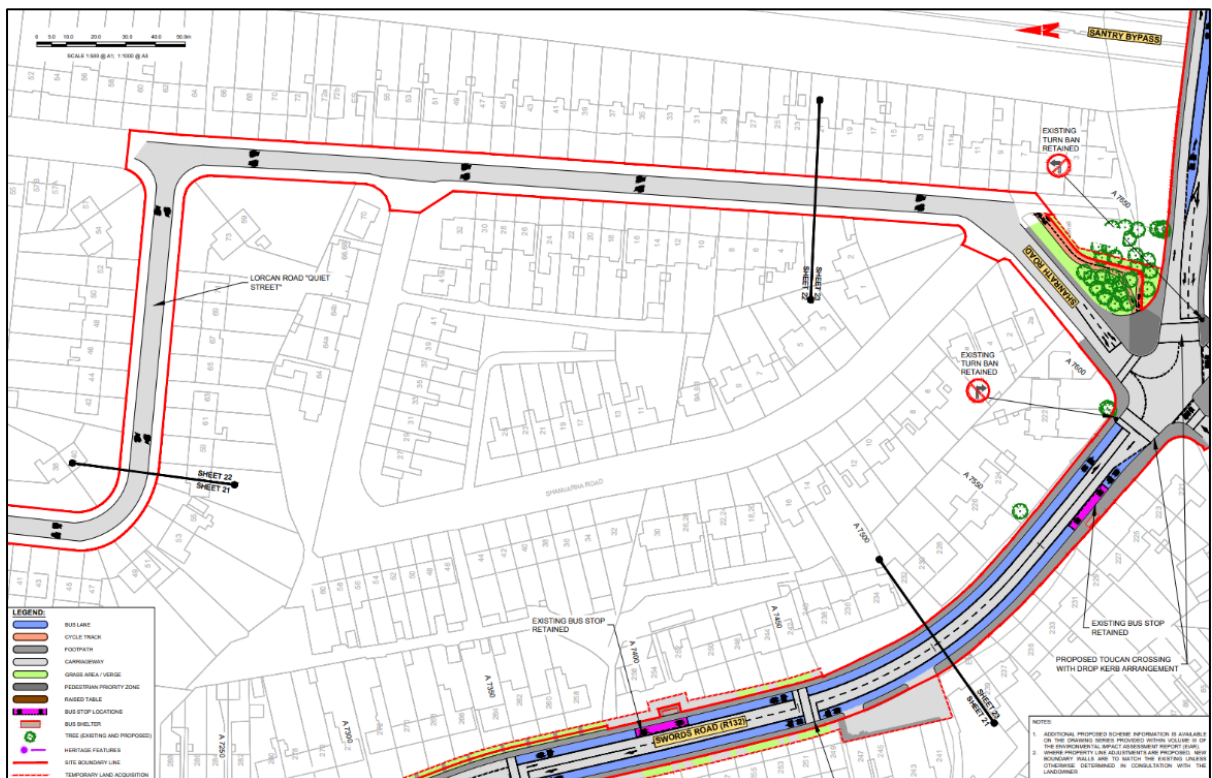


Figure 2.18 Extract from General Arrangement Drawing (Sheet 22)

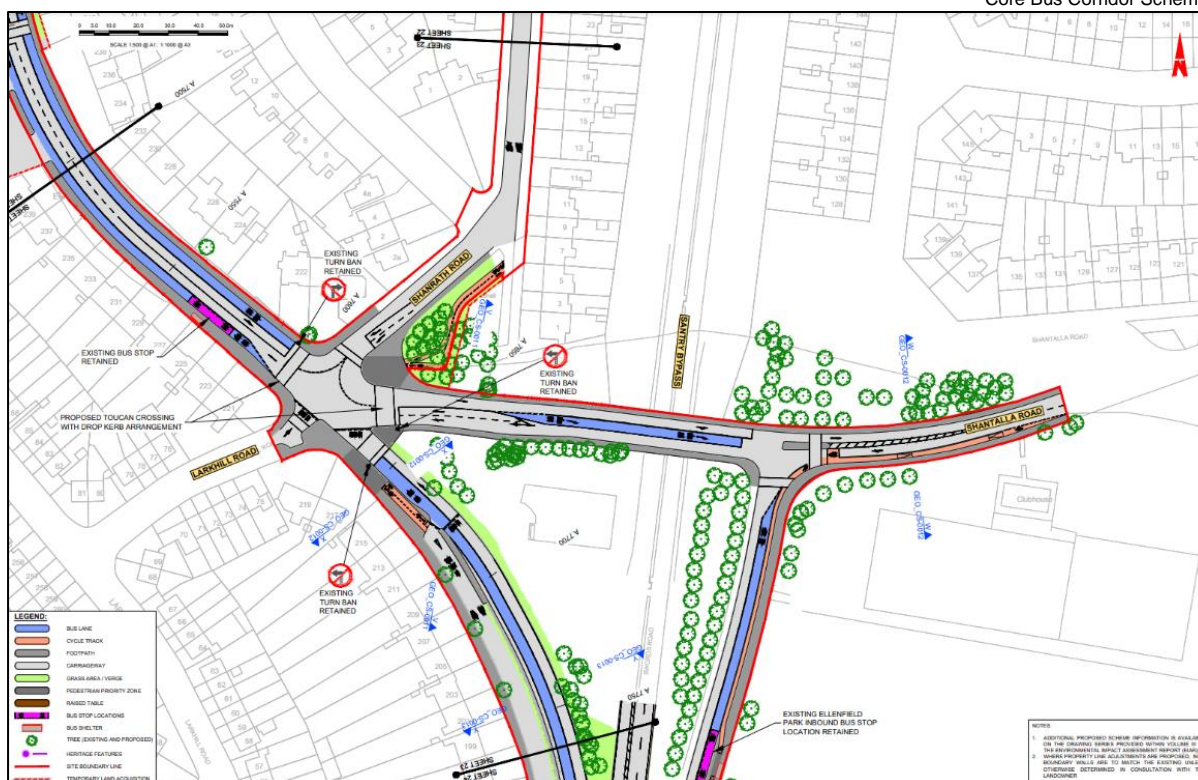


Figure 2.19 Extract from General Arrangement Drawing (Sheet 23)

2.2.2 Overview of Submissions Received

Table 2.2 below lists the 9 individual submissions made in respect of the Proposed Scheme at Santry.

Table 2.2 Submissions Made in Respect of Santry

No	Name	No	Name	No	Name
12	Deirdre and Aidan O'Callaghan	29	Karen Wade	46	Róisín Shorthall
22	Ian Croft	36	Michelle Bannon and Ranjith Techell	47	Santry Forum
26	Jerry and Lorraine Crowley	41	Oak View Residents Association	51	MKN Investments Limited

A number of issues were raised and these are listed below and described in Section 2.2.3 and 2.2.4 below.

Common Issues Raised

1. Clarification regarding removal of trees and existing boundary at Santry Bypass junction (Swords Road (R132)/Larkhill Road/Shanrath Road junction)
2. Opposition to the removal of trees at Swords Road (R132)/Larkhill Road/Shanrath Road junction
3. Objection to development of a bus terminus on the green space at Coolock Lane
4. Integration with Omni Park Shopping Centre
5. Opposition to the 'quiet street' cycle lane along Swords Road.

Other Issues Raised

1. Removal of trees and existing barriers/guardrails at Whitehall Junction and request for further trees to be planted in various locations through Santry

2. Request for footpath to be upgraded along the Swords Road Slip Road
3. Light sequence at the Swords Road (R132)/Larkhill Road/Shanrath Road junction
4. Request for paving area and wall at the Comet to be upgraded
5. Request for upgrade and removal of existing barriers/guardrails at Santry Bypass Junction
6. Request for footpath at left hand side of the corner of Shanowen Road and Swords Road to be widened
7. Request for existing walls to be upgraded
8. Request for new signage on Collins Avenue West
9. Environmental impact of the scheme on Santry
10. Impact on local community of the widening of the R132
11. Public consultation process
12. Demolition
13. The scheme proposals do little in the way of public realm improvements
14. Connectivity with the Santry River Restoration and Greenway project
15. Clarification on plans for the junction of Santry Avenue and Swords Road
16. Congestion at Griffith Avenue
17. Inadequate consideration of the needs of older people and those with a disability
18. Bus stop locations
19. Suggestion to remove bank of earth adjacent to footpath in front of Magenta Hall
20. Suggestion to remove on street parking
21. Suggestion to widen footpath
22. Integration with development lands at Omni Living SHD

2.2.3 Common Issues Raised and Responses

2.2.3.1 Clarification regarding removal of trees and existing boundary at Santry Bypass Junction (Swords Road (R132)/Larkhill Road/Shanrath Road junction) and opposition to their removal

Summary of issue raised

A number of submissions request to identify exactly which trees will be removed on the embankment lands at the slip road at the Swords Road (R132)/Larkhill Road/Shanrath Road junction on map number 1101(08).1i and 1101(09).2i and how many will be replaced. It was considered that it has taken almost 20 years for these trees and shrubs to reach maturity. Clarification is also sought on whether the existing railing and wall between Swords Road and the Santry Road Slip Road will be retained.

Response to issue raised

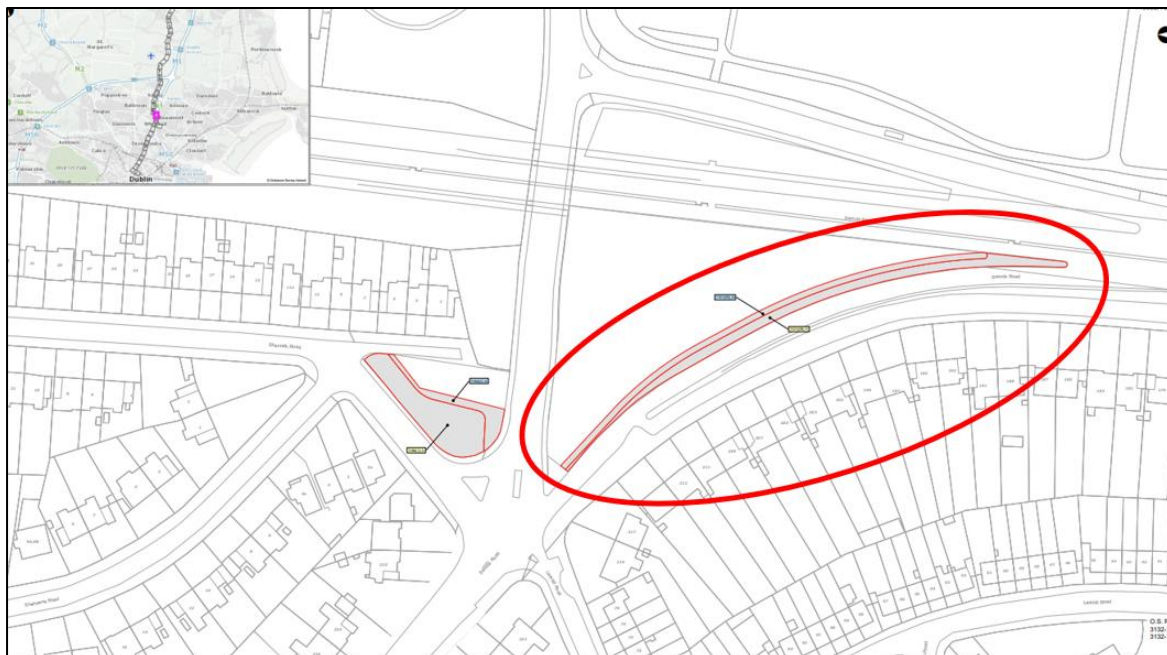


Figure 2.20 Extract from Deposit Maps indicating plots 1101(08).1i and 1101(09).2i (Sheet 22)

The existing general traffic slip road at this location is being widened to provide a bus lane and a general traffic lane as indicated in Sheet 23 of 37 of the General Arrangement Drawings within Volume 3 of the EIAR (accompanying Chapter 4 Proposed Scheme Description). The Proposed Scheme will encroach past the existing kerb line by approximately 3m at the widest point. Approximately 1-2m of this width contains no trees due to the presence of a grass verge and vehicle restraint system. The extents of tree loss is depicted in Landscape General Arrangement Sheet 23 of 37 (see Figure 2.21) of the EIAR Volume 3 Figures Chapter 4 Proposed Scheme Description drawings, as indicated by the red lines in this figure, a small portion of the overall area of trees and vegetation is highlighted for removal.

An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4 of the EIAR. As per the Tree Schedule in that report, the removals at that location are as follows:

- An alder tree (Tree Number T0405) which has been assessed as a Category C tree (low value and conservation); and
- Partial removal of a mixed species group (Tree Number G0404) which is described as a '*predominantly comprising lime that form merged spreading canopy at corner of junction*', which has been assessed as a Category B group (moderate value and conservation). Approximately 409m² of this tree group will require removal.
- Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. With respect to the various woodland and tree habitats assessed, the Chapter states that there are no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.19 and Table 12.20 respectively. Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact as a result of the removal of trees and vegetation on the streetscape, with the Construction Phase impact across the Proposed Scheme assessed as Negative, Moderate / Significant, Temporary / Short-Term (Section 17.4.3.2.9 and Table 17.7). The Chapter assesses the residual impact of tree and vegetation loss at 15 years post-construction in order to allow for the establishment of the proposed landscaping measures, with the residual Operational Phase impact reducing to Negative, Slight / Moderate, Long-Term over time.

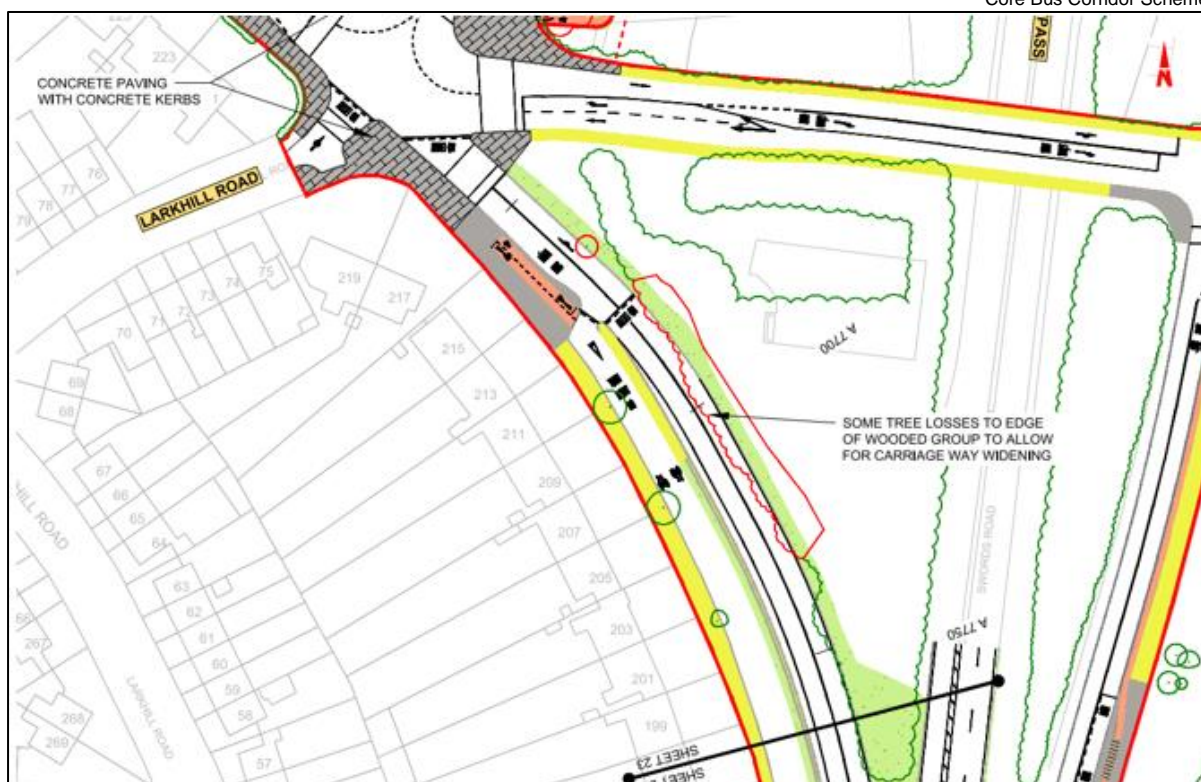


Figure 2.21 Proposed Landscape General Arrangement at the Slip Road (Sheet 23)

The existing boundary wall between the slip road and Swords Road is not impacted as part of the Proposed Scheme and will be retained.

2.2.3.2 Objection to development of a bus terminus on the green space at Coolock Lane

Summary of issue raised

A number of submissions object to the development of a bus terminus on the green space in Santry. Respondents are concerned about the potential adverse impact this development may have on the existing traffic congestion issues in the area. In particular with the convergence of Oak Avenue with traffic from Centra and Oak View housing estate. The proposed terminus is adjacent to two housing developments which have already been approved.

It is also noted that there is a problem with overnight parking of trucks and vans at this location, which obstruct visibility for residents and customers.

There are also concerns about the environmental impact as a direct result of the terminus.

A suggestion was made to relocate the terminus to another Centra supermarket with an undeveloped green space adjacent with no dwellings or residents located east of the Coolock/Santry roundabout.

Response to issue raised

At this location a terminus for the D4 route is proposed in the green space at the junction of Coolock Lane and the Swords Road. A terminus is a mechanism for buses on the D4 route to turn around and go back out on their route.

The bus infrastructure for the Proposed Scheme was assessed in Chapter 6 Traffic and Transport in section 6.4.6.1.4.3:

This assessment outlines the changes to bus stop infrastructure along Section 3 of the Proposed Scheme. It assesses any changes in the number or location of stops, and any changes to bus stop facilities. There are currently ten bus stops along Section 3 of the Proposed Scheme – five 'inbound' stops towards the City Centre and five 'outbound' stops towards Santry and Dublin Airport.

Under the proposals, there will be a total of 12 stops – six ‘inbound’ and six ‘outbound’, with one new inbound stop and one new outbound stop. Inbound, a new stop will be provided south of the R132 / Coolock Lane Junction, close to stop 1624. Outbound, a new stop will be provided north of the R132 / Santy Avenue Junction, close to stop 1624.

The proposals at this location are not anticipated to result in any change to parking demand or volumes of traffic.

The environmental impact of the terminus is assessed in the EIAR with respect to all relevant environmental topics. It has specifically been assessed as follows:

- In Chapter 12 (Biodiversity) in Volume 2 of the EIAR, Section 12.4.3.2.1 regarding the habitat loss and fragmentation impacts of the Construction Phase states that *‘It is also proposed to alter a green space (separating car parking spaces for local businesses from Coolock Lane) to include the provision of a bus turning area. This element will result in the partial loss of a strip of ground within the GA2-dominated verge which the local authority has seeded with pollinating plant and reduced the mowing regime. This potential impact will not result in a significant effect at any local geographic scale’*. It also states in Section 12.5.1.2.1 with respect to mitigation in this area *‘The partial loss of a local authority pollinator-rich strip within a GA2-dominated verge at the intersection of Coolock Lane and the R132 Swords Road, which will be reinstated with species rich grassland in the area not being constructed as a Bus terminus’*. There are no significant residual impacts identified in the Chapter as a result of the habitat impacts at this location.
- In Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR, Section 17.4.3.1.3 regarding the Construction Phase impact on the townscape and streetscape character, mentions the proposed bus terminus with respect to the Northwood Avenue to Shantalla Road section of the Proposed Scheme, *‘There will be impacts on open space at Coolock Lane with the introduction of a bus terminus’*, while Section 17.4.3.2.5 discusses the impacts on amenity designations during the Construction Phase for which the alterations to the open space in that area is also mentioned. As recorded in Table 17.11 of the Chapter, the residual Construction Phase impact for the character of the whole scheme section is Negative, Significant and Temporary/Short-Term, and for the amenity of that specific area is Negative, Moderate and Long-Term. The impact ratings reduce for the Operational Phase as recorded in Table 17.10 of the Chapter, with the impact on the character of the section changing from Negative, Moderate and Short-Term at one year post-construction, to Positive, Moderate and Long-Term at 15 years post-construction (once the landscaping measures and changes have had time to fully establish within the streetscape), and the amenity impact in that specific area improving slightly from Negative, Moderate/Significant and Short-Term to Negative, Moderate and Long-Term.
- Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases at the nearest sensitive receptors to the Proposed Scheme. Figures 7.6, 7.7 and 7.8 (Sheet 2) in Volume 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the potential Construction Phase impact at that location with respect to NO₂ and particulate matter (PM₁₀ and PM_{2.5}), with the maps showing that the change pollutant concentrations is Negligible across all three pollutants. Figures 7.3, 7.4 and 7.5 (Sheet 2) in Volume 3 of the EIAR map the same information for the modelled Operational Phase impacts in the Opening Year of 2028, with the impact again showing to be Negligible at that location.
- Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there was an unattended noise monitoring location at Santry Villas (Reference Number CBC0002UNML004), in close proximity to the proposed location of the Coolock Lane bus terminus as shown in Figure 9.2 (Sheet 5) in Volume 3 of the EIAR. Figure 9.3 in Volume 3 of the EIAR maps the potential noise impacts associated with the predicted Construction Phase traffic, with the proposed terminus location (Sheet 3) mapped with an impact significance rating of Not Significant. Figures 9.4 and 9.5 in Volume 3 of the EIAR map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for the Opening Year giving an impact significance rating of Imperceptible to Slight-Moderate along Coolock Lane. The modelled impact reduces slightly in the Design Year modelling to

Imperceptible to Not Significant – Slight. The Chapter also assesses the potential noise associated with bus stops, namely idling engines, acceleration and deceleration, and air brakes. The Chapter states that *'Given the dominance of existing road traffic at the closest NSLs [Noise Sensitive Locations] to the proposed new or relocated bus stops and the reduction in bus engine noise through the transition to electric bus, the potential noise impact to adjacent NSLs is Not Significant'*.

An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4 of the EIAR. As per the Tree Schedule in that report, the four trees to be removed within that open space to facilitate the proposed bus terminus are semi-mature lime trees (Tree Numbers T0882, T0883, T0884, T0885) and are all categorised as being of moderate value and conservation. As shown on the Landscape General Arrangement Drawings (Sheet 18 of 37) there are new trees proposed within that area to reduce the impact.

Regarding the suggestion to relocate the terminus to another location east of the Coolock/Santry roundabout, this is not a viable option. The methodology for assessing and refining the locations for the bus stops along the Proposed Scheme has been summarised in Section 4.13 of the Preliminary Design Report, provided as part of the Supplementary Information.

In line with this, the basic criteria considered when locating bus stops are as follows:

- Driver waiting and passengers are clearly visible to each other;
- Located close to key facilities;
- Located close to main junctions without affecting road safety or junction operation;
- Located to minimise walking distance between interchange stops;
- Where there is space for a bus shelter;
- Located in pairs, 'tail to tail' on opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and
- Adequate footway width.

Additionally, the Proposed Scheme is designed to enhance the interchange between the various modes of public transport operating in the city and wider metropolitan area, both now and in the future. The design has been developed with this in mind and, in so far as possible, is seeking to provide for improved existing or new interchange opportunities with other transport services. These include existing and future Dublin Bus services.

2.2.3.3 Integration with Omni Park Shopping Centre

Summary of issue raised

It is requested that appropriate measures are in place to ensure the continued and uninterrupted access to what is one of the largest District Centres in the Greater Dublin Area.

It is noted that there are backlogs at the Omni Park Shopping Centre junction. Suggestions have been made by local residents to take land from Omni Park Shopping Centre to facilitate a longer dedicated traffic lane for northbound vehicles turning left into the car park. It was also suggested creating a second access route in and out of the shopping centre to ease pressure on the existing junction. It has been highlighted that the issue is set to worsen with the high volume of new developments in the vicinity of the junction.

Response to issue raised

The Junction Design Report which has been included in EIAR Volume 4 Appendices Part 1 of 2 Appendix A6.3 provides an assessment of the Swords Road / Lorcan Road / Omni Park junction. The proposed design is summarised as follows, *'the existing 4 arm signalised junction and slip road is proposed to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance*

pedestrian, cyclist and bus priority infrastructure. The left slip with splitter island on the CBC south arm will be removed. Improved pedestrian crossing opportunities with removal of side road splitter island. The key design rationale was to enhance pedestrian crossing facilities on all arms of the junction, provide protected cycle infrastructure and crossing facilities, whilst improving bus priority. Full policy outcomes for CBC route can be achieved by Junction Type 1 and signal operation, giving priority to bus and improved facilities for pedestrians and cyclists.'

The creation of a second access route is outside the scope and objectives of the Proposed Scheme planning application.

2.2.3.4 Concerns about Lorcan Road and Shanrath Road being used as 'quiet streets'

Summary of issue raised

One submission raised that the residents of Lorcan Road and Shanrath Road are concerned about these roads being used as 'quiet streets'. Locals feel that more could have been done to facilitate safe cycle lanes on Swords Road, through Santry Village.

One submission is opposed to the location of the cycle lane on their road as it is their experience that many cyclists use the footpath instead of the road, creating a risk to pedestrians and residents attempting to exit driveways in their cars. The submission suggests relocating the cycle lane to Ellenfield Park.

Response to issue raised

Section 4.6.3.4 of Chapter 4 Proposed Scheme Description in Volume 2 of the EIAR describes the rationale for quiet street treatment:

'Where the Proposed Scheme cannot facilitate cyclists without significant impact on bus priority, alternative cycle routes are explored for short distances away from the Proposed Scheme route. Such offline options may include directing cyclists along streets with minimal general traffic other than car users who live on the street. Guidance in this regard has been provided within the BCPDGB which states:

'Diversions of proposed cycle facilities on to quieter parallel routes, to avoid localised narrowing of cycle tracks on the main CBC route, is to be considered in the context of the CBC route being listed as a primary cycle route as per the Greater Dublin Area Cycle Network Plan. These diversions, however, may also be considered where appropriate cycle facilities cannot be provided along the CBC route without significant impact.'

So-called Quiet Streets (due to the low amount of general traffic) are deemed suitable for cyclists sharing the roadway with the general traffic, without the need to construct segregated cycle tracks or painted cycle lanes. The Quiet Street Treatment would involve appropriate advisory signage for both the general road users and cyclists.

A Quiet Street cycle route has been proposed from the Omni Park Shopping Centre/Lorcan Road junction, through Lorcan Road concluding at the Larkhill Road/Shantalla Road/Shanrath Road junction. This Quiet Street cycle route avoids the pinch point at Santry Village.

Another Quiet Street cycle route commences at the Larkhill Road/Shantalla Road/Shanrath Road junction and concludes at the Collins Avenue Junction where the cyclist re-joins the mainline. This Quiet Street cycle route avoids the section of N1 with high volumes of traffic.'

Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of the EIAR, describes alternative cycle route options that were considered for Santry Village. This is described in Section 3.4.1.1.

'Further design development and assessment work was carried out at the Draft Preferred Route Option stage on this section of the Proposed Scheme. Consultation feedback from statutory consultees and landowners, as well as feedback received from members of the public following the first non-statutory public consultations held from the 14 November 2018 to 29 March 2019, also formed the need to review this route option during the design process.

One of the principal issues reviewed was the proposed one-way system for general traffic in Santry Village. It became apparent that the one-way proposal for general traffic might affect the existing

access/egress arrangements for residents along the Lorcan and Shanrath Roads and impact on commercial deliveries and local business.

The Feasibility and Options Assessment Report (NTA 2018a) found that the most appropriate route was along the route of SY1, through Santry Village. In that report a number of alternative options were developed, and SY1C was considered the most desirable option following an MCA. SY1C comprised a one-way system for general traffic northbound between Shantalla Road and Omni Shopping Centre, which had bus lanes in each direction, one traffic lane northbound between Shantalla Road and Omni Shopping Centre and an off-road cycle track. Southbound traffic would travel along the N50 (Santry Bypass) and re-join Shantalla Road via a new slip road.

As well as Option SY1C, the Feasibility and Options Assessment Report considered a two-way option, Option SY1B, which maintained two-way traffic and bus lanes in each direction throughout Santry from Shantalla Road to Coolock Lane. The review carried out reassessed options for the cycling and traffic routing through an MCA, which is discussed further below.

3.4.1.1.2 Cycle Route Options

Both of the options described above diverted commuting cyclists away from Santry Village via a parallel two-way cycle track which would be provided along Coolock Lane, Oak Park Avenue and the N50 as shown in Figure 2.22. The feedback from the first non-statutory public consultation considered it an unattractive route for cyclists as there is little to no passive surveillance. Security and safety concerns were raised regarding the opening onto the N50 from Oak Park Avenue and also the vertical height differences which would result in steep gradients for cyclists.

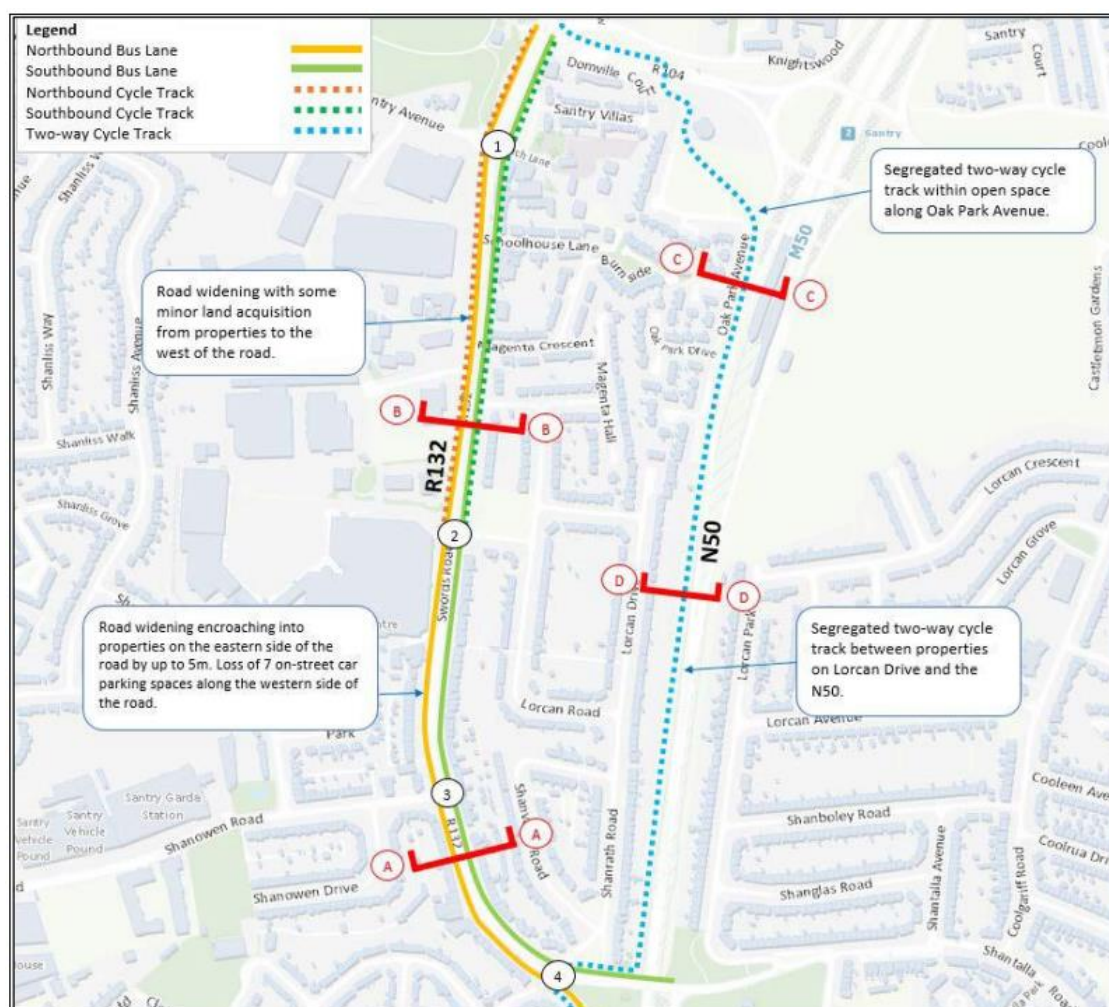


Figure 2.22 Cycle Route Option 1 – Two Way Cycle Track Away from Santry Village

A further cycle route option, Option 2, was developed to redirect cyclists through Lorcan Road and Shanrath Road where a quiet street environment could be implemented. This alternative cycle route

commences at the junction with Omni Park Shopping Centre and connects with the Swords Road at the junction with Shantalla Road as shown in Figure 2.23.

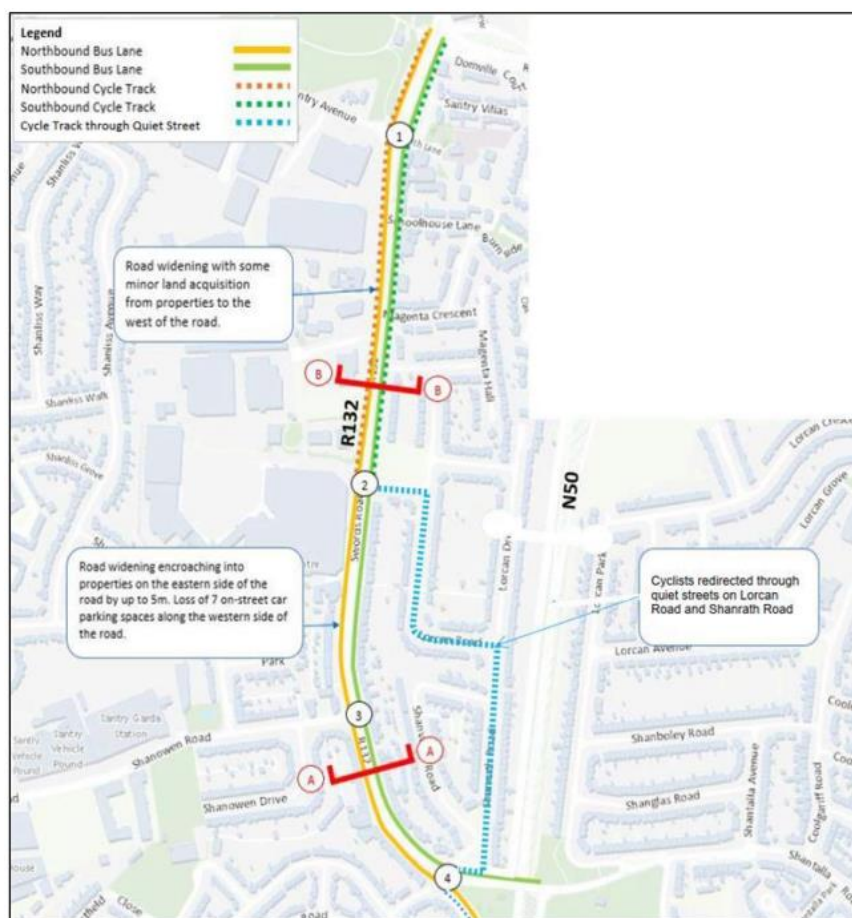


Figure 2.23 Route Option SY1B

As with the selection of the Emerging Preferred Route options, each route option was evaluated using an MCA with one of the primary criteria being 'Environment', under which there was a number of sub-criteria which each route option was considered against comparatively. Based on the MCA undertaken, Cycle Route Option 2 was selected, as it offers more benefits over Option 1, for example:

- The length of new cycle track required is a roughly half that required for Option 1;
- It more closely aligns with the route of Primary Route 2A from the GDA Cycle Network;
- It is a less significant diversion from the main street and is more likely to be used by cyclist compared to Option 1; and
- Fewer trees are required to be removed. Routing the cyclists through Lorcan Road and Shanrath Road is a change from the Emerging Preferred Route.'

In relation to the suggestion to relocate the cycle lane through Ellenfield Park, this would not be feasible as it does not follow the desire line of cyclists using the Proposed Scheme.

2.2.4 Other Issues Raised and Responses

2.2.4.1 Removal of trees and existing barriers/guardrails at Whitehall Junction and request for further trees to be planted in various locations through Santry.

Summary of issues raised

One submission request for trees on Swords Road between Whitehall Church and Whitehall Junction to be replaced, as these were replacement trees promised to residents after the Port Tunnel was constructed. It is also requested that trees are planted on the pavement outside 219 Swords Road

and through the village and on the corner with Shanowen Road and along the Swords Road Slip Road in order to improve the amenity of the area. The same submission also requests that the existing barriers/guardrails at each side of the Whitehall Junction should be replaced or upgraded to add to the amenity of the area.

Response to issues raised

Section 17.4.3.1.4 of Chapter 17 (Landscape (Streetscape) & Visual) in Volume 2 of the EIAR assesses the construction phase impacts of the Proposed Scheme and notes that the construction works will not alter the existing townscape character along this section of the Proposed Scheme but there will be changes to the streetscape character in some locations, most notably through the loss of a the trees lining the Swords Road in front of the car park at the Church of the Holy Child. The magnitude of change in the baseline environment is medium/high. The potential townscape/streetscape impact of the Construction Phase on this section is assessed to be Negative, Significant and Temporary/Short-Term

Section 17.4.4.1.4 assesses the operational phase of the Proposed Scheme and notes that although the proposals have been designed to limit the impact on existing trees and vegetation as far as practicable, there will be some continued effects from loss of trees removed during the Construction Phase, most notably at Whitehall Church of the Holy Child and Swords Road/Griffith Avenue junction. However, trees will be replaced in the majority of cases and associated negative effects will be largely negated over the long-term as the replacement planting matures. The magnitude of change in the baseline environment is medium. The potential townscape/streetscape impact of the Operational Phase is assessed to be Negative, Moderate and Short-Term becoming Positive, Moderate, Long-Term.

The existing guardrails at Collins Avenue junction will be removed as part of the Proposed Scheme.

Regarding the request for new trees to be planted throughout Santry, Santry Village is already a very constrained area and priority has been given to providing minimum footpath widths and bus priority. New trees are proposed at the entrance to Lorcan Road, Magenta Crescent, opposite Swiss Cottage, on both sides of the road adjacent to Santry Villas and at Coolock Lane as depicted in the Landscape General Arrangement Drawing Sheets 18 to 20 of 37 of the EIAR Volume 3 Figures Chapter 4 Proposed Scheme Description.

2.2.4.2 Request for footpath to be upgraded along the Swords Road Slip Road

Summary of issue raised

One submission requests that the footpath along the Swords Road Slip Road should be upgraded to improve the amenity of the area and for safety reasons as there are large cracks on it.

It is also suggested that the walls along the east and west side of Swords Road between Santry Bypass junction, the Church on the east and the Whitehall Junction on the west should be upgraded with stone facing as it always requires repainting due to graffiti.

Additionally, it is suggested that the new wall at Magenta Hall should be stone faced given its length to improve the amenity of the area.

Response to issue raised

As depicted in the Landscape General Arrangement Drawings Sheet 23 to 24 of 37 of the EIAR Volume 3 Figures Chapter 4 Proposed Scheme Description, see Figure 2.24 and Figure 2.25, the existing kerb line and footpath will be retained as part of the Proposed Scheme therefore it is not anticipated that any upgrades will be carried out on the existing footpath. As noted in Section 7.2.1 of the Preliminary Design Report included in the Supplementary Information, *'in the case where no works are required to accommodate a bus lane the local authority will remain responsible for the maintenance and repairs to the existing carriageway'*.

Regarding the walls, as there is no impact to these walls as part of the Proposed Scheme, no works are proposed. As noted above the local authority will remain responsible for the maintenance and repairs to the existing carriageway.

Figure 17.2.2.18 (Photomontages) in Volume 3 of the EIAR, see Figure 2.26, shows a representation of the streetscape once the Proposed Scheme is operational at Magenta Hall. A pre-cast concrete wall with 1.2m high fence on top to prevent falls is proposed. The face of the wall is to have vertical channels (approximately 50mm wide) every 500mm to break up the mass of the wall.

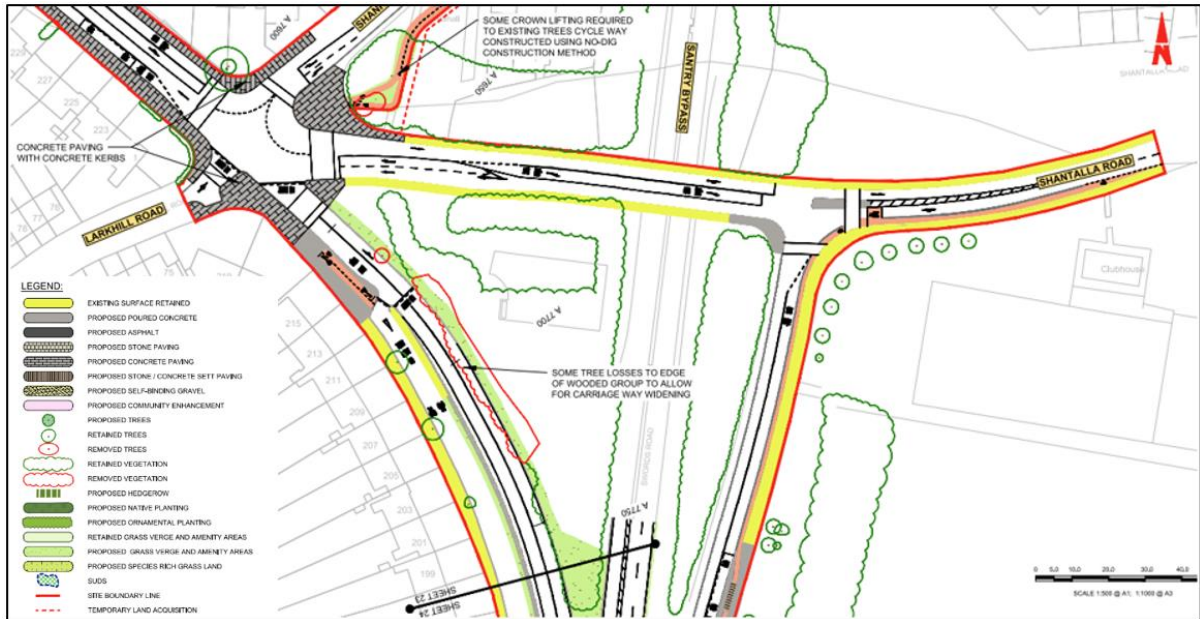


Figure 2.24 Proposed Landscape General Arrangement at the Slip Road (Sheet 23)



Figure 2.25 Proposed Landscape General Arrangement at the Slip Road (Sheet 24)



Figure 2.26 'View 20' Proposed New Layout at Magenta Hall

2.2.4.3 Light sequence at the Swords Road (R132)/Larkhill Road/Shanrath Road junction

Summary of issue raised

One submission suggests that as the Swords Road (R132)/Larkhill Road/Shanrath Road junction is extremely busy, cyclists are unlikely to cross the junction to use the cycle path on Shanrath Road and are more likely to continue along either the bus lane or the footpath in Santry Village. For this reason the respondent suggests that the light sequence at the junction should include a dedicated turn for cyclists both from the Swords Road and Shanrath Road to encourage cyclists to use the Shanrath Road.

The submission also suggests that the light sequence of the traffic lights on Shantalla Road opposite the parks should be sequenced with the lights and Swords Road (R132)/Larkhill Road/Shanrath Road junction as there is often a backlog of traffic in both directions.

Response to issue raised

A dedicated phase for cyclists is provided for cyclists at this junction to allow them to cross between Shanrath Road and Swords Road. This can be seen on Sheet 21 of 44 of the Junction System Drawings of the EIAR Volume 3 Figures Chapter 4 Proposed Scheme Description, see Figure 2.27.

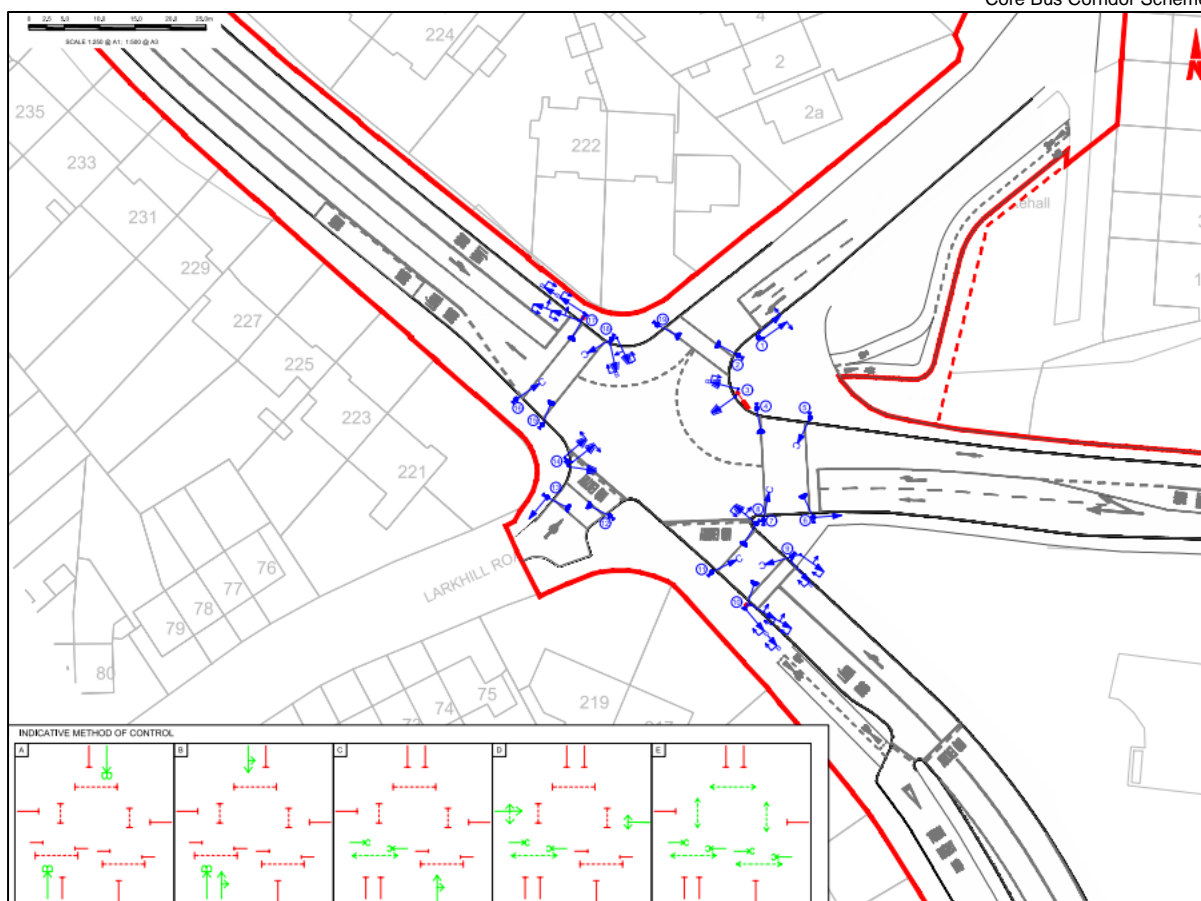


Figure 2.27 Proposed Junction System Drawing at Swords Road / Shanrath Road Junction (Sheet 21)

The signal staging plans at the Swords Road (R132)/Larkhill Road/Shanrath Road junction and Shantalla Road (R132) junction (over the bridge) are proposed to be synchronised to avoid blocking back of traffic flows in both the directions.

2.2.4.4 Request for paving area and wall at the Comet to be upgraded

Summary of issue raised

One submission suggests that the paving area and wall at the Comet should be upgraded and capped to enhance the amenity of the area. In addition, the area outside the shops on the east side of the village should also be upgraded.

Response to issue raised

These areas are to be enhanced as part of the Proposed Scheme, see Figure 2.28 for extract from the proposed Landscape General Arrangement of the EIAR Volume 3 Figures Chapter 4 Proposed Scheme Description, and Figure 2.29 which indicates a sketch view of the area outside the Comet. Section 4.5.3.8 of Chapter 4 of Volume 2 of the EIAR states the following, 'The area in front of The Comet and the retail area on the eastern side of the route is proposed to have surface treatment enhancements. This includes a wider pedestrian footway in concrete paving and the vehicular forecourt in concrete setts. The pedestrian footway along the western retail area near the Comet is also proposed to be enhanced with concrete paving and the parking area in concrete setts along with a replacement low rendered wall off-white or cream to match the residential walls. The Centra forecourt proposes to be de-cluttered and reorganised. The footways along these retail areas to be resurfaced in concrete paving slabs and concrete kerbs to match the rest of the residential footways to the northern part of this section.'

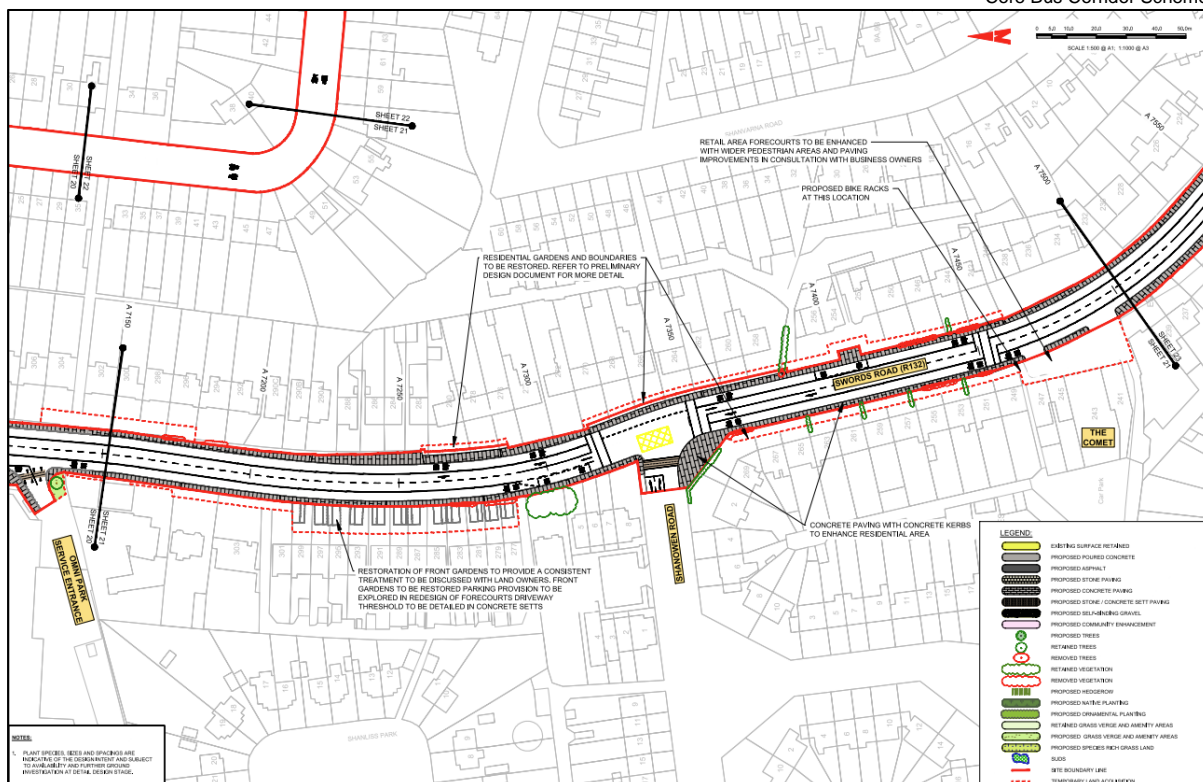


Figure 2.28 Proposed Landscape General Arrangement at the Comet (Sheet 21)



Figure 2.29 Sketch View Looking towards The Comet

2.2.4.5 Request for upgrade and removal of existing barriers/guardrails at Santry Bypass Junction

Summary of issue raised

One submission requests that existing barriers and guardrails at the Santry Bypass junction are upgraded/removed as they are excessive and not necessary, particular the one on the Swords Road Slip Road, to enhance the amenity of the area.

Response to issue raised

It is understood that the submission is referring to the existing pedestrian guard rails at the Swords Road (R132)/Larkhill Road/Shanrath Road junction. These pedestrian guardrails will be removed as part of the Proposed Scheme. The NTA recognises the importance of the rationalisation of street furniture across the Proposed Scheme to reduce visual clutter. Section 17.4.1.4.5 of Chapter 17 Landscape and Visual notes that, inter alia, the following specific landscape / townscape and visual measures are included within the Proposed Scheme:

'Proposals for the treatment of the urban realm within the streetscape impacted by the Proposed Scheme will have regard to the existing character of the street or location, to emerging policies, objectives and proposals for the urban realm and to opportunities for mitigation of impact on the urban realm and the streetscape. Proposals will have regard to historic details and features, to the quality of existing and proposed materials, to the reduction of clutter, ease of legibility, and management and maintenance requirements.'

2.2.4.6 Request for footpath at left hand side of the corner of Shanowen Road and Swords Road to be widened

Summary of issue raised

One submission suggests that the footpath at the left-hand side of the corner of Shanowen Road and Swords Road should be widened as it is considered dangerously narrow given the footfall on this road coming from the Omni. It was considered that, as there is a very wide path on the other side of the road it should not be a problem to widen the pavement on this corner.

Response to issue raised

Minor widening is being achieved at the corner, however it is not possible to provide a wider footpath along Shanowen Road itself, as away from the junction the footpath on the other side of Shanowen Road is quite narrow.

2.2.4.7 Request for new signage on Collins Avenue West

Summary of issue raised

One submission requests that a new sign for no overtaking/single line traffic only should be erected on Collins Avenue West before the junction between Swords Road slip road and the slip road to the N1. It considers that cars back up on Collins Avenue before the junction and then cars overtake at speed from the rear to either turn right at the yellow box before the slip road to the N1 or to turn right at Whitehall Junction. Consequently, this makes exiting from the Swords Road slip road very difficult and dangerous as the overtaking cars cannot see the cars exiting the slip and vice versa.

Response to issue raised

The introduction of a cycle lane along Collins Avenue West results in a narrower traffic lane on the approach to the Swords Road slip road and the slip road to the N1, it is anticipated that this will encourage slower vehicle speeds and will discourage vehicles from overtaking at this location. This can be seen in General Arrangement Drawing Sheet 25 of 37 of the EIAR Volume 3 Figures Chapter 4 Proposed Scheme Description, see Figure 2.30.

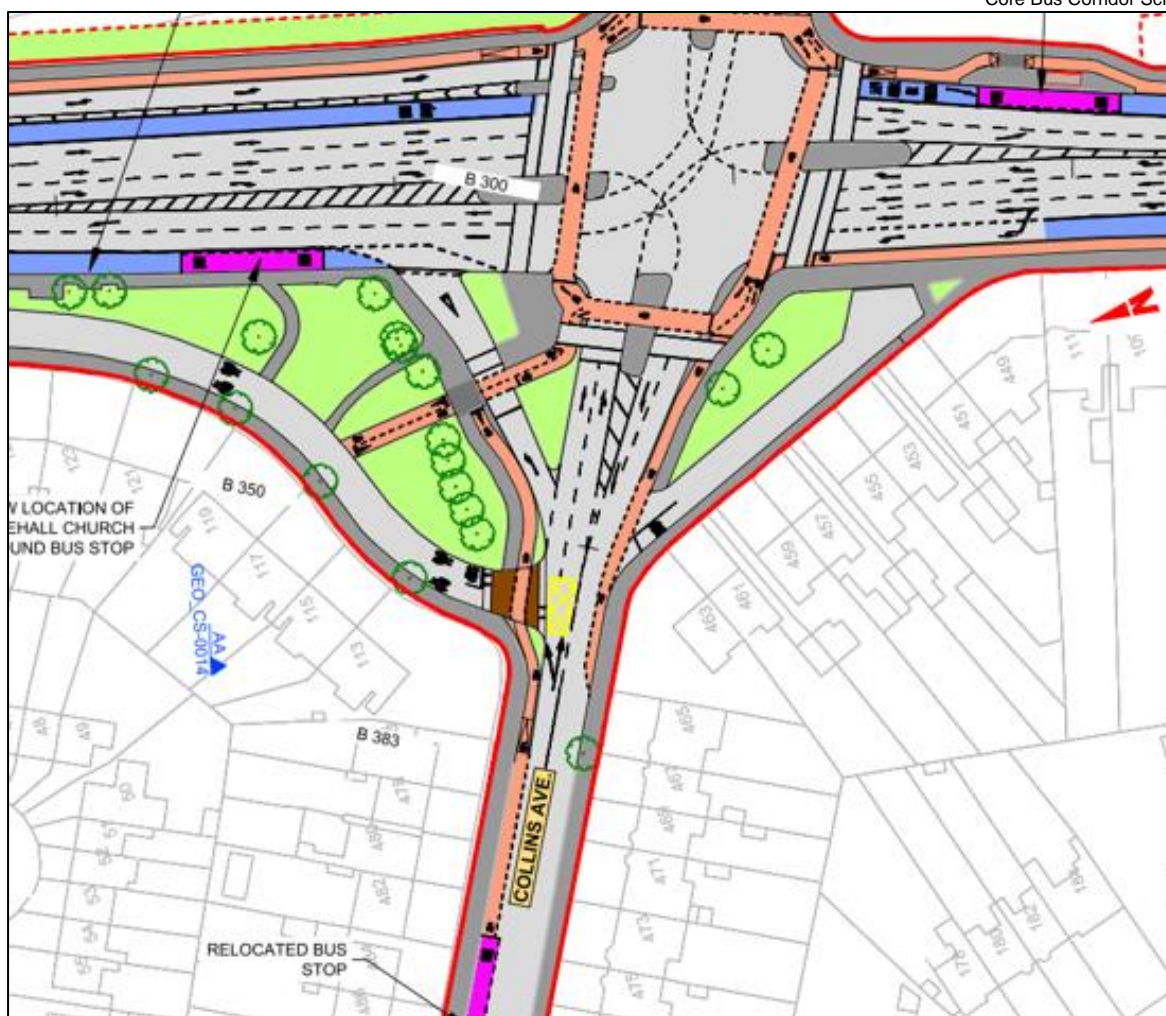


Figure 2.30 Proposed General Arrangement at Swords Road / Collins Avenue Junction (Sheet 25)

2.2.4.8 Environmental impact of the scheme on Santry

Summary of issue raised

One submission is concerned about the environmental impact of the Proposed Scheme on Santry. It considers that the scheme threatens almost every public green space in Santry, including many planted areas which are there to promote pollinators, and a large number of mature trees. The submission is also concerned about increased temperatures, increasing exhaust fumes and road noise.

Response to issue raised

The environmental impact of the Proposed Scheme through Santry is assessed in the EIAR and is summarised as follows.

In Chapter 12 (Biodiversity) in Volume 2 of the EIAR it describes the habitat types within the Proposed Scheme boundaries, with them mapped in Figure 12.5 in Volume 3 of the EIAR. With respect to the loss of habitat (including in green spaces through Santry), these areas are generally categorised as being of 'Local Importance', and the Chapter categorises the majority of these areas ('*improved amenity grasslands (GA2), planted flowers beds (BC4) and ornamental/non-native shrub (WS3), areas of disturbed ground (ED2 and ED3) and scrub (WS1), hard standing (BL3) and dry meadows and grassy verges (GS2) habitat*') as being of 'Lower Value', while trees and hedgerows are generally of 'Higher Value'. In Table 12.16 the total extent of habitat loss for the whole Proposed Scheme is quantified with respect to permanent and temporary losses, with such losses generally assessed as being significant losses at the local geographic scale, particularly during the Construction Phase. As part of the mitigation measures for the Proposed Scheme, new planting will be done (new street trees,

woodland trees, hedgerows, grasses and other planting) as listed in Section 12.5.1.2.1. There are no significant residual impacts identified in the Chapter as a result of the habitat impacts at this location.

In Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR, Section 17.4.3.1.3 outlines the Construction Phase impact on the townscape and streetscape character in the Northwood Avenue to Shantalla Road section of the Proposed Scheme, stating '*The construction works are extensive and result in substantial changes to elements of the existing streetscape. While the construction works will not alter the existing townscape character along this section of the Proposed Scheme the works are extensive and will result in changes to elements of the existing streetscape, most notably through the removal of mature trees*' giving it an impact rating of Negative, Significant and Temporary / Short-Term, while it assesses the Construction Phase impact specifically on Santry Demesne as Negative, Moderate and Temporary / Short-Term. The impact specifically on trees and vegetation is described in Section 17.4.3.2.9 listing the route through Santry to Shantalla Road as one of the impacted areas, giving an overall assessment of vegetation removal as being Negative, Moderate / Significant and Temporary / Short-Term during construction. It is proposed to replace as many trees and areas of lost vegetation as possible along the route to compensate for the losses during construction. As a result the impact ratings reduce for the Operational Phase as recorded in Table 17.10 of Chapter 17, with the impact on the character of the section changing from Negative, Moderate and Short-Term at one year post-construction to Positive, Moderate and Long-Term at 15 years post-construction.

Specifically with respect to the loss of mature trees, in addition to Chapter 17, reference can be made to the Landscape General Arrangement drawings in Volume 3 of the EIAR (under Chapter 4 Proposed Scheme Description) for a map showing the specific trees to be lost, and to Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4 of the EIAR for the specific detail (ages, maturity levels, condition, etc.) of all trees to be removed / replaced. Section 17.4.1.3.3 of Chapter 17 describes the loss of one mature tree between Northwood Avenue and Coolock Lane (a mature horse chestnut tree located on the eastern side of the Swords Road, opposite Santry Demesne near Morton Stadium as described in Appendix A17.1 as tree reference T0207), and one mature tree along the boundary of Santry Demesne (a mature sycamore tree opposite Santry Villas as described in Appendix A17.1 as tree reference T0255), resulting in a total of two mature trees requiring removal through Santry between Northwood Avenue and Shantalla Road. All other trees to be removed in this section range from young to early mature. Reference can be made to the Landscape General Arrangement drawings in Volume 3 of the EIAR (under Chapter 4 Proposed Scheme Description) for a map showing the specific trees to be lost, and to Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4 of the EIAR for the specific detail (ages, maturity levels, condition, etc.) of all trees to be lost.

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases within the study area. For the traffic assessment, the focus is on air quality sensitive receptors which will bound the Proposed Scheme and those along diverted traffic routes within the study area. Figures 7.3 to 7.8 in Volume 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the modelled change in annual mean concentration of NO₂ and particulate matter (PM₁₀ and PM_{2.5}) during the Construction Phase (Figures 7.6 to 7.8) and Operational Phase (Figures 7.3 to 7.5). For the Santry area (Sheet 2 in each Figure), the significance of the change is generally negligible for all three pollutants modelled, potentially improving slightly to Slight Beneficial for NO₂ at some locations through Santry during the Operational Phase.

Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there were a number of noise monitoring locations through Santry, namely an unattended location at Santry Villas (Reference Number CBC0002UNML004) and four attended locations in Morton Stadium (Reference Number CBC0002ANML007), on the opposite side of the Swords Road from the stadium (Reference Number CBC0002ANML008), at Magenta Crescent (Reference Number CBC0002ANML009) and in the green area in Magenta Hall (Reference Number CBC0002ANML010), as shown in Figure 9.2 (Sheet 5 and 6) in Volume 3 of the EIAR. Figure 9.3 in Volume 3 of the EIAR maps the potential noise impacts associated with the predicted Construction Phase traffic, with Santry (Sheet 3) mapped with an impact significance rating of Not Significant to Slight-Moderate. Figures 9.4 and 9.5 in Volume 3 of the EIAR map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for the Opening Year giving an impact significance rating of Imperceptible to Not

Significant through Santry. The modelled impact generally remains unchanged in the Design Year modelling.

Chapter 8 (Climate) in Volume 2 of the EIAR has assessed the climate impact as a result of both the construction and operation of the Proposed Scheme. Specifically with respect to tree and vegetation clearance, the impact of this has been assessed under the heading of 'Land Use Change', with the assessment described in Section 8.3.4.1.2 of Chapter 8 as '*The change in land use associated with the Proposed Scheme, including the felling and planting of trees and vegetation, has been calculated using the methodology outlined in Chapter 4 (Forest Land) of the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories (IPCC 2006). Land use change is also appropriately assessed using the same methodology*'. During the Construction Phase the impact from land use change is recorded in Section 8.5.1.4 as '*The Construction Phase of the Proposed Scheme is predicted to result in the temporary removal of grassland to facilitate a Construction Compound. However, overall, there will be a Negligible impact on carbon sequestration as a result of the Construction Phase of the Proposed Scheme, leading to a Not Significant impact*', with the Operational Phase impact being described in Section 8.5.2.3 as '*The Operational Phase of the Proposed Scheme will not result in any significant changes to land use. Thus, there will be an imperceptible positive impact on carbon sequestration as a result of the Operational Phase of the Proposed Scheme*'.

2.2.4.9 Impact on local community of the widening of the R132

Summary of issue raised

One submission is concerned about the impact upon the local community resulting from the expansion of the R132. An expansion of the R132 resulting in reduced footpaths and additional traffic would make it more difficult to get around on foot and would reduce local residents to travelling even short distances by car. It is also suggested that it would have a detrimental impact on local businesses.

Response to issue raised

The Proposed Scheme has been designed to deliver upon the scheme objectives set out in Chapter 1 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets the scheme objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the scheme objectives and to construct the scheme with permanent and temporary acquisitions respectively.

As per Appendix A10.2 – The Economic Impact of the Core Bus Corridors, numerous case studies have been done to understand the impact of similar schemes on that of local businesses. It was found in Ireland, that businesses have a tendency to overestimate the impact of cars on their business. For example, a survey undertaken of businesses on Henry Street showed that they perceived 40% of customers arrived by bus whereas the actual percentage was 49%. Another example was businesses perceiving that 6% of customers would walk to Henry Street whereas the actual percentage was 19%.

The conclusion from these studies in Section 2 of this report states "*Evidence from studies in Ireland and internationally suggest that reductions in the numbers of car journeys to the shops should not lead to a reduction in footfall as traders typically overestimate the importance of cars. Many shoppers are already arriving using sustainable transport options and therefore should be quick to take advantage of new transport options. There may be some disruption to business during the construction phase, however once the new routes are open footfall should return to normal and may in fact rise.*"

Additionally, research was undertaken for shoppers of Henry Street and Grafton Street to understand how much was spent in shops by people arriving different modes of transport. On average, it was found that car spending was more per trip. However, due to the frequency of visits by bus, bike and walking, the average spend was higher.

The conclusion for this in Section 2 – The Impact on Local Businesses states "*There is strong international evidence to suggest that the proposed improvements will lead to further increases in the use of sustainable transport. This should, in turn, more than compensates for reductions in visits by*

car users. Whilst spend per visitor may fall slightly, the overall spend rises due to the increased overall footfall. This effect should occur as soon as the new proposed routes open with shoppers choosing to make even more use of sustainable transport decisions.

Whilst there is limited evidence of the impact during the construction work, none of the evidence suggested an increase in business insolvency or a departure of businesses from the area during construction works.”

2.2.4.10 Public consultation process

Summary of issue raised

One submission was surprised to read in the EIAR that a second round of consultation on the BusConnects plan had taken place between 4 March 2020 and 30 April 2020 and from 4 November 2020 to 16 December 2020. The respondent claims they, along with other local residents, cannot recall being informed that the public was being consulted again. It suggests that the apparent lack of public objections at this time was due to the fact that the public in general did not know about these plans.

Response to issue raised

As noted in Section 1.6.3.2 Preferred Route Option Consultation Overview of Chapter 1 of the EIAR:

‘The PRO, or second round, of public consultation took place from 4 March 2020 to 30 April 2020. The public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post. There was one consultation event held at Whitehall on 11 March 2020 for CBC01 Clongriffin to City Centre and CBC02 Swords to City Centre. Public submissions were accepted until 17 April 2020 in which the public were able to view the proposals and discuss them directly with members of the BusConnects Infrastructure team. Due to the COVID-19 pandemic, this event had to end earlier than scheduled and all further planned consultation events scheduled after 12 March 2020 were postponed. In deference to the submissions which had already been received, the decision was made not to cancel the consultation. However, due to the introduction of COVID-19 public health restrictions, further on-site or face-to-face public engagement was restricted.

Following the EPR submissions review of the proposals, there were some changes to the number of properties that were potentially impacted. In total, 298 letters were prepared and delivered on 2 March 2020 to properties either continuing to be potentially impacted; newly potentially impacted; or no-longer potentially impacted, with recipients invited to schedule meetings with the BusConnects Infrastructure team if they wished to discuss the proposals on an individual basis.

Consequently, presumably due to the COVID-19 impacts, there were just 31 submissions received relating to the Proposed Scheme, and no landowner meetings were requested. The submissions ranged from individual submissions by residents, commuters and local representatives, to detailed proposals from various associations and private sector businesses.

Design development and planning for the Proposed Scheme continued, and the BusConnects Infrastructure team determined to run an additional round of public consultation in November 2020 to complete the non-statutory public engagement prior to finalising the PRO. The third round of public consultation took place from 4 November 2020 to 16 December 2020.

With the continuing effect of the COVID-19 pandemic and associated restrictions, the third Public Consultation was held largely virtually. A virtual consultation room for the Proposed Scheme was developed and virtual access to the room was facilitated. Along with offering a call back facility, the room provided a description of the Preferred Route from start to finish with supporting maps and included information of all revisions made since the previous rounds of public consultation, as well as other supporting documents. Over the six weeks of the consultation, 234 unique users visited the virtual information room for the Proposed Scheme. A third Community Forum virtual consultation call was also held on 16 November 2020, as part of the third round of non-statutory consultation.

As per the previous rounds, those properties continuing to be either potentially impacted; newly potentially impacted; or no-longer potentially impacted were written to directly to receive information on the consultation in advance of any wider publication of the proposals. One-to-one meetings were offered via Zoom or over the phone for those who wished to discuss the proposals further in relation

to their own property with the minutes being recorded as part of the consultation process. In total, 243 letters were sent between 1 and 3 November.

As per previous rounds the public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post.

In addition, virtual meetings were resumed with residents' groups to provide updates on aspects of the Proposed Scheme.

There were 231 submissions over the second and third phase of public consultation (March / April 2020 and November / December 2020).'

As detailed in the Swords to City Centre Public Consultation Report 2018-2022, provided as part of the supplementary information, a number of Community Forums were established during the first round of non-statutory public consultation in 2018 and have continued through all three rounds of consultation. The aim of the Community Forums was to create a two-way communication process with representatives of local communities, establish and build relationships, provide timely updates on the designs and plans, whilst listening to the issues and concerns raised by members of the community. To date, 4 meetings have been held as part of the Swords to City Centre Community Forum, each with an average number of 105 attendees.

As mentioned in the above text Online and virtual elements were developed to assist the public in viewing the proposals in the context of Covid 19 These non-statutory Public Information Events were advertised in local newspapers, through radio, on the BusConnects website, through extensive email reminders to public representatives, Local Authorities' Public Partnership Networks (PPN's), emails to Community Forum members, promoted through social media and digital channels.

2.2.4.11 Demolition

Summary of issue raised

In early 2022, planning permission was granted for works on a private site (1 Magenta Crescent) adjoining the Swords Road. The build is now complete and appears to cause an obstacle to an expansion of the road in that area. The submission queries if such a 'pinch point' were to be present in the middle of Santry, it would make the scheme pointless and asks will DCC require the residents to knock down their new build?

Response to issue raised

There is no requirement to demolish the new build at 1 Magenta Crescent. No properties are identified for demolition in Santry as part of the Proposed Scheme. Properties to be demolished or part demolished as part of the Proposed Scheme are identified in Section 4.6.18 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR, this list does not include any properties in Santry.

2.2.4.12 The scheme proposals do little in the way of public realm improvements

Summary of issue raised

One submission considers that the Proposed Scheme does little in the way of public realm improvements. It is believed that the proposals represent a missed opportunity to enhance the street scape in Santry Village and Whitehall.

Response to issue raised

It is an objective of the Proposed Scheme to ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible. This consists of replacing footway surfaces appropriate to the location, native planting, new street trees, areas of wildflower grass verges and replacement hedgerows.

As set out in Chapter 4 (Proposed Scheme Description) of Volume 2 of the EIAR, the landscape and urban realm proposals are derived from analysis of the existing urban realm which allowed the

designers to consider appropriate enhancement opportunities along the route. The enhancement opportunities include key nodal locations which focus on locally upgrading the quality of the paving materials, extending planting, decluttering of streetscape and general placemaking along the route. Along the route there will be a number of enhancements to specific urban realm hot spots where there is a clear opportunity to improve existing key public spaces. In Santry, these include improvements north of Santry River, Coolock Lane and entrance to Santry Park, shopping parade opposite Heiton Buckley, entrance to Lorcan Road, the area in front of the Comet, the Centre forecourt and at Collins Avenue, as illustrated on the Landscape General Arrangement Drawings.

2.2.4.13 Connectivity with the Santry River Restoration and Greenway project

Summary of issue raised

One submission raised that it is imperative that the Santry River Greenway interacts with the bus corridor in a considered and safe way. It noted that the NTA included a reference to the potential greenway entrance on map 16 of 37 but provision for a safe crossing on Swords Road must be established. It is accepted that a toucan crossing is proposed but this must be designed with the future Greenway in mind.

Response to issue raised

One of the key objectives of the Proposed Scheme is to enhance interchange between the various modes of public transport operating in the city and wider metropolitan area. The Proposed Scheme facilitates improved existing and new interchange opportunities with other transport services including the Santry River Greenway and the Royal Canal Greenway.

As noted in Section 1.6.3.3 of Chapter 1 Introduction of Volume 2 of the EIAR, one of the design changes adopted as part of the final Preferred Route Option was a greater connection between Santry Village and the Santry River Walkway which is now facilitated in the Preferred route Option through connections at the Northwood Avenue Junction.

Chapter 4 Proposed Scheme Description also notes that *'The area immediately north of Santry River has been identified as a location for a local enhancement. The entrance to Santry Riverside Walk will be enhanced by existing vegetation being partly cleared to open views to the river. New concrete paving and a seating area will create a gateway and link to the walk'*.

2.2.4.14 Clarification on plans for the junction of Santry Avenue and Swords Road

Summary of issue raised

One submission looks for clarification on the proposed changes at the junction of Santry Avenue and Swords Road. It considers that according to the drawing, Santry Avenue will no longer have three lanes approaching the Swords Road. It is proposed that the slip road for northbound traffic will be removed, reducing it to two lanes.

Response to issue raised

As set out in Section 2.1 of EIAR Chapter 2 Need for the Proposed Scheme, *'The Proposed Scheme is needed in order to enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor through the provision of enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region.'*

Table 3.10 of Appendix A2.1 Planning Report of EIAR Chapter 2 notes that the NTA's GDA Transport Strategy (GDATS) 2022 – 2042 identifies a range of measures to achieve the aims of the GDATS. Measure WALK3 relates to Improved Junctions and sets out how the NTA, in conjunction with local authorities, will implement junction improvements across the GDA to, inter alia, enhance movement by pedestrians and cyclists via a programme of removal of slip lanes at appropriate locations, together with consideration of junction signalling changes to better balance the use of the junction between motorised and vulnerable modes.

Section 4.4.3 of DMURS relates to junction design and sets out how junction design is largely determined by volumes of traffic and while the design of junctions has traditionally prioritised motor vehicle movement, designers must take a more balanced approach to junction design in order to meet the objectives of Smarter Travel and DMURS. Specifically, DMURS states that designers should, inter

alia, 'Omit left turn slips, which generally provide little extra effective vehicular capacity but are highly disruptive for pedestrians and cyclists.'

It is clear from the above that the retention of the existing left turn slip lane at the Santry Avenue junction would be contrary to the requirements of DMURS and measure WALK3 of the GDATS. In relation to achieving the scheme objectives, the removal of left turn slip lanes at this location is required to achieve the necessary enhanced pedestrian, cyclist and bus priority infrastructure.

2.2.4.15 Congestion at Griffith Avenue

Summary of issue raised

One submission considers that since the introduction of protected cycle tracks on Griffith Avenue, there have been considerable problems. It noted that the cycle tracks are needed but considers that the execution of the project has resulted in increased congestion at the junction of Griffith Avenue and Swords Road. It is the respondent's view that this issue will not be addressed by the proposed plans for the junction.

Response to issue raised

The impact of the scheme on general traffic is assessed in Chapter 6 Traffic and Transport in Volume 2 of the EIAR. The conclusion of these assessments is summarised below,

Section 4 (Shantalla Road to Botanic Avenue) – Given the improvements to bus priority, walking and cycling as a result of the Proposed Scheme, there will likely be an overall reduction in operational capacity for general traffic along the direct study area.

As outlined within Section 6.4 and summarised in Table 6.81 of Chapter 6, the Proposed Scheme will deliver strong positive impacts to the quality of pedestrian, cycling and bus infrastructure during the Operational Phase providing for enhanced levels of People Movement in line with the scheme objectives. These improvements will help to provide an attractive alternative to the private car and promote a modal shift to walking, cycling and public transport, allowing for greater capacity and comfort along the corridor to facilitate the sustainable movement of people as population and employment levels grow in the future.

The operational performance of the junction in the 2028 forecast year has been outlined in Appendix 6.3 - Junction Design Report. As outlined on page 78 of the report, the junction will operate at capacity for general traffic in both the AM and PM peak hours although general traffic will only represent 19% of the mode share at the junction in the opening year.

2.2.4.16 Inadequate consideration of the needs of older people and those with a disability

Summary of issue raised

One submission considers that inadequate consideration has been given to the needs of older people and those with a disability. There seems to have been little direct consultation with disability and older person's groups given the frequency of dangerous crossing on this corridor.

The addition of a pedestrian crossing at the Comet Pub is acknowledged and welcomed however the request for a crossing at Santry Close has been ignored.

Response to issue raised

As detailed in the Swords to City Centre Public Consultation Report 2018-2022, provided as part of the supplementary information, *'Disability Representative Groups and other special interest groups have also had opportunities to engage with the BusConnects Infrastructure team in the context of Community Forums. These special interest groups are diverse and representative of commuters, cyclist advocacy groups, disability groups, environmental and business groups. These groups were provided with maps and brochures as requested, and encouraged to make submissions on behalf of their members. They were also invited to public meetings and there have been a number of specific meetings between the BusConnects Infrastructure team, Disability Groups and Cycling Advocacy Groups. These meetings broadened the number of stakeholders significantly and allowed their specific areas of interest and concern to be considered.'*

Accessibility for mobility impaired users is a core element of the Proposed Scheme design. As set out in Section 4.5 of Chapter 4 (Proposed Scheme Description), in Volume 2 of the EIAR, the design *'...has been informed by the principles of DMURS, Building for Everyone: A Universal Design Approach (NDA 2020), How Walkable is Your Town (NDA 2015), Shared Space, Shared Surfaces and Home Zones from a Universal Design Approach for the Urban Environment in Ireland (NDA 2012), Best Practice Guidelines, Designing Accessible Environments (Irish Wheelchair Association 2020), Inclusive Mobility (UK Department for Transport 2005), Guidance on the Use of Tactile Paving Surfaces (UK DfT 2021), and BS8300:2018 Volume 1 Design of an accessible and inclusive built environment – External Environment – code of practice.....'* Accessibility is also addressed in Chapter 12 of the Preliminary Design Guidance Booklet (Appendix A4.1 in Volume 4 of the EIAR).

Further detail on accessibility for mobility impaired users is given in Section 4.6.5 in Chapter 4 of Volume 2 of the EIAR. It acknowledges that the Disability Act 2005 (as amended) places a statutory obligation on public service providers to consider the needs of disabled people. A Disability Audit of the existing environment and proposed draft preliminary design for the corridor was undertaken. The Audit provided a description of the key accessibility features and potential barriers to disabled people based on the Universal Design standards of good practice. The Audit was undertaken in the early design stages with the view to implementing any key measures identified as part of the design development process. In achieving the enhanced pedestrian facilities there has been a concerted effort made to provide clear segregation of modes at key interaction points along the Proposed Scheme which was highlighted as a potential mobility constraint in the Audit. In addressing one of the key aspects to segregation, the use of the 60mm set down kerb between the footway and the cycle track is of particular importance for guide dogs, whereby the use of white line segregation is not as effective for establishing a clear understanding of the change of pavement use and potential for cyclist/pedestrian interactions. One of the other key areas that was focused on was the interaction between pedestrians, cyclists and buses at bus stops. The Proposed Scheme has prioritised, where possible, the use of island bus stops, including signal call button for crossing of cycle tracks, to manage the interaction between the various modes with the view to providing a balanced safe solution for all modes.

In Chapter 10 (Population), the assessment has had cognisance of vulnerable groups such as people with disabilities. In Section 10.2.4.1.2.1 addressing land take, a high sensitivity has been applied to residential properties which; *'...ensures that all populations are considered in the assessment including vulnerable groups such as young children, elderly, and people with disabilities.....'*

Section 11.3.2 in Chapter 11 (Human Health) addresses deprivation, disability and health inequalities. Table 11.5 sets out the population, disability and relative deprivation within the study area. The data in Table 11.5 shows that approximately 2.6% of people within the study area have at least one disability. This is a substantially lower proportion of the population than average for Dublin (14.9%) but nevertheless equates to 2,085 people. An analysis of 2016 Census data by Disability Federation Ireland (DFI) identified that 44% of people in Dublin City and 18% of people in Fingal who have a disability do not have access to a car, compared to 31% of the general population.

Section 11.4.4.6 addresses impacts on health inequalities. It states in the Section: *'...However, the Proposed Scheme is expected to address some gaps in existing provision, as well as upgrade some pedestrian and cycle routes to a better standard (segregated instead of delineated with painted white lines). Assuming these design measures are correctly installed, the urban environment would be easier and safer for a wider variety of pedestrians, including the visually impaired, wheelchair users and people with mobility difficulties, parents with young children and pushchair users. This would help to reduce health inequalities in terms of accessibility in the urban environment, particularly for people with disabilities.....'*

Section 11.6.2 in Chapter 11 sets out the predicted operational phase residual impacts. It states that: *'...The Proposed Scheme is expected to have a significantly positive contribution to health outcomes related to increased physical activity, equitable access to services and improved safety for vulnerable road users...'*

Providing accessibility for mobility impaired users is a core element of the Proposed Scheme and the potential impact on people with disabilities has been appropriately considered in both the scheme design and the impact assessment.

Regarding the request for a pedestrian crossing at Santry Close, a toucan crossing is proposed approximately 45m to the north, at Northwood Avenue.

2.2.4.17 Bus stop locations

Summary of issue raised

One submission has suggested the relocation of a number of bus stops:

1. Bus stop at Swords Road/Larkhill Road junction be relocated to the Comet as that area can accommodate a bus lay-by and to facilitate the flow of traffic at Whitehall flyover junction.
2. Bus stop at Swords Road/Shanowen Road junction be relocated to the Comet, to facilitate flow of traffic on Shanowen Road and northbound traffic on Swords Road.
3. Bus stop at Santry Holistic Clinic can accommodate a bus lay-by. To facilitate flow of traffic from Shanowen Road and Swords Road to the City.
4. Proposed bus stop at Santry Villas should not be considered as a high volume of traffic uses this junction. The bus stop area adjacent to Magner's Pharmacy can accommodate a bus lay by.
5. Bus stop on Shantalla Road which is 15 meters from the flyover bridge should not be considered as it is unsafe due to the gradient of the road. Suggestion to put it past the roundabout at Ellenfield park.

Response to issue raised

Appendix H of the Preliminary Design Report included in the Supplementary Information includes the Bus Stop Review Report. This report sets out a comprehensive exercise which has been carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice principles related to bus stop placement. These principles include:

- Driver and waiting passengers are clearly visible to each other;
- Located close to key local facilities;
- Located close to main junctions without affecting road safety or junction operation;
- Located to minimise walking distance between interchange stops;
- Where there is space for a bus shelter;
- Located in pairs, 'Tail to tail' on opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and
- Adequate footway width.

A main consideration in the siting of bus stops is to minimise walking distance between interchange stops. This exercise was carried out with cognisance of the interface with orbital routes proposed as part of the Dublin Area Bus Network Redesign, which involved significant liaison with the BusConnects Dublin Area Bus Network Redesign team.

The scope of the Proposed Scheme includes the provision of infrastructure for bus services routed along the main corridor to the City Centre. Infrastructure for orbital bus routes, if required, will be delivered as part of a separate orbital core bus corridor scheme, whereby the provision of bus stops, including their location, can be assessed on a holistic basis along the orbital corridor, taking into account the location of existing nearby bus stops which are outside the red line boundary of the Proposed Scheme.

The bus stop locations were reviewed at each stage of the design process with a view to ensuring that the objectives of the Proposed Scheme were met. Feedback from each of the non-statutory consultations was also considered in reviewing the bus stop locations as part of the design of the scheme.

As a result of the Proposed Scheme, there have been gains in population across the whole route for catchments withing 10 and 15 minutes from the bus stops. This is also completed with fewer bus stops along the Proposed Scheme.

The analysis also concludes,

'It is recommended to relocate 14 of the 41 bus stops inbound and 12 of the 31 bus stops outbound along the route. In addition, it is proposed to remove 2 of the inbound bus stops and 1 of the outbound bus stops, but to add 1 new stop inbound and 2 new stops outbound.'

It is anticipated that the overall journey time along these routes will reduce as a result of these changes. The removal of stops will lead to less time lost due to dwell times at stops and the associated time lost due to deceleration and acceleration before and after the stops. Additionally, operational improvement such as the placement of stops after junctions should serve to reduce journey times.'

Regarding the proposals for alternative locations for the bus stops suggested by the submissions, the bus stop analysis has concluded the following.

1. This bus stop is regularly used, there are no issues with permeability. Relocating the bus stop to the Comet would require additional land take which would reduce the amount of parking spaces at this shopping area.
2. This bus stop at this location acts as an interchange bus stop between Routes 1 and 104 on Shanowen Road and the Arterial routes on Swords Road. In addition, relocating the bus stop to the Comet would require additional land take which would reduce the amount of parking spaces at this shopping area.
3. Facilitating a lay by bus stop here would require additional land take which would reduce the amount of parking spaces at this shopping area.
4. This new bus stop is located so that it provides an interface with the Orbital Bus N6 and the terminus of Bus Route D4. As described in Appendix H of the Preliminary Design Report included in the Supplementary Information *'at locations where interchange is expected it is recommended that the desirable maximum distance between the interchanging bus stops is 100m.'* Magner's Pharmacy is located approximately 275m away from this interchange.
5. It is understood that the respondent is referring to bus stop number 1641 which is located approximately 100m to the south of the Shantalla Road junction. This bus stop is retained at its existing location, relocating it as suggested by the submission would not be feasible as the proposed location is not located along the bus routes that service stop number 1641.

2.2.4.18 Suggestion to remove bank of earth adjacent to footpath in front of Magenta Hall

Summary of issue raised

One submission suggests that the bank of earth adjacent to the footpath in front of Magenta Hall on the east side of the Swords Road be removed to facilitate the extension of the bus lane and traffic turning right into Omni.

Response to issue raised

This bank of earth will be removed as part of the Proposed Scheme. As depicted in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 03 General Arrangement drawings, Sheet 20, land take is currently proposed at this location to facilitate widening of the existing road corridor to provide a general traffic lane, bus lane, cycle track and footpath in each direction. A right turn lane for traffic turning right into the Omni Park Shopping Centre is also proposed at this location. Figure 2.31 indicates the proposed general arrangement at Magenta Hall while Figure 2.32 (Figure 17.2.2.18 (Photomontages) in Volume 3 of the EIAR), shows what the streetscape will look like once the Proposed Scheme is operational at Magenta Hall.

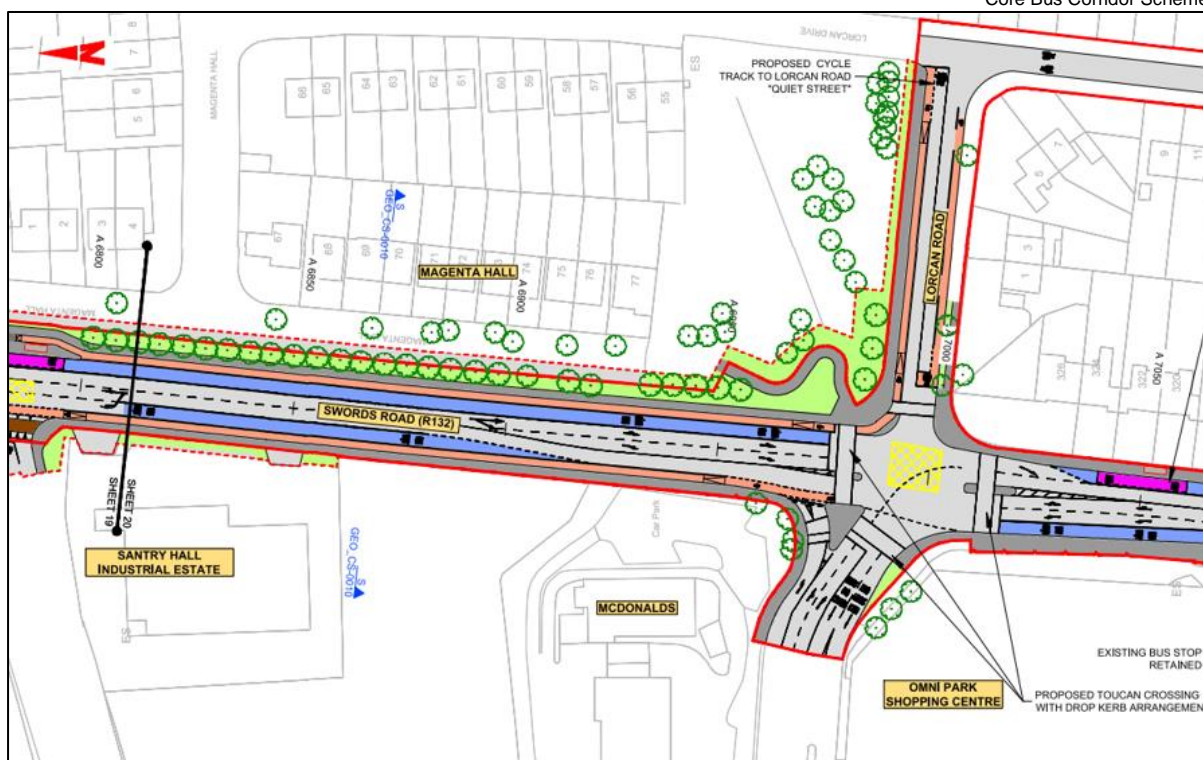


Figure 2.31 Proposed General Arrangement at Magenta Hall (Sheet 20)



Figure 2.32 'View 20' Proposed New Layout at Magenta Hall

2.2.4.19 Suggestion to remove on street parking

Summary of issue raised

One submission suggests the removal of on street parking and that off street parking maybe available to effected residents if desired.

Response to issue raised

It is understood that this comment refers to the on-street parking north of Shanowen Road. This suggestion has already been implemented as part of the Proposed Scheme, see Figure 2.33. As described in Section 4.5.3.1 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR,

'Between the Omni Park Shopping Centre entrance and the Shantalla Road junction it is proposed to maintain the two-way general traffic lanes and introduce continuous bus lanes in both directions. A segregated footpath will be maintained on either side. This will require some land take from adjacent properties on both sides of the existing road in Santry Village and the removal of existing on-street car parking. Off street parking is proposed at residential properties between the shopping centre and Shanowen Road to offset the loss of on-street parking. Off street parking is proposed at residential properties between the shopping centre and Shanowen Road to offset the loss of on-street parking.'

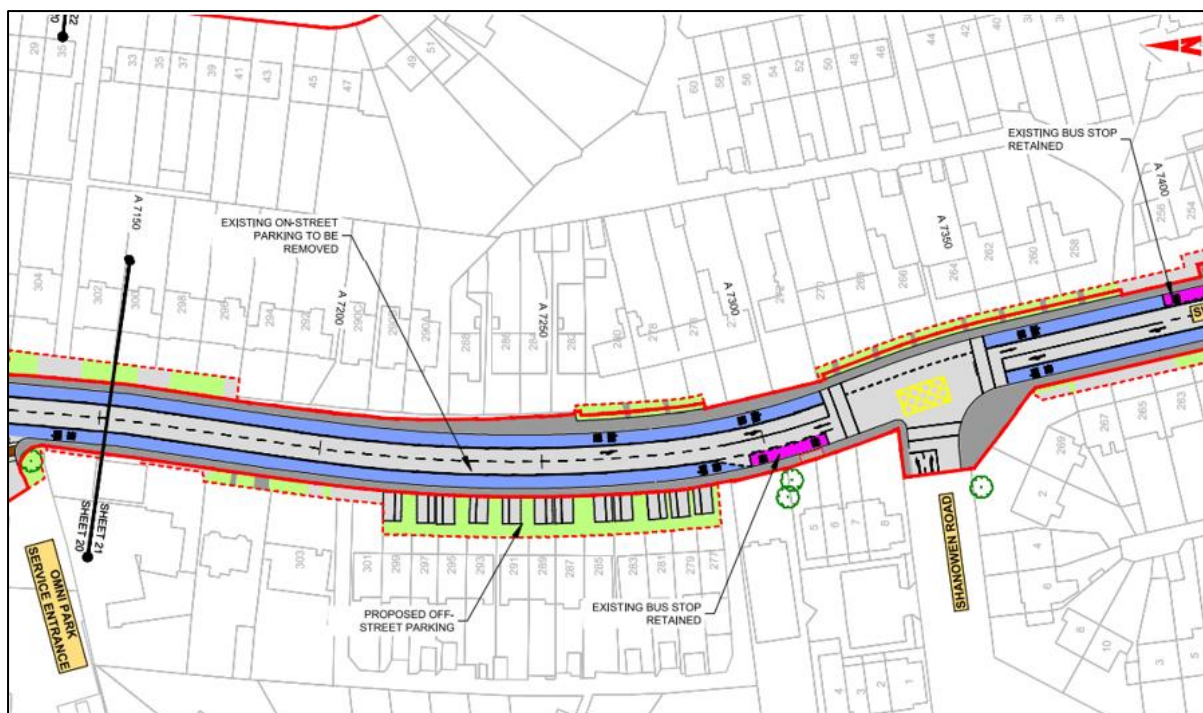


Figure 2.33 Proposed General Arrangement in between Omni Park Shopping Centre and Shanowen Road (Sheet 21)

2.2.4.20 Suggestion to widen footpath

Summary of issue raised

One submission suggests to take a small triangle shaped piece of land from a garden on the Swords Road (east) to widen the footpath.

Response to issue raised

It is unclear what location or chainage this submission is referring to, however, as described in Section 4.5.3.2 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR, the desirable minimum width for a footpath of 2.0m has been provided throughout Santry Village with the exception of the locations outlined in Table 4.10 of Chapter 4, see Table 2.3. These deviations from standard are required at Santry Demesne, as providing a standard width would require additional land take, impacting the ground of Santry Demesne and the adjacent historical wall.

As noted in Section 16.3.1.2 of Chapter 16 Architectural Heritage of Volume 2 of the EIAR, Santry Demesne is identified as a designed landscape associated with sites included in the RMP. *'Santry Demesne is in use as a public park and retains many features of architectural interest. These include features along its eastern boundary which are within the study area: the Coolock Lane entrance, the demesne wall and historic boundary planting. The demesne is a National Monument. It is further recognized through inclusion in the NIAH Garden Survey (NIAH 2380). It is of Medium sensitivity.'*

Table 2.3 Reduced Standard Cross-Sections on Section 3 – Northwood Avenue to Shantalla Road

Location	Design Element	Required DMURS/NCM Standard	Length	Design	Justification
Ch. A6040-A6320 (outbound)	Cycle Track	1.5m	280m	1.5m	Providing a standard width would require additional land take, impacting the ground of Santry Demesne and the adjacent historical wall.
Ch. A6145 – A6290 (outbound)	Footway	1.8m	145m	1.8m	Providing a standard width would require additional land take, impacting the ground of Santry Demesne and the adjacent historical wall.
Ch. A5950 – A6320 (citybound)	Cycle Track	1.5m	370m	1.5m	Providing a standard width would require additional land take, impacting the ground of Santry Demesne, the adjacent historical wall and proposed Natural Heritage Area (pNHA).
Ch. A6094 – A6145 (citybound)	Footway	1.8m	151m	1.8m	Providing a standard width would require additional land take, impacting the ground of Santry Demesne, the adjacent historical wall and pNHA.

2.2.4.21 Integration with development lands at Omni Living SHD

Summary of issue raised

One submission wishes to ensure that due regard is had in the granting of such planning permission for BusConnects that it does not prejudice the delivery of the granted scheme ABP-307011-20 in any way.

Response to issue raised

The NTA confirms its awareness of this planning application. Granted permissions have been considered in the development of the Proposed Scheme, reference is made to this strategic housing development in Section 3.2.5 of the Preliminary Design Report provided as part of the supplementary information. Chapter 21 (Cumulative Impacts and Environmental Interactions) in Volume 2 of the EIAR describes the cumulative impact assessment undertaken to identify and assesses the combined impact of the Proposed Scheme with other proposed projects or developments within the vicinity of the Proposed Scheme. Appendix A21.1 (Record of Stages 1 & 2 of Cumulative Effects Assessment (Longlist to Shortlist)) in Volume 4 of the EIAR lists all developments considered as part of the assessment. The Omni Living SHD scheme (An Bord Pleanála Reference 307011) was included on that list of assessed projects. The assessment carried out by each environmental specialist identified the potential for cumulative impacts with respect to the topics of air quality (construction dust), noise and vibration, population, human health, biodiversity, water, and landscape (townscape) and visual, and therefore the Omni Park SHD was brought forward for further cumulative assessment.

Appendix A21.2 (Stage 4 Specialist Assessments) in Volume 4 of the EIAR records the more detailed assessment for those developments which were shortlisted in Appendix A21.1. With respect to the proposed Omni Living SHD, the further assessment under those topics listed above concluded the following with respect to cumulative impacts:

- Air Quality (construction dust) (Table A21.2.1) – ‘no significant residual effects’;
- Noise and Vibration (Table A21.2.2) – ‘Potential for temporary increase in cumulative construction noise if both occur at same time. No significant residual cumulative effects post mitigation’;
- Population (Table A21.2.3) – ‘No significant cumulative impacts’;
- Human Health (Table A21.2.4) – during construction ‘Negative, Slight and Temporary’, during operation ‘No impact’;
- Biodiversity (Table A21.2.5) – with respect to all SHDs in proximity to the Proposed Scheme, ‘A significant residual effect with regard disturbance and displacement of non-SCI breeding birds during construction will remain albeit at the local geographic scale’ and ‘A significant residual effect with regard loss of habitat will remain albeit at the local geographic scale’;
- Water (Table A21.2.6) – ‘Not significant’; and

- Landscape (Townscape) and Visual (Table A21.2.7) – during construction ‘*If construction periods overlap / are successive, there remains potential for localised moderate temporary / short-term cumulative construction in the townscape/streetscape. Effects would be not significant if this is not the case*’, during operation ‘*No significant cumulative effects expected. There remains potential for localised negative slight short-term effects. Medium and long-term cumulative effects are predicted to be neutral*’.

2.3 Proposed Scheme at Drumcondra

2.3.1 Description of Proposed Scheme at this Location

As stated in Section 4.5.4.1 of Chapter 4 of the Proposed Scheme Description of Volume 2 of the EIAR:

‘From Shantalla Road to the Botanic Avenue, a continuous bus lane will be provided in both directions. It is proposed to retain the existing bus lanes and provide a segregated cycle track and footpath between Shantalla Road and Millmount Avenue in both directions. Between Shantalla Road and Collins Avenue the main north/south cycle route and pedestrian route will continue via a Quiet Street Treatment along the Swords Road. An additional south bound segregated cycle track will be provided adjacent to the south bound slip lane of the Shantalla Road junction. A short section of this cycle track is reduced to 1.5m wide in front of the Church of the Holy Child in addition to a reduction of the existing 3.5m wide footpath to 2m wide.

Localised narrowing of the cycle track is also required at Plunket College and Highfield Hospital to avoid land take and impacting a row of high-quality trees along the boundary of Plunket College. Narrowing is also required outbound along Drumcondra Road Upper between St Patrick’s College and Griffith Avenue, where providing a standard width would result in significant loss of mature trees.

It is proposed to upgrade the Collins Avenue junction to better facilitate bus priority and provide dedicated, segregated bus lanes to the stop lines with signal-controlled priority. The other key junctions, at Griffith Avenue, Richmond Road/Millmount Avenue and Botanic Avenue, will be upgraded to improve cyclist provision and bring bus lanes closer to the stop lines.

In Drumcondra, an independent pedestrian and cycle bridge over the River Tolka is being provided as part of the Proposed Scheme to allow the proposed bus lanes to be accommodated over the existing bridge. The proposed bridge would require the removal of two Poplar trees within Our Lady’s Park while four new smaller-sized trees have been proposed surrounding the square paved area, subject to underground utilities. Three new small canopy trees are proposed at the west end of the bridge adjacent to Millmount Terrace. The existing square area of paving surrounding the statue on the south side of the river will be replaced and enhanced with a combination of stone and concrete paving together with new seating as a local area enhancement. The path close to the river will be re-aligned and re-surfaced to meet with the new paved square. Additional planting is to be provided on the eastern side of the path to prevent access to the narrow embankments leading to the river side beneath the structure. To facilitate bus lanes and cycle tracks in each direction it is necessary to remove one inbound and one outbound traffic lane between Clonliffe Road and Eccles Street. In addition, the landscaped central reserve will be removed between Portland Avenue and Belvidere Road to facilitate the required cross-section. South of Belvidere Road, the existing landscaped central reserve will be maintained. Continuous bus lanes will be provided throughout, with the exception of a short section of signalised bus priority inbound between Whitworth Place and Portland Place’

An extract from General Arrangement Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR are included in Figure 2.34 to Figure 2.38.

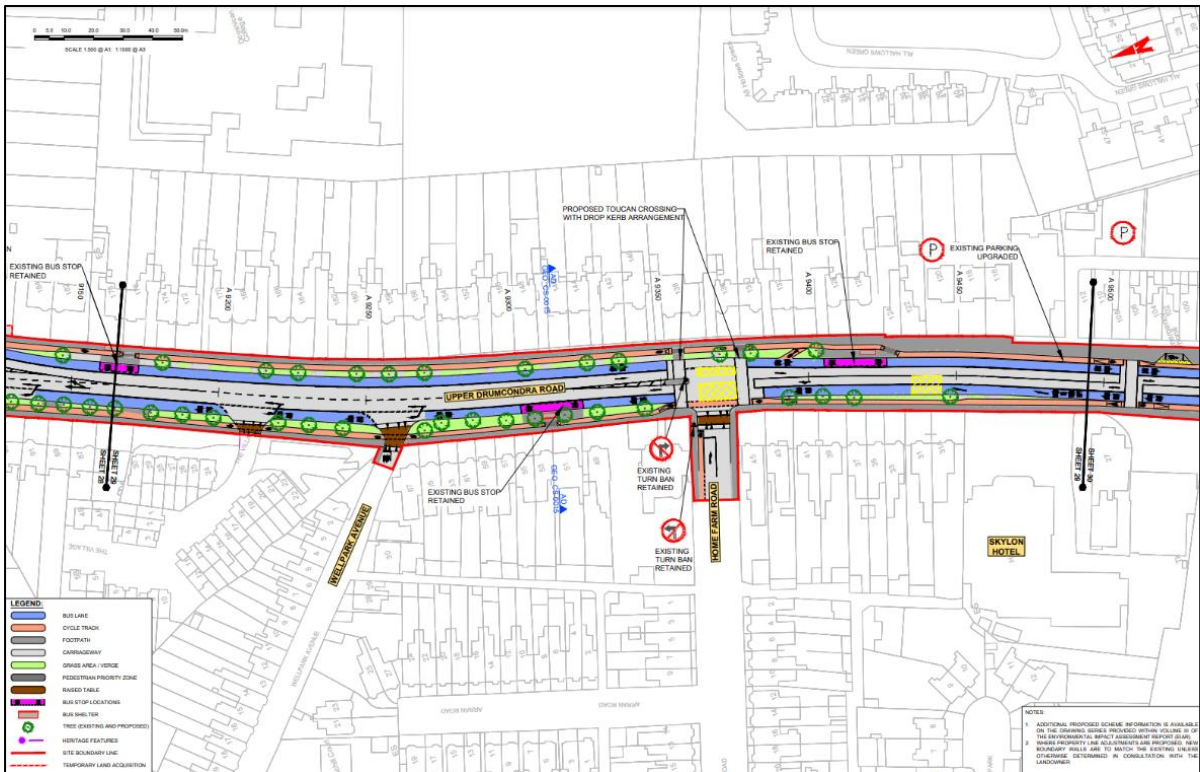


Figure 2.34 Extract from General Arrangement Drawing (Sheet 29)

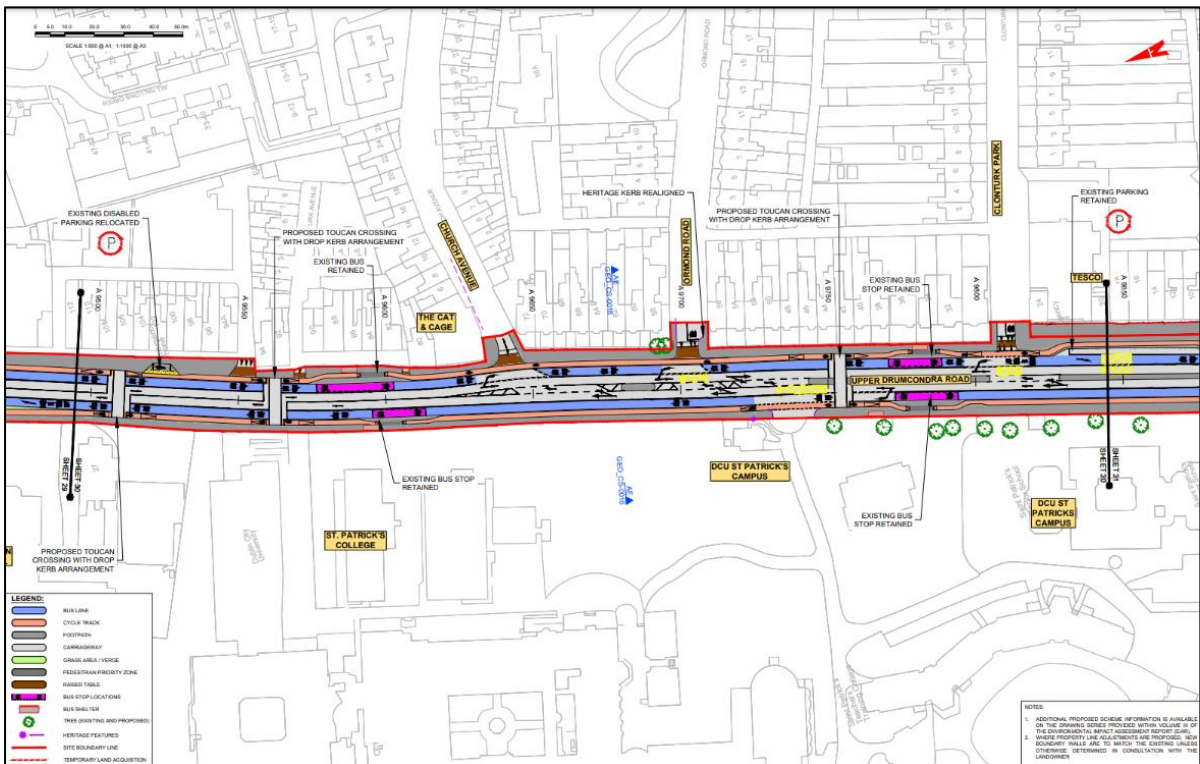
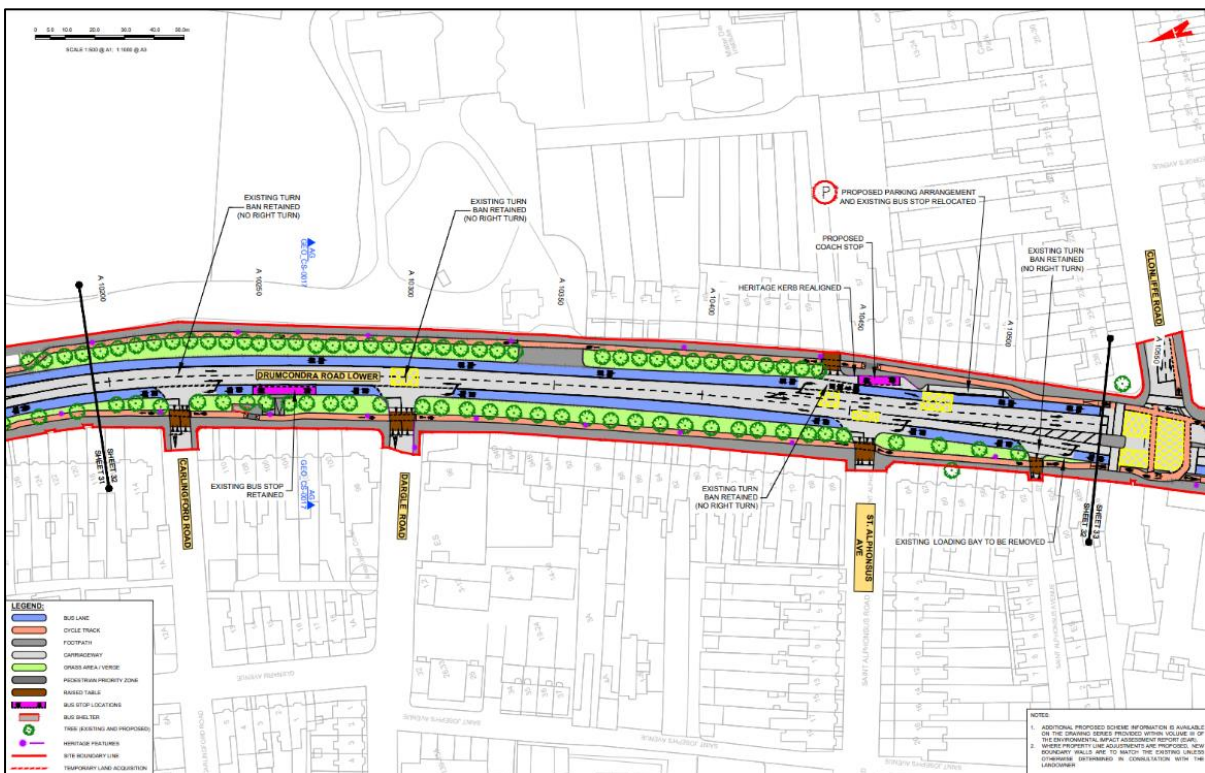
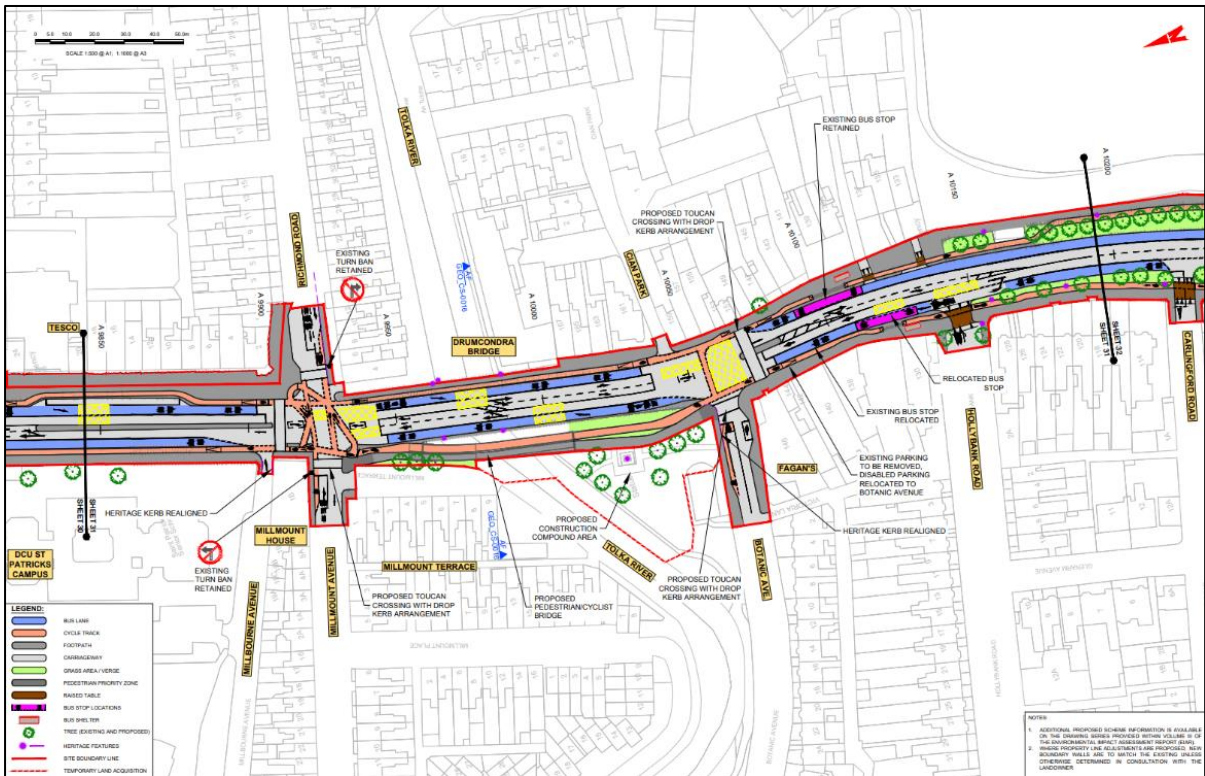


Figure 2.35 Extract from General Arrangement Drawing (Sheet 30)



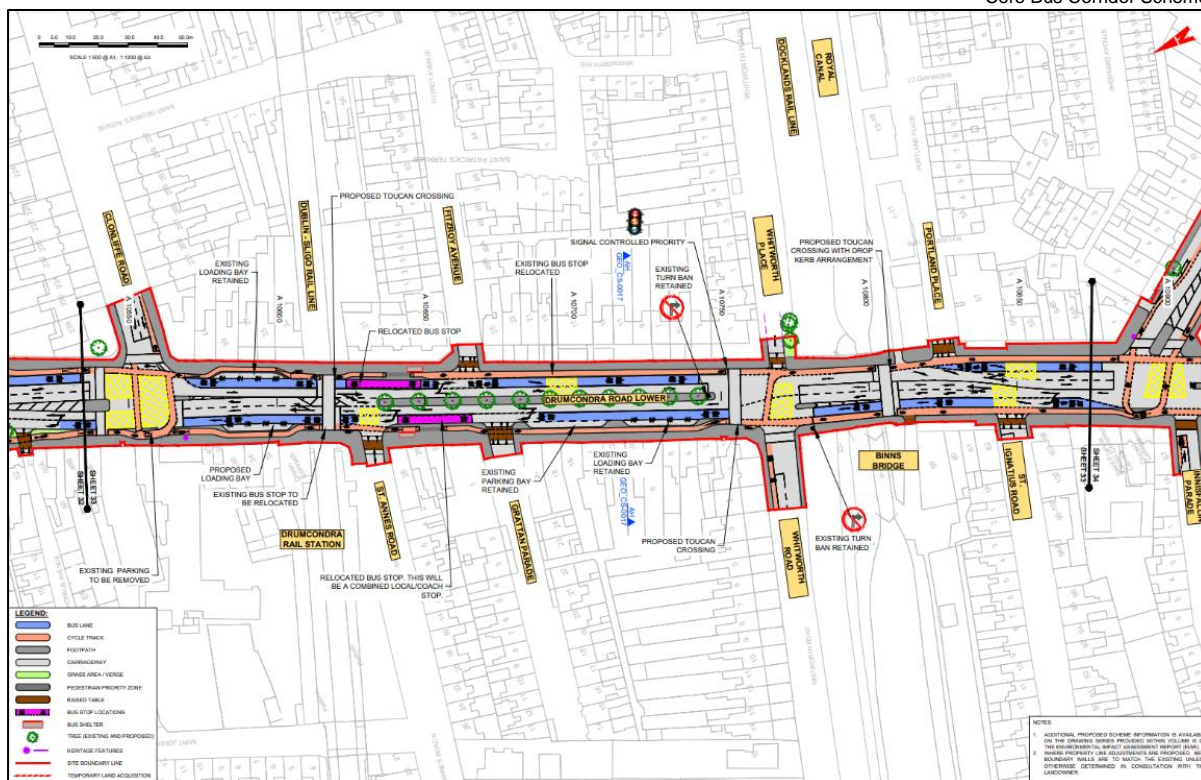


Figure 2.38 Extract from General Arrangement Drawing (Sheet 33)

2.3.2 Overview of Submissions Received

Table 2.4 below lists the 5 individual submissions made in respect of the Proposed Scheme at Drumcondra.

Table 2.4 Submissions Made in Respect of Drumcondra

No	Name	No	Name	No	Name
6	Brian O'Rourke	23	Iona and District Residents Association (IDRA) C/O Carol Lynch	32	Leo McNamee
7	Brittney Bennett	24	Iona and District Residents Association C/O Rory Flynn		

A number of issues were raised and these are listed below and described in Section 2.3.3 and 2.3.4 below.

Common Issues Raised

1. Support for the Proposed Scheme
2. Concern of rat runs through the Drumcondra area
3. Cycle infrastructure
4. Pedestrian infrastructure
5. Enforcement
6. Parking
7. Noise, air pollution, and vibrations

8. Bus lanes and bus stops
9. Discouraging heavy vehicles

Other Issues Raised

1. Public realm
2. Use of NTA Eastern Regional Model
3. Request for closure of Saint Anne's Road
4. Impact on Richmond Road
5. Impact to Our Lady's Park, Drumcondra
6. Impact to traffic flow
7. 30kph zones and signage
8. Request for adjustments to Iona Road and St Alphonsus Road roundabouts
9. Request for the fundamental reworking of the street design

2.3.3 Common Issues Raised and Responses

2.3.3.1 Support for the Proposed Scheme

Summary of issue raised

Multiple submissions welcomed the Proposed Scheme, specifically including the investment in local bus services and public transport.

Response to issue raised

The support for the scheme is noted and welcomed by the NTA.

2.3.3.2 Concern of rat runs through the Drumcondra area

Summary of issue raised

A number of submissions considered that the Proposed Scheme would further exacerbate the existing 'rat runs' in the Drumcondra area, as well as creating further 'rat runs'. Respondents commented they were concerned with the lack of infrastructure and mitigation that had been put in place to impact the increased level of traffic resulting in these 'rat runs' in the residential surrounding Drumcondra. 'Rat runs' of concern that were highlighted in submissions included:

- Drumcondra Road
- Iona District (specifically during construction and opening year streets periods)
- Iona Road, Iona Park, Iona Crescent, and Hollybank Road route
- Botanic Avenue Hollybank Road route
- St Alphonsus Road, St Patricks, Whitworth Road (Additional traffic on St Annes Road, St Clements Road) route
- St Anne's Road, St Patricks Road, St Patricks Parade, St Columba's Road Upper, Lindsay Road route
- Binns Bridge, Whitworth Road, St Patricks Road, Iona Road, Crawford Avenue, Hollybank Road, Glendalough Road, Botanic Avenue route
- Saint Anne's Road route

Other submissions raised concerns with specific roads, with Drumcondra Road said to be extremely busy, and respondents being concerned about 'rat runs' and future increase in traffic. Another submission commented on the Proposed Scheme increasing traffic in the Iona District, as cross city traffic avoids the N1 and Drumcondra Road, putting further pressure on existing 'rat runs'.

Response to issue raised

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling on this key access corridor in the Dublin region.

In meeting its objectives, the Proposed Scheme will deliver strong positive impacts in terms of promoting active travel and sustainable transport.

It is noted in Chapter 6 Traffic and Transport Volume 2 of the EIAR that the Opening year 2028 AM scenario shows a 31% difference between the Do Minimum and Do Something opening scenarios in general traffic along the Proposed Route due to modal shift to other modes, such as public transport and active travel. There is an increase of 71% in the number of people travelling via bus and an increase of 39% in people walking or cycling along the Proposed Scheme during the AM Peak Hour. These are referenced from Table 6.53 Modal Shift of 2028 AM Peak Hour along Proposed Scheme by hourly trips and modal split per scenario, see Table 2.5 and shown in Figure 2.39 (reproduced from diagrams 6.6 in Chapter 6). The results indicate a 64% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

Table 2.5 Modal Shift of 2028 AM Peak Hour Along Proposed Scheme

Direction	Time Period	Mode of Transport	Do Minimum		Do Something		Difference	
			Hourly Trips	Modal Split (%)	Hourly Trips	Modal Split (%)	Hourly Trips	Difference (%)
Inbound towards the City Centre	AM Peak Period	General Traffic	900	39%	620	21%	-280	-31%
		Public Transport	1,120	48%	1,920	65%	800	71%
		Walking	210	9%	180	6%	-30	-14%
		Cycling	100	4%	250	8%	150	150%
		Combined Walking/Cycling	310	13%	430	14%	120	39%
		Sustainable Modes Total	1,430	61%	2,350	79%	920	64%
		Total (All modes)	2,330	100%	2,970	100%	640	27%

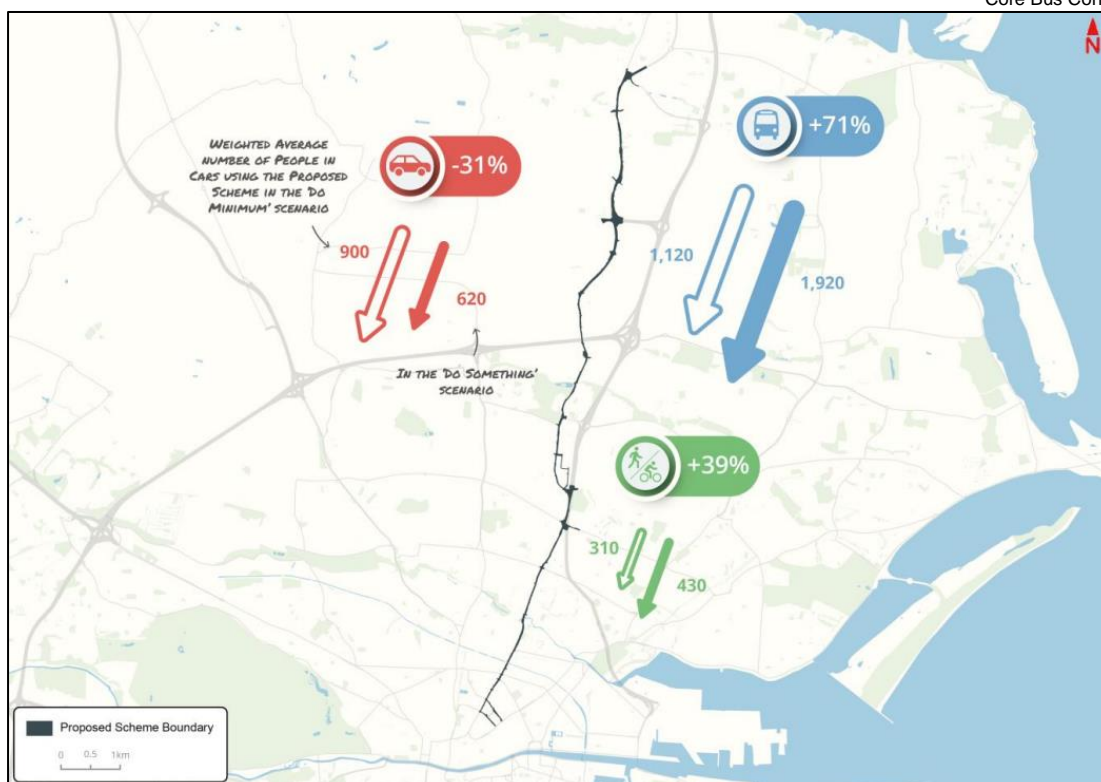


Figure 2.39 Weighted Average People Movement by Mode During 2028 AM Peak Hour

Similarly for the PM scenario, there is a 32% difference between the Do Minimum and Do Something opening scenarios in general traffic, an increase of 79% in the number of people travelling via bus and an increase in 54% in the number of people walking or cycling along the Proposed Scheme during the PM Peak Hour. This will result in an overall decrease in levels of general traffic in the routes listed above. These are referenced from Table 6.54 Modal Shift of 2028 PM Peak Hour along Proposed Scheme, see Table 2.6 and shown in Figure 2.40 (reproduced from diagrams 6.7 in Chapter 6). The results indicate a 73% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

Table 2.6 Modal Shift of 2028 PM Peak Hour along Proposed Scheme

Direction	Time Period	Mode of Transport	Do Minimum		Do Something		Difference	
			Hourly Trips	Modal Split (%)	Hourly Trips	Modal Split (%)	Hourly Trips	Difference (%)
Outbound from the City Centre	PM Peak Period	General Traffic	740	42%	500	22%	-240	-32%
		Public Transport	760	43%	1,360	60%	600	79%
		Walking	180	10%	160	7%	-20	-11%
		Cycling	80	5%	240	11%	160	200%
		Combined Walking/Cycling	260	15%	400	18%	140	54%
		Sustainable Modes Total	1,020	58%	1,760	78%	740	73%
		Total (All modes)	1,760	58%	2,260	78%	500	28%

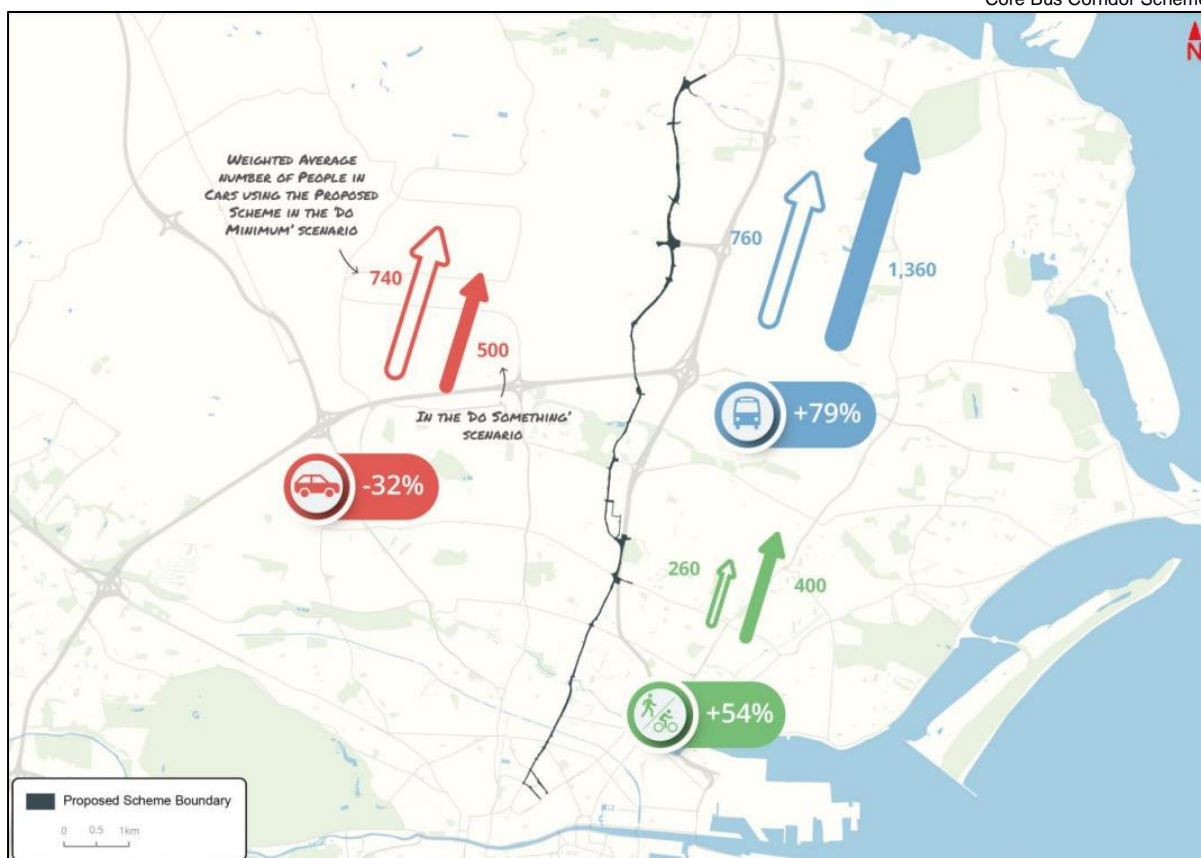


Figure 2.40 Weighted Average People Movement by Mode During 2028 PM Peak Hour

A traffic redistribution assessment was carried out to determine the impacts of the Proposed Scheme on general traffic movements along the indirect study area. From Section 6.4.6.3 Operational Phase Summary, the results of the assessment demonstrate that the surrounding road network has the capacity to accommodate the redistributed general traffic as a result of the Proposed Scheme. The majority of assessed junctions that required further traffic analysis have Volume to Capacity ratios that are broadly similar before and after the Proposed Scheme implementation. Overall, it has been determined that the impact of the reduction in general traffic flows along the Proposed Scheme will be Positive, Moderate and Long-Term, whilst the impact of the redistributed general traffic along the surrounding road network will be Negative, Slight and Long-Term. Thus, overall, there will be no significant deterioration in the general traffic environment in the study area as a consequence of meeting the scheme objectives of providing enhanced sustainable mode priority along the direct study area. For Drumcondra Road, the result of the traffic modelling showed an impact of within the threshold below 85% for the opening year of 2028 and between 85%-100% in year 2043. The overall magnitude of impact is classed as Low. Due to this, the local road network is deemed capable in catering for this slight increase in general traffic, as with other junctions in the locality.

2.3.3.3 Cycle infrastructure

Summary of issue raised

Numerous submissions made reference to concerns regarding cycle infrastructure along the route, many stating that a number of junctions were challenging, and go against guidelines set out in the NTA's Cycling Design Manual (2023).

One submission commented on the designs heading north outside Plunkett College in GA drawing 27. Concerns were raised in relation to the proposed width of the cycle lane, where the lane narrows from 2m to 1.7m on the steep incline of the hill. The submission considers that the width of the lane will leave no space for overtaking, dissuading less confident/ slower cyclists from using the infrastructure. The submission went on to suggest the cycle lane could be widened by acquiring lands from the College.

Further concerns were raised in multiple submissions regarding the setback, staged, and staggered crossings, locations included:

- Swords Road/ Collins Avenue junction (staggered/staged crossings)
- Clonliffe Road to Botanic Avenue (five setback crossings)

At these locations the crossings have been labelled as dangerous in submissions and going against the NTA Cycle Design Manual (2023). Further comments were made in one submission about the inconsistency of the setback crossings from Clonliffe Road to Botanic Avenue, as these will be the only points where cyclists will not have priority at junctions, putting vulnerable cyclists at risk.

Other respondents commented on the northbound cycle lanes on Drumcondra Road that contain four intersections which will become more challenging as a result of the second, two of them are:

- Whitworth Road and Drumcondra Road
- Saint Alphonsus Road and Drumcondra Road

The submission went on to comment that two are more problematic due to the combination of the north/left turning traffic and southbound/right turning traffic, specifically due to the turning over 2 vehicle and a cycle lane. These are:

- St Annes Road and Drumcondra Road
- Hollybank Road and Drumcondra Road

One submission requested that cyclist safety is improved through the Drumcondra and Iona area, ensuring international best practice is used.

One submission raised concerns regarding the junction design at the Swords Road/ Collins Avenue junction. The respondent commented that the junction is completely unsuitable for an urban environment and goes against multiple guidelines in line with DMURS.

The submission goes on to state that the Proposed Scheme creates extra private vehicle capacity, going against the remit of BusConnects and the Transport Strategy for the Greater Dublin Area (2022-2024). The Scheme design would most likely increase air pollution, which would have further impact on Swords Road, which currently is one of the worst air pollution areas, going against further policy in the Climate Action Plan (2023).

Response to issue raised

With regards to the point raised about junctions being challenging for cyclists and going against NTA Cycling Design Manual, it is important to note that no two junctions are the same. Junctions on the Proposed Scheme have broadly been categorised into 3 types of junctions as set out in Appendix A4.1 Preliminary Design Guidance Booklet (PDGB) of the EIAR and specifically set out at each location in the Junction Design Report which has been included in EIAR Volume 4 Appendices Part 1 of 2 Appendix A6.3 and summarised in Table 4.5, Table 4.12, Table 4.18, Table 4.25 and Table 4.32 in Chapter 4 of Volume 2 of the EIAR. A more detailed description of the junction types on the Proposed Scheme is provided in Sections 5.3.3.1, 5.3.3.2, 5.3.3.3 and 5.3.3.4 of the Preliminary Design Report with a detailed summary of the junction types along the Proposed Scheme also provided in Table 5.1 and 5.2 of the Preliminary Design Report.

The junction types set out in the PDGB directly align to the Proposed Scheme core aims and objectives. One of the core aims of the Proposed Scheme is to:

'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.'

The proposed scale of the BusConnects CBC Infrastructure Works will be transformational for cycling in Dublin, delivering a large number of the primary cycling routes identified in the Greater Dublin Area Cycle Network plan. With proposals of this scale, it is critical that the overall design approach matches the stated ambition, and can achieve a longevity that such investment deserves. With this in mind, the NTA set about developing 'Design Principles' for the project. These principles would complement existing documents and standards such as the National Cycle Manual and DMURS. The PDGB was developed to outline the agreed design principles and to enable consistency of design.

Documents such as the National Cycle Manual and DMURS continue to serve the engineering and development industry well, and over the past 7-10 years, have played an important role in allowing Ireland to follow international best practice. The PDGB, like all guidance documents, was developed to be cognisant of the ever-changing nature of society, including commuting patterns and behaviours. To acknowledge the expected increase in cycling numbers and to set about achieving the necessary

'step change' to cater for this increase, international best practice from countries which have already experienced this transition successfully was consulted. The ambition of the PDGB was to take the benefits of the traditional junction layout from the National Cycle Manual and supplement this with a range of measures aimed at increasing protection for cyclists and reducing uncontrolled conflict with pedestrians.

The Netherlands has one of the highest rates of bicycle use in the world, provides the widest range of cycling know-how and is famous worldwide for its cycling infrastructure. The 'Ontwerprijzer Fietsverkeer' (Dutch Cycle Design Guide) was used during the development of the PDGB. Of particular interest to the NTA, was how the design of junctions could be improved to offer better protection to cyclists.

The typical protected junction layout, as shown in Figure 2.41 below, offers significant safety improvements compared to the traditional junction layout. The deflection of the cycle track at the junction allows the protection kerb (Note 4) to be positioned on the corner of the junction. In urban locations subject to spatial constraints, the protection kerb provides a tighter turning radius for vehicles and will force the left-turning motorist to reduce speed before making the tighter turn. This design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, avoiding any cyclist-vehicle conflict at weaving and merging lanes, for example, where access to a dedicated left-turn lane would previously have necessitated a vehicle to cross the cycle lane. Right-turning cyclists will navigate the cycle lane on the junction and turn right (in a controlled manner) after it crosses the side arm. Other benefits to this junction design include:

- a) Traffic Signal arrangement removes any uncontrolled pedestrian-cyclist conflict;
- b) Raised and protected cycle track approaching junction;
- c) Reduced risk of side-swipe due to the removal of cyclist-vehicle conflict at weaving and merging lanes on all approaches;
- d) Improved right-turning safety; and
- e) Improved sight lines for left turning traffic.

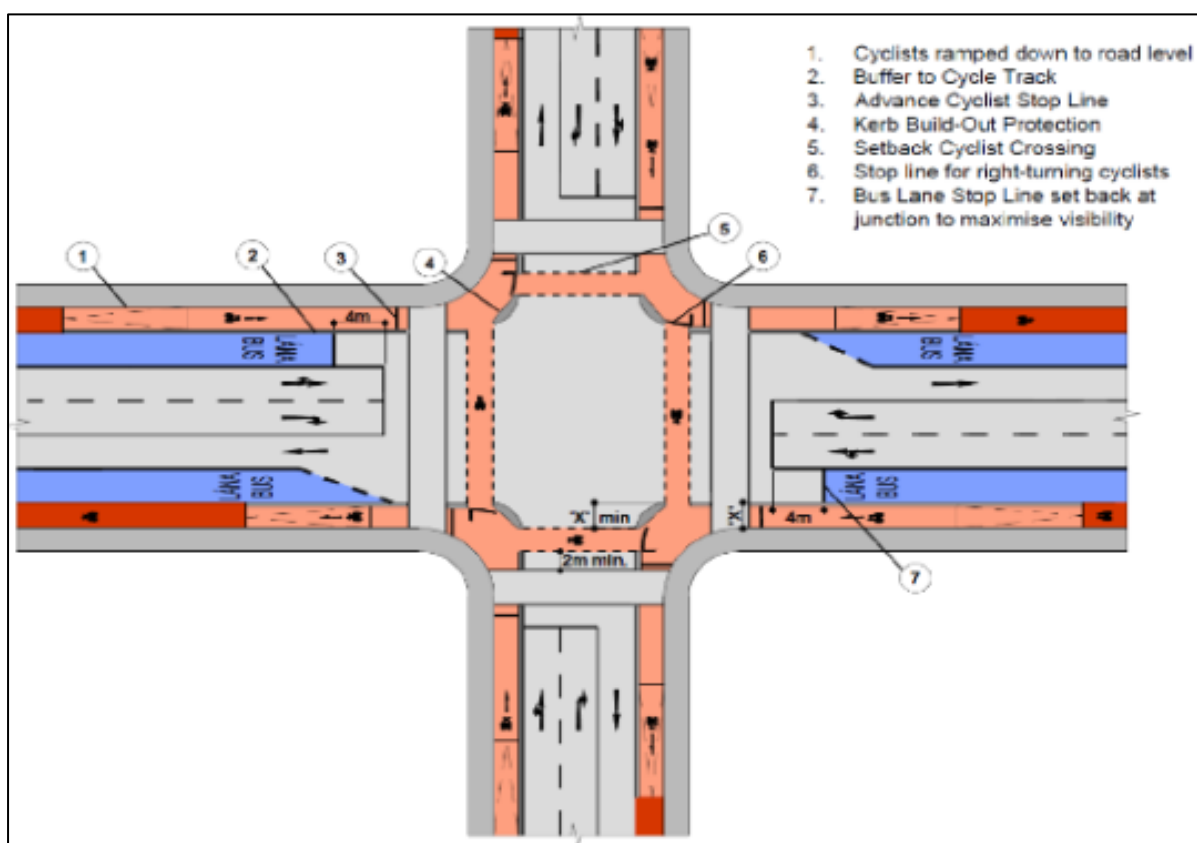


Figure 2.41 Typical Junction Layout from BusConnects Design Guidance Booklet

With regard to the point raised about cycle lane widths, the NTA recognises the importance of accommodating the full range of cycles to ensure routes are accessible to all cyclists. The NTA notes the comments raised in the submissions and notes that Section 2 of the PDGB outlines the objectives of the design guidance document. Within this section the following statement is made:

'In the approach to cycle infrastructure design, the BusConnects project not only aims to cater for existing cyclists, but more particularly for younger and older cyclists, mobility impaired cyclists and new cyclists as well as those who currently do not cycle but would be prepared to, subject to improved safety and greater cycle infrastructure provision.'

One of the main outcomes of the Proposed Scheme is safe, segregated cycling facilities which are accessible to all along the corridor. As set out in the PDGB and in accordance with the NCM width calculator, the desirable minimum width for a single-direction, with-flow, raised adjacent cycle track is 2.0m, to provide a high Quality of Service and allow for overtaking within the cycle track, as well as to cater for larger cycles. Notwithstanding this aspiration, it is acknowledged that the Proposed Scheme is to be delivered in constrained urban environments, and the delivery of a 2.0m+ wide cycle track may not always be practicable. As such, the cycle track widths have been reduced to typically 1.8m or 1.5m wide where the provision of 2.0m wide cycle tracks is not practicable.

As stated in Section 4.5.4 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR,

'Localised narrowing of the cycle track is also required at Plunket College and Highfield Hospital to avoid land take and impacting a row of high-quality trees along the boundary of Plunket College. Narrowing is also required outbound along Drumcondra Road Upper between St Patrick's College and Griffith Avenue, where providing a standard width would result in significant loss of mature trees'

A 2m wide cycle track outside Plunkett College would require the removal of the existing trees. It was concluded the impact of the removal of the trees would be significant, without appreciably improving the level of service for cyclists.

Whilst cycles can come in a range of shapes and sizes (for example standard, tandem, recumbent, cargo, handcycle, wheelchair user tricycle, articulated bikes with additional child trailer or trailer bikes), these cycles are typically less than 1m in width and will be accommodated by the Proposed Scheme.

Regarding the concerns raised about the crossings between Clonliffe Road and Botanic Avenue (which include the intersections at Saint Alphonsus Road and Hollybank Road as mentioned in the submissions), these crossing points are minor junctions; raised tables are provided to raise the road level up to footpath level and facilitate unimpeded crossing.

Regarding the other intersections noted such as Whitworth Road and St. Annes Road, these existing junctions are both proposed to be upgraded to improve infrastructure for pedestrians and cyclists.

Regarding the concerns raised about the Swords Road / Collins Avenue junction, EIAR Chapter 6 Traffic and Transport Appendix A6.3 Junction Design Report sets out the design rationale for this junction. *'The existing 4 arm signalised junction, with left turn slip road, is proposed to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure. Removal of the existing left turn slip and splitter island on Collins Avenue east arm will provide improved pedestrian crossing opportunities. Junction Type 1 is proposed inbound, on the CBC north arm, and Junction Type 3 outbound on the CBC south arm. The key design rationale was to enhance pedestrian crossing facilities on all approaches of the junction, provide protected cycle infrastructure and crossing facilities, whilst improving bus priority.'*

An assessment of the qualitative impacts on the Pedestrian Infrastructure for Section 4 of the Proposed Scheme is summarised in Table 6.43 of Chapter 6 Traffic and Transport, see Figure 2.42. This assessment identifies a Positive Significant effect on the Swords Road / Collins Avenue junction during the operational phase.

Similarly the cycling impact of this junction during the operation phase has also been assessed as a Positive Significant effect, see Figure 2.43.

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R132 Swords Road Mid Link Toucan Crossing (Holy Child Church)	A8000-A8030	D	B	Medium	Medium	Positive Significant
R132 Swords Road / Collins Avenue four-arm Signalised Junction	A8200 - A8280	F	C	Medium	Medium	Positive Significant
Collins Avenue/ The Thatch Road	B200 - B150	D	B	Medium	High	Positive Very Significant

Figure 2.42 Section 4 Significance of Effects for Pedestrian Impact During Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R132: Swords Road slip road and Collins Avenue Junction	A7650 - A8250	D	B	Medium	Medium	Positive Significant

Figure 2.43 Section 4 Cycling Impact During Operational Phase

2.3.3.4 Pedestrian infrastructure

Summary of issue raised

One submission suggested the use of Dutch kerbs in the Drumcondra area at house entrances, avoiding unpleasant, undulating paths for pedestrians and other footway users.

Another submission commented on the need to improve pedestrian safety and use international best practice on the route.

Concerns were highlighted in relation to the footpaths, with Crawford Road being highlighted as too narrow and a number of others having mature trees impact their use by all users, these include:

- Lindsay Road
- Iona Road
- Hollybank Road
- Gartan Avenue
- Iona Park

It has been requested within the submission that the road is widened at these locations to enable use for all and discourage pedestrians walking on the road.

Response to issue raised

Regarding the suggested use of Dutch kerbs at house entrances, it is proposed to use dropped kerbs at such locations to avoid undulating cycle tracks, as detailed in the BusConnects Preliminary Design Guidance Booklet (included in EIAR Volume 4, Appendix A4.1).

Regarding the point raised about the need to improve pedestrian safety and use international best practice on the route, one of the primary objectives of the Proposed Scheme is to:

'Ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.'

A key element in considering the public realm is providing safe, comfortable facilities for pedestrians, and in particular vulnerable pedestrians, who sit at the top of the hierarchy of road users, as outlined in the Design Manual for Urban Road and Streets (DMURS). Providing high-quality pedestrian facilities, including appropriate crossing facilities, has been a core element of the design of the Proposed Scheme.

Chapter 6, Traffic and Transport, of the EIAR outlines the methodology followed in assessing the impact of the Proposed Scheme with respect to the baseline environment. Section 6.4.6.1.1.1 notes the following:

'The impacts to the quality of the Pedestrian Infrastructure as a result of the Proposed Scheme have been considered with reference to any changes to the existing pedestrian facilities along footpaths and crossing locations within the direct study area. Reference has been made to the overall changes along the full length of the Proposed Scheme and the impact assessment primarily focuses only on the pedestrian facilities at junctions to provide a direct comparison between the Do Minimum and Do Something scenarios. Where the Proposed Scheme introduces a change to a junction layout, the impact on pedestrians has been assessed using a set of criteria which has been derived from guidance listed in Section 6.9. The contents of Table 2.7 outline the assessment criteria for each junction

Table 2.7 Pedestrian Junction Assessment Criteria

Aspect	Indicator
Routing	Are pedestrian crossings (signalised or uncontrolled) available on all arms?
Directness	Where crossings are available, do they offer direct movements which do not require diversions or staggered crossings i.e., no or little delay required for pedestrians to cross in one direct movement?
Vehicular speeds	Are there measures in place to promote low vehicular speeds, such as minimally sized corner radii and narrow carriageway lane widths?
Accessibility	Where crossings exist, are there adequate tactile paving, dropped kerbs (or raised table treatment) and road markings for pedestrians (including able-bodied, wheelchair users, mobility impaired and pushchairs)?
Widths	Are there adequate footpath and crossing widths in accordance with national standards?

The level of service (LoS) rating demonstrated in Table 2.8 has been applied to each junction for both the Do Minimum and Do Something scenarios based on whether the above indicators have been met.'

Table 2.8 Pedestrian Junction Assessment LoS

LoS	Indicators Met (of a Total of 5)
A	5
B	4
C	3
D	2
E	1
F	0

It is further noted that Appendix 11 of the Preliminary Design Report within the Supplementary Information includes an Accessibility Audit Report which assessed the existing situation along the route of the Proposed Scheme to identify existing issues and problems for people with mobility impairment. A number of issues including issues with parking provision, drainage, footpath levels, crossing points and tactile paving surfaces, among others were highlighted during this audit. The Proposed Scheme will address these issues, and will provide significantly improved facilities for vulnerable road users.

Therefore, the anticipated impact on pedestrian infrastructure in Section 4 (Shantalla Road to Botanic Avenue) during the Operational Phase will be Positive, Very Significant and Long-Term, while the anticipated impact on pedestrian infrastructure in Section 5 (Botanic Avenue to Granby Row) during the Operational Phase will be Positive, Very Significant and Long-Term. This aligns with the overarching aim to provide enhanced walking infrastructure on the corridor. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in Appendix A6.4.1 (Pedestrian Infrastructure Assessment) of Volume 4 of the EIAR.

Regarding the concerns raised about footpath widths being too narrow, each of the locations noted here are out with the scope of the Proposed Scheme.

2.3.3.5 Enforcement

Summary of issue raised

Multiple submissions commented that camera enforcement would be vital to ensure to proper running of the public transport routes. Further comments raised included that the removal of taxis from bus lanes would be necessary to ensure car traffic does not delay to buses. Some submissions commented previous enforcement has not been successful, therefore further measures are needed.

Response to issue raised

The NTA acknowledges the comments raised in relation to camera enforcement. Whilst enforcement for the lawful use of bus lanes is currently a matter for An Garda Síochána the NTA is separately exploring proposals and methods for bus lane enforcement as set out under Measure INT20 – Enforcement of Road Traffic Laws of the Greater Dublin Area Transport Strategy 2022-2042. Notwithstanding this, specific measures have been considered in the development of the Proposed Scheme that will help deter inappropriate and unlawful use of bus lanes including advanced bus signal detection systems which will activate green signals at traffic lights for authorised vehicles only.

2.3.3.6 Parking

Summary of issue raised

A number of submissions raised concerns with parking in the Drumcondra area. Parking on the footway was raised as a key area of concern, with St Alphonsus Road and St Patricks Avenue being highlighted as two locations where the issue is prominent, due to the inability for all users to use the footpath due to the limited space available.

Other concerns related to the disabled parking bay outside Markey's shop on Drumcondra Road Lower. The proposed bay location is in close proximity to the junction and will be impacted by the high volume of traffic turning on Botanic Avenue. The submission suggests the relocation of the end of Hollybank Road.

One submission raised further concerns with an increasing amount of commuter parking within the area, which limits spaces for local people, specifically in the Iona District.

Response to issue raised

Regarding the concerns raised about illegal parking, issues relating to illegal parking are the responsibility of Dublin City Council and are outside of the remit of the NTA in this Proposed Scheme.

In relation to the amendment to the disabled parking bay outside Markey's shop on Drumcondra Road Lower, this parking bay has been relocated approximately 25m away to facilitate the segregated cycle track along Drumcondra Road Lower. The suggestion to relocate the parking bay to Hollybank Road is not feasible given that there already is a segregated cycle track and relocated bus stop proposed at this location. There is sufficient space outside Fagan's on Botanic Avenue to provide this parking bay plus a 2.0m wide footpath. The wheelchair accessible parking bays will be designed in accordance with the requirement of the Building Regulations TGD Part M as described in Section 6 of the BusConnects Preliminary Design Guidance Booklet (included in EIAR Volume 4, Appendix A4.1).

The impact of the scheme on parking and loading is assessed in Chapter 6 Traffic and Transport in Volume 2 of the EIAR. The conclusion of these assessments is summarised below,

Section 4 (Shantalla Road to Botanic Avenue) – *'With the change in parking provisions north of R132 Swords Road / Iveragh Road Junction, the Proposed Scheme will be able to provide significant improvements to walking, cycling and bus facilities, and encourage the use of sustainable modes of transport, which will ultimately reduce the demand for public parking spaces. Considering the overall retention of 265 parking spaces compared to a loss of four spaces and the potential shift to sustainable modes, the anticipated impact on parking and loading in Section 4 during the Operational Phase will be Negative, Slight and Long Term.'*

Section 5 (Botanic Avenue to Granby Row) – *'With the change in parking provisions at the locations specified, the Proposed Scheme will be able to provide significant improvements to walking, cycling and bus facilities, and encourage the use of sustainable modes of transport, which will ultimately reduce the demand for public parking spaces. Considering the overall retention of 686 parking spaces*

compared to a loss of 19 spaces and the potential shift to sustainable modes, the anticipated impact on parking and loading in Section 5 during the Operational Phase will be Negative, Slight and Long Term)

2.3.3.7 Noise, air pollution, and vibrations

Summary of issue raised

Concerns were also raised in relation to the noise pollution due to the increasing levels of traffic on Richmond Road, especially with idling cars and aggressive driving near homes which are not extensively set back off the road. Air quality was also considered an issue due to the excessive traffic levels and increased emissions, resulting in harm to the environment and public health.

Further comments queried the impact on the surrounding areas of the Proposed Scheme, over 100m away, which would impact local communities within the Iona District.

Response to issue raised

Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR describes the impact assessment with respect to noise as a result of the construction and operation of the Proposed Scheme. The study area for potential noise and vibration impacts during both Construction and Operational Phases relate to areas of potentially impacted noise sensitive locations (NSLs), which include areas where people spend significant periods of time and where concentration, sleep and amenity are important considerations. The key noise and vibration sensitive receptors in the vicinity of Richmond Road are predominantly residential dwellings.

Traffic modelling for the Proposed Scheme was undertaken (as described in Chapter 6 (Traffic & Transport) in Volume 2, and in Appendix A6.1 (Transport Impact Assessment Report) in Volume 4 of the EIAR), and the modelling outputs were used to undertake a detailed analysis of traffic noise changes, focussing on modelled roads within 1km of the Proposed Scheme in order to assess the surrounding road network. For Richmond Road and the junction of Richmond Road and Drumcondra Road, the capacity analysis result showed that the threshold for traffic for the Opening Year and Year 2043 was within the threshold, between 85%-100%. The magnitude of impact for the opening year is resulted as being of Not Significant to Low. This means that Richmond Road will be able to accommodate any additional traffic and also the junction of Drumcondra Road and Richmond Road.

Section 9.5 of Chapter 9 of the EIAR describes all proposed mitigation measures for the control of noise impacts during both the Construction and Operational Phases. The mitigation measures are also described in Chapter 22 (Summary of Mitigation and Monitoring Measures) in Volume 2 of the EIAR, and in Appendix A5.1 (Construction Environmental Management Plan) in Volume 4 of the EIAR. As the impact assessment concluded that the Operational Phase noise impacts will not be significant (Negative, Moderate to Positive, Imperceptible), there are no specific mitigation measures required during the Operational Phase. Mitigation measures during the Construction Phase include:

- Selection of quiet plant;
- Noise control at source;
- Screening;
- Restrictions on hours of work;
- Liaison with the public; and
- Monitoring.

In terms of construction, Section 9.5.1 of the EIAR describes the predicted Construction Phase impacts following the implementation of those mitigation measures. All Construction Phase impacts will be temporary. The significance of the predicted impacts are mapped in Figure 9.3 in Volume 3 of the EIAR, with Richmond Road shown on Sheet 5. Figure 9.3 shows the impact on Richmond Road as being Not Significant to Imperceptible.

In terms of operational impact, Section 9.5.2 of Chapter 9 of the EIAR states that once operational *'there are no calculated significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme'*, with Richmond Road specifically being Imperceptible to Not Significant as shown

in Sheet 5 of Figure 9.4 (Opening Year 2028 Traffic Noise Impact Summary) and Figure 9.5 (Design Year 2043 Traffic Noise Impact Summary) in Volume 3 of the EIAR. Therefore, as outlined above, no further noise mitigation measures have been proposed.

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases within the study area. For the traffic assessment, the focus is on air quality sensitive receptors which will bound the Proposed Scheme and those along diverted traffic routes within the study area. Figures 7.3 to 7.8 in Volume 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the modelled change in annual mean concentration of NO₂ and particulate matter (PM₁₀ and PM_{2.5}) during the Construction Phase (Figures 7.6 to 7.8) and Operational Phase (Figures 7.3 to 7.5). For Richmond Road (Sheet 3 in each Figure), the significance of the change is negligible away from the Proposed Scheme for all three pollutants modelled, improving to Slight to Substantial Beneficial for NO₂ at the junction with Drumcondra Road.

With respect to the assessment of impacts on the wider surrounding communities further from the Proposed Scheme boundary, the study areas for each environmental topic have been outlined in each chapter in Volume 2 of the EIAR. These study areas are selected in order to capture all the likely significant effects of both the Construction and Operational Phases of the Proposed Scheme, and can vary a good deal between environmental topics based on how far an impact can reasonably be expected to be experienced. For example:

- Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR has two study areas as outlined in Section 6.2.1, a direct study area (the Proposed Scheme) and an indirect study area (area of influence the Proposed Scheme has on changing traffic volumes above a defined threshold);
- Chapter 7 (Air Quality) in Volume 2 of the EIAR has a number of study areas as described in Section 7.2.1, mainly the area either side of the Proposed Scheme up to 350m for the Construction Phase and 200m for the Operational Phase;
- Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR also has different study areas for both the Construction and Operational Phases as described in Section 9.2.1, namely up to 300m from the Proposed Scheme for the Construction Phase and up to 1km for the Operational Phase;
- Chapter 10 (Population) in Volume 2 of the EIAR describes the community assessment study area as '*Community areas that will either be intersected by or are adjacent to the Proposed Scheme*'. The 'community areas' are based on the 2016 Census parish boundaries from the Central Statistics office;
- Both Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR both have a study area which encompasses an area extending 50m in all directions from the boundary of the Proposed Scheme; and
- Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR describes the study area in Section 17.2.1 as follows, '*The primary study area is a boundary-to-boundary road/street corridor along the Proposed Scheme, which incorporates the immediately adjoining landscapes, including open spaces, parks, gardens and other land use areas, together with amenity, landscape/townscape and visual planning considerations. This study area also extends where required to incorporate wider viewpoints to the Proposed Scheme*'.

As outlined above, and in other topic chapters within Volume 2 of the EIAR, the Iona District or parts thereof as relevant to the topic, have been fully assessed within the EIAR.

2.3.3.8 Bus lanes and bus stops

Summary of issue raised

One submission noted the proposed bus lane on Drumcondra Road between Hollybank Road and Botanic Avenue, commenting that this lane previously allowed traffic to merge into the inner lane more safely when turning left into Botanic Avenue.

One submission raised issues with the relocation of current bus stops. The proposed changes to Bus Stop 19 on Drumcondra Road Lower would reduce the sightlines for traffic turning right from

Hollybank Road onto Drumcondra Road. The relocation of Bus Stop 17 is supported within the submission, due to the possibility of improving safety for vehicles.

Response to issue raised

Regarding the comment about the bus lane between Hollybank Road and Botanic Avenue previously allowing traffic to merge into the inner lane to turn left into Botanic Avenue, the existing junction is proposed to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure. Left turning vehicles will now use the general traffic lane to turn left onto Botanic Avenue as depicted in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 03 General Arrangement drawings, Sheet 31, Figure 2.44.

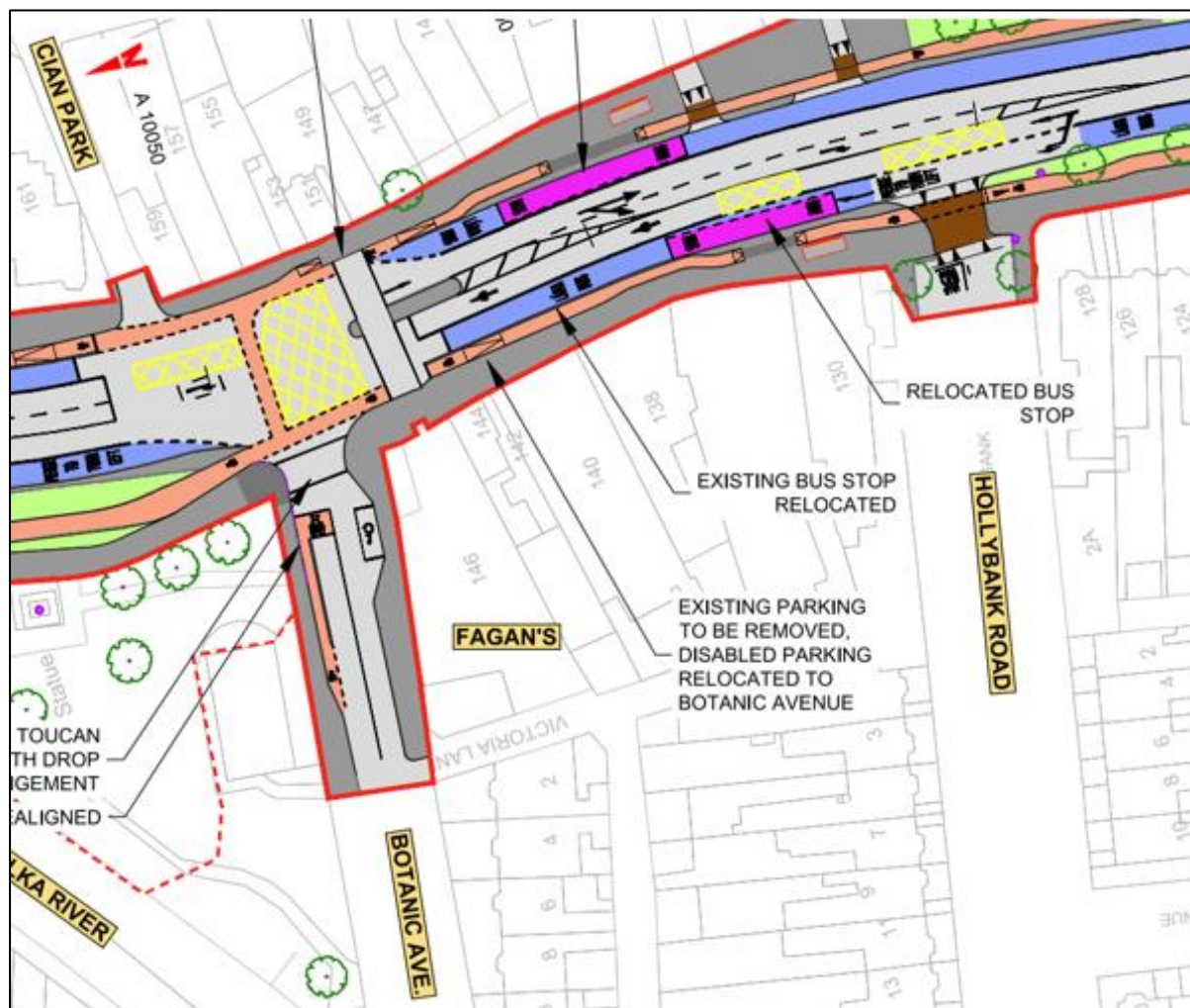


Figure 2.44 Proposed General Arrangement between Hollybank Road and Botanic Avenue (Sheet 31)

The NTA notes the support of the relocation of Bus Stop 17. Regarding Bus Stop 19, The design of the Proposed Scheme at this location complies with the visibility requirements set out in Section 4.4.5 of DMURS. The Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided in the Supplementary Information did not highlight any safety issues with the proposed arrangement in this regard.

2.3.3.9 Discouraging heavy vehicles

Summary of issue raised

Submissions noted the high level of heavy vehicles that use the route. One comment raised was that HGVs are using Richmond Road as a shortcut to Dublin port, causing congestion, road damage and posing safety risks.

Another submission raised concerns with the impact on local people of vehicles over 3.5 tonnes driving through the district, request specific measures to discourage them from using the route. Further submissions commented that 'Maximum Gross Weight 3.5t' signs are regularly ignored by road users.

Response to issue raised

While the junction of Swords Road / Richmond Road will be upgraded to enhance safer pedestrian and cycling use, there are no plans under the Proposed Scheme to make changes to the environs of Richmond Road. The NTA acknowledges the comments raised in relation to enforcement. Enforcement of road traffic laws, including weight restrictions is a matter for An Garda Síochána.

The existing Maximum Gross Weight regulatory traffic sign at the start of Richmond Road will remain and has been taken into account within the traffic and transportation assessment as detailed in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR.

2.3.4 Other Issues Raised and Responses

2.3.4.1 Public Realm

Summary of issue raised

One submission requested the application of modern good quality placemaking to aid in the improvement of accessibility within the local area. The respondent further request that international best practice was applied to help highlight and address the negative impact of through traffic in the local community, creating better spaces for the community.

Response to issue raised

The aim of the Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor. The Proposed Scheme will greatly improve transport services for all that live along the route of the Proposed Scheme, including along Drumcondra, by providing significantly improved sustainable transport options. Furthermore, it is an objective of the Proposed Scheme to ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible. This consists of replacing footway surfaces appropriate to the location, native planting, new street trees, areas of wildflower grass verges and replacement hedgerows.

As described in Sections 4.5.4 and 4.5.5 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR a number of landscape and urban realm proposals are planned for the Drumcondra area, as detailed below:

'Along Drumcondra Road Upper, the design proposes to make footway surfaces consistent in appearance using poured concrete and concrete kerbs with repairs to match existing as needed. Reinstatement of grass verges and enlarging existing tree surrounds is proposed to support future tree health. No-dig construction methods are to be utilised where works could otherwise impact on existing tree roots.'

The DCU area is proposed as a local area of enhancement with the proposed design including high-quality grey concrete slabs interspaced with darker grey linear bands of paving that continue along the DCU boundary to the west for visual continuity. Granite kerbs are proposed along this area utilising existing granite kerbs where possible. A general declutter and unified street furniture use is proposed for this area. Parking bays are proposed to be finished in concrete setts to visually integrate with pedestrian areas, or as inset parking bays at footway level to provide wider footways when not in use. The private forecourts have the potential to be repaved in concrete block paving in consultation with landowners. Edge kerbs are proposed to mark the boundary of private forecourts. The commemorative flower post features are to be retained or relocated in consultation with Local Authorities.'

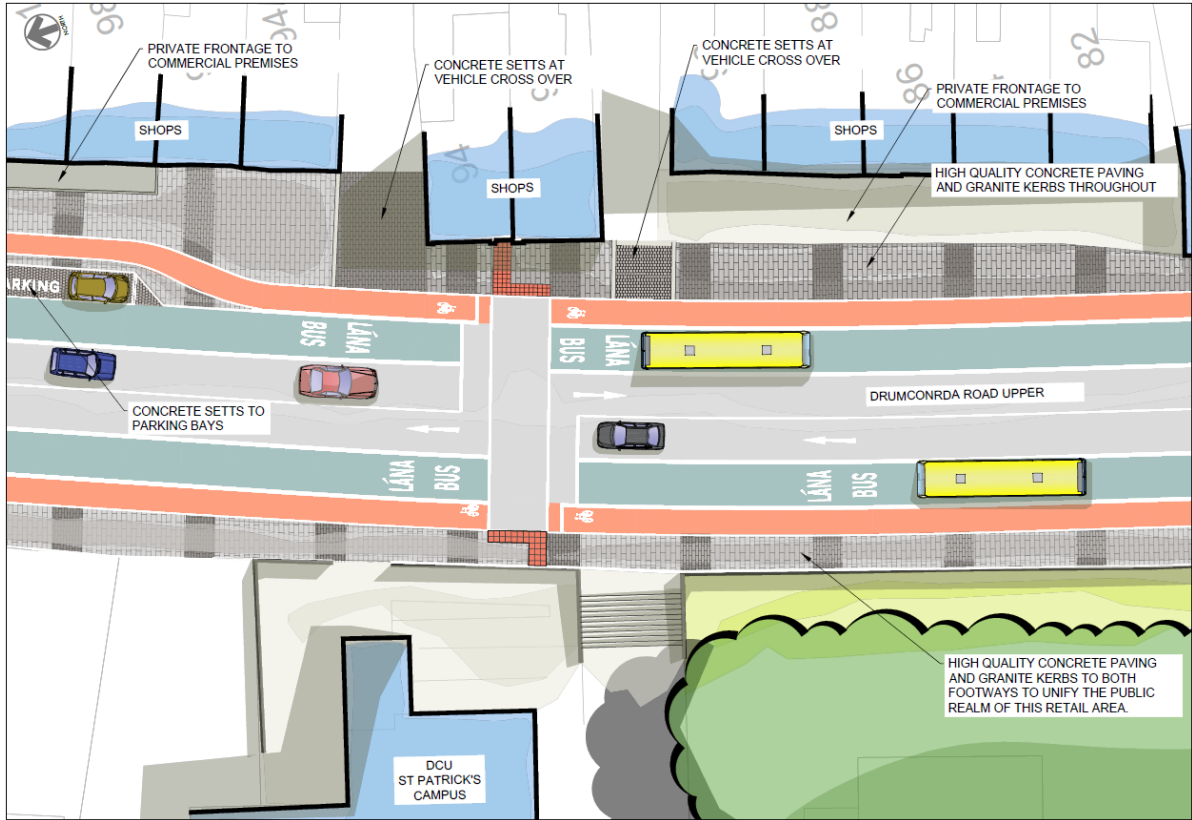


Figure 2.45 DCU Area Indicative Design

The footway in front of Cat and Cage pub to be finished in concrete paving slabs and granite kerbs. The banding feature starts at the edge of the pub. The pedestrian crossing at the side street is finished in concrete setts to enhance pedestrian priority. The residential area footways are to feature concrete paving slabs and granite kerbs of the same type as the retail area but without the banding feature.

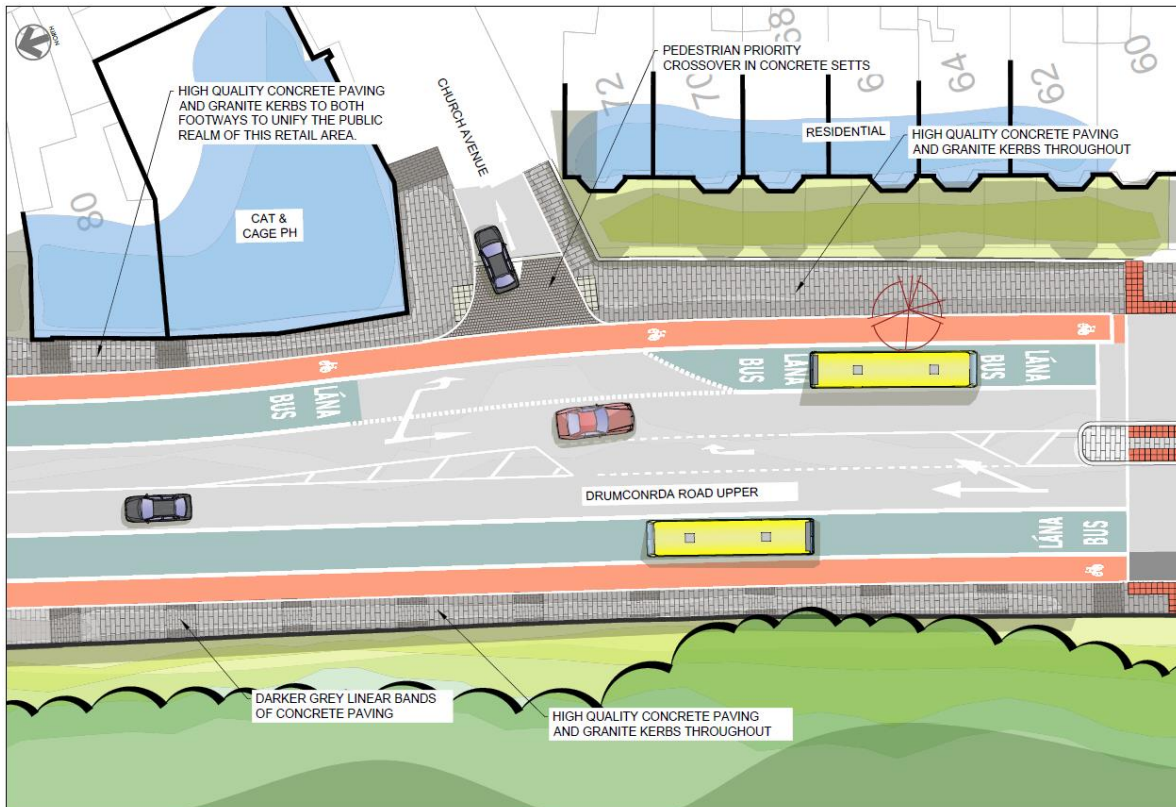


Figure 2.46 Footways in the Vicinity of the Cat and Cage Pub Indicative Design

The Drumcondra Road Upper shopping parade is also identified as a local enhancement opportunity to improve the image of the urban realm. The design proposed is to reflect the same design style and materials as the DCU area in order to make the two retail areas visually unified. The design includes footway enhancements with high-quality grey concrete slabs interspaced with darker grey linear paving units as feature bands. Granite kerbs are proposed along this area reusing exiting granite kerbs where possible. The refreshed paving and banding are proposed in the private forecourt areas up to the edge of the shops but will need to be agreed with landowners. Parking bays are proposed to be finished in concrete setts to visually integrate with adjacent pedestrian areas or as inset parking bays at footway level to provide wider footways when not in use. The commemorative flower post features are to be retained or relocated within the darker banding feature paving in consultation with Local Authorities.

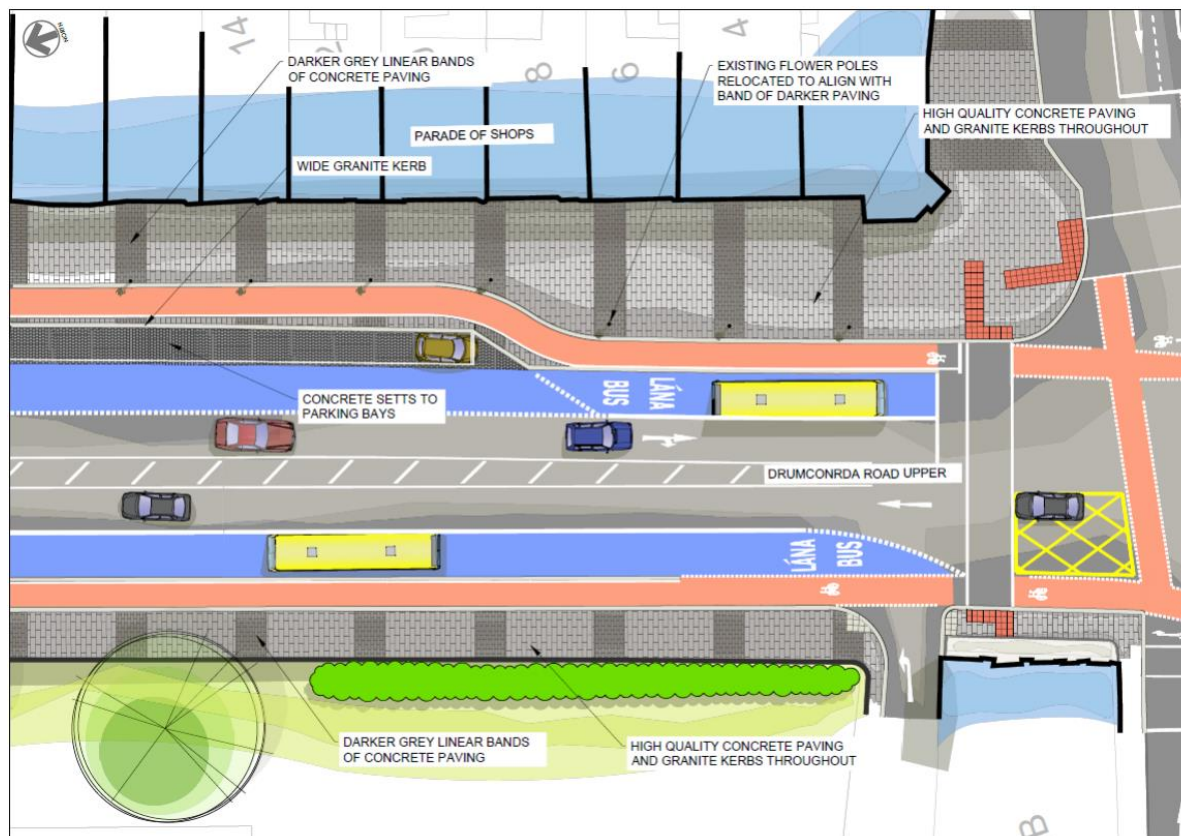


Figure 2.47 Drumcondra Road Upper Shopping Parade Indicative Design

A new pedestrian and cycle bridge is proposed along the western edge of Frank Flood Bridge leading into Our Lady's Park.

The proposed bridge would require the removal of two Poplar trees within Our Lady's Park which are a different variety to one another and six Silver Birch trees adjacent to Millmount Terrace. Six new smaller-sized trees have been proposed surrounding the square paved area in Our Lady's Park, subject to underground utilities. Three new small canopy trees are proposed at the west end of the bridge adjacent to Millmount Terrace.

The existing square area of paving surrounding the statue on the south side of the river will be replaced and enhanced with a combination of stone and concrete paving together with new seating as a local area enhancement. The path close to the river will be re-aligned and re-surfaced to meet with the new paved square. Additional planting is to be provided on the eastern side of the path to prevent access to the narrow embankments leading to the river side beneath the structure.

The bridge structure and its parapets have been designed to be slender and visually 'light' to enable views of the existing road bridge to be retained. A two-tone colour scheme has been adopted which will create distinction between the central girder and the edge member preventing it appearing monolithic. The parapet top rail, posts and edge member are proposed to be painted light grey. The central girder is to be coloured oxide red which reflects the dark red brick colour in some of the buildings in proximity to the bridge. The proposed mesh panel of the parapet is to be stainless steel. The soffit of the bridge

shall be painted black to create a shadow effect further improving the slender appearance of the edge member.

The bridge deck is proposed to be an anti-slip surface consisting of aggregate bonded together with an epoxy resin. This surface continues to the junction with Millmount Terrace to provide a consistent application of the same material. The cycle way section will be coloured 'Tuscan Terracotta' resin or similar in order that it appears as a tone that complements the standard cycle ways. The footway section will be coloured in a grey resin in order that it complements the new paved footways in the area.

The space between the bridge soffit and ground is to feature pebbles set in mortar to discourage anti-social behaviour.

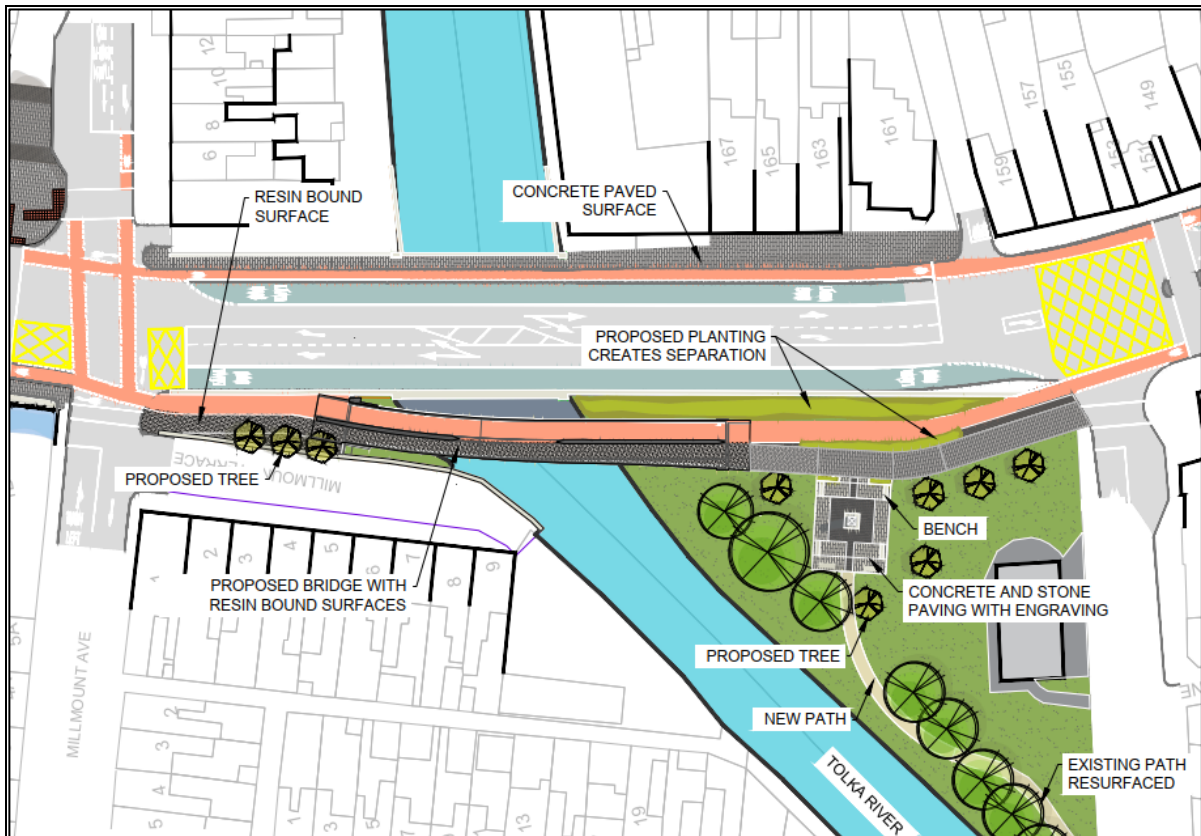


Figure 2.48 Frank Flood Bridge Indicative Design

The remaining footways along this section south of Botanic Avenue are proposed to be resurfaced in asphalt and concrete kerbs to match existing. The footways along the residential area in Drumcondra Road Lower repaired and resurfaced as needed. Maintenance works are proposed for the existing brick structure at the northern end of Drumcondra Road Lower to remove the graffiti which will in turn enhance the street scene and perception of safety in the area.

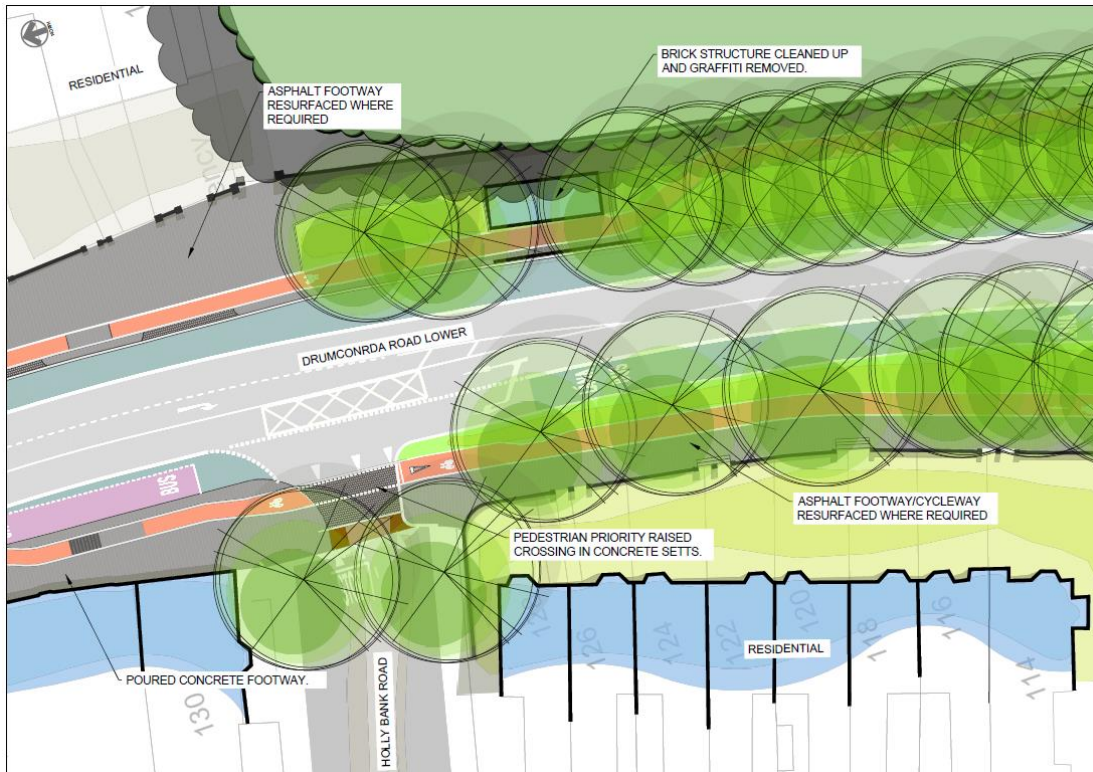


Figure 2.49 Northern End of Drumcondra Street Lower Indicative Design

Although not required to deliver the Proposed Scheme, there is the potential to include a local area enhancement to the paved area outside the café in the residential area west of Drumcondra Road Lower. The concept proposal includes high quality grey concrete paving and granite kerbs.

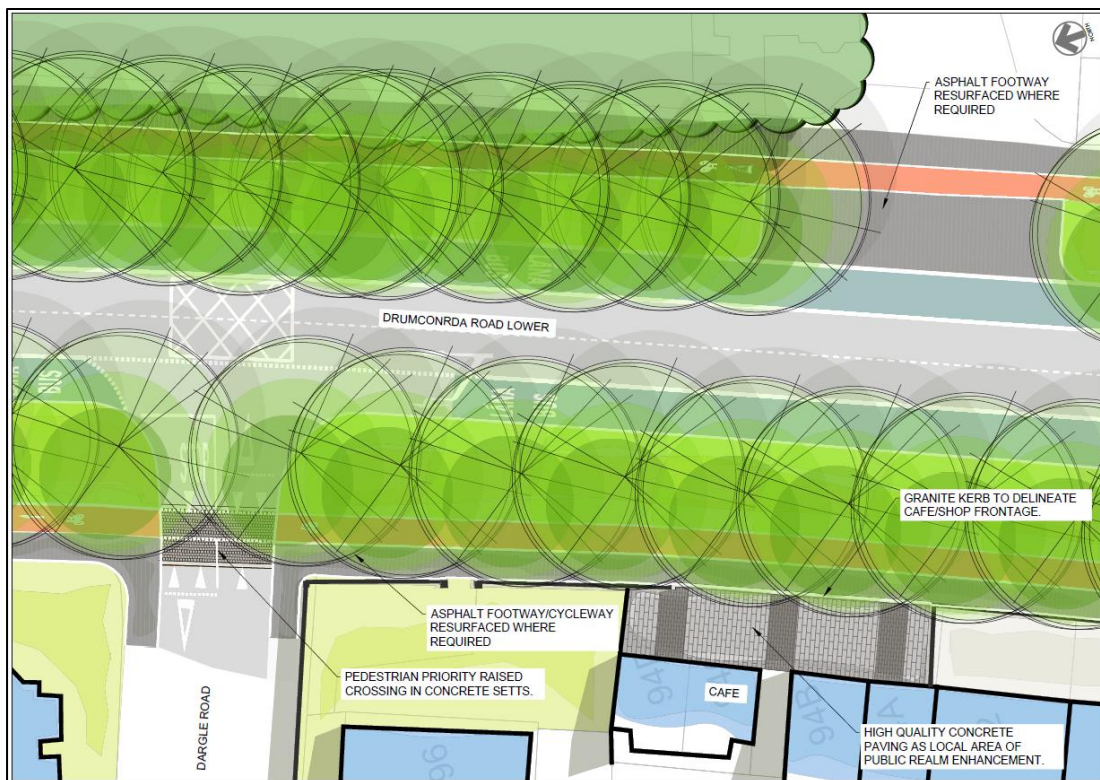


Figure 2.50 Café and Footways in the Residential Area West of Drumcondra Street Lower Indicative Design

The urban realm in the Drumcondra Rail Station and Bridge area is to be improved by de-cluttering the footways. Any realignment to footways due to proposed works would be reinstated with materials to match the existing materials. The retention and reuse of paving and quality kerb materials is proposed where possible.'

2.3.4.2 Use of NTA Eastern Regional Model

Summary of issue raised

One submission raised concerns that the NTA Eastern Regional Model does not forecast the traffic in the Iona District accurately, and therefore the conclusions supporting traffic volumes in the area are incorrect, not accurately predicting the traffic output in the district.

Response to issue raised

While the NTA's Eastern Regional Model is the primary tool and provides the overarching information on forecast travel demand for each mode of transport, it also works with a suite of other models such as a local area model, microsimulation modelling and local junction modelling that have been calibrated to a greater level of detail based on traffic survey data. More information on the methodology of modelling and the Proposed Scheme is described in Appendix A6.1, Sub Appendix (Appendix 1 – Transport Modelling Report).

As outlined in Section 3.2.2.3, "The NTA's ERM is the most sophisticated modelling tool available for assessing complex multi modal movements within an urban context. This provides a consistent framework for transport assessments. The ERM is the ideal tool to use as a basis for the assessment of the Proposed Scheme and to estimate its multi-modal impact. In addition, it provides the platform to forecast future trip demand and distribution".

2.3.4.3 Request for closure of Saint Anne's Road

Summary of issue raised

One submission centred around concerns for the rat run that runs through Saint Anne's Road, in the submission it was suggested that the road should be closed to traffic and the junction of Drumcondra Road, whilst keeping permeability for cyclists and pedestrians.

The respondent believes this would give opportunity for the pocket park to be extended, or a small plaza to be created which would benefit local businesses. It is noted that the closure would require a no right turn onto Drumcondra Road, with the comment that previous closures of Saint Anne's Road has caused little disruption and saw the vehicle traffic on the road considerably reduced.

The submission requests that the option is considered, with the possibility of piloting the Proposed Scheme before use.

Response to issue raised

It is noted in Section 6.4.6.2.2.1 of Chapter 6 (Traffic & Transport) of Volume 2 of the EIAR that the modelled forecasts for the 2028 opening year indicate that one of the impacts of the proposed Swords to City Centre Core Bus Corridor Scheme is that there is forecasted to be a reduction of 31% in the number of people travelling via car along the scheme corridor towards the city centre at AM peak hour. Similarly, in the PM peak hour, there is a reduction of 32% in the number of people travelling via car.

The Proposed Scheme provides a balance between ensuring that the use of these side streets by through traffic is discouraged at all times, while also ensuring that access by car to local streets, schools and businesses is maintained, via the surrounding road network.

Section 6.4.6.2.8 of EIAR Chapter 6 Traffic and Transport provides details of the General Traffic Assessment. Section 6.4.6.2.9.1 provides an overview and states: *'The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is, however, recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for*

general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.'

Section 6.4.6.2.8.1 goes on to state that *'The purpose of this Section is to assess the overall impact that any redistributed general traffic will have on both the direct and indirect study areas. It should be noted that the impacts presented in this Chapter are based on the final Preliminary Design for the Proposed Scheme which includes embedded mitigation to limit environmental and traffic and transport impacts to a minimal level as part of the iterative design development work described previously above.'*

Section 6.4.6.2.8.2 discusses the significance of the General Traffic Impact and states: *'To determine the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and indirect study areas, the LAM Opening Year 2028 model results have been used to identify the difference in general traffic flows between the Do Minimum and Do Something scenarios and the associated level of traffic flow difference as a result of the Proposed Scheme. The assessment has been considered with reference to both the reductions and increases in general traffic flows along road links.'*

Direct Study Area

AM Peak Hour

Section 6.4.6.2.8.3 of Chapter 6 summarises the General Traffic Flow Difference in the AM Peak Hour and notes the following:

'The contents of Table 6.67 demonstrate that there is a slight to profound reduction of between -129 and -1644 in general traffic flows along the direct study area during the AM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. Therefore, the anticipated impact on general traffic during the Operational Phase will be Positive, Significant and Long-Term on the direct study area.'

There are no increases in traffic flows along the direct study area during the AM Peak Hour of the 2028 Opening Year.'

PM Peak Hour

Section 6.4.6.2.8.4 of Chapter 6 summarises the General Traffic Flow Difference in the AM Peak Hour and notes the following:

'The contents of Table 6.71 demonstrate that there is a slight to significant reduction of between -161 and -986 general traffic flows along the direct study area during the PM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. Therefore, the anticipated impact on general traffic during the Operational Phase during the AM peak hour will be Positive, Moderate and Long-Term on the direct study area.'

Direct Increases in General Traffic: There are no increases to general traffic flows along the direct study area during the PM Peak Hour of the 2028 Opening Year.'

Indirect Study Area

AM Peak Hour

'The results of the junction analysis illustrated in Appendix A6.4.8 demonstrates that the majority of local / regional road junctions during the AM Peak Hour of the 2028 Opening Year are operating with a maximum V / C ratio of below 85% during both scenarios and that the impact of the Proposed Scheme is negligible at the majority of these local / regional road junctions within the indirect study area.'

In summary, the effect of redistributed traffic associated with the Proposed Scheme is expected to result in a Low Positive and Long-Term effect at five of the 121 assessed junctions, a Not Significant and Long-Term effect at 100 of the 121 assessed junctions, an Imperceptible and Long-Term effect at 11 of the 121 assessed junctions and to result in a Negative, Moderate and Long-Term effect at five of the 121 assessed junctions.'

The redistribution of traffic during the 2028 AM Peak Hour raises no impacts assessed as significant or greater impact.'

PM Peak Hour

'The results of the junction analysis illustrated in Appendix A6.4.8 demonstrates that the majority of local / regional road junctions during the PM Peak Hour of the 2028 Opening Year are operating with a maximum V / C ratio of below 85% during both scenarios and that the impact of the Proposed Scheme is negligible at the majority of these local / regional road junctions within the indirect study area.

In summary, the effect of redistributed traffic associated with the Proposed Scheme is expected to result in a Low Positive and Long term effect at two of the 145 assessed junctions, a Not Significant and Long-Term effect at 114 of the 145 assessed junctions, an Imperceptible and Long-Term effect at 27 of the 145 assessed junctions and to result in a Negative, Slight and Long-Term effect at two of the 145 assessed junctions.

The redistribution of traffic during the 2028 PM Peak Hour raises no impacts assessed as significant or greater impact.'

Summary

Section 6.4.6.2.8.7 provides a summary of the General Traffic Impact Assessment and states:

"Given the improvements to bus priority, walking and cycling as a result of the Proposed Scheme, there will likely be an overall reduction in operational capacity for general traffic along the direct study area. This may in turn result in some redistribution of general traffic away from the main corridor onto the surrounding road network.

Using the TII guidelines as an indicator for best practice, the LAM Opening Year 2028 model results were used to identify the difference in traffic flows between the Do Minimum and Do Something scenarios. The following thresholds have been used to identify where further assessment is required:

- **Local / Regional Roads:** *Traffic redistribution results in an increase above 100 combined flows (i.e. in a two-way direction) along residential, local and regional roads in the vicinity of the Proposed Scheme in the AM and PM peak hours; and*
- **National Roads:** *Traffic exceeds 5% of the combined turning flows at junctions with/ on/or with national roads in the AM and PM peak hours as a result of traffic redistribution comparing the Do Minimum to the Do Something scenario with the Proposed Scheme in place.*

The overall results of this assessment can be summarised as follows:

- *The majority of assessed junctions have V / C ratios of below 85%, i.e. they are operating well within capacity for all assessed years in both the Do Minimum and Do Something scenarios. This indicates that these junctions will be able to accommodate any additional general traffic volumes redistributed as a result of the Proposed Scheme. The effect of the Proposed Scheme on the majority of junctions is deemed imperceptible to not significant and long-term; and*
- *No junctions are predicted to experience a significance of effect that is significant or higher.*

It should be noted that while there are low impacts to the operational capacity in the indirect study area, this level of congestion is acceptable according to national guidance. Section 3.4.2 of DMURS (2019) recognises that a certain level of traffic congestion is an inevitable feature within urban networks and that junctions may have to operate at saturation levels for short periods of time during the peak hours of the day. Chapter 1 of the Smarter Travel Policy Document (DTTAS 2019b) also acknowledges that it is not feasible or sustainable to accommodate continued demand for car use.

Therefore, it can be concluded that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area. Therefore, the anticipated impact on general traffic during the Operational Phase will be Negative, Slight and Long-Term. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no further mitigation measures have been considered to alleviate the impact outside of the direct study area.

It should therefore be considered that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area in the context of the increased movement of people overall and on sustainable modes in particular.'

Based on the result of the above assessment, no interventions are proposed at Saint Anne's Road.

2.3.4.4 Impact on Richmond Road

Summary of issue raised

One submission raised a number of concerns regarding Richmond Road, with the overarching request to implement filtered permeability on Richmond Road to address ongoing traffic issues, with a minimum request of further engagement with local residents on drafting a liveable street.

The respondent further raised concerns with the cars mounting the footpath on the road, due to its narrow width. A parking scheme was implemented in June 2023 but has not resolved the issue. Further issues with the use of the road included large vehicles, including HGVs using Richmond Road as a shortcut to Dublin port, causing congestion, road damage and posing safety risks. The submission further states risk of speeding on Richmond Road, especially after the parking scheme, where cars try to beat lights through using the road as a shortcut.

Concerns were also raised in relation to the noise pollution due to the increasing levels of traffic on Richmond Road, especially with idling cars and aggressive driving near homes which are not extensively set back off the road. Air quality was also considered an issue due to the excessive traffic levels and increased emissions, resulting in harm to the environment and public health.

The request for filtered permeability was suggested with a six-month trial to determine if it would work, in order to preserve the historical and residential charm of the area, making it more accessible and enjoyable for all.

Response to issue raised

While the junction of Swords Road / Richmond Road will be upgraded to enhance safer pedestrian and cycling use, there are no plans under the Proposed Scheme to make changes to the environs of Richmond Road.

It is noted in Section 6.4.6.2.2.1 of Chapter 6 (Traffic & Transport) of Volume 2 of the EIAR that the modelled forecasts for the 2028 opening year indicate that one of the impacts of the proposed Swords to City Centre Core Bus Corridor Scheme is that there is forecasted to be a reduction of 31% in the number of people travelling via car along the scheme corridor towards the city centre at AM peak hour. Similarly, in the PM peak hour, there is a reduction of 32% in the number of people travelling via car.

The Proposed Scheme provides a balance between ensuring that the use of these side streets by through traffic is discouraged at all times, while also ensuring that access by car to local streets, schools and businesses is maintained, via the surrounding road network.

Section 6.4.6.2.8 of EIAR Chapter 6 Traffic and Transport provides details of the General Traffic Assessment. Section 6.4.6.2.9.1 provides an overview and states: *'The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is, however, recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.'*

Section 6.4.6.2.8.1 goes on to state that *'The purpose of this Section is to assess the overall impact that any redistributed general traffic will have on both the direct and indirect study areas. It should be noted that the impacts presented in this Chapter are based on the final Preliminary Design for the Proposed Scheme which includes embedded mitigation to limit environmental and traffic and transport impacts to a minimal level as part of the iterative design development work described previously above.'*

Section 6.4.6.2.8.2 discusses the significance of the General Traffic Impact and states: *'To determine the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and*

indirect study areas, the LAM Opening Year 2028 model results have been used to identify the difference in general traffic flows between the Do Minimum and Do Something scenarios and the associated level of traffic flow difference as a result of the Proposed Scheme. The assessment has been considered with reference to both the reductions and increases in general traffic flows along road links.'

Direct Study Area

AM Peak Hour

Section 6.4.6.2.8.3 of Chapter 6 summarises the General Traffic Flow Difference in the AM Peak Hour and notes the following:

'The contents of Table 6.67 demonstrate that there is a slight to profound reduction of between -129 and -1644 in general traffic flows along the direct study area during the AM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. Therefore, the anticipated impact on general traffic during the Operational Phase will be Positive, Significant and Long-Term on the direct study area.'

There are no increases in traffic flows along the direct study area during the AM Peak Hour of the 2028 Opening Year.'

PM Peak Hour

Section 6.4.6.2.8.4 of Chapter 6 summarises the General Traffic Flow Difference in the AM Peak Hour and notes the following:

'The contents of Table 6.71 demonstrate that there is a slight to significant reduction of between -161 and -986 general traffic flows along the direct study area during the PM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. Therefore, the anticipated impact on general traffic during the Operational Phase during the AM peak hour will be Positive, Moderate and Long-Term on the direct study area.'

Direct Increases in General Traffic: There are no increases to general traffic flows along the direct study area during the PM Peak Hour of the 2028 Opening Year.'

Indirect Study Area

AM Peak Hour

'The results of the junction analysis illustrated in Appendix A6.4.8 demonstrates that the majority of local / regional road junctions during the AM Peak Hour of the 2028 Opening Year are operating with a maximum V / C ratio of below 85% during both scenarios and that the impact of the Proposed Scheme is negligible at the majority of these local / regional road junctions within the indirect study area.'

In summary, the effect of redistributed traffic associated with the Proposed Scheme is expected to result in a Low Positive and Long-Term effect at five of the 121 assessed junctions, a Not Significant and Long-Term effect at 100 of the 121 assessed junctions, an Imperceptible and Long-Term effect at 11 of the 121 assessed junctions and to result in a Negative, Moderate and Long-Term effect at five of the 121 assessed junctions.'

The redistribution of traffic during the 2028 AM Peak Hour raises no impacts assessed as significant or greater impact.'

PM Peak Hour

'The results of the junction analysis illustrated in Appendix A6.4.8 demonstrates that the majority of local / regional road junctions during the PM Peak Hour of the 2028 Opening Year are operating with a maximum V / C ratio of below 85% during both scenarios and that the impact of the Proposed Scheme is negligible at the majority of these local / regional road junctions within the indirect study area.'

In summary, the effect of redistributed traffic associated with the Proposed Scheme is expected to result in a Low Positive and Long term effect at two of the 145 assessed junctions, a Not Significant

and Long-Term effect at 114 of the 145 assessed junctions, an Imperceptible and Long-Term effect at 27 of the 145 assessed junctions and to result in a Negative, Slight and Long-Term effect at two of the 145 assessed junctions.

The redistribution of traffic during the 2028 PM Peak Hour raises no impacts assessed as significant or greater impact.'

Summary

Section 6.4.6.2.8.7 provides a summary of the General Traffic Impact Assessment and states:

“Given the improvements to bus priority, walking and cycling as a result of the Proposed Scheme, there will likely be an overall reduction in operational capacity for general traffic along the direct study area. This may in turn result in some redistribution of general traffic away from the main corridor onto the surrounding road network.

Using the TII guidelines as an indicator for best practice, the LAM Opening Year 2028 model results were used to identify the difference in traffic flows between the Do Minimum and Do Something scenarios. The following thresholds have been used to identify where further assessment is required:

- **Local / Regional Roads:** Traffic redistribution results in an increase above 100 combined flows (i.e. in a two-way direction) along residential, local and regional roads in the vicinity of the Proposed Scheme in the AM and PM peak hours; and
- **National Roads:** Traffic exceeds 5% of the combined turning flows at junctions with/ on/or with national roads in the AM and PM peak hours as a result of traffic redistribution comparing the Do Minimum to the Do Something scenario with the Proposed Scheme in place.

The overall results of this assessment can be summarised as follows:

- The majority of assessed junctions have V / C ratios of below 85%, i.e. they are operating well within capacity for all assessed years in both the Do Minimum and Do Something scenarios. This indicates that these junctions will be able to accommodate any additional general traffic volumes redistributed as a result of the Proposed Scheme. The effect of the Proposed Scheme on the majority of junctions is deemed imperceptible to not significant and long-term; and
- No junctions are predicted to experience a significance of effect that is significant or higher.

It should be noted that while there are low impacts to the operational capacity in the indirect study area, this level of congestion is acceptable according to national guidance. Section 3.4.2 of DMURS (2019) recognises that a certain level of traffic congestion is an inevitable feature within urban networks and that junctions may have to operate at saturation levels for short periods of time during the peak hours of the day. Chapter 1 of the Smarter Travel Policy Document (DTTAS 2019b) also acknowledges that it is not feasible or sustainable to accommodate continued demand for car use.

Therefore, it can be concluded that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area. Therefore, the anticipated impact on general traffic during the Operational Phase will be Negative, Slight and Long-Term. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no further mitigation measures have been considered to alleviate the impact outside of the direct study area.

It should therefore be considered that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area in the context of the increased movement of people overall and on sustainable modes in particular.'

Based on the result of the above assessment, no interventions are proposed at Richmond Road.

2.3.4.5 Impact to Our Lady's Park, Drumcondra

Summary of issue raised

One submission raised concerns in relation to Our Lady's Park and the impact during and after the construction phase. The new cycle/pedestrian bridge was a focus of concerns, the respondent

commenting that the bridge would cause the Drumcondra Road side of the park to be no longer easily accessible and will promote potential for antisocial behaviour. Further concerns were raised regarding the relocation of the statue of Our Lady, which is noted to be included in the National Inventory of Architectural Heritage, local residents are concerned where the statue to be placed to remain prominent in the park.

The submission highlights EIAR Volume 4 Appendix A16.3, commenting that the new bridge design makes no effort to demonstrate any empathy with the historic boundary treatments of the surrounding area. The materials will make the bridge a target of criminal damage, such as graffiti. The respondent suggests the current bridge could be widened, and existing boundaries reinstated to maintain the Park as well as remain in keeping with the local area.

Comments also highlighted the lack of consultation with local people regarding the changes to community space.

Response to issue raised

The Statue of Our Lady will not be permanently relocated, if the statue requires temporary removal to facilitate the construction of the proposed bridge on the west side of Frank Flood Bridge, it will be returned to its current setting and as close as possible to its current location. The impact on Our Lady's Park and the Statue of Our Lady within the park has been assessed within the EIAR, particularly in Chapter 15 (Archaeological & Cultural Heritage), Chapter 16 (Architectural Heritage) and Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 as outlined below.

- Chapter 15 assesses the impact of the removal and reinstatement of the statue from a cultural heritage perspective (Reference Number CBC0002CH022, also included in Appendix A15.2 (Archaeological and Cultural Heritage Inventory) in Volume 4 of the EIAR) stating the following, *'A mid-20th century Marian statue is located within a small park known as 'Our Lady's Park'. There will be a temporary impact on the setting of the memorial during construction phase. The memorial will require protection from any adverse impacts for the duration of the works and if necessary, it can be temporarily removed to ensure its protection. This cultural heritage feature has a low sensitivity value and the magnitude of impact is low therefore the potential impact is Negative, Slight, Temporary'*. It is not intended to relocate the statue, Section 15.5.1.8.2 states, *'The Marian Statue at Our Lady's Park in Drumcondra (CBC0002CH022; Figure 15.1 Sheet 15 of 18 in Volume 3 of this EIAR) will be protected from any adverse impacts during construction works and if necessary for its protection, it will be removed under archaeological supervision. This will be undertaken in accordance with a method statement agreed with the statutory authorities. It will be returned to its current setting and as close as possible to its current location following completion of the works.'*
- Chapter 16 assesses the impact of the removal and reinstatement of the statue from an architectural heritage perspective, and specifically as it is recorded on the National Inventory of Architectural Heritage (NIAH Reference Number 50130158, also included in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 of the EIAR). The chapter states that *'The Statue of Our Lady (NIAH 50130158) will be temporarily removed to facilitate the construction of the proposed cycle and pedestrian bridge on the west side of Frank Flood Bridge. The statue is of Medium sensitivity. There is potential for loss or damage to sensitive fabric during its removal, transport, storage and reinstatement, the magnitude of which is High. The predicted Construction Phase impact will be Direct, Negative, Significant and Temporary'*. However with the appropriate mitigation (recording, removal, safe storage and reinstatement) the impact reduces to Direct, Negative, Slight and Temporary.
- Chapter 17 assesses the impact on the amenity of Our Lady's Park during construction and operation of the Proposed Scheme. During the Construction Phase the Chapter describes the impact on Our Lady's Park as Negative, Significant and Temporary / Short-Term. For the Operational Phase the Chapter states that *'The new bridge will provide much improved cycle and pedestrian access across the River Tolka, improving the functionality of the open space, and arguably also provide increased amenity space for the park. There will be improvements to the open space with improved paving, footpaths and additional seating, and the setting of the relocated Marian statue will be enhanced. Effects will become positive over time as replacement planting matures and the bridge becomes an accepted part of the townscape'*. The impact following construction is described as Neutral, Moderate / Significant and Short-Term, improving to Positive, Moderate and Long-Term at 15 years post-construction.

Regarding concerns raised about antisocial behaviour, Section 10.4.4.1.1 of EIAR Chapter 10 Population considers the Community Amenity and for Our Lady's Park, Drumcondra community area this is assessed a Negative, Moderate/Significant and Short-Term impact.

'These environmental impacts have been considered together to identify if there will be in-combination impacts acting upon the same community facilities.'

The assessment concluded that there would be a range of impacts on community amenity as a result of the Operational Phase of the Proposed Scheme. The impact on community amenity in community areas predominantly along the Proposed Scheme (Swords, River Valley, Larkhill – Whitehall – Santry, Marino, Drumcondra, Glasnevin, Iona Road, North William Street, Gardiner Street, Berkeley Road, Dominick Street and Pro Cathedral) differs depending on location, however, is expected to range between Negative, Slight and Long Term to Positive, Not Significant and Long-Term. A summary of the findings of the community amenity assessment of the Operational Phase of the Proposed Scheme is as follows: • Negative, Slight and Long-Term – Swords, Larkhill – Whitehall – Santry, Marino, Drumcondra, Glasnevin, Iona Road, Gardiner Street, Berkeley Road and Pro Cathedral; • Negative, Not Significant and Long-Term – Swords and Larkhill – Whitehall – Santry; • Positive, Not Significant and Long-Term – Iona Road, North William Street, Gardiner Street, Berkeley Road, Dominick Street and Pro Cathedral.

It should be noted that the impacts outlined above are considered to be localised, and as such, the wider community areas located along the Proposed Scheme (Swords, River Valley, Larkhill – Whitehall – Santry, Marino, Drumcondra, Glasnevin, Iona Road, North William Street, Gardiner Street, Berkeley Road, Dominick Street and Pro Cathedral) are expected to experience a Neutral to Positive, Not Significant and Long-Term impact on community amenity during the Operational Phase.'

Additional information in relation to the potential community impacts arising from crime and antisocial behaviour is set out in EIAR Chapter 10 Population Appendix A10.2 Economic Impact of the Core Bus Corridors, which notes the following:

'Good infrastructure has also been shown to have a positive impact on levels of crime, particularly low level crimes such as theft and vandalism. There is evidence from a wide range of studies that redesigned public realm, especially those which are better lit and more visible, see significant reductions in the level of crime.'

Access to Our Lady's Park will still be possible from Botanic Avenue. The design intent for the Frank Flood Bridge is to provide a well-detailed structure that complements the existing historical bridge and local surroundings. A number of landscaping and urban realm improvements are proposed for the area as described in Section 4.5.4.8.2 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR.

'The proposed bridge would require the removal of two Poplar trees within Our Lady's Park which are a different variety to one another and six Silver Birch trees adjacent to Millmount Terrace. Six new smaller-sized trees have been proposed surrounding the square paved area in Our Lady's Park, subject to underground utilities. Three new small canopy trees are proposed at the west end of the bridge adjacent to Millmount Terrace.'

The existing square area of paving surrounding the statue on the south side of the river will be replaced and enhanced with a combination of stone and concrete paving together with new seating as a local area enhancement. The path close to the river will be re-aligned and re-surfaced to meet with the new paved square. Additional planting is to be provided on the eastern side of the path to prevent access to the narrow embankments leading to the river side beneath the structure.

The bridge structure and its parapets have been designed to be slender and visually 'light' to enable views of the existing road bridge to be retained. A two-tone colour scheme has been adopted which will create distinction between the central girder and the edge member preventing it appearing monolithic. The parapet top rail, posts and edge member are proposed to be painted light grey. The central girder is to be coloured oxide red which reflects the dark red brick colour in some of the buildings in proximity to the bridge. The proposed mesh panel of the parapet is to be stainless steel. The soffit of the bridge shall be painted black to create a shadow effect further improving the slender appearance of the edge member.

The bridge deck is proposed to be an anti-slip surface consisting of aggregate bonded together with an epoxy resin. This surface continues to the junction with Millmount Terrace to provide a consistent

application of the same material. The cycle way section will be coloured 'Tuscan Terracotta' resin or similar in order that it appears as a tone that complements the standard cycle ways. The footway section will be coloured in a grey resin in order that it complements the new paved footways in the area',



Figure 2.51 West Elevation of Proposed Bridge with an Oxide Red Colour Scheme

Further details of the design considerations for the bridge can be found in Appendix J – Structures Preliminary Design Report of the Preliminary Design Report provided in the Supplementary Information.

Regarding the suggestion to widen the existing bridge, it was determined in the options report that it would not be feasible to directly widen the existing masonry arch structure and therefore a new independent structure is to be provided to accommodate the wider highway cross section desired at this location.

Regarding the comment raised about lack of consultation with local people regarding the changes to the community space. The Public Consultation Report 2018-2022 provided in the Supplementary Information for the Proposed Scheme outlines the extensive public consultation and stakeholder engagement undertaken during that period, with three rounds of non-statutory public consultation undertaken.

Throughout the three rounds a number of consultation tools were used, including:

- a dedicated website, launched in May 2017;
- an individual brochure for the Proposed Scheme (updated at all 3 rounds);
- public information events (in person for first and second rounds, virtual for third round),
- Community Forum events, to create a two-way communication process with representatives of local communities, (in person for first and second rounds, virtual for third round)
- range of digital channels, including Twitter and Facebook;
- traditional published material;
- press and radio advertising;
- outdoor advertising;
- presentations; and
- infographics.

The public events took place in accessible venues chosen to maximise the level of local engagement and attendance where possible. These events allowed members of the public to speak directly and in detail with members of the BusConnects Infrastructure team about the proposals. These non-statutory Public Information Events were advertised in local newspapers, through radio, on the BusConnects website, through extensive email reminders to public representatives, Local Authorities' Public Partnership Networks (PPN's), emails to Community Forum members, promoted through social media and digital channels.

It is acknowledged by the NTA that the change in design from an initial proposal to widen the existing bridge to a parallel structure was introduced at the third round of public consultation in November 2020.

The third round of public consultation took place from 4 November 2020 to 16 December 2020.

With the continuing effect of the COVID-19 pandemic and associated restrictions, the third Public Consultation was held largely virtually. A virtual consultation room for the Proposed Scheme was developed and virtual access to the room was facilitated. Along with offering a call back facility, the room provided a description of the Preferred Route from start to finish with supporting maps and included information of all revisions made since the previous rounds of public consultation, as well as other supporting documents. Over the six weeks of the consultation, 234 unique users visited the virtual information room for the Proposed Scheme. A third Community Forum virtual consultation call was also held on 16 November 2020, as part of the third round of non-statutory consultation.

As per the previous rounds, those properties continuing to be either potentially impacted; newly potentially impacted; or no-longer potentially impacted were written to directly to receive information on the consultation in advance of any wider publication of the proposals. One-to-one meetings were offered via Zoom or over the phone for those who wished to discuss the proposals further in relation to their own property with the minutes being recorded as part of the consultation process. In total, 243 letters were sent between 1 and 3 November 2020.

As per previous rounds the public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post. In addition, virtual meetings were resumed with residents' groups to provide updates on aspects of the Proposed Scheme. There were 231 submissions over the second and third phase of public consultation (March / April 2020 and November / December 2020).

The scheme drawings in the consultation brochure highlighted the revised arrangement for the proposed bridge at the existing Frank Flood Bridge, see Figure 2.52 below.

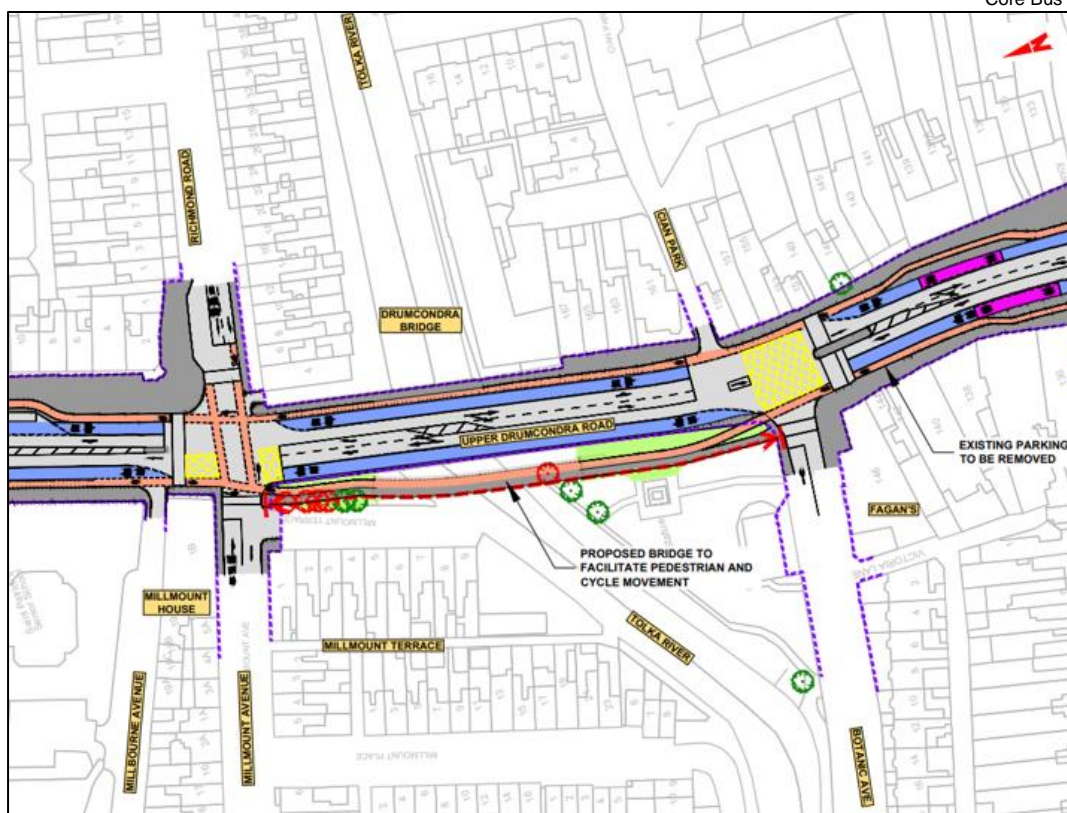


Figure 2.52 Extract from Updated Draft PRO Drawings - Third round of non-statutory consultation

Advertisements detailing where interested parties could access further information on the CBC including viewing the proposals, making a submission and attending information events were placed in local and national newspapers, online and in highly visible areas around the Greater Dublin Area. There were 200 submissions relating to the Proposed Scheme during this round of non-statutory public consultation.

2.3.4.6 Impact to traffic flow

Summary of issue raised

Concerns were raised regarding the traffic flow within the Drumcondra area. One submission commented that cross city traffic will have a greater incentive to avoid Drumcondra Road and N1, increasing traffic in the Iona District. The submission went on to note that there is a lack of cross city/radial routes resulting in private vehicle traffic will be in greater demand and will increase excessive traffic volume in Iona District. A request was made for a long term traffic management solution to mitigate against the new traffic flow patterns in the Iona District after the opening year.

The submission also raised concerns about the specific proposed no right turn from St Alphonus to Drumcondra Road commenting that it will push more traffic onto St Patricks Road and St Brigid's Road due to the movement down St Anne's Road.

Response to issue raised

As noted in section 6.4.6.2.8.3 and 6.4.6.2.8.4 of Chapter 6 Traffic and Transport, it is forecasted that traffic flows will experience a reduction in general traffic on St. Patrick's Road.

It is noted that *“there will be an overall reduction in operational capacity for general traffic along the direct study area, given the proposed infrastructural changes to the existing road layout outlined above. This reduction in operational capacity for general traffic will create some level of traffic redistribution from the Proposed Scheme onto the surrounding road network. The LAM Opening Year 2028 model results were used to identify the impact in traffic flows between the Do Minimum and Do Something scenarios. A reduction in general traffic flows along a road link has been described as a positive impact to the environment. An increase in general traffic flows along a road link has been described as a negative impact to the environment.*

Reference has been given to TII's Traffic and Transport Assessment Guidelines as an indicator for best practice, to determine the key road links that require further traffic analysis due to the increase in traffic. Operational capacities were extracted Environmental Impact Assessment Report (EIAR) Volume 2 of 4 Main Report Swords to City Centre Core Bus Corridor Scheme Chapter 6 Page 166 from the LAM at the associated junctions of the key road links to identify the impact that the Proposed Scheme will have on the Volume / Capacity ratios. The results are presented in terms of the significance of the impact to the V / C ratio for each junction based on its sensitivity and magnitude of impact. The results of the assessment demonstrate that the surrounding road network has the capacity to accommodate the redistributed general traffic as a result of the Proposed Scheme. The majority of assessed junctions that required further traffic analysis have V / C ratios that are broadly similar before and after the Proposed Scheme implementation.

Overall, it has been determined that the impact of the reduction in general traffic flows along the Proposed Scheme will be Positive, Moderate and Long-Term whilst the impact of the redistributed general traffic along the surrounding road network will be Negative, Slight and Long-Term. Thus, overall, there will be no significant deterioration in the general traffic environment in the study area as a consequence of meeting the scheme objectives of providing enhanced sustainable mode priority along the direct study area."

2.3.4.7 30kph zones and road signage

Summary of issue raised

One submission discussed the introduction of the 30kph in the Iona District, implemented by DCC. Telraams data collected by the local residents association showed that 30-40% of cars are exceeding the speed limit, with a majority of vehicles only exceeding it outside peak time when traffic volumes allow.

The submission also considers the lack of observation of local signage in the area across the Proposed Scheme area, with various levels of importance. The submission requests specific measures are put in place to create safer roads, to combat the current lack of recognition of signage.

One submission noted the high number of educational facilities, churches, and local amenities within the surrounding area. Comments in the submission mentioned that school on-road markings and other measures are regularly ignored by vehicles. Due to safety concerns on the route the submission requests specific measures at times when children are going to and from schools and childcare.

Due to the high speeds through 30kph noted in one submission, it is requested that sweeping corners to be made safer so that vehicles cannot 'carry momentum' through corners and create safer facilities for pedestrians and cyclists. It was further suggested that roads could be narrowed to encouraged motorists to moderate their speeds.

Response to issue raised

Enforcement of road traffic laws, including compliance with speed limits and other road signage, is a matter for An Garda Síochána. It is noted by the NTA that majority of the specific locations highlighted in this submission are out with the extents of the Proposed Scheme. Chapter 6 Traffic and Transport Volume 2 of the EIAR notes that in the Opening year 2028 AM scenario shows a 31% decrease in general traffic along the Proposed Route due to modal shift to other modes, such as public transport, cycling and walking. Similarly for the PM scenario, there is a 32% reduction in general traffic. This will result in an overall decrease in levels of general traffic in the routes listed above. A traffic redistribution assessment was carried out to determine the impacts of the Proposed Scheme on general traffic movements along the indirect study area.

From Section 6.4.6.3 Operational Phase Summary, the results of the assessment demonstrate that the surrounding road network has the capacity to accommodate the redistributed general traffic as a result of the Proposed Scheme. The majority of assessed junctions that required further traffic analysis have Volume to Capacity ratios that are broadly similar before and after the Proposed Scheme implementation. Overall, it has been determined that the impact of the reduction in general traffic flows along the Proposed Scheme will be Positive, Moderate and Long-Term whilst the impact of the redistributed general traffic along the surrounding road network will be Negative, Slight and Long-Term. Thus, overall, there will be no significant deterioration in the general traffic environment in

the study area as a consequence of meeting the scheme objectives of providing enhanced sustainable mode priority along the direct study area.

The traffic signs and road markings design for the Proposed Scheme can be found in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 08 Traffic Signs and Road Markings. As described in Section 4.6.9.1 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR,

'A preliminary traffic signage design has been undertaken to identify the requirements of the Proposed Scheme, whilst allowing for further design optimisation at the detailed design phase. A combination of Information, Regulatory and Warning signs have been assessed taking consideration of key destinations/centres; intersections/decision points; built and natural environment; other modes of traffic; visibility of signs and viewing angles; space available for signs; existing street furniture infrastructure; existing signs. In line with DMURS, the signage proposals have been 'kept to the minimum requirements of the TSM (Department of Transport Traffic Signs Manual), particularly where place values are very high'.

A review of the existing regulatory and warning signs in the vicinity of the route was carried out to identify unnecessary repetitive and redundant signage to be removed. This includes rationalising signage structures by better utilising individual sign poles and clustering signage together on a single pole.

As stated in TSM Chapter 1, in urban areas the obstruction caused by posts located in narrow pedestrian footpaths should be minimised. Therefore, where practicable, signs are to be placed on single poles, or larger signs will be cantilevered from a post at the back of the footpath using H-frames where necessary. Passively safe posts will be introduced where possible to eliminate the need for vehicle restraint systems.'

With regard to the Proposed Scheme, there are a number of measures that have been implemented that are likely to have a traffic calming effect. These include improved junction layouts with reduced corner radii, narrow carriageway line widths and raised table crossings on side roads.

2.3.4.8 Request for adjustments to street design in the Iona District

Summary of issues raised

One submission requests adjustments to the mini roundabouts on Iona Road and St Alphonsus Road, as the current use of them is considered not suitable for all users and increased safety for cyclists and pedestrians is needed.

One submission commented that due to the extent and range of issues present in the Iona District and the high volume of traffic which is continuing to rise, a more fundamental reworking of the street design is needed within the Iona District.

Response to issues raised

As noted in section 6.4.6.2.8.3 and 6.4.6.2.8.4 of Chapter 6 Traffic and Transport, it is forecasted that traffic flows will experience a reduction in general traffic in the Iona District.

It is noted in Section 6.4.6.2.2.1 of Chapter 6 (Traffic & Transport) of Volume 2 of the EIAR that the modelled forecasts for the 2028 opening year indicate that one of the impacts of the proposed Swords to City Centre Core Bus Corridor Scheme is that there is forecasted to be a reduction of 31% in the number of people travelling via car along the scheme corridor towards the city centre at AM peak hour. Similarly, in the PM peak hour, there is a reduction of 32% in the number of people travelling via car.

The Proposed Scheme provides a balance between ensuring that the use of these side streets by through traffic is discouraged at all times, while also ensuring that access by car to local streets, schools and businesses is maintained, via the surrounding road network.

Section 6.4.6.2.8 of EIAR Chapter 6 Traffic and Transport provides details of the General Traffic Assessment. Section 6.4.6.2.9.1 provides an overview and states: *'The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is, however, recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout*

and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.'

Section 6.4.6.2.8.1 goes on to state that *'The purpose of this Section is to assess the overall impact that any redistributed general traffic will have on both the direct and indirect study areas. It should be noted that the impacts presented in this Chapter are based on the final Preliminary Design for the Proposed Scheme which includes embedded mitigation to limit environmental and traffic and transport impacts to a minimal level as part of the iterative design development work described previously above.'*

Section 6.4.6.2.8.2 discusses the significance of the General Traffic Impact and states: *'To determine the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and indirect study areas, the LAM Opening Year 2028 model results have been used to identify the difference in general traffic flows between the Do Minimum and Do Something scenarios and the associated level of traffic flow difference as a result of the Proposed Scheme. The assessment has been considered with reference to both the reductions and increases in general traffic flows along road links.'*

Direct Study Area

AM Peak Hour

Section 6.4.6.2.8.3 of Chapter 6 summarises the General Traffic Flow Difference in the AM Peak Hour and notes the following:

'The contents of Table 6.67 demonstrate that there is a slight to profound reduction of between -129 and -1644 in general traffic flows along the direct study area during the AM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. Therefore, the anticipated impact on general traffic during the Operational Phase will be Positive, Significant and Long-Term on the direct study area.'

There are no increases in traffic flows along the direct study area during the AM Peak Hour of the 2028 Opening Year.'

PM Peak Hour

Section 6.4.6.2.8.4 of Chapter 6 summarises the General Traffic Flow Difference in the AM Peak Hour and notes the following:

'The contents of Table 6.71 demonstrate that there is a slight to significant reduction of between -161 and -986 general traffic flows along the direct study area during the PM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. Therefore, the anticipated impact on general traffic during the Operational Phase during the AM peak hour will be Positive, Moderate and Long-Term on the direct study area.'

Direct Increases in General Traffic: There are no increases to general traffic flows along the direct study area during the PM Peak Hour of the 2028 Opening Year.'

Indirect Study Area

AM Peak Hour

'The results of the junction analysis illustrated in Appendix A6.4.8 demonstrates that the majority of local / regional road junctions during the AM Peak Hour of the 2028 Opening Year are operating with a maximum V / C ratio of below 85% during both scenarios and that the impact of the Proposed Scheme is negligible at the majority of these local / regional road junctions within the indirect study area.'

In summary, the effect of redistributed traffic associated with the Proposed Scheme is expected to result in a Low Positive and Long-Term effect at five of the 121 assessed junctions, a Not Significant and Long-Term effect at 100 of the 121 assessed junctions, an Imperceptible and Long-Term effect at 11 of the 121 assessed junctions and to result in a Negative, Moderate and Long-Term effect at five of the 121 assessed junctions.'

The redistribution of traffic during the 2028 AM Peak Hour raises no impacts assessed as significant or greater impact.'

PM Peak Hour

'The results of the junction analysis illustrated in Appendix A6.4.8 demonstrates that the majority of local / regional road junctions during the PM Peak Hour of the 2028 Opening Year are operating with a maximum V / C ratio of below 85% during both scenarios and that the impact of the Proposed Scheme is negligible at the majority of these local / regional road junctions within the indirect study area.

In summary, the effect of redistributed traffic associated with the Proposed Scheme is expected to result in a Low Positive and Long term effect at two of the 145 assessed junctions, a Not Significant and Long-Term effect at 114 of the 145 assessed junctions, an Imperceptible and Long-Term effect at 27 of the 145 assessed junctions and to result in a Negative, Slight and Long-Term effect at two of the 145 assessed junctions.

The redistribution of traffic during the 2028 PM Peak Hour raises no impacts assessed as significant or greater impact.'

Summary

Section 6.4.6.2.8.7 provides a summary of the General Traffic Impact Assessment and states:

"Given the improvements to bus priority, walking and cycling as a result of the Proposed Scheme, there will likely be an overall reduction in operational capacity for general traffic along the direct study area. This may in turn result in some redistribution of general traffic away from the main corridor onto the surrounding road network.

Using the TII guidelines as an indicator for best practice, the LAM Opening Year 2028 model results were used to identify the difference in traffic flows between the Do Minimum and Do Something scenarios. The following thresholds have been used to identify where further assessment is required:

- **Local / Regional Roads:** *Traffic redistribution results in an increase above 100 combined flows (i.e. in a two-way direction) along residential, local and regional roads in the vicinity of the Proposed Scheme in the AM and PM peak hours; and*
- **National Roads:** *Traffic exceeds 5% of the combined turning flows at junctions with/ on/or with national roads in the AM and PM peak hours as a result of traffic redistribution comparing the Do Minimum to the Do Something scenario with the Proposed Scheme in place.*

The overall results of this assessment can be summarised as follows:

- *The majority of assessed junctions have V / C ratios of below 85%, i.e. they are operating well within capacity for all assessed years in both the Do Minimum and Do Something scenarios. This indicates that these junctions will be able to accommodate any additional general traffic volumes redistributed as a result of the Proposed Scheme. The effect of the Proposed Scheme on the majority of junctions is deemed imperceptible to not significant and long-term; and*
- *No junctions are predicted to experience a significance of effect that is significant or higher.*

It should be noted that while there are low impacts to the operational capacity in the indirect study area, this level of congestion is acceptable according to national guidance. Section 3.4.2 of DMURS (2019) recognises that a certain level of traffic congestion is an inevitable feature within urban networks and that junctions may have to operate at saturation levels for short periods of time during the peak hours of the day. Chapter 1 of the Smarter Travel Policy Document (DTTAS 2019b) also acknowledges that it is not feasible or sustainable to accommodate continued demand for car use.

Therefore, it can be concluded that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area. Therefore, the anticipated impact on general traffic during the Operational Phase will be Negative, Slight and Long-Term. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no further mitigation measures have been considered to alleviate the impact outside of the direct study area.

It should therefore be considered that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area in the context of the increased movement of people overall and on sustainable modes in particular.'

Based on the result of the above assessment, no interventions are proposed at Iona Road, St Alphonsus Road and in the general Iona District.

2.4 Proposed Scheme at Dorset Street

2.4.1 Description of Proposed Scheme at this Location

As stated in Section 4.5.5.1 of Chapter 4 of the Proposed Scheme Description of Volume 2 of the EIAR:

'To facilitate bus lanes and cycle tracks in each direction it is necessary to remove one inbound and one outbound traffic lane between Clonliffe Road and Eccles Street. In addition, the landscaped central reserve will be removed between Portland Avenue and Belvedere Road to facilitate the required cross-section. South of Belvedere Road, the existing landscaped central reserve will be maintained.

Continuous bus lanes will be provided throughout, with the exception of a short section of signalised bus priority inbound between Whitworth Place and Portland Place. On Dorset Street Lower, south of Eccles Street, some minor kerb realignments are proposed to provide bus, cycle and a single traffic lane in each direction. The painted central reserve will be removed to facilitate this. Four existing cellars are affected by the Proposed Scheme. The cellars will be acquired and infilled with concrete. It is proposed to provide new turning restrictions at the following junctions:

- *Left turn ban from Dorset Street to Synott Place;*
- *Right turn ban from Dorset Street Lower inbound to Eccles Street, and*
- *Left turn ban from Dorset Street to Hardwicke Place.*

On North Frederick Street, the existing bans on left-turning traffic from Dorset Street Lower and straight through traffic from Blessington Street will be maintained. North Frederick Street is restricted to one southbound traffic lane and one northbound traffic lane from the junction of Dorset Street with Gardiner Row.

South of Gardiner Row the existing southbound traffic lane and bus lane will be maintained. This section of the Proposed Scheme ties into the existing street layout at Parnell Street. Two-way cycle facilities will be provided on the west side of Parnell Square East. The right turn slip lane from Parnell Square North will be closed to facilitate the two-way cycle track.

Outbound buses will use Parnell Street, Parnell Square West and Granby Row to access Dorset Street Upper. A bus lane will be provided along these roads to facilitate outbound buses.

The existing signalised junctions at Clonliffe Road; Whitworth Road; Belvedere Road, North Circular Road, Gardiner Street Upper, Eccles Street and North Frederick Street/Blessington Street are proposed to be upgraded to provide improved infrastructure for pedestrians and cyclists.

At-grade cycle tracks have been utilised in order to maintain the existing kerb lines as the route approaches the city centre. The cycle tracks will be at carriageway level and segregated from general traffic using slip formed kerbs. At-grade cycle tracks have been proposed at Drumcondra Road Lower, southbound and Dorset Street Lower, between Portland Place Junction and Eccles Street Junction.'

An extract from General Arrangement Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR are included in Figure 2.53 and Figure 2.54.

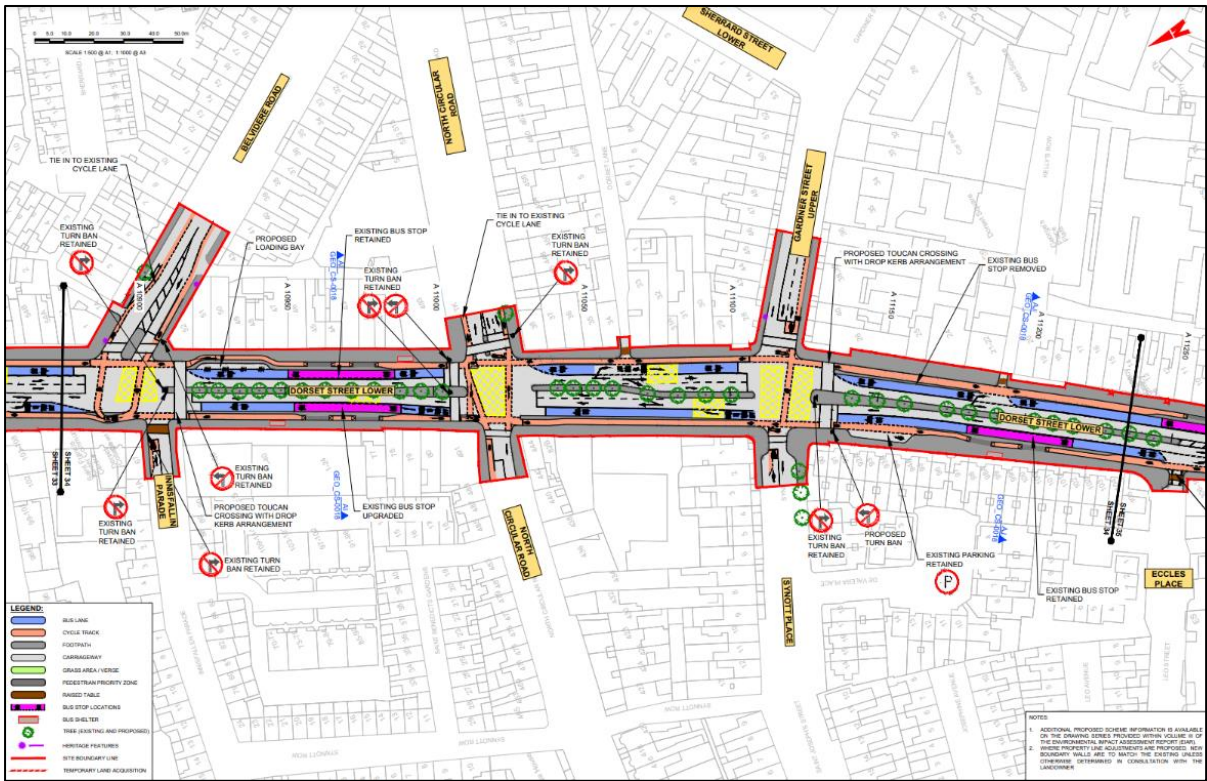


Figure 2.53 Extract from General Arrangement Drawing (Sheet 34)

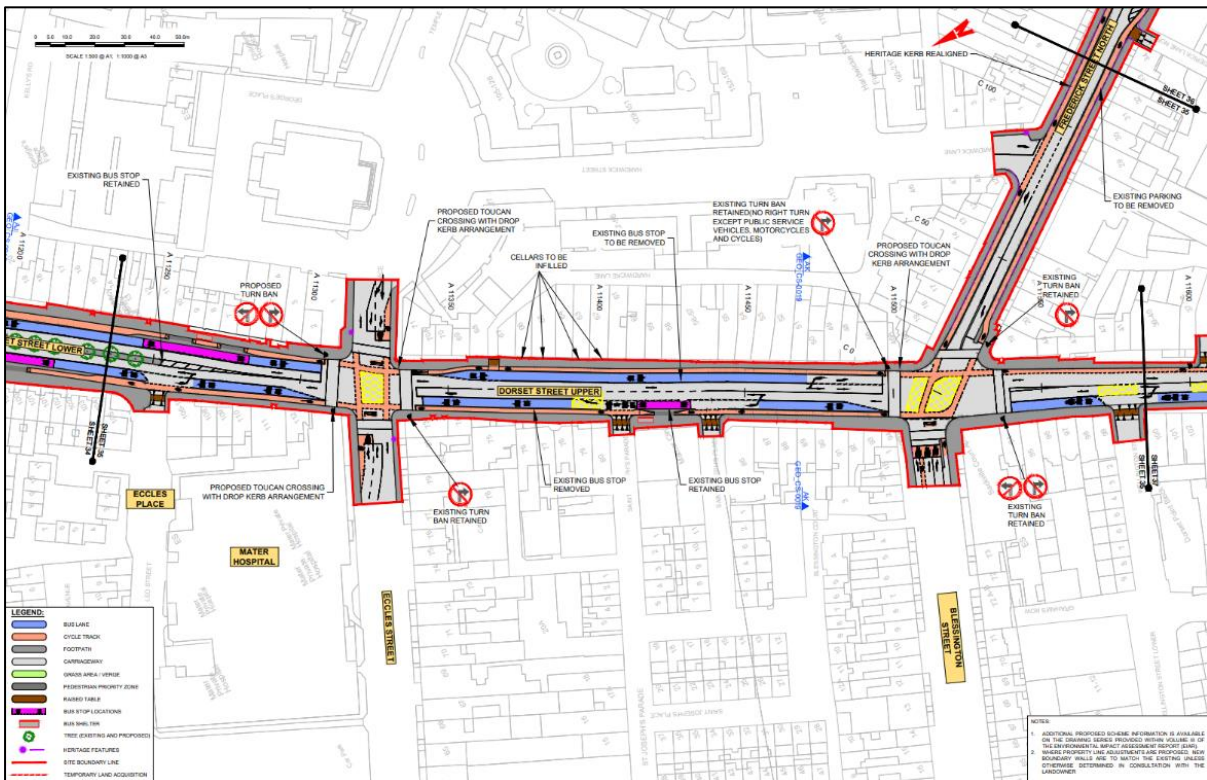


Figure 2.54 Extract from General Arrangement Drawing (Sheet 35)

2.4.2 Overview of Submissions Received

Table 2.9 below lists the 4 individual submissions made in respect of the Proposed Scheme at Dorset Street.

Table 2.9 Submissions Made in Respect of Dorset Street

No	Name	No	Name
15	District 7 Community Alliance	33	Leo Street and District and Association and Lower Dorset Street Community Group
21	Greater Dorset Street Together	38	MPM Residents Association

A number of issues were raised and these are listed below and described in Section 2.4.3 and 2.4.4 below.

Common Issues Raised

1. Removal of the central reserve (median)
2. Lack of consultation
3. Unique community / sense of place
4. Drawing inconsistencies
5. Impacts of turn bans
6. Relocations of bus stops

Other Issues Raised

1. Absence of cycle facilities
2. Pedestrian crossing design
3. Impacts on heritage kerbs
4. Increased emissions
5. Infrastructure on adjacent streets
6. Bike bunkers or parking requested as cycling become safer.

2.4.3 Common Issues Raised and Responses

2.4.3.1 Removal of the central reserve (median)

Summary of issue raised

A number of submissions consider that removal of the central reserve (median) along Dorset Street would allow for the redistribution of space for wider cycle tacks and footpaths, minimise conflicts at bus stops with cyclists, allow for loading bays for businesses as well as additional disabled parking, increase opportunities for trees and more greenery in the area and links better with DMURS guidance for multifunctional streets.

Concern was expressed that the Proposed Scheme fails to provide the design for a carriageway through the neighbourhood, as it does not separate cycle users, allow for safe areas to pull in, resident parking or loading facilities, propose greening, or consider the effect of adding no left turns along the route where all adjoining roads are residential.

Response to issue raised

Removal of the central reserve in order to accommodate the cycle tracks and widen the footpaths on either side was considered during the design, but was determined to be contrary to the needs of the Proposed Scheme, as discussed in Section 3.4.1.2 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR:

With the removal of one traffic lane in each direction between Clonliffe Road and Eccles Street, adequate space was available to meet the BusConnects desirable minimum requirements for 3m wide bus lanes, minimum 2m wide footpaths and fully segregated, 2m wide cycle tracks, without the necessity to remove the tree-lined central reserve between Gardiner Street Upper/Synott Place and Hardwicke Place/Eccles Street, as shown in Figure 2.55.

In line with the government's Climate Action Plan, reducing the construction carbon footprint has been a key consideration in the layout development of the Proposed Scheme. The removal of the existing tree-lined central reserve along Dorset Street Lower (involving trees and paving that would otherwise be unaffected by the works) was considered unnecessarily disruptive and undesirable.

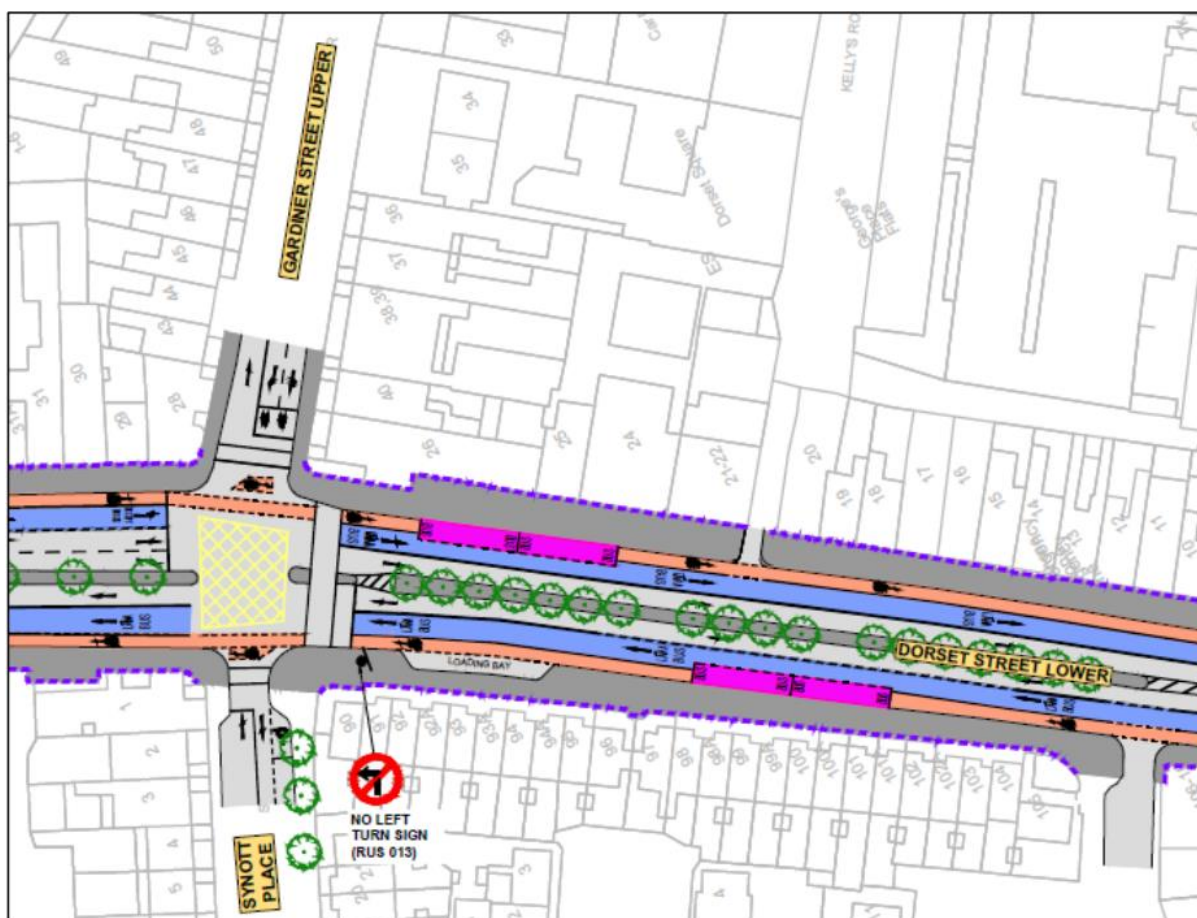


Figure 2.55 Gardiner Street Upper/Synott Place to Hardwicke Place/Eccles

Street Replacement of trees from the central reserve with new trees in the footpaths is not straightforward. It was evident from the available utilities information that the footpaths on both sides of the carriageway are very significantly congested with services, particularly in comparison with the central reserves.

It was considered that removal of the central reserve and trees and the disruption of the existing footpaths that are generally in good condition would have a negative impact on the urban realm and carbon footprint of the Proposed Scheme. The design strategy adopted was to retain the existing kerb lines and drainage regimes, where possible. This has been accomplished everywhere, apart from bus stop locations, where the footpaths will be widened out to accommodate Shared Landing Area bus stops. In this way, the depth of excavation required, and the waste generated, is minimised. Most of the construction required will involve raising carriageway levels and installation of segregating kerbs or flexible bollards.

Under the Draft Preferred Route Option, the central reserve was retained everywhere apart from the section between Whitworth Road/Whitworth Place and Belvedere Road/Innisfallen Parade.

Presently cyclists are required to use shared bus lanes. Segregated cycle tracks are provided under the Proposed Scheme.

2.4.3.2 Lack of consultation

Summary of issue raised

The Greater Dorset Street Together Group feels as though they have not been sufficiently consulted and considers that the BusConnects team refused to walk the route with the group and discuss the issues with the Proposed Scheme in the area.

Disappointment that no design iterations have been considered at all from the initial conception of the project, as evidenced in EIAR Section 4.3, despite significant engagement with residents and businesses within the Dorset Street area.

Concern that the Mater Hospital has not yet been consulted on how it may benefit from BusConnects or how changes to traffic flow may affect its operation.

Response to issue raised

Section 1.6.2 Emerging Preferred Route Option Consultation of Chapter 1 Introduction of Volume 2 of the EIAR states the following:

'The EPR consultation phase for the Proposed Scheme occurred from 14 November 2018 to 29 March 2019.

The public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post. One consultation event was held in which the public were able to view the proposals and discuss them directly with members of the BusConnects Infrastructure team. It was held at the Carnegie Court Hotel on the 11 January 2019.

In addition to the open public consultation, a Community Forum was established with the aim of facilitating two-way communication between local communities and the BusConnects Infrastructure team.

Two Community Forum meetings took place, on the 8 January 2019 in Swords and 28 January 2019 in Whitehall, where the Community Forum was provided with an update on the design for the Proposed Scheme and given the opportunity to ask questions of the project team and provide feedback.

In addition, there have been meetings held with residents' groups to provide updates on aspects of the Proposed Scheme. The BusConnects Infrastructure team has made the presentations given at the Community Forum and Residents Group meetings available to the public on the BusConnects website (www.busconnects.ie).

Letters were delivered to each individual potentially impacted property affected by the Proposed Scheme that, in addition to providing information about the Proposed Scheme, offered a one-to-one meeting to discuss the likely impact, issues and concerns. Each potentially impacted property was also sent a copy of the Emerging Preferred Route brochure for the Swords to City Centre Core Bus Corridor. In total, 253 letters were delivered, with 17 property owners availing of the one-to-one meetings.

There were a total of 767 submissions made in respect of the Proposed Scheme during the Emerging Preferred Route consultation phase.'

Section 1.6.3 Preferred Route Option Consultations of Chapter 1 of the EIAR states:

'A Community Forum meeting took place in Whitehall on the 17 September 2019 for community representatives and public representatives. This Community Forum was held in advance of the launch of a second round of public consultation, with the aim of keeping the public and their representatives updated on the design process between the first and second consultation. The meeting involved the

presentation of an updated overview of the design for the Proposed Scheme, outlining several new design options being developed for consideration in specific areas where issues were identified following review of the submissions from the first non-statutory public consultation. Again with the use of an independent chairperson, the community and public representatives were given the opportunity to ask questions of the BusConnects Infrastructure team and provide feedback.

1.6.3.2 Preferred Route Option Consultation Overview

The PRO, or second round, of public consultation took place from 4 March 2020 to 30 April 2020. The public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post. There was one consultation event held at Whitehall on 11 March 2020 for CBC01 Clongriffin to City Centre and CBC02 Swords to City Centre. Public submissions were accepted until 17 April 2020 in which the public were able to view the proposals and discuss them directly with members of the BusConnects Infrastructure team. Due to the COVID-19 pandemic, this event had to end earlier than scheduled and all further planned consultation events scheduled after 12 March 2020 were postponed. In deference to the submissions which had already been received, the decision was made not to cancel the consultation. However, due to the introduction of COVID-19 public health restrictions, further on-site or face-to-face public engagement was restricted.

Following the EPR submissions review of the proposals, there were some changes to the number of properties that were potentially impacted. In total, 298 letters were prepared and delivered on 2 March 2020 to properties either continuing to be potentially impacted; newly potentially impacted; or no-longer potentially impacted, with recipients invited to schedule meetings with the BusConnects Infrastructure team if they wished to discuss the proposals on an individual basis.

Consequently, presumably due to the COVID-19 impacts, there were just 31 submissions received relating to the Proposed Scheme, and no landowner meetings were requested. The submissions ranged from individual submissions by residents, commuters and local representatives, to detailed proposals from various associations and private sector businesses.

Design development and planning for the Proposed Scheme continued, and the BusConnects Infrastructure team determined to run an additional round of public consultation in November 2020 to complete the non-statutory public engagement prior to finalising the PRO. The third round of public consultation took place from 4 November 2020 to 16 December 2020.

With the continuing effect of the COVID-19 pandemic and associated restrictions, the third Public Consultation was held largely virtually. A virtual consultation room for the Proposed Scheme was developed and virtual access to the room was facilitated. Along with offering a call back facility, the room provided a description of the Preferred Route from start to finish with supporting maps and included information of all revisions made since the previous rounds of public consultation, as well as other supporting documents. Over the six weeks of the consultation, 234 unique users visited the virtual information room for the Proposed Scheme. A third Community Forum virtual consultation call was also held on 16 November 2020, as part of the third round of non-statutory consultation.

As per the previous rounds, those properties continuing to be either potentially impacted; newly potentially impacted; or no-longer potentially impacted were written to directly to receive information on the consultation in advance of any wider publication of the proposals. One-to-one meetings were offered via Zoom or over the phone for those who wished to discuss the proposals further in relation to their own property with the minutes being recorded as part of the consultation process. In total, 243 letters were sent between 1 and 3 November.

As per previous rounds the public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post.

In addition, virtual meetings were resumed with residents' groups to provide updates on aspects of the Proposed Scheme.

There were 231 submissions over the second and third phase of public consultation (March / April 2020 and November / December 2020). Key issues raised are presented in the following sections.'

A design iteration is described in Section 3.4.1.2 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR, whereby the design was amended during development of the

Draft Preferred Route Option, such that the existing central reserve was retained between Gardiner Street Upper/Synott Place and Hardwicke Place/Eccles Street:

The topographical survey allowed more detailed design of the corridor to be undertaken for development of the Draft Preferred Route Option. With the removal of one traffic lane in each direction between Clonliffe Road and Eccles Street, adequate space was available to meet the BusConnects desirable minimum requirements for 3m wide bus lanes, minimum 2m wide footpaths and fully segregated, 2m wide cycle tracks, without the necessity to remove the tree-lined central reserve between Gardiner Street Upper/Synott Place and Hardwicke Place/Eccles Street, as shown in Figure 2.56.

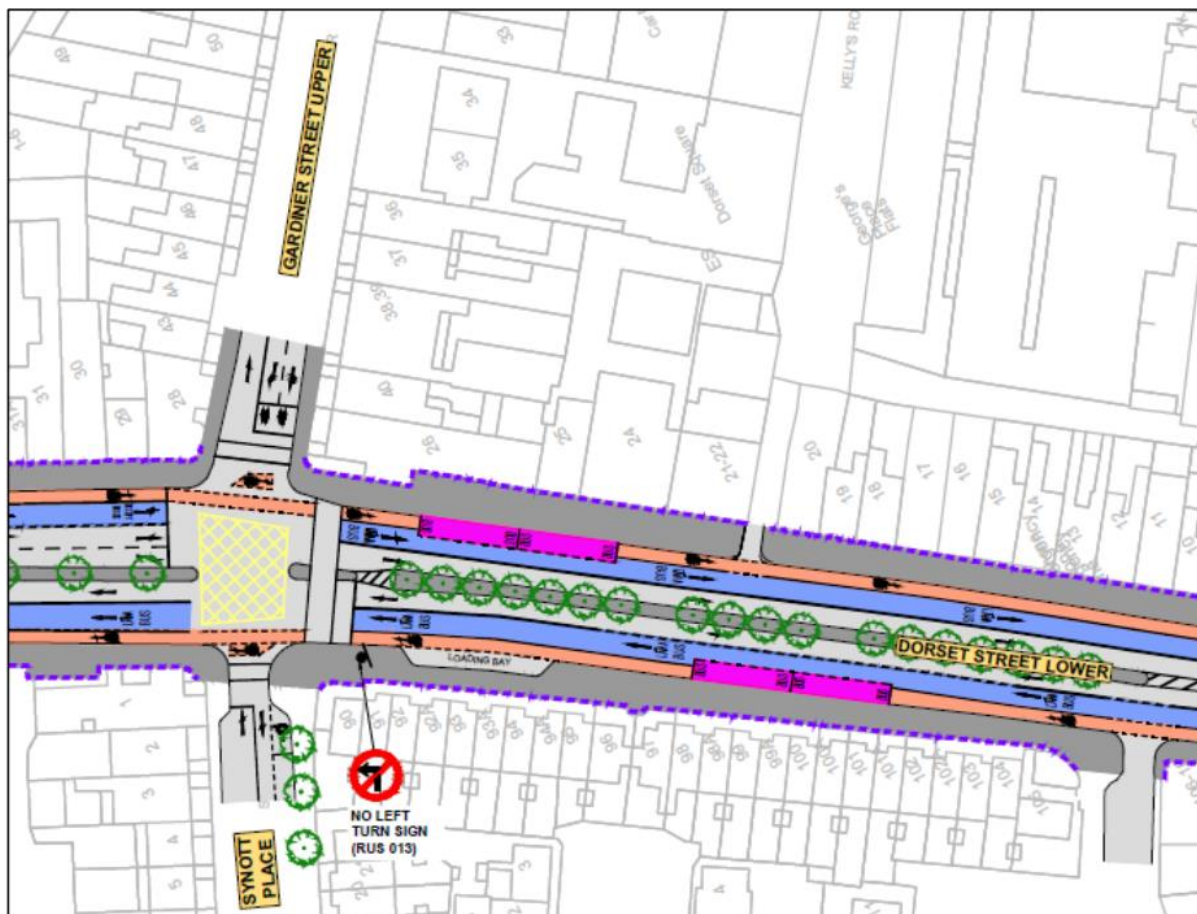


Figure 2.56 Gardiner Street Upper/Synott Place to Hardwicke Place/Eccles

2.4.3.3 Unique community / sense of place

Summary of issue raised

A number of submissions identify Dorset Street as a Key Urban Village under the Dublin City Development Plan and a centre of residential and business activity.

A submission considers that there was a lack of recognition for the *Greater Dorset Street Together Plan*, which was funded by DCC and included in the Dublin City Development Plan 2022-2028, predating BusConnects.

A submission considers that the area fails to be regarded as a unique community in Section 10.2.1.1 of the EIAR, despite being a Key Urban Village, and considers that the EIAR fails to recognise Dorset Street.

Concerns that Dorset Street does not have key components that are vital to the area within the design, including an improvement to pedestrian or commercial activity, or the recognition of place status. Further comments suggest the existing problems, especially relating to commercial activity have only been further exacerbated by the Proposed Scheme.

A submission contended that the Proposed Scheme will fail to meet projected aims in Section 1.1 of the EIAR:

- Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and
- Ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

Response to issue raised

Dorset Street is not identified as a Key Urban Village under Map K Strategic Development and Regeneration Areas and Key Urban Villages of the Dublin City Development Plan 2022-2028:



Figure 2.57 Extract from Map K Strategic Development and Regeneration Areas and Key Urban Villages of the Dublin City Development Plan 2022-2028

Chapter 2 Core Strategy of the Dublin City Development Plan 2022-2028 identifies the ‘Greater Dorset Street Plan’ an example of a local initiative that could be used to inform a future Local Environmental Improvement Plan (LEIP) for the area. Table 2-15 proposes that a LEIP be prepared for Dorset Street, however no such Plan is in place at present.

Section 10.2.1.1 of Chapter 10 (Population) in Volume 2 of the EIAR outlines the methodology used to assess the community and economic impacts of the Proposed Scheme. Regarding the study area for the community assessment, Section 10.2.1.1 states ‘*The study area for the assessment of impacts on community amenity, land take and accessibility consist of ‘community areas’, which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a)*’. This has been the approach taken across all of the BusConnects Dublin population assessments in order to ensure a consistency of approach. As shown in Figure 10.1 Sheet 3 in Volume 3 of the EIAR, Dorset Street is along the boundary between Gardiner Street, Berkely Road and Dominick Street community areas, and has been assessed as part of those areas.

Section 10.4.4.1.2.2 of Chapter 10 Population of Volume 2 of the EIAR considers community accessibility and notes the following:

The significant improvements to the walking, cycling and bus facilities included within the Proposed Scheme will encourage sustainable modes of transport, therefore reducing the demand for private vehicles / parking along the Proposed Scheme. Improved accessibility is also expected to increase

social cohesion within the local community as discussed further in Appendix A10.2 (The Economic Impact of the Core Bus Corridors) (EY 2021) in Volume 4 of this EIAR.

Bus Users

Chapter 6 (Traffic and Transport) identified a Positive, Moderate to Profound and Long-Term impact on bus infrastructure and a Positive, Significant and Long-Term impact on bus network performance (which includes journey times and journey time reliability). It is therefore expected that access to community facilities by bus users will also improve along the Proposed Scheme.

These impacts on access to community facilities for pedestrians, cyclists and bus users are expected to be experienced by community areas located predominantly along the Proposed Scheme as these will be where signal controlled junctions and improved footpath and cycle tracks will be provided. The community areas likely to experience these positive impacts are Swords, River Valley, Larkhill – Whitehall – Santry, Marino, Drumcondra, Glasnevin, Iona Road, North William Street, Gardiner Street, Berkeley Road, Dominick Street and Pro Cathedral.

Private Vehicles

Chapter 6 (Traffic and Transport) identified a Positive, Moderate and Long-Term impact from the reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from redistributed traffic in the surrounding road network. Chapter 6 (Traffic and Transport) did not identify any localized impacts during the AM and PM peak period at any junctions in the surrounding network of the Proposed Scheme as a result of displaced traffic.

On the whole, the community areas that are likely to experience Positive, Moderate and Long-Term impacts on change in access to community facilities, as a result of the reduction in general traffic, are those situated along the Proposed Scheme, such as Swords, River Valley, Larkhill – Whitehall – Santry, Marino, Drumcondra, Glasnevin, Iona Road, North William Street, Gardiner Street, Berkeley Road, Dominick Street and Pro Cathedral.

The residual impacts of the population assessment are provided in Section 10.6 of the Chapter. There is generally a predicted improvement under the community and economic assessment once the Proposed Scheme is operational (Table 10.15), with impacts being generally positive, specifically with respect to community and economic accessibility (Positive, Slight to Very Significant, Long-Term).

2.4.3.4 Drawing inconsistencies

Summary of issue raised

Submissions identified Inconsistencies in the scheme drawings including:

- Sheet 34- a relocated bus stop from a location where no bus stop currently exists. (A11150);
- Sheet 34: Loading bay on Dorset Street marked as proposed but these are existing and appear to be reduced in number;
- Sheet 35- incorrectly shows an exception to a right turn ban for motorcycles, cycles and public services up the one way Blessington Street. The left turn ban (with exceptions) for North Frederick Street is missing. (A11450-11500);
- Sheet 35- incorrectly shows a pedestrian crossing, where none currently exists (Ch A11550).

Response to issue raised

- Sheet 34: It is noted that the bus stop at Ch A11150 on Map 34 no longer exists.
- Sheet 34: It is confirmed that the existing loading bays are to be reconfigured such that the proposed cycle track will pass behind the loading bays as shown on Drawing 34. The number of loading bays will remain the same as existing.
- Sheet 35: It is confirmed that the right turn ban from Dorset Street to Blessington Street is for all vehicles, and the existing left turn ban from Dorset Street to North Frederick Street) Except Public Service Vehicles, Motorcycles and cycles) is retained.
- It is confirmed that the pedestrian crossing at Ch A11550 is a proposed pedestrian crossing.

2.4.3.5 Impacts of turn bans

Summary of issue raised

Sheet 34: Concern that the no-left-turn from Dorset Street onto Synott place will divert cars into Eccles Place and turn Leo Street into a “rat run”. Further note that Eccles Place cannot be turned into a no-left-turn due to the supply bays for the Mater Private.

Concerns were raised that the proposed right turn ban from Dorset Street to Eccles Street will create significant traffic, noise and pollution for the people in the local area and have further negative impacts including:

- clear and appropriate signage will be needed showing an alternative route for the people visiting Mater and the Mater Private Hospitals.
- Management of the illegal parking on Eccles Street will need to be improved to reduce risks to pedestrians, cyclists and other motorists.
- The drop-off area at the front of the Mater Private will need to be managed to avoid blockages, with possible drop off points on Eccles Street.
- Comment that a proper traffic management system will need to be in place on Eccles Street and Berkeley Road and at the junction.
- Concern that some of the alternative routes will not be suitable due to the Luas, pedestrian crossing and high level of bikes, as well as some roads being very narrow. Routes will need improved signalling and traffic calming on Wellington Street, and Dominick Street.
- Comment that the illegal right turn suggested on Google Maps onto Bolton Street needs to be amended.

Map 35: Proposed turn ban onto Temple Street (Hardwicke Place) is considered to impact deliveries and services to local shops, restaurants and hospitals.

Concern the diversions on Dorset Street will increase the amount of traffic on Mountjoy Street and the bottom of Western Way, therefore Mountjoy will need traffic calming measures to deal with this additional traffic. Further greening and planting should be added to the road as well in line with the Development Plan as the MPM area currently sits between three greening strategies.

Concern the no right turn from Temple Street onto Dorset Street will divert onto Nelson Street and increase traffic volumes on a relatively quiet street. Request for the Mater to be consulted in any further plans.

Response to issue raised

Regarding the issue raised about a turning ban at Eccles Place, there is no change to the existing arrangement at Eccles Place junction as part of the Proposed Scheme.

Access to Temple Street and Eccles Street will be available via the surrounding road network. One option for this journey for vehicles travelling inbound along Dorset Street bound for Temple Street or Eccles Street, is to turn left onto Belvedere Road, continue to Mountjoy Square and take a right along Mountjoy Square North, continue straight onto Gardiner Place before turning right onto Temple Street. Those needing to access Eccles Street can continue along Hardwicke Place and through the junction with Dorset Street Upper onto Eccles Street. An alternative is to turn left from Dorset Street onto Gardiner Street Upper, take a right via Gardiner Place before turning right onto Temple Street/Eccles Street.

The observed left-turns delivery vehicles from Dorset Street onto Temple Street (Hardwicke Place) is quite low (less than 12 vehicles/ hr) during the morning peak periods.

The no-left-turn is adopted as per the BusConnects Preliminary Design Guidance Booklet to enhance cyclist and bus priority infrastructure and to maintain Bus and cycling priority along the Corridor.

Regarding the comment raised about no right turn from Temple Street onto Dorset Street, NTA can confirm that there are no bans proposed from the Temple Street onto Dorset Street as part of the Proposed Scheme.

2.4.3.6 *Relocations of bus stops*

Summary of issues raised

Concern for the consolidation of bus stop 11 with bus stop 14 as these service larger areas in a busy business area, along with nearby hospitals.

Concern that bus stop 12 traffic will also be redirected to bus stop 14, resulting in increased litter, noise and antisocial behaviour.

Concern for the removal of the bus stop on Upper Dorset street and move it the Lower Dorset Street creating a larger bus stop [Bus Stop 14]. The concern is that this larger bus stop will have direct view into people's bedrooms. Request to leave the bus stop where it is or consider ways to not directly impinge on residents privacy with meetings with residents. Or move bus stop away from residential houses and implement the planting of trees (possible if central median was removed).

Concern bus stop 50 is not needed due to the proximity and route range of bus stop 51. Bus stop 52 is crucial for those with luggage and is indispensable for user convenience and promoting bus services, whilst bus stop 49 caters for various routes.

Response to issues raised

Appendix H of the Preliminary Design Report included in the Supplementary Information includes the Bus Stop Review Report. This report sets out a comprehensive exercise which has been carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice principles related to bus stop placement. These principles include:

- Driver and waiting passengers are clearly visible to each other;
- Located close to key local facilities;
- Located close to main junctions without affecting road safety or junction operation;
- Located to minimise walking distance between interchange stops;
- Where there is space for a bus shelter;
- Located in pairs, 'Tail to tail' on opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and
- Adequate footway width.

A main consideration in the siting of bus stops is to minimise walking distance between interchange stops. This exercise was carried out with cognisance of the interface with orbital routes proposed as part of the Dublin Area Bus Network Redesign, which involved significant liaison with the BusConnects Dublin Area Bus Network Redesign team.

The scope of the Proposed Scheme includes the provision of infrastructure for bus services routed along the main corridor to the City Centre. Infrastructure for orbital bus routes, if required, will be delivered as part of a separate orbital core bus corridor scheme, whereby the provision of bus stops, including their location, can be assessed on a holistic basis along the orbital corridor, taking into account the location of existing nearby bus stops which are outside the red line boundary of the Proposed Scheme.

The bus stop locations were reviewed at each stage of the design process with a view to ensuring that the objectives of the Proposed Scheme were met. Feedback from each of the non-statutory

consultations was also considered in reviewing the bus stop locations as part of the design of the scheme.

As a result of the Proposed Scheme, there have been gains in population across the whole route for catchments withing 10 and 15 minutes from the bus stops. This is also completed with fewer bus stops along the Proposed Scheme.

Preliminary Design Report Chapter 4, Table 4.7: Swords to City Centre Bus Stop Summary identifies that Bus Stop 11 is being moved to Ch 11420, coincident with Bus Stop 12. There is no proposal to move Bus Stop 12 to Bus Stop 14. Bus Stop 14 is not proposed to be increased in size.

Bus Stop 49 is retained in its present location. Bus Stop 50 is no longer in service. The location of Bus Stop 51 is unchanged. Appendix A: Bus Stop Review Table of the Bus Stop Review Analysis included in Appendix H of the Preliminary Design Report provided as Supplementary Information identifies that Bus Stop 52 *“is located in close proximity with the Temple street Bus stop. This bus stop is also located close to bus interchange point at North Frederick Street/Granby Row, where most users will board or alight. This bus stop is also located at a narrow section of the Dorser Street Upper”*, therefore the Bus Stop is proposed to be removed.

2.4.4 Other Issues Raised and Responses

2.4.4.1 Absence of cycle facilities

Summary of issue raised

Concern no cycle facilities on Parnell Square West or Granby Row will result in collisions as the road is currently incredibly dangerous for cyclists. Request for these street plans to be revised. Suggestion to transform perpendicular parking to parallel parking and introduce cycle lanes and wider footway.

Concern for the absence of a segregated cycle track on the city bound side of the street between Blessington Street and Granby Row. Suggestion to reduce vehicle traffic lanes, implement bus priority signalling and introduce segregated cycle lanes.

Response to issues raised

Two way cycle infrastructure will be provided on the corridor along North Frederick Street and Parnell Square as far as O’Connell Street. A combined bus and cycle lane is proposed along Parnell Square West between Parnell Street and the Dorset Street Upper / Granby Row Junction and also between Blessington Street and Granby Row.

Chapter 6 Traffic and Transport of Volume 2 of the EIAR outlines the cycling qualitative assessment along Section 5 of the Proposed Scheme, which sets out the overall Do Minimum Level of Service (LoS) and the Do Something LoS and the description of impact. Please refer to Appendix A6.4.2 (Cycling Infrastructure Assessment) which outlines in further detail the methodology behind each LoS rating given to the Do Minimum and Do Something scenarios.

Table 2.10 Section 5 Cycling Impact During Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R132: Botanic Avenue Junction and Clonliffe Road Junction	A10050 - A10560	C	A	Medium	High	Positive Very Significant
R132: Clonliffe Road Junction and North Circular Road Junction	A10560 - A11030	D	A	High	High	Positive Profound
R132 North Circular Road Junction and Dorset Street Lower / R135 Blessington Street / Frederick Street North Junction	A11030 - A11550	D	A	High	High	Positive Profound
Dorset Street Lower / R135 Blessington Street / Frederick Street North Junction and Dorset Street Upper / Granby Row Junction	A11550 - A11770	D	C	Low	High	Positive Moderate
Frederick Street North Junction and Parnell Square East / Gardiner Row Junction	A11500 - C200	D	A	High	High	Positive Profound
Parnell Square East / Gardiner Row Junction and Rae Cavendish / Parnell Street Junction	C200 - C450	D	A	High	High	Positive Profound
Parnell Square West and the Dorset Street Upper / Granby Row Junction	D374 - D0	D	C	Low	High	Positive Moderate
Section Summary	-	D	B	Medium	High	Positive Very Significant

The contents of Table 2.10 'demonstrate the anticipated impact on cycling infrastructure in Section 5 during the Operational Phase will be Positive, Very Significant and Long-Term effect. The LoS across the seven sub-sections in the Do Minimum scenario has been assessed as ranging from C to D with six of the seven being assessed as a D indicating that generally the existing facilities are not of a high standard.

The findings of the cycling assessment aligns with the objective of the CBC Infrastructure Works, applicable to the Traffic and Transport assessment of the Proposed Scheme, to 'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.'

2.4.4.2 Pedestrian crossing design

Summary of issues raised

Map 34: Pedestrian crossing at junction limited to 2no or 3no, instead of 4no in accordance with DMURS.

Concern that the Parnell Square / Granby Row Junction is very wide and difficult to cross, request for the footpaths in this area, with temporary buildouts requested until the near development.

Response to issues raised

Junction design iterations have been undertaken to optimise pedestrian, cyclist and bus priority infrastructure on the Proposed Scheme.

A build out is included in the design of the Proposed Scheme to reduce the width of the pedestrian crossing at the Parnell Square / Granby Row Junction, as shown on Sheet 36 of EIAR Volume 3 Chapter 4 Proposed Scheme Description, 03 General Arrangement drawings.

2.4.4.3 Impacts on heritage kerbs

Summary of issue raised

Map 34 & 35: No enhancement of Heritage kerbs proposed

Response to issues raised

The kerbs along Dorset Street on Sheets 34 and 35 were installed as part of the Dorset Street Urban Renewal project and will be retained under the Proposed Scheme.

2.4.4.4 Increased emissions

Summary of issue raised

Concern that emissions are going to increase in the Dorset Street area due to the Proposed Scheme. Comment that increasing emissions when they are already about the accepted EU levels is negligent. Concern there are no plans to mitigate this with greenery.

Response to issues raised

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases at the nearest sensitive receptors to the Proposed Scheme. As part of the baseline air quality surveys undertaken for the Proposed Scheme, there were two air quality monitoring locations near Dorset Street (Reference Number CBC0002DT006 at Temple Street Hospital, Reference Number CBC0002DT007 on Frederick Street), as shown in Figure 7.1 (Sheet 3) in Volume 3 of the EIAR.

Figures 7.6, 7.7 and 7.8 in Volume 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the potential Construction Phase impact at that location with respect to NO₂ and particulate matter (PM₁₀ and PM_{2.5}), with the maps showing that the change in pollutant concentrations is Negligible for particulate matter along Dorset Street (Figure 7.7 and 7.8, Sheet 3), and Negligible to Substantial Beneficial for NO₂ along Dorset Street, with Negligible to Moderate Adverse impacts on some surrounding roads (Figure 7.6, Sheet 3). Section 7.4.2.2.3 of Chapter 7 describes the impact as *'the majority of modelled receptors are estimated to experience a negligible impact due to the Proposed Scheme in terms of the annual mean NO₂ concentration. A slightly beneficial impact is estimated at 35 receptors, a moderate beneficial impact at 63 receptors and a substantial beneficial impact at 34 receptors. All beneficial impacts are modelled along the Proposed Scheme due to the diversion of traffic off these routes. A slight adverse impact is expected at 55 receptors and a moderate adverse impact at six receptors on the R101 North Circular Road, the R802 Gardiner Street Upper/Middle/Lower, the R803 Ballybough Road and Gardiner Row. These localised moderate adverse impacts are considered negative, significant and short-term as NO₂ concentrations exceed the limit value but only occur during the short-term Construction Phase'*.

Figures 7.3, 7.4 and 7.5 in Volume 3 of the EIAR map the same information for the modelled Operational Phase impacts in the Opening Year of 2028, with the impact again shown to be Negligible at that location for particulate matter (both PM₁₀ and PM_{2.5}) (Figure 7.4 and Figure 7.5, Sheet 3), and Negligible to Substantial Beneficial for NO₂ along Dorset Street, with Negligible to Moderate Adverse impacts on some surrounding roads (Figure 7.3, Sheet 3). Section 7.4.3.3 of Chapter 7 describes the impact as *'the majority of modelled receptors are estimated to experience a negligible impact due to the Proposed Scheme in terms of the annual mean NO₂ concentration. A slightly beneficial impact is estimated at 75 receptors, a moderate beneficial impact at 52 receptors and a substantial beneficial impact at 60 receptors due to the diversion of traffic off the Proposed Scheme routes. A slight adverse impact is expected at 61 receptors and a moderate adverse impact at three receptors on the R108 Phibsborough Road and the R101 North Circular Road Junction. These localised moderate adverse impacts are considered Negative, Significant and Short-Term, as NO₂ concentrations exceed the limit value, but will decrease below the limit by 2043 due to reductions in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet'*.

Regarding the modelling results for the Operational Phase, it is also stated within the Chapter *'The predictions reported are based on conservative assumptions regarding background pollutant concentrations and the improvement in vehicle emission rates. 2019 background pollutant concentrations have been used to represent 2028 and are likely to be lower by the Opening Year (2028), than in 2019. Older fleet projections were used in the absence of a fleet that incorporates the effects of the 2021 Climate Action Plan (Government of Ireland 2021) measures, including a larger proportion of electric vehicles planned by the Opening Year (2028) than has been modelled. In reality, total concentrations (and magnitude of change) are likely to be lower than those reported here'*.

Section 7.6.2 of Chapter 7 describes the residual Operational Phase impacts as follows:

'The air dispersion modelling assessment has found that the majority of all modelled receptors are predicted to experience negligible impacts due to the Proposed Scheme, and beneficial impacts are also estimated along the length of the Proposed Scheme. The number of receptors where an exceedance of the NO₂ limit value is predicted decreases as a result of the Proposed Scheme.

There are localised residual moderate adverse effects predicted at human receptors on the R101 North Circular Road and the R108 Phibsborough Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. Exceedances of the NO₂ annual mean limit value were also modelled in the existing baseline and the Do Minimum, indicating existing poor air quality in this area. However, the residual impacts due to the Proposed Scheme are expected to reduce to slight adverse or negligible by 2043, due to reductions in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts on the R101 North Circular Road and the R108 Phibsborough Road due to the Opening Year (2028) of the Operational Phase of the Proposed Scheme are therefore considered Negative, Significant and Short-Term reducing to Negative and Slight/Negligible Long-Term in 2043 (Design Year) for the Operational Phase of the Proposed Scheme.

Overall, it is considered that the residual impacts as a result of the Proposed Scheme's Operational Phase will be Neutral and Long-Term.'

2.4.4.5 Infrastructure on adjacent streets

Summary of issue raised

Concern there is currently no pedestrian crossing on Western Way across from the Black Church, with increased bus traffic one is requested at this location.

Concern there are no public bins within the Mountjoy Street area, therefore the current problem will be exacerbated if bins are not installed.

More public realm elements are needed around the Black Church, MPM support the Dublin 7 Alliance's suggestion of pedestrianising one side of Black Church.

Response to issues raised

The issues raised relating to Western Way, Mountjoy Street and Black Church are outside the scope and objectives of the Proposed Scheme planning application

2.4.4.6 Bike bunkers or parking requested as cycling become safer.

Summary of issue raised

Bike bunkers or parking requested as cycling become safer.

Response to issues raised

As noted in Section 4.6.3 of Chapter 6 of Volume 2 of the EIAR, bike racks will generally be provided, where practicable, at Bus Stops and key additional locations as noted in the Landscaping General Arrangement drawings in Volume 3 of this EIAR and in accordance with the cycle parking provision shown in the bus stop arrangements shown in Appendix A4.1 Preliminary Design Guidance Booklet (PDGB) for BusConnects Core Bus Corridors of Volume 4 Part 1 of 4 of the EIAR.

2.5 Proposed Scheme at Fosterstown / Pinnock Hill

2.5.1 Description of Proposed Scheme at this Location

As stated in Section 4.5.1.1 of Chapter 4 of the Proposed Scheme Description of Volume 2 of the EIAR:

'The Proposed Scheme commences south of Swords on the R132 Swords Road at Pinnock Hill. The existing roundabout at Pinnock Hill will be modified to a fully signalised junction with pedestrian and cyclist facilities. New access arrangements are proposed at Swords Veterinary Hospital, while the

proposed fully signalised junction has been designed to integrate with the aspirations of the Fosterstown Local Area Plan which recognises the requirement for the provision of the Fosterstown Link Road.

Between the Pinnock Hill and Airside junctions, the existing bus lanes will be maintained, the existing footpath will be upgraded, and segregated cycle lanes provided. These proposals can be provided by eliminating one inbound traffic lane and narrowing the existing carriageway. The existing signalised junction at Airside is proposed to be upgraded to provide improved infrastructure for pedestrians and cyclists.'

An extract from General Arrangement Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR are included in Figure 2.58 to Figure 2.60.

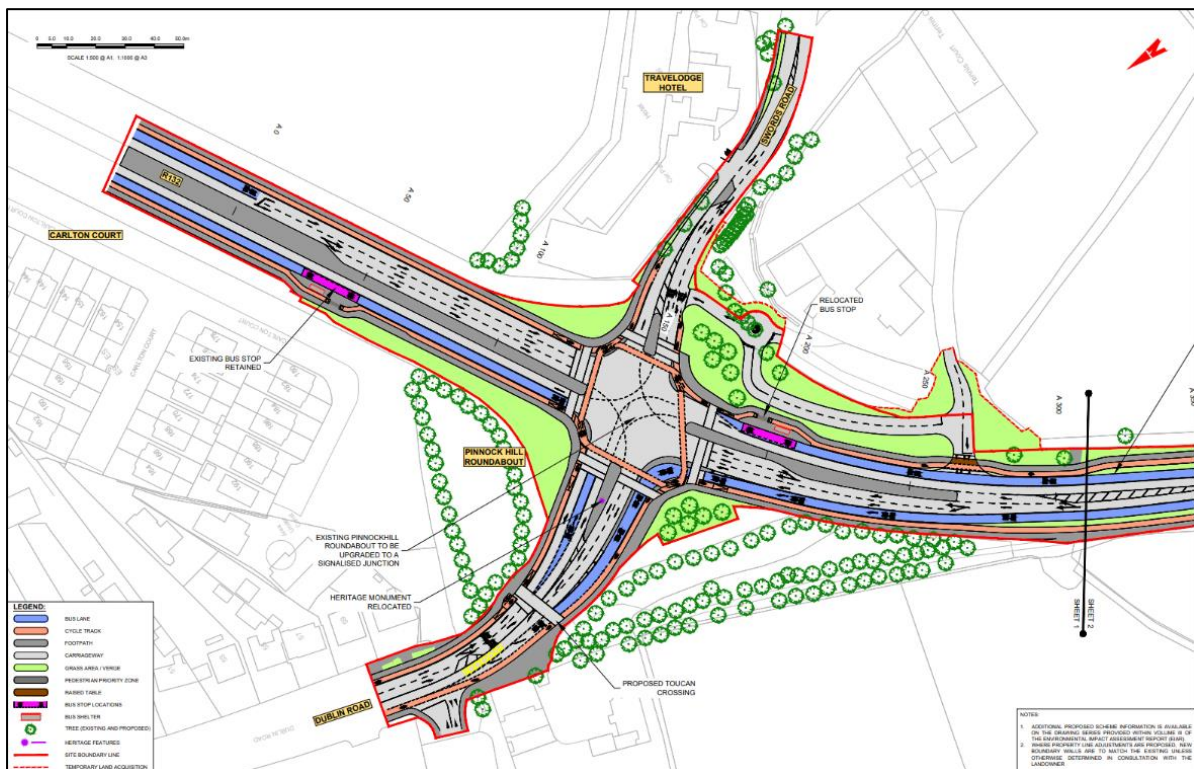


Figure 2.58 Extract from General Arrangement Drawing (Sheet 1)

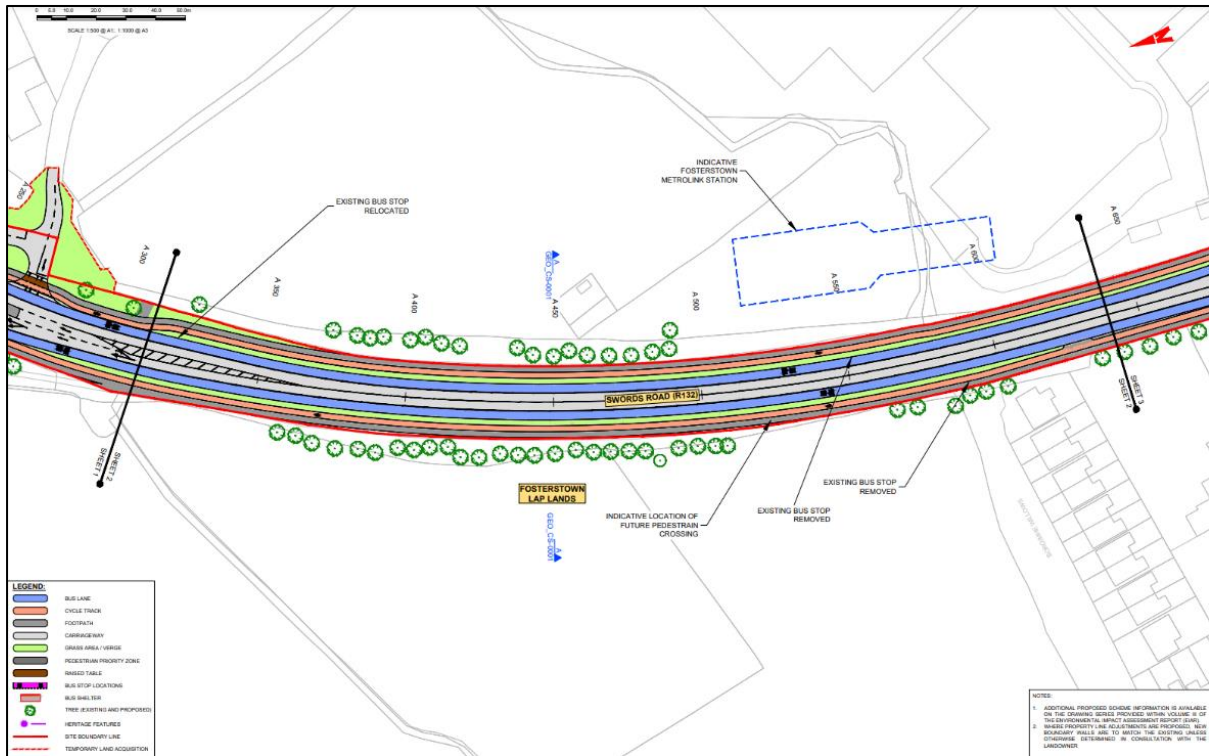


Figure 2.59 Extract from General Arrangement Drawing (Sheet 2)

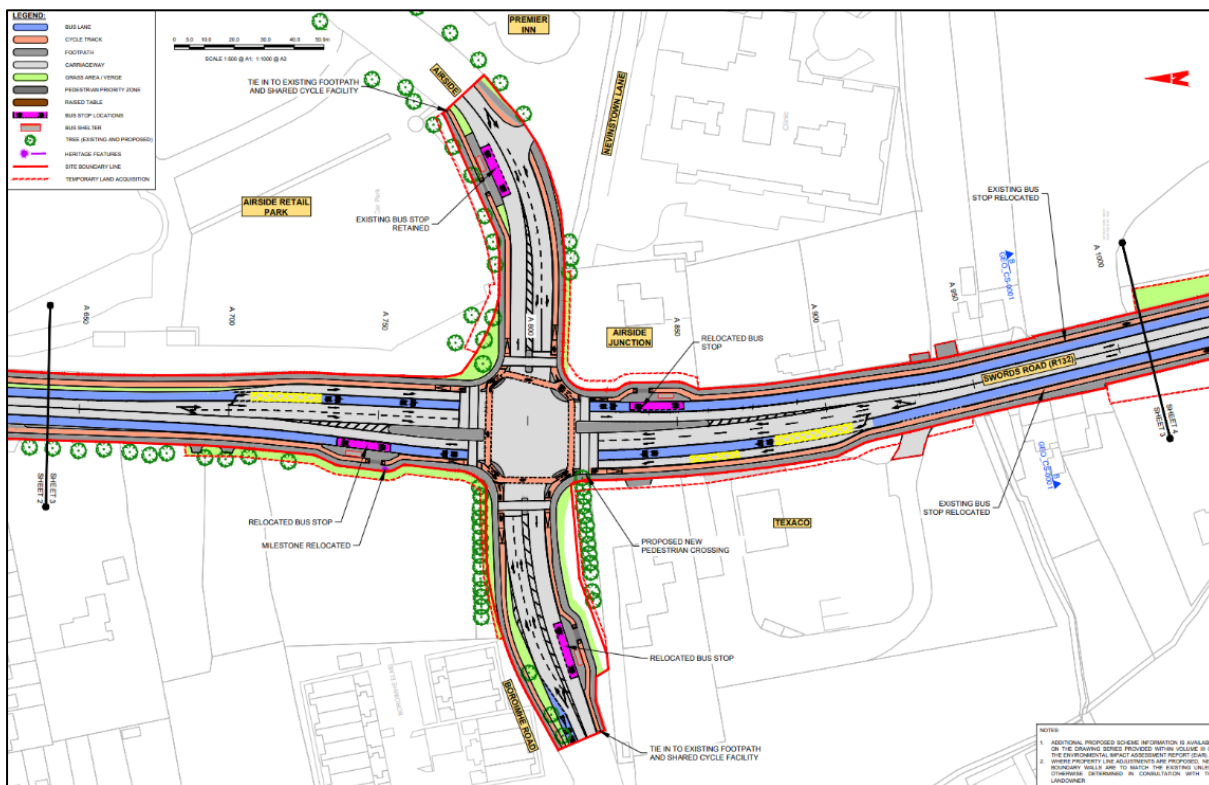


Figure 2.60 Extract from General Arrangement Drawing (Sheet 3)

2.5.2 Overview of Submissions Received

Table 2.11 below lists the two individual submissions made in respect of the Proposed Scheme at Fosterstown / Pinnock Hill.

Table 2.11 Submissions Made in Respect of Fosterstown / Pinnock Hill

No	Name	No	Name
25	J. Murphy Developments Limited	37	MKN Properties Limited

A number of issues were raised and these are listed below and described in Sections 2.5.3 and 2.5.4 below.

Common Issues Raised

1. Support for the Proposed Scheme

Other Issues Raised

1. SHD planning application
2. Temporary access to land
3. Inclusion of pedestrian crossing
4. Pinnock Hill roundabout design and MetroLink integration

2.5.3 Common Issues Raised and Responses

2.5.3.1 Support for the Proposed Scheme

Summary of issue raised

One submission stated their support for the Proposed Scheme, commenting that the delivery of high frequency public transport is essential to the sustainable development of North Dublin. The submission further suggested the Proposed Scheme would enhance the ability of the area to unlock and sustain the growth potential of lands along the route.

Another submission stated the Proposed Scheme would significantly benefit the lands related to the submission, providing a high-quality public transport link towards the city centre.

Response to issue raised

The support for the scheme is noted and welcomed by the NTA.

2.5.4 Other Issues Raised and Responses

2.5.4.1 SHD planning application

Summary of issue raised

One submission reference a current planning application regarding a Strategic Housing Development (SHD) which was submitted to ABP on 14th April 2022 under the name Fosterstown North SHD. The respondent wishes the NTA to note the proposed development is comprised 645 residential units, for approximately 1,000 people, immediately adjacent to the R132 on which the Proposed Scheme is proposed.

The submission further considers that the backlog at ABP has resulted in no decision yet as to the outcome of the planning application.

Response to issue raised

The NTA has engaged with Fingal County Council in respect of the Fosterstown Local Area Plan. Within Appendix A2.1 Planning Report contained in the EIAR Volume 4 Appendices Part 1 of 4, Section 3.7.1.4 provides details of Fosterstown Masterplan 2019 Part C and how the Proposed Scheme response to the various objectives within this LAP. It is understood that the Fosterstown North SHD forms the southern part of the Fosterstown Masterplan area, situated to the south of the town centre of Swords.

As noted in Section 6.2.2 of Chapter 6 Traffic and Transport, subsection 6.2.2.1 Traffic and Transport Assessment Guidelines:

'To determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).'

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network.

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014): *'a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences'*. The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel. The document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is generally an appropriate means of assessing the traffic and transport impact of additional trips on the surrounding road network.

The TIA, which supports this EIAR Chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

'The proposed Pinnock Hill signalised junction has been designed to integrate with the aspirations of the Fosterstown Local Area Plan which recognises the requirement for the provision of the Fosterstown Link Road.'

2.5.4.2 Temporary access to lands

Summary of issue raised

In relation to Fosterstown North SHD, one submission comments that northern access to the site at this location is dependent on an external third party and the development of the lands at the location to the north. It is therefore requested that the development of lands be allowed to progress in conjunction with the delivery of the BusConnects corridor with a temporary access point on Swords Road.

Within the submission the respondent considers the planning application proposed temporary access from R132 Swords Road, with a temporary short break in the bus lane of the BusConnects preferred route options to allow vehicle to continue access to the site. A Traffic and Transport Assessment detailed all outcomes of this proposals, commenting that the proposed access will have no negative traffic impact to the future bus network.

The proposed temporary access is requested to be in place from the approval of the planning permission until such a time as the alternative access from the lands to the rear is completed by the adjoining property owner.

Request for the proposed temporary junction required to access the lands on Swords Road, in the BusConnects proposal until such a time as the alternative access from the lands to the rear is completed by the adjoining property owner. It would remain compatible with the overall SHD proposals and would not impact on the delivery and operation of the proposed bus corridor.

Response to issue raised

In developing the Proposed Scheme, the NTA has engaged with FCC regarding the proposed development and therefore are aware of the plans for Fosterstown North SHD at this site. During the development of the Proposed Scheme, granted permissions have been considered. It is noted that the proposals for this site are not yet granted. The NTA acknowledges the future requirement for a temporary junction to the Fosterstown North SHD and NTA will continue to engage with the relevant local authorities and developers with regards to future schemes. However the temporary or permanent access to development lands is a matter for the local authority.

2.5.4.3 Pedestrian crossing inclusion

Summary of issue raised

One submission raised a query to the inclusion of a further pedestrian crossing, in relation to the Fosterstown North SHD planning application. The additional signal-controlled pedestrian crossing on the R132 would facilitate access to the proposed MetroLink through the lands related to the SHD and towards the Fosterstown Metro Station. It is also noted the delivery of the crossing would achieve the pedestrian crossing objective for the Proposed Scheme.

Response to issue raised

The NTA acknowledges the future requirement for a pedestrian crossing between the Fosterstown North SHD and the proposed Fosterstown MetroLink station. This has been considered as part of the Proposed Scheme and the indicative location of the future pedestrian crossing is indicated in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 03 General Arrangement drawings, Sheet 02, see Figure 2.61. However the need for such crossing is associated with the proposed MetroLink Scheme and consequently is outside the scope of the Proposed Scheme.

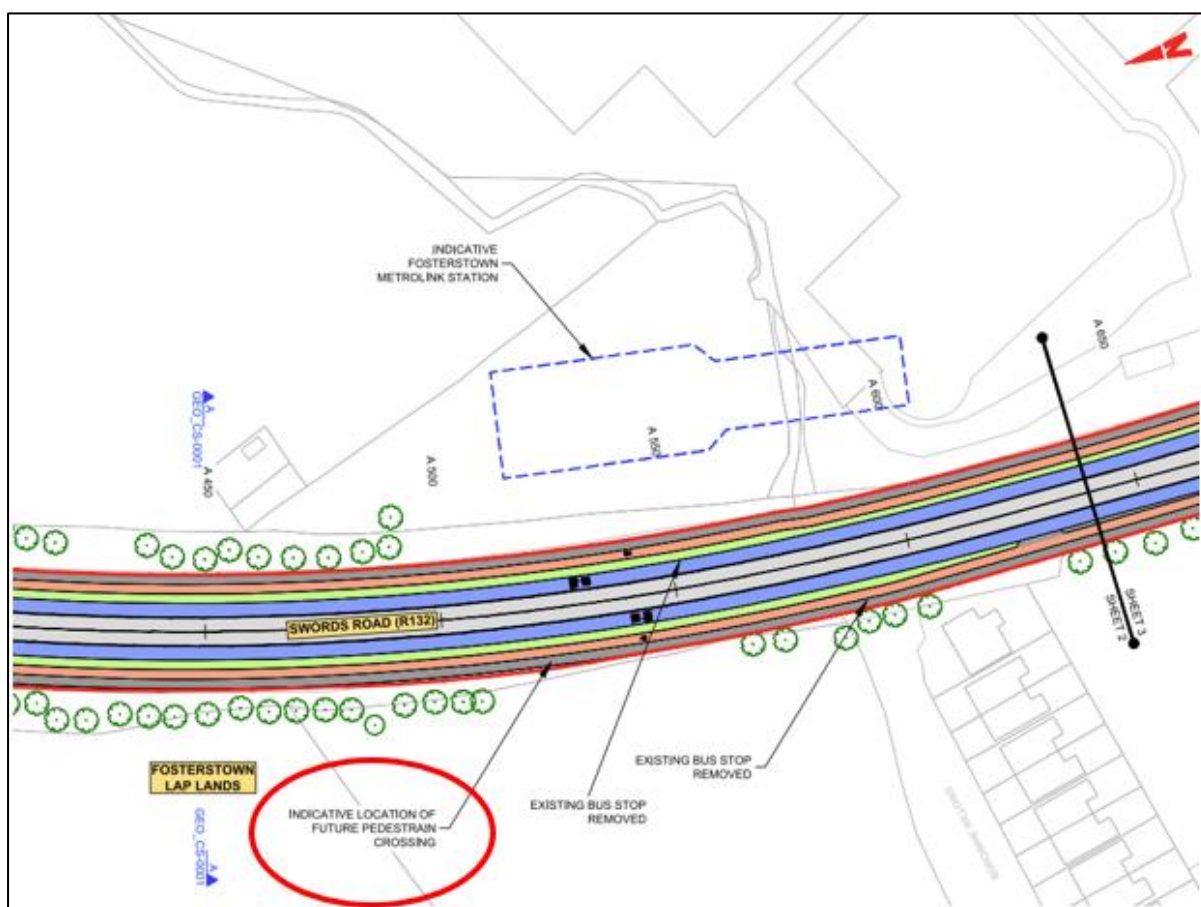


Figure 2.61 Proposed General Arrangement at Fosterstown LAP Land (Sheet 02)

2.5.4.4 Pinnock Hill roundabout design and MetroLink integration

Summary of issue raised

One submission noted that the preferred route designs for the Proposed Scheme do not align with the delivery of the Fosterstown Link Road. The objective for the Link Road has been included in various development plans and has been in consultation with both the Fingal County Council (FCC), the NTA and the BusConnects and MetroLink teams.

The respondent refers to the FCC and NTA comments regarding the delivery of the Link Road, advising this would be premature and may prejudice the Pinnock Hill Roundabout detailed design. The respondent further comments that planning permission for Pinnock Hill SHD was advised by FCC and the NTA that their scheme should provide for the part delivery of the Fosterstown Link Road.

The submission therefore raises the surprise of the respondents to the new design of Pinnock Hill roundabout as a signalised junction which completely omits to consider the future Link Road which is awaiting delivery. It is further noted that the signalised junction design is not consistent with the delivery of the three schemes currently under consideration for the area, the Fosterstown Link Road, BusConnects, and the MetroLink.

In addition, the design for the Pinnock Hill area is therefore disconnected and it will be possible that a further redesign is needed in the future for the inclusion of all three schemes. The submission requests the rectification of the design, in order for it to be revised accordingly to cater to future needs.

Response to issue raised

The proposals for the link road is a matter for Fingal County Council and the relevant developers. NTA have engaged with FCC on a number of occasions during the design development process because of the interface of the Proposed Scheme with the Fosterstown Link Road. As noted in Section 4.5.1 and Section 4.6.6.3.3 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR *'the proposed fully signalised junction has been designed to integrate with the aspirations of the Fosterstown Local Area Plan which recognises the requirement for the provision of the Fosterstown Link Road.'*

Additionally, Section 2.3.5.1.1 of Chapter 2 Need for the Proposed Scheme, also details the various objectives associated with the Fosterstown Masterplan 2019 and details how the scheme facilitates these objectives, see Table 2.12.

Table 2.12 Fosterstown Masterplan 2019 Part C

	Reference / Section	Objective	Scheme Response
Fosterstown Masterplan 2019 Part C	Vision	<i>The vision for Fosterstown is to create a residential community that is mixed and balanced, and forms a clear nexus with the scale of commercial development anticipated on the nearby Barrysparks & Crowscastle area. The Fosterstown lands have a unique opportunity to utilise the new connections that will emerge in Swords via the MetroLink station and Core Bus Corridor on the R132.</i>	The Proposed Scheme will help to facilitate this objective. The Proposed Scheme will enhance the streetscape through urban realm improvement and provide enhanced public transport and connection options in Swords.
	Transport and Movement	<i>The Masterplan seeks to facilitate strong pedestrian and cyclist connections, as well as strong connections to the town centre and public transport infrastructure</i>	The Proposed Scheme aligns with the objective as it will create an attractive, resilient, equitable public transport network better connecting communities and improving access to work, education and social activity. Along the route of the Proposed Scheme, improvements and enhancements will be made to footpaths, walkways, and pedestrian crossings
		<i>Car dominance will be discouraged and active travel promoted</i>	The Proposed Scheme aligns with the objective as it will help to promote modal shift from private car to sustainable transport options. It enhances active travel networks along the Proposed Scheme by the extension and segregation of high quality cycles lanes reducing the dependency on private car use.

Reference / Section	Objective	Scheme Response
	<i>Pedestrian and cyclist connections have been incorporated to facilitate access to the Metro station and Swords Main Street.</i>	The Proposed Scheme will help facilitate access to the Metro Station and Swords Main Street through pedestrian and cycling connections.
	<i>Main vehicular access to the Masterplan lands will be achieved via the new Fosterstown Link Road from the R132 to the Forest Road. The detailed design of the Fosterstown Link Road and junction layout will be subject to consultation through the planning consent process.</i>	The Proposed Scheme will help facilitate access to the Masterplan Lands via the new Fosterstown Link Road from the R132 to the Forest Road.
	<i>The Pinnock Hill Roundabout on the R132 will be upgraded to accommodate the new link road.</i>	The existing roundabout at Pinnock Hill will be modified to a fully signalised junction with pedestrian and cyclist facilities.
	<i>Ensure that pedestrian and cyclist facilities are designed in accordance with Section 5.8.3 of the NTAs Transport Strategy for the Greater Dublin Area 2016 – 2035.</i>	The Proposed Scheme aligns with the objective as the BusConnects Dublin Programme is the NTA's programme to greatly improve bus services in the Greater Dublin Area of which the Proposed Scheme is part.
Green Infrastructure	<i>Provide an east-west green corridor along the existing stream encompassing pedestrian and cyclist infrastructure, connecting from existing open space at Boraimhe Birches to the west of the lands with the R132 to the east of the lands.</i>	The Proposed Scheme will help facilitate access options at the Airside Junction.
Phasing and Implementation: Phase 1 (Pre-Metrolink)	<p>Essential Infrastructure</p> <ul style="list-style-type: none"> • BusConnects service or similar enhanced bus service • Pedestrian access to designated BusConnects (or similar) stops (required before commencement of Phase 2) • Upgrade to Pinnock Hill roundabout (signalisation or similar) • Fosterstown Link Road (new access road from the Forest Road to connect with the Pinnock Hill Roundabout) • Realignment of Dublin Road to connect with Fosterstown Link Road, including pedestrian/ cyclist/ green infrastructure amenities • Upgrade Pinnock Hill Roundabout and provide improved links to Airside. <p>Non-Essential Development (in the broader Swords area)</p> <ul style="list-style-type: none"> • Upgrade to the R132 in the form of footpaths, segregated cycle paths 	The Proposed Scheme is part of the overall BusConnects project which will provide the infrastructure required to provide an enhanced bus service. It will also include essential infrastructure upgrades throughout the Proposed Scheme corridor.
Phasing and Implementation: Phase 2	<p>Essential Infrastructure</p> <ul style="list-style-type: none"> • R132 upgrade - replace existing roundabouts with signalised junctions (or similar) • R132 upgrade - segregated cycle lanes 	Two roundabouts are to be converted to signalised junctions as part of the Proposed Scheme, these include: <ul style="list-style-type: none"> • Pinnock Hill Roundabout; and • Cloghran Roundabout.
A Connected Place	<i>The presence of the Fosterstown Metro Station, as well as the upcoming BusConnects project, presents a unique opportunity to create a community with excellent public transport links and reduced reliance on the private car.</i>	The Proposed Scheme, which is part of the BusConnects project, will provide the transport infrastructure necessary to support sustainable transport options. Enhanced sustainable transport options with greater accessibility to same will encourage a modal shift from the private car.

2.6 Whole Scheme

2.6.1 Overview of Submissions Received

Table 2.13 below lists the 11 individual submissions made in respect of the Proposed Scheme.

Table 2.13 Submissions Made in Respect of the Whole Scheme

No	Name	No	Name	No	Name
3	Bob Laird	16	Donal O'Brolchain	39	Neasa Hourigan TD
5	Brendan Heneghan	18	Dublin Commuter Coalition	48	Stephen Hall
8	Carmel Sherry and Celine Byrne	19	Dublin Cycling Campaign	51	Transport Infrastructure Ireland
14	Development Applications Unit	20	Fingal County Council		

A number of issues were raised and these are listed below and described in Sections 2.6.2 to 2.6.12 below.

Common Issues Raised

1. Support for the Proposed Scheme
2. Impact to pedestrian facilities
3. Impact to cycle facilities
4. Junction design
5. Impact to bus services
6. Impact to bus stops
7. Impact to bus lanes and bus gates
8. Consultation process
9. Impact to trees and greenery
10. Need for the Proposed Scheme
11. Metro Link and Fosterstown Link Road
12. Impact to parking and loading
13. Land acquisition
14. Impacts due to changes in traffic movement
15. Collisions between pedestrians and cyclists
16. Archaeology and cultural heritage
17. Supplementary data and missing elements
18. Alternative routes
19. Enforcement
20. Impact to Our Lady's Park, Drumcondra
21. Impact and requested changes to Dorset Street
22. Luas network

Other Issues Raised

1. Traffic light sequencing

2. Impact to traffic flow
3. Situation in Swords
4. Scheme fees
5. Unexplained elimination of current road layout
6. Inadequate modelling
7. Impact to the airport
8. Administrative discrepancy
9. Use of shared space within the Proposed Scheme
10. Design review and missed opportunities
11. Flooding and SUDs
12. Disability review
13. Frank Flood Bridge design
14. Filtered permeability on Richmond Road
15. Request for public realm improvements
16. CEMP, interactions with the Proposed Scheme, and conditions

2.6.2 03 – Bob Laird

Overview of submission

A number of issues were raised and these are listed below and described below:

1. Support for the Proposed Scheme
2. North of Pinnock Hill Roundabout
3. Supporting traffic management
4. Proposed Removal of Bus Stop 3671 at Airport Roundabout northbound

2.6.2.1 Support for the Proposed Scheme

Summary of issue raised

The submission states support for the development, and its aim to facilitate high quality sustainable transport by both bus and cycling.

Response to issue raised

The support for the scheme is noted and welcomed by the NTA.

2.6.2.2 North of Pinnock Hill Roundabout

Summary of issue raised

The submission raised concerns that the Proposed Scheme ends at Pinnock Hill roundabout with no indication of how buses will continue with reliable journey times going north of this location. It went on to state that buses entering the corridor, already delayed from Swords, will result in a consistent and reliable service along the whole corridor. It was then further mentioned that if any length of the bus route is omitted then it will be difficult to deliver the bus service at the quality and reliability necessary to achieve the objectives.

Response to issue raised

As noted in Section 4 of the Swords to City Centre Preferred Route Option Report included in the Supplementary Information, *'at the northern end, the Study Area begins south of Swords at Pinnock Hill Roundabout. The route in Swords, north of Pinnock Hill, will be developed separately by Fingal County Council as part of local connectivity project'*.

The bus services will use the existing infrastructure to continue the bus services north of Pinnock Hill.

2.6.2.3 Supporting Traffic Management

Summary of issue raised

Concerns were raised that the route has been designed for local access, with some four phase lights along the route, delaying and slowing journeys for bus users. The submission further stated there is quite often poor priority for the main bus route, with the Swords Scheme having approximately 47 set of lights creating delays on the route. The respondent suggested that the Bord include a comment in relation to the need for priority traffic lights in the corridor.

Response to issue raised

As noted in Section 12 of the Preliminary Design Report, included in the Supplementary Information, *'it is the intention to provide specific detection for buses located a sufficient distance from the junction to allow the traffic signal junctions to respond efficiently to the requested bus priority request. There will be further back up loop or above ground detection provided to ensure that all vehicles permitted to use the lane will be detected although these would be standard non-priority demands'*.

As noted in Chapter 6 Traffic and Transport of Volume 2 of the EIAR, *'the Proposed Scheme includes an upgrade of the existing bus priority and cycle facilities associated with the corridor. The Proposed Scheme includes a substantial increase in the level of bus priority provided along the corridor, including the provision of additional lengths of bus lane, resulting in improved journey time reliability. Throughout the Proposed Scheme bus stops will be enhanced to improve the overall journey experience for bus passengers.'*

Table 2.14 demonstrates the changes as a result of the Proposed Scheme:

Table 2.14 Summary of Changes as a Result of the Proposed Scheme

Total Length of Proposed Scheme	12km	
Bus Priority	Existing (km)	Proposed Scheme (km)
Bus Lanes		
Inbound	9.3	11.3
Outbound	8.0	11.8
Bus Priority through Traffic Management		
Inbound	0	0.33
Outbound	0	0.3
Total Bus Priority (both directions)	17.3	23.7 (+39%)
Bus Measures		
Proportion of Route with Bus Priority Measures	72%	100%
Cycle Facilities – Segregated		
Inbound	2.7	9.4
Outbound	4.1	9.4
Cyclist Facilities – Non-segregated		
Inbound	3.1	1.3 (Quiet Street)
Outbound	4.2	1.3 (Quiet Street)
Cyclist Facilities – Overall		
Total Cyclist Facilities (both directions)	14	21.6 (+53%)
Proportion Segregated (including Quiet Street Treatment)	48%	100%
Other Features		
Number of Pedestrian Signal Crossings	86	125

'The Proposed Scheme will provide 11.3km inbound and 11.8km outbound of bus lanes across the corridor. This is an increase from 9.3km inbound and 8.0km outbound in the Do Minimum scenario. In conjunction with signal controlled bus priority, this contributes to an increase of 39% in total bus priority measures in both directions in the Do Something scenario compared to the Do Minimum. Overall, the Proposed Scheme will provide bus priority measures along the entirety of the corridor.'

As noted in Section 6.4.6.3 of Chapter 6, 'A qualitative impact assessment has been undertaken based on the provision of bus priority, pedestrian accessibility and changes to the bus stop facilities. The results of the assessment demonstrate that the improvements to the quality of the bus infrastructure will be Positive, Slight and Long-Term in Section 1, Positive, Moderate and Long-Term in Section 2, Positive, Profound and Long-Term in Section 3, Positive, Very Significant and Long-Term in Sections 4 and 5'.

2.6.2.4 Proposed Removal of Bus Stop 3671 at Airport Roundabout northbound

Summary of issue raised

Request to retain bus stop or move closer to the airport due to the frequency of the route, the infrequency or consistency from the airport bus service, and the walking to the bus stop being more convenient as it is a better connecting bus. Comments the change would create more attractive sustainable travel options, and retain a significant number of users, for which it's removal would be inconvenient due to the intersection of two bus routes at this location.

Response to issue raised

Appendix H of the Preliminary Design Report included in the Supplementary Information includes the Bus Stop Review Report. This report sets out a comprehensive exercise which has been carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice principles related to bus stop placement. These principles include:

- Driver and waiting passengers are clearly visible to each other;
- Located close to key local facilities;
- Located close to main junctions without affecting road safety or junction operation;
- Located to minimise walking distance between interchange stops;
- Where there is space for a bus shelter;
- Located in pairs, 'Tail to tail' on opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and
- Adequate footway width.

A main consideration in the siting of bus stops is to minimise walking distance between interchange stops. This exercise was carried out with cognisance of the interface with orbital routes proposed as part of the Dublin Area Bus Network Redesign, which involved significant liaison with the BusConnects Dublin Area Bus Network Redesign team.

The scope of the Proposed Scheme includes the provision of infrastructure for bus services routed along the main corridor to the City Centre. Infrastructure for orbital bus routes, if required, will be delivered as part of a separate orbital core bus corridor scheme, whereby the provision of bus stops, including their location, can be assessed on a holistic basis along the orbital corridor, taking into account the location of existing nearby bus stops which are outside the red line boundary of the Proposed Scheme.

The bus stop locations were reviewed at each stage of the design process with a view to ensuring that the objectives of the Proposed Scheme were met. Feedback from each of the non-statutory consultations was also considered in reviewing the bus stop locations as part of the design of the scheme.

As a result of the Proposed Scheme, there have been gains in population across the whole route for catchments within 10 and 15 minutes from the bus stops. This is also completed with fewer bus stops along the Proposed Scheme.

The analysis also concludes,

'It is recommended to relocate 14 of the 41 bus stops inbound and 12 of the 31 bus stops outbound along the route. In addition, it is proposed to remove 2 of the inbound bus stops and 1 of the outbound bus stops, but to add 1 new stop inbound and 2 new stops outbound.

It is anticipated that the overall journey time along these routes will reduce as a result of these changes. The removal of stops will lead to less time lost due to dwell times at stops and the associated time lost due to deceleration and acceleration before and after the stops. Additionally, operational improvement such as the placement of stops after junctions should serve to reduce journey times.'

Regarding the proposals to retain bus stop 3671, Appendix H of the Preliminary Design Report included in the Supplementary Information includes the Bus Stop Review Report. This report sets out a comprehensive exercise which has been carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice principles related to bus stop placement. The bus stop analysis concludes that bus stop 3671 is currently lightly used and for this reason it has been removed. There are alternative bus stops available approximately 275m to the north across from the Coachmans Inn and to the south, approximately 550m away near Kealy's pub.

2.6.3 05 – Brendan Heneghan

Overview of submission

A number of issues were raised and these are listed below and described below:

1. All one scheme and therefore should be all one fee
2. Submissions on one relevant to others
3. Time savings over all schemes
4. Issues related to Whitehall to Terenure Corridor
5. Lack of consideration of obvious alternatives
6. Omit entire Santry section of scheme and augment with A5 service
7. Administrative Discrepancy

2.6.3.1 All one scheme and therefore should be all one fee

Summary of issue raised

Submission fees must be paid for each individual submission, the respondent commented that BusConnects is a large Scheme with multiple corridors, therefore there is an excessive demand for fees, resulting in a clear breach of environmental laws which allow the respondent to place objections. The respondent in question requests the Bord refund all fees paid beyond the first fee for the Templeogue Rathfarnham Corridor, as it is the NTA's fault they are not connected.

Response to issue raised

The fees payable for observations / submissions are determined by An Bord Pleanála, as allowed by Section 144 of the Planning and Development Act 2000, as amended.

2.6.3.2 Submissions on one relevant to others

Summary of issue raised

- a. Deficient Consultation Process
- b. Elimination of roundabouts with no explanation
- c. Elimination of important left turn slip roads
- d. Inadequate modelling

- e. Moving of bus stops
- f. Widespread destruction of trees
- g. Bus Gates

Response to issue raised

a. Deficient Consultation Process

Ireland ratified the Aarhus Convention in June 2012 and it entered into force in Ireland in September 2012. Prior to that ratification, Ireland had to ensure that all the provisions of the Convention were implemented in national law, which took a number of years, and involved over 60 pieces of legislation.

Accordingly, Ireland's obligations under the Aarhus Convention have been fully incorporated into Irish legislation and include rights of access to information on the environment, rights of participation in planning determinations, rights of access to adequate review procedures and various other rights.

These are now statutory provisions, which are binding on all applicable parties.

In relation to transport infrastructure projects, the applicable statutory provisions are set out in the relevant planning and transport legislation, which include requiring major projects to seek planning consent from An Bord Pleanála. Those application processes for large infrastructure schemes provide for a statutory process requiring the making available for public review all of the applicable information set out in the legislation and permitting the making of submissions in relation to the proposals to the determining body, being An Bord Pleanála.

Thereafter, the legislation provides for the holding of an Oral Hearing, enabling direct public engagement and participation in the decision making process.

As part of the scheme development stage, various non-statutory public consultation processes have been undertaken. These processes are in excess of the requirements of the Aarhus Convention, whose obligations are already enshrined in Irish legislation including "statutory public consultations" which is the stage that the project has now reached.

The NTA notes the comment regarding the technical nature and volume of the documents presenting a potential barrier to the general public seeking access to information relating to the scheme. Given the nature of such infrastructure schemes as BusConnects Core Bus Corridors, there is invariably a substantial amount of technical information which needs to be provided, so as to ensure that the consent application is comprehensive in nature to meet legislative requirements and provide the competent authority with the necessary information to allow them to reach a decision. Volume 1 of the EIAR comprises the Non-Technical Summary of the EIAR for the Proposed Scheme. Chapter 1 in Volume 2 of the EIAR contains information on the content and structure of the EIAR. Section 1.5.6 of Chapter 1 sets out the information which must be contained in the EIAR. The NTA has sought to make the information as concise as possible, while ensuring that the necessary information has been provided. Section 1.5.7 of Chapter 1 sets out the structure of the EIAR. It is considered that the structure of the EIAR does provide the necessary legibility for those interested parties (both lay persons and technical specialists) to find the information of relevance to them. While the EIAR has been prepared in compliance with the EIA Directive, it has also been written to make it accessible to a wider, non-specialist audience in so far as possible.

In May 2017 the NTA launched the BusConnects Programme and then in June 2018 published the Core Bus Corridors Project Report. The report was a discussion document outlining proposals for the delivery of Core Bus Corridor Routes across Dublin.

Since the commencement of the non-statutory period of the CBC Infrastructure Works, there has been a total of three rounds of non-statutory public consultation.

The term "non-statutory" is used to describe the public consultation which occurred from [2018 to 2022] because this consultation process with the public and interested stakeholders was undertaken by the NTA on a voluntary basis and was not required by law. The purpose of this process was to inform the public and stakeholders of the evolution of the proposal from an early stage and to seek feedback on the design proposals.

This is in contrast with the statutory consultation period which ran from 23 May 2023 to 12 September 2023 during which an opportunity was provided to members of the public, including Mr Heneghan, (as well as certain prescribed bodies) to make submissions to An Bord Pleanála in accordance with section 51 of the Roads Act 1993 (as amended).

First Round of Non-Statutory Public Consultation – The first round of non-statutory public consultation on the Emerging Preferred Route Options was from November 2018 until March 2019 divided into three phases. The reason it was divided into three phases was primarily due to the fact that the BusConnects Infrastructure team carried out all aspects of the first round without external design service providers having been appointed at that stage. Moreover, the BusConnects Infrastructure team sought to gain maximum engagement from the public from the commencement of the CBC Infrastructure Works to raise awareness, establish relationships and gain immediate insight and knowledge of the issues at an early stage.

It was also important that at the start of the non-statutory consultation that considerable time and resources were dedicated by the BusConnects Infrastructure team to initiate contact with potential impacted properties. Each of the potentially impacted property owners were offered the opportunity to meet with members of the BusConnects Infrastructure team on a one-to-one basis which meant a significant amount of resources had to be dedicated to this process.

Second Round of Non-Statutory Public Consultation – The non-statutory public consultation for the Preferred Route Options ran from March 2020 to April 2020 as Ireland entered the first lockdown due to the Covid-19 pandemic. The consultation continued in deference to the number of online submissions received during this period. A number of public facing elements of the consultation were cancelled in line with Government health guidelines, however, all other elements of the consultation including online versions of the brochures, supporting documentation were available. Other communication tools including the Freephone, email and digital aspects remained active for submissions to be received.

Third Round of Non-Statutory Public Consultation – This round of non-statutory public consultation for the Preferred Route Options from November 2020 to December 2020 was added due to the disruption caused to the second-round consultation process. It was important that further engagement was facilitated to communicate design development changes prior to concluding the determination of the Preferred Route Options. Methods had emerged whereby traditional public information events could be replaced by virtual online alternatives to offset the restrictions that continued associated with the Covid-19 Pandemic. Accordingly, all elements of the public consultation and stakeholder engagement were conducted virtually or online in line with the Government health guidelines.

b. Elimination of roundabouts

Section 2.1 of EIAR Chapter 2 Need for the Proposed Scheme sets out the objectives of the Proposed Scheme, which are to:

- Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements;
- Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;
- Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;
- Enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks;
- Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and
- Ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible

In order to achieve these objectives, it is essential to enhance pedestrian and cyclists safety, as well as providing priority to bus movement over general traffic movements, particularly at road junctions, including segregating cyclist from general traffic wherever practicable.

As highlighted in Section 2.3.3.5 of the EIAR Volume 2 Chapter 2 'The Department of Transport, Tourism and Sport (DTTAS) Smarter Travel - A Sustainable Transport Future ('Smarter Travel') is the National planning policy document to deliver an integrated transport policy for Ireland as supported by Government. Section 7 page 48 of this policy document identifies 'DMURS' as the key design manual applicable in achieving the Goal 7 of Smarter Travel which *'aims to support enhanced permeability and ensure that the universal design principle and Hierarchy of Road Users model is used to inform future investment decisions to reduce inequalities, support a whole of journey approach, and prioritise sustainable mobility.'* This internationally recognised 'pedestrian first' hierarchy of road users is shown in Figure 2.62 below.

Figure 8: Hierarchy of Road Users model



Figure 2.62 Smarter Travel Figure 8

'DMURS' is The Design Manual for Urban Roads and Streets (Government of Ireland 2013). DMURS advocates this hierarchy of road user model to encourage more sustainable travel patterns and sets out the principles, approaches and standards to be applied to the design of all urban roads and streets in Ireland, defined as those with a speed limit of 60 km/h or less.

Chapter 4 of EIAR Proposed Scheme Description provides details of how the scheme design was developed. Section 4.4 Design Principles sets out how the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (NTA 2021), included as Appendix A4.1 in Volume 4 of the EIAR, was prepared to ensure that a consistent design approach for the Core Bus Corridor Infrastructure Works was adopted based on the objectives of the Proposed Scheme. The purpose of the PDGB is to complement various existing guidance documents/design standards relating to the design of urban streets, bus facilities, cycle facilities and public realm. As listed in Section 4.4 DMURS as one of the key documents for the design of urban streets, bus facilities, cycle facilities and public realm.

Section 4.4.3 of DMURS relates to junction design and in respect of roundabouts states: *'Large roundabouts are generally not appropriate in urban areas. They require a greater land take and are difficult for pedestrians and cyclists to navigate, particularly where controlled crossings/cycle facilities are not provided, and as such, vehicles have continuous right of way.'*

DMURS goes on to state that: *'Where large roundabouts currently exist, road authorities are encouraged, as part of any major upgrade works, to replace them with signalised junctions or retrofit them so that are more compact and/or pedestrian and cycle friendly, as is appropriate.'*

By contrast, in relation to traffic signalised junctions DMURS states that: *'These can provide a wide range of capacities depending on the widths of the approaches, the presence of bus lanes on approach, cycle times and turning traffic flows. Traffic signal junctions can include*

pedestrian phases and advanced stop lines for cyclists, thus making them safer. Traffic Signals should generally be used at all junctions between Arterial and Link streets. Where pedestrian activity is particularly high (such as within a Centre or around a Focal Point), designers may apply all-round pedestrian phase crossings with diagonal crossings.'

The above quotes from DMURS are directly applicable to the two existing large roundabouts on the route of the Proposed Scheme, namely the Pinnock Hill Roundabout and Cloghran Roundabout.

It is clear from the above that the retention of the roundabouts would be contrary to the requirements of DMURS. Furthermore, in relation to achieving the scheme objectives the replacement of the Pinnock Hill Roundabout and Cloghran Roundabout with signalised junctions is essential to achieving the necessary enhanced pedestrian, cyclist and bus priority infrastructure.

Section 6.3.2.4.1 and 6.3.3.4.1 of EIAR Chapter 6 Traffic and Transport describes the characteristics of these two existing roundabout junctions and these are shown in Images 6.1 and 6.4, see Figure 2.63 below. In particular buses are not provided any priority over general traffic at either junction and there is an absence of controlled pedestrian crossing facilities on three of the four arms at Pinnock Hill roundabout and at all arms of the Cloghran roundabout.



Image 6.1: Pinnock Hill Roundabout Arrangement



Image 6.4: Cloghran Roundabout Arrangement

Figure 2.63 Existing roundabout layouts at Pinnock Hill Roundabout and Cloghran Roundabout

EIAR Chapter 6 Traffic and Transport Appendix A6.3 Junction Design Report sets out the design rationale for both junctions to be upgraded to a 4 arm signalised junction.

The Pinnock Hill junction is proposed to be upgraded to a 4-arm signalised junction as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure. The design rationale was to provide pedestrian crossing facilities on all arms of the junction, provide protected cycle infrastructure and crossing facilities, whilst improving bus priority. Full policy outcomes for CBC route can be achieved by Junction Type 1 and signal operation, giving priority to bus and improved facilities for pedestrians and cyclists.

The existing Cloghran Roundabout is proposed to be upgraded to a 4-arm signalised junction as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure. The design rationale was to introduce more direct and compact pedestrian crossing facilities on all arms of the junction, provide protected cycle infrastructure and crossing facilities, whilst improving bus priority. Full policy outcomes for CBC route can be achieved by Junction Type 1 and signal operation, giving priority to buses and provide improved facilities for pedestrians and cyclists.

c. Elimination of important left turn slip roads

As described in the preceding paragraph relating to roundabouts, Smarter Travel and DMURS are the key national policy and design guidance relevant for the Proposed Scheme. Section 4.4.3 of DMURS relates to junction design and sets out how junction design is largely determined by volumes of traffic and while the design of junctions has traditionally prioritised motor vehicle movement, designers must take a more balanced approach to junction design in order to meet the objectives of Smarter Travel and DMURS.

Specifically, DMURS states that designers should, inter alia, *'Omit left turn slips, which generally provide little extra effective vehicular capacity but are highly disruptive for pedestrians and cyclists. Where demand warrants, they may be replaced with left turning lanes with tighter corner radii'*.

In addition, the NTA's GDA Transport Strategy (GDATS) 2022 – 2042 identifies a range of measures to achieve the aims of the GDATS, as noted in Table 3.10 of Appendix A2.1 Planning Report of EIAR Chapter 2 Need for the Proposed Scheme. Measure WALK3 relates to Improved Junctions and sets out how the NTA, in conjunction with local authorities, will implement junction improvements across the GDA to, inter alia, enhance movement by pedestrians and cyclists via a programme of removal of slip lanes at appropriate locations, together with consideration of junction signalling changes to better balance the use of the junction between motorised and vulnerable modes.

It is clear from the above that the retention of the left turn slip lanes would be contrary to the requirements of DMURS. In relation to achieving the scheme objectives the removal of left turn slip lanes is essential to achieving the necessary enhanced pedestrian, cyclist and bus priority infrastructure.

d. Inadequate modelling

Section 3.2.1 of Appendix A6.2 Traffic Modelling Report sets out the multi-tiered transport modelling approach that has been adopted. It explains that there are four tiers of transport modelling which have been used in the design development and to assess the Proposed Scheme.

- Tier 1 (Strategic Level): The NTA's East Regional Model (ERM) is the primary tool which has been used to undertake the strategic modelling of the Proposed Scheme and has provided the strategic multi-modal demand outputs for the proposed forecast years;

- Tier 2 (Local Level): A Local Area Model (LAM) has been developed to provide a more detailed understanding of traffic movement at a local level. The LAM is a subset model created from the ERM and contains a more refined road network model used to provide consistent road-based outputs to inform the TIA, EIA and junction design models. This includes information such as road network speed data and traffic redistribution impacts for the Operational Phase. The LAM also provides traffic flow information for the micro-simulation model and junction design models and has been used to support junction design and traffic management plan testing;
- Tier 3 (Corridor Level): A micro-simulation model of the full 'end to end' corridor has been developed for the Proposed Scheme. The primary role of the micro-simulation model has been to support the ongoing development of junction designs and traffic signal control strategies and to provide bus journey time information for the determination of benefits of the Proposed Scheme; and
- Tier 4 (Junction Level): Local junction models have been developed, for each junction along the Proposed Scheme to support local junction design development. These models are informed by the outputs from the above modelling tiers, as well as the junction designs which are, as discussed above, based on people movement prioritization.

Section 3.2.4 of Appendix A6.2 provides details of the Proposed Scheme micro-simulation model and Section 3.2.5 states that: "The Proposed Scheme micro-simulation model has provided key information on end-to-end bus and car journey times along the Proposed Scheme. The Proposed Scheme micro-simulation model is supplied traffic flow information from the LAM and uses consistent information from the junction design models, in terms of signal plans, green times, staging, phasing and offsets. 3D Visualisations of sections of the Proposed Scheme have been developed based on the 2D models to help visualise and demonstrate the benefits and impacts of the scheme to stakeholders. Overall, the Proposed Scheme micro-simulation model has provided key transport metric inputs to the TIA in terms of operational features, vehicle interaction, person level delay and bus journey time and reliability performance."

Section 4.3 of Appendix A6.1 provides details of the modelled time periods and notes that: "The transport models developed for the Proposed Scheme cover all time periods across a typical average weekday. The ERM demand model covers the following time periods with the road and public transport models assigning a representative 1-hour within each of the 3-hr demand periods:

- AM Peak period covering the period between 07.00-10.00;
- Morning Inter-Peak covering the period between 10.00-13.00;
- Afternoon Inter-Peak covering the period between 13.00-16.00;
- PM Peak period covering the period between 16.00-19.00; and
- Off-Peak covering the period between 19.00-07.00.

The LAM covers the 4 peak hour time periods outlined below:

- AM Peak hour covering the period between 08.00-09.00;
- Morning Inter-Peak hour covering the period between 12.00-13.00;
- Afternoon Inter-Peak hour covering the period between 15.00-16.00; and
- PM Peak hour covering the period between 17.00-18.00.

The Proposed Scheme Microsimulation Model covers the following periods:

- Weekday AM peak between 07:00 and 10:00; and
- Weekday PM peak between 16:00 and 19:00.

e. **Moving of bus stops**

Appendix H of the Preliminary Design Report included in the Supplementary Information includes the Bus Stop Review Report. This report sets out a comprehensive exercise which has been carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice principles related to bus stop placement. These principles include:

- Driver and waiting passengers are clearly visible to each other;
- Located close to key local facilities;
- Located close to main junctions without affecting road safety or junction operation;
- Located to minimise walking distance between interchange stops;
- Where there is space for a bus shelter;
- Located in pairs, 'Tail to tail' on opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and
- Adequate footway width.

A main consideration in the siting of bus stops is to minimise walking distance between interchange stops. This exercise was carried out with cognisance of the interface with orbital routes proposed as part of the Dublin Area Bus Network Redesign, which involved significant liaison with the BusConnects Dublin Area Bus Network Redesign team.

The scope of the Proposed Scheme includes the provision of infrastructure for bus services routed along the main corridor to the City Centre. Infrastructure for orbital bus routes, if required, will be delivered as part of a separate orbital core bus corridor scheme, whereby the provision of bus stops, including their location, can be assessed on a holistic basis along the orbital corridor, taking into account the location of existing nearby bus stops which are outside the red line boundary of the Proposed Scheme.

The bus stop locations were reviewed at each stage of the design process with a view to ensuring that the objectives of the Proposed Scheme were met. Feedback from each of the non-statutory consultations was also considered in reviewing the bus stop locations as part of the design of the scheme.

As a result of the Proposed Scheme, there have been gains in population across the whole route for catchments within 10 and 15 minutes from the bus stops. This is also completed with fewer bus stops along the Proposed Scheme.

The analysis also concludes,

'It is recommended to relocate 14 of the 41 bus stops inbound and 12 of the 31 bus stops outbound along the route. In addition, it is proposed to remove 2 of the inbound bus stops and 1 of the outbound bus stops, but to add 1 new stop inbound and 2 new stops outbound.'

'It is anticipated that the overall journey time along these routes will reduce as a result of these changes. The removal of stops will lead to less time lost due to dwell times at stops and the associated time lost due to deceleration and acceleration before and after the stops. Additionally, operational improvement such as the placement of stops after junctions should serve to reduce journey times.'

f. **Widespread destruction of trees**

Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4 of the EIAR describes the comprehensive tree survey undertaken in order to assess the impacts of the Proposed Scheme and provides a detailed overview of the proposed tree losses in order to facilitate the construction of the Proposed Scheme. Table 2 of Appendix A17.1 summarising the total removals is provided below. As shown below, the majority of trees / hedges to be removed

have been assessed as Category C trees which are of low arboricultural quality. Of these proposed removals, Appendix A17.1 also states that ‘A total of 27 trees are recommended for removal irrespective of the proposed development, due to severe physiological or structural decline that means they cannot realistically be retained in the context of current land use for longer than 10 years, or due to a high likelihood of failure that poses an unacceptable risk to persons to property’.

Table 2. Summary of removals by quality and type.

	Category A	Category B	Category C	Total
Trees	2	36	141	180
Groups	0	7	12	19
Hedges	0	0	9	9
Total	2	43	162	208

The Landscape General Arrangement drawings in Volume 3 of the EIAR (drawing set 05 accompanying EIAR Chapter 4) show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Section 12.5.1.2.1 of Chapter 12 (Biodiversity) in Volume 2 of the EIAR provides the quantities of proposed new and replacement planting for the Proposed Scheme as shown in the Landscape General Arrangement drawings. These proposed quantities to be planted are:

- 91 street trees;
- 1,160m² of woodland trees;
- 758m of hedgerow;
- 14,479m² of species rich grassland;
- 1,789m² of ornamental planting;
- 1,159m² of native planting; and
- 31,460m² of amenity grass.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact on trees and vegetation along the Proposed Scheme during both the Construction and Operational Phases of the Proposed Scheme. Section 17.5 of Chapter 17 outlines the mitigation required in order to reduce the impacts as far as reasonably practicable. With respect to trees and vegetation, the mitigation is restated below.

‘Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 ‘Trees in relation to design, demolition and construction - Recommendations’ (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project specific arboricultural methodology for such works, which will be prepared by a professional qualified arborist.’

‘Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with ‘BS 3998:2010 Tree Work – Recommendations’ (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist.’

‘The Arboricultural Assessment prepared for the Proposed Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for ongoing monitoring of retained trees during the Operational Phase.’

As summarised in Table 17.9 of Chapter 17, the Construction Phase impact on trees and vegetation is predicted to be Negative, Moderate / Significant, Temporary / Short-Term. As

summarised in Table 17.10 in Chapter 17, following the establishment of the proposed landscape measures (15 years post-construction), the impact on trees and vegetation will have reduced to Negative, Slight / Moderate, Long-Term.

g. Bus Gates

With regards to the Proposed Scheme, no new bus gates are proposed. There is an existing arrangement traffic restrictions on North Frederick Street which, although not demarcated as a bus lane/bus gate, preforms similar to a bus gate and will be maintained.

2.6.3.3 Time savings over all schemes

Summary of issue raised

The submission raises questions around unsubstantiated claims surrounding time savings. The submission states that across an array of corridors the only savings that exceed 10minutes are Ringsend in and Tallaght out. The submission goes on to say that these minimal time savings apart from being a shocking waste of taxpayer's money, do not justify very invasive measures in the outer suburbs which will be grossly inconvenient for residents and environmentally damaging.

Response to issue raised

Section 6.4.6.3 of Chapter 6 of Volume 2 of the EIAR notes the following:

'Operational Impacts for Bus Passengers and Operators: A micro-simulation modelling assessment has been developed and network performance indicators established for bus operations along the 'end to end' corridor. The results of the assessment demonstrate that the total bus journey times on all modelled bus services will improve by between 8% and 19% during the AM and PM Peak hours of the 2028 Opening Year and 2043 Design Year. Based on the AM and PM peak hours alone, this equates to 10.1 hours of savings in 2028 and 9.8 hours in 2043, when compared to the Do Minimum combined across all buses. On an annual basis this equates to approximately 7,660 hours of bus vehicle savings in 2028 and 7,400 hours in 2043, when considering weekday peak periods only. Journey time variation and reliability are shown to improve in all Do Something scenarios compared to the Do Minimum. Overall it is anticipated that the improvements to the network performance indicators for bus users along the Proposed Scheme will be Positive, Significant and Long-Term.'

2.6.3.4 Issues related to Whitehall to Terenure Corridor

Summary of issue raised

The submission raised issues with the No. 16 bus service. It goes on to say that no priority is given by NTA to getting people quickly from the airport and that there is a lack of clarity as to how the A Spine services will navigate the city if the City Council gets permission for College Green Plaza.

Response to issue raised

The issue relating to the No. 16 bus service is outside the scope and objectives of the Proposed Scheme. It is noted that in addition to the level of service improvements to existing bus services as a result of the Proposed Scheme, the ongoing Dublin Area Bus Network Redesign will see continued investment in bus services into the future, which will also be afforded similar journey-time reliability and therefore improve their attractiveness as an alternative to private car usage.

EIAR Volume 2 Chapter 2 Need for the Proposed Scheme outlines the policy context that underpins the Proposed Scheme as well as the regional and local transport need for the Proposed Scheme. Section 2.2.1.5 notes the following:

'To inform the preparation of the GDA Transport Strategy, the NTA prepared the Core Bus Network Report (NTA 2015) for the Dublin Metropolitan Area, which identified those routes on which there needed to be a focus on high capacity, high frequency and reliable bus services, and where investment in bus infrastructure should be prioritised and concentrated. The Core Bus Network is defined as a set of primary orbital and radial bus corridors which operate between the larger settlement centres in the Dublin Metropolitan Area.'

Section 2.2.2 of Chapter 2 notes that: *'The Proposed Scheme will facilitate almost 100% bus priority and will complement the rollout of the Dublin Area Bus Network Redesign to deliver improved bus services on the route. This will improve journey times for bus, enhance its reliability and provide resilience to congestion'*.

2.6.3.5 Omit entire Santry section of scheme and augment with A5 service

Summary of issue raised

The submission suggests that any works on a corridor between the junction of Coolock Lane and the flyover at Shantalla Road not be permitted and that the A2/A4 proceed via Coolock Lane.

The submission also makes reference to the maps within the supplementary information. The respondent commented that the CPO Deposit map are not up to standard, mentioning that sheets 19 to 21 show a high number of gardens affected and it is wholly disproportionate to the alternatives.

Response to issue raised

As noted above, the issue relating to the A2/A4 bus service is outside the scope and objectives of the Proposed Scheme. It is noted that in addition to the level of service improvements to existing bus services as a result of the Proposed Scheme, the ongoing Dublin Area Bus Network Redesign will see continued investment in bus services into the future, which will also be afforded similar journey-time reliability and therefore improve their attractiveness as an alternative to private car usage.

Regarding the suggestion that there should be no works between the junction of Coolock Lane and the Flyover at Shantalla Road, the Emerging Preferred Route proposed a northbound one-way traffic system between the Omni Park Shopping Centre and the Shantalla Road junction, along with bus lanes in both directions, and a new slip road allowing southbound traffic onto the bypass to exit onto Shantalla at the N1/M50 bridge. As this section of the Swords Road is not wide enough to provide segregated cycle facilities, it was proposed to redirect cyclists through Coolock Lane and to an offline, two-way cycle track adjacent to Oak Park Avenue, running parallel to west of Santry Bypass (N1/M50) and connection at the Shanrath Junction. Following consultation feedback received from members of the public following the first non-statutory public consultations held from the 14th of November 2018 to the 29th of March 2019, it became apparent that the one-way proposal for general traffic might affect the existing access/egress arrangements for residents along the Lorcan and Shanrath Roads and impact on commercial deliveries and local business.

Section 3.4.1.1 of Chapter 3 of the EIAR set out that design development and assessment work was carried out at the Draft Preferred Route Option Stage on this section of the Proposed Scheme. This is also documented in Section 6.2.2.2 of the Preferred Route Option Report (provided as part of the Supplementary Information of the EIAR), looked at a one-way option through Santry Village, which was considered.

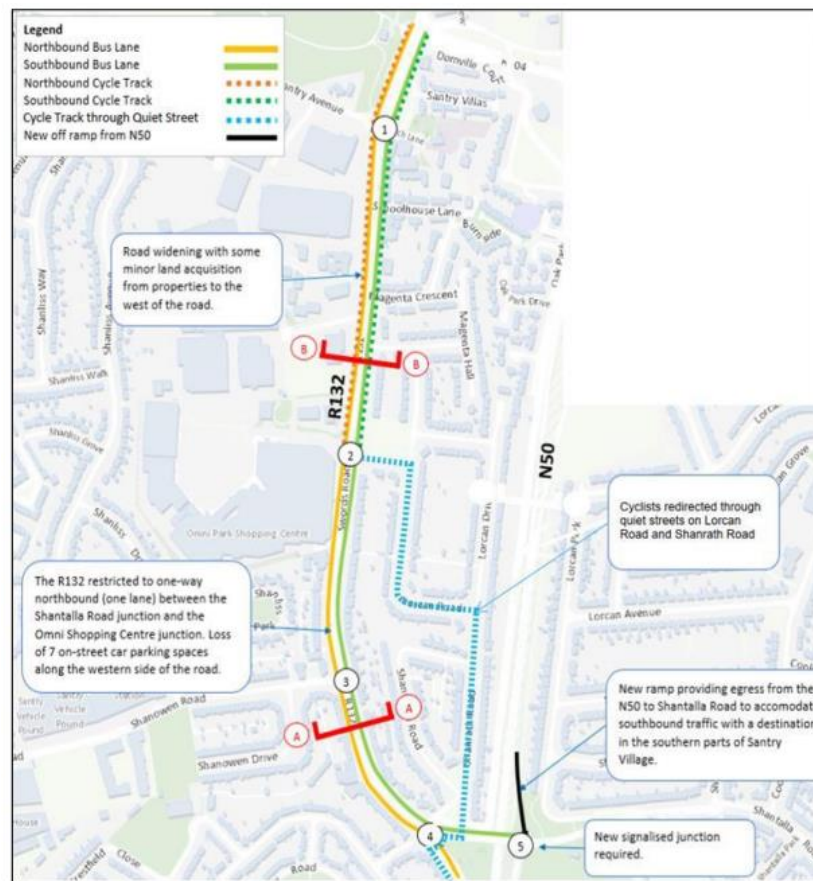


Figure 2.64 One-Way Route Option through Santry Village (Option SY1C)

This option removes southbound traffic between Omni Shopping Centre and Shantalla Road to minimise land acquisition on Swords Road for this section of the scheme. A bus lane would be provided in each direction but only one traffic lane (northbound) would be maintained for general traffic.

Combined with the proposal to redirect cyclists through Lorcan Road and Shanrath Road this option would negate the need for any land acquisition along this section of the scheme.

To allow access from the north to properties in the south of Santry Village, this option would require the construction of a new southbound slip road off the N50 at Shantalla Road. The new slip road would join the Shantalla Road via a new signalled junction.

A cross-section on Swords Road for this scheme option is illustrated in Figure 2.65.

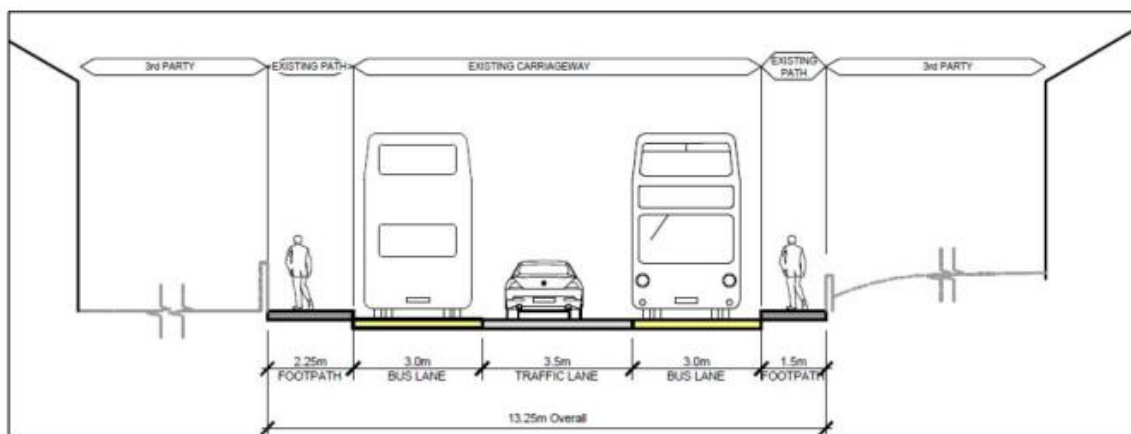


Figure 2.65 One-Way Route Option through Santry Village (Option SY1C)

The proposed traffic management changes would have a direct impact on traffic routes to, from and through the southern part of Santry Village.

The Stage 2 Route Options Assessment – Multi-Criteria Analysis table for this section is included in Appendix A of the Preferred Route Option Report.

A summary of the assessment and relative ranking of route options against the five main assessment criteria is presented in Table 2.15 below.

Table 2.15 Santry Village Final Summary of MCA

Assessment Criteria	Option 1 (SY1B) Two-Way Option	Option 2 (SY1C) One-Way Option
Economy	Yellow	Yellow
Integration	Green	Orange
Accessibility and Social Inclusion	Green	Orange
Safety	Yellow	Yellow
Environment	Orange	Green

Signal-controlled bus priority (similar to that adopted at Santry Demesne, see Section 6.2.1 of the Preferred Route Options Report) was also considered as an option through Santry Village, in order to reduce the impact on land take. For signal-controlled bus priority to operate successfully, queue lengths from the next junction cannot be allowed to develop on the shared bus/traffic lane portion, as this would result in delays to the bus service. Junction modelling of this option through Santry Village showed extensive queuing at the Lorcan Road/Omni Park Shopping Centre, Shanowen Road and Shanrath Road junctions, which are in close proximity to each other (300m between the Lorcan Road/Omni Park and Shanowen Road junctions and 250m between the Shanowen Road and Shanrath Road junctions). On this basis, signal-controlled bus priority was discounted as a feasible option through Santry Village.

Based on the following key findings from the Multi-Criteria Assessment undertaken for this section of the study area, Route Option SY1B (two-way option) is the Preferred Route Option for the following reasons:

- It performs more favourably under the Integration criterion because this option requires no changes to the current traffic management regime in Santry. SY1C would require detours and increased journey times for traffic travelling to and from the north with an origin or destination in the southern parts of Santry and people travelling south from the southern parts of Santry;
- It performs more favourably under the Accessibility and Social Inclusion criterion because under Option SY1C, journey times of the regular trips made by local residents living between the Omni Park Shopping Centre and Shantalla Road/Swords Road Roundabout would be increased.

In addition to the above alternative solution which specific to Santry Village, Chapter 3 of the EIAR sets out the reasonable alternatives studies and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route.

'For urban transport systems, bus-based transport is the appropriate public transport mode for passenger demand levels of up to 4,000 passengers per hour per direction. (UITP 2009). Light rail provision would generally be appropriate to cater for passenger demand of between 3,500 and about 7,000 passengers per hour per direction. Passenger demand levels above 7,000 passengers per hour per direction would generally be catered for by heavy rail or metro modes, which would usually be expected to serve a number of major origins or destinations along a Particular corridor. In the case of

both the bus and light rail modes, higher levels of passenger demand than the above stated figures can be accommodated under specific conditions.

The development of the prior GDA Transport Strategy considered the likely public transport passenger demand levels across the region using the NTA's transport model and took into account the other studies referenced above, in addition to studies that had been carried out to investigate a potential light rail scheme within the area of this corridor. Likely passenger flows were identified to be within the capacity of bus transport, without reaching the quantum of passenger demand which would support the provision of a higher capacity rail solutions in addition to a Metrolink. Section 3.2.1 set out various studies undertaken for the prior GDA Transport Strategy. Arising from these studies and the specific assessment and transport modelling work undertaken for the prior Strategy, it was concluded that a bus-based transport system would be the proposed public transport solution in the corridor of the Proposed Scheme. The proposed transport solution would be supplemented by Metro, to provide more passenger capacity and enhanced interchange between the Luas Red and Green Line Services, proposed Metrolink Station at Fosterstown, Sligo/Maynooth Line Heavy Rail Services at Drumcondra Station and the Suburban Interchange between the Orbital and Radial Routes at Coolock Lane. It was considered that there would be insufficient demand to justify the provision of an additional light rail alternative beyond what is proposed above, particularly given the low to medium density nature of development in this corridor.

Similar to BRT, the light rail option would be worse for the environment in terms of construction impacts, including flora and fauna, heritage, air and noise, compared to the CBC proposal. Light rail requires continuous unbroken physical lane infrastructure to achieve high-priority. This would involve significantly more land take and potentially involve demolition of buildings at pinch-points. In the case of the CBC proposals, bus-priority can be achieved through short lengths at pinch-points by the use of signal-controlled priority.

Given the consideration of light rail provision, and the level of likely public passenger use along this overall corridor assessed in the transport modelling work, the development of the prior GDA Transport Strategy identified that a Metro solution would be economically justified within the area covered by this corridor. Therefore, it is intended to develop the light rail Metro system along this corridor through the implementation of MetroLink.

Arising from the various studies and analysis that had been carried out, and the specific assessment and transport modelling work undertaken for the prior GDA Transport Strategy, it was concluded that a high quality bus-based transport system, supplemented by the implementation of MetroLink, would be part of the proposed public transport solution in the corridor of the Proposed Scheme. This is because the development of an underground Metro would not remove the need for additional infrastructure to serve the residual bus needs of the area covered by the Proposed Scheme, nor would it obviate the need to develop the cycling infrastructure required along the route of the Proposed Scheme'.

With respect to congestion charging, Section 3.2.8 of the EIAR states that a key success factor of demand management is greater use of alternative travel modes, in particular public transport. In the case of Dublin, the existing public transport system does not currently have sufficient capacity to cater for larger volumes of additional users.

'In advance of a significant uplift in overall public transport capacity in the Dublin metropolitan area, the implementation of major demand management measures across that area would be unsuccessful. Effectively constraining people from making journeys by car and requiring them to use other modes, without those modes having the necessary capacity to cater for such transfer, would not deliver an effective overall transport system. Instead, the capacity of the public transport system needs to be built up in advance of, or in conjunction with, the introduction of major demand management measures in the Dublin metropolitan area. This is especially true in the case of the bus system where a major increase in bus capacity through measures such as the Proposed Scheme would be required for the successful implementation of large-scale demand management initiatives.

While the foregoing addresses the dependency of demand management measures on public transport capacity, it is equally correct that the provision of greatly enhanced cycling facilities will also be required to cater for the anticipated increase in cycling numbers, both in the absence of demand management measures and, even more so, with the implementation of such measures. Demand management initiatives by themselves will not deliver the level of segregated cycling infrastructure required to support the growth in that mode. Consequently, the progression of demand management proposals will not secure the enhanced safe cycling infrastructure envisaged under the Proposed Scheme'.

Finally it is noted that park and ride and cashless fares both form part of the broader BusConnects programme and may be implemented to complement improvements to the overall bus system, including the Proposed Scheme infrastructure.

Regarding the comment about land take on sheets 19 to 21 of the deposit maps, Section 4.5.3.1 of EIAR Chapter 4 Proposed Scheme Description describes the proposals for the section of the route between Coolock Lane and Shantalla Road. The following is an overview of the Proposed Scheme:

'Between Coolock Lane and the entrance to Omni Park Shopping Centre, it is proposed to extend continuous bus lanes and cycle tracks in both directions. This will require some limited land take from adjacent properties on both sides of the existing road and the removal of existing on-street car parking.'

'Between the Omni Park Shopping Centre entrance and the Shantalla Road junction it is proposed to maintain the two-way general traffic lanes and introduce continuous bus lanes in both directions. A segregated footpath will be maintained on either side. This will require some land take from adjacent properties on both sides of the existing road in Santry Village and the removal of existing on-street car parking. Off street parking is proposed at residential properties between the shopping centre and Shanowen Road to offset the loss of on-street parking.'

'It is proposed to redirect cyclists through Lorcan Road and Shanrath Road as a Quiet Street. This cycle route commences at the junction with Omni Park Shopping Centre and connects with the Swords Road at the junction with Shantalla Road. A two-way cycle track is proposed to connect the Quiet Street from Shanrath Road through the Shanrath junction, connecting to the existing Quiet Street west of the off-slip.'

The extents of this land acquisition are shown on the General Arrangement Drawings included in EIAR Volume 3 Chapter 4 Appendices, as shown in Figure 2.66 to Figure 2.69.

The proposed lane arrangement and necessary route cross section cannot be achieved without the need for land acquisition from properties along Swords Road.

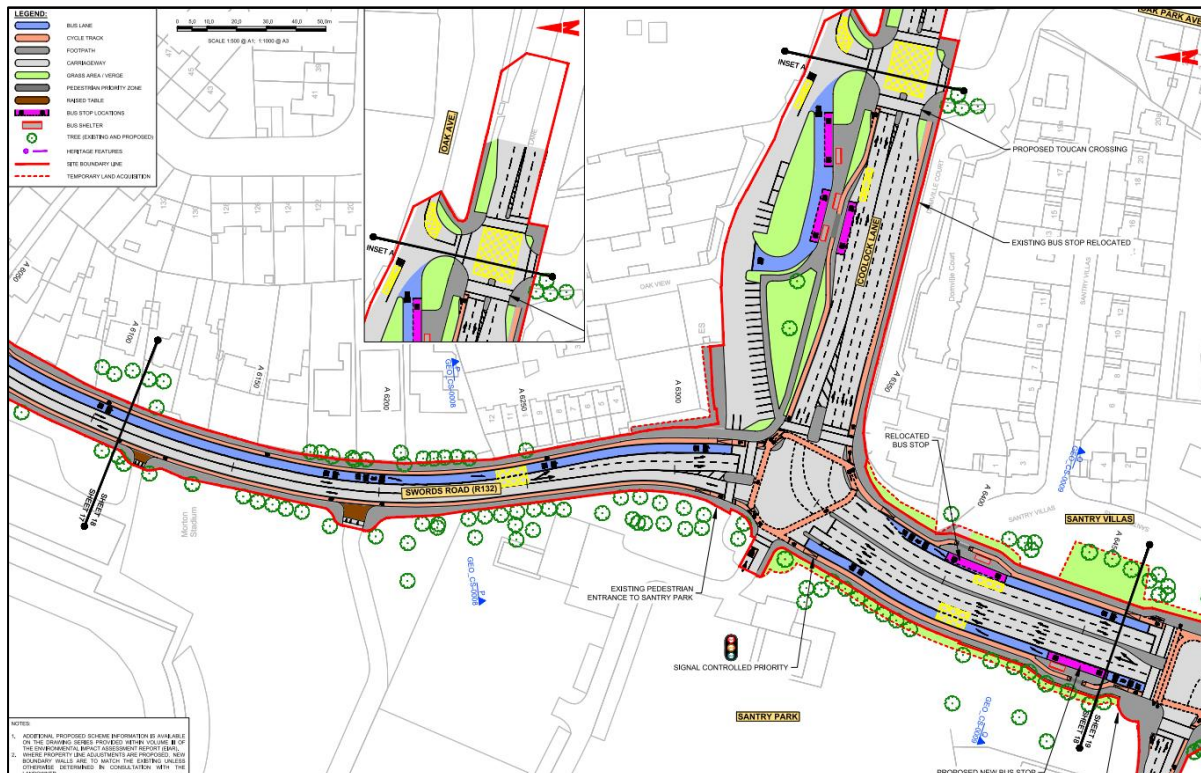


Figure 2.66 Extract of the Proposed Scheme General Arrangement Drawings (Sheet 18)

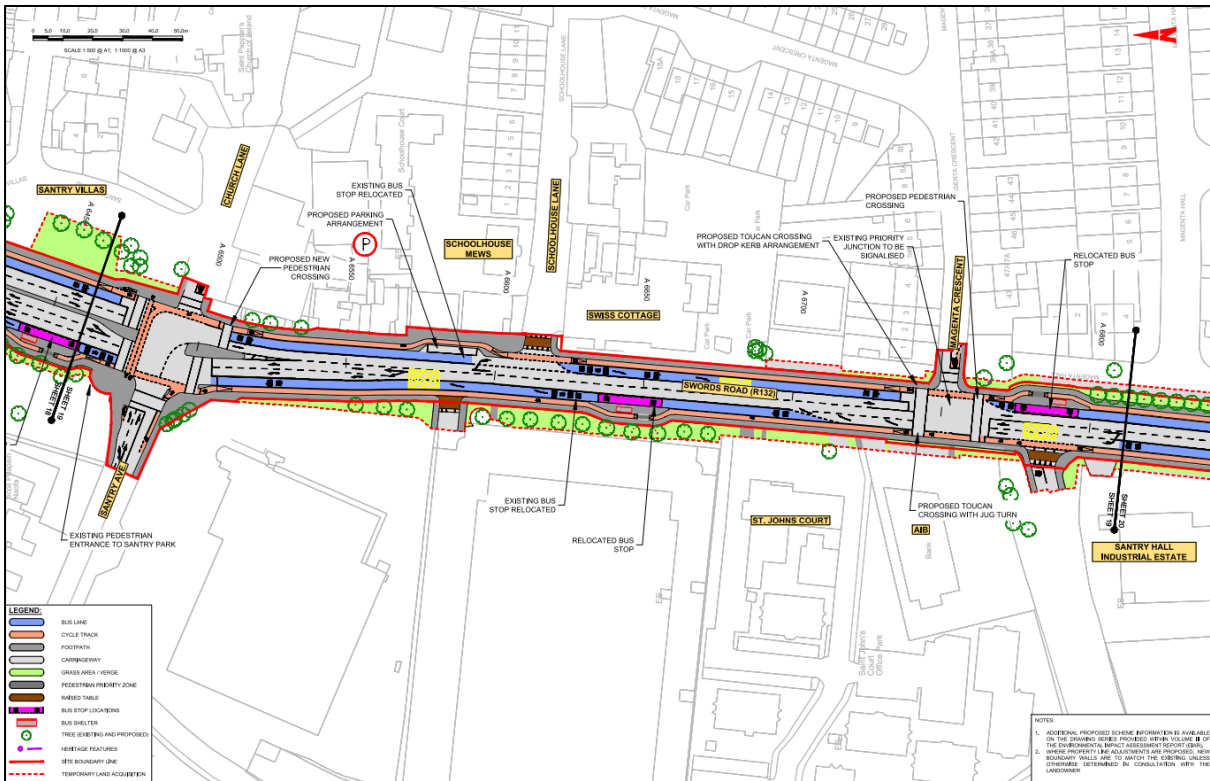


Figure 2.67 Extract of the Proposed Scheme General Arrangement Drawings (Sheet 19)

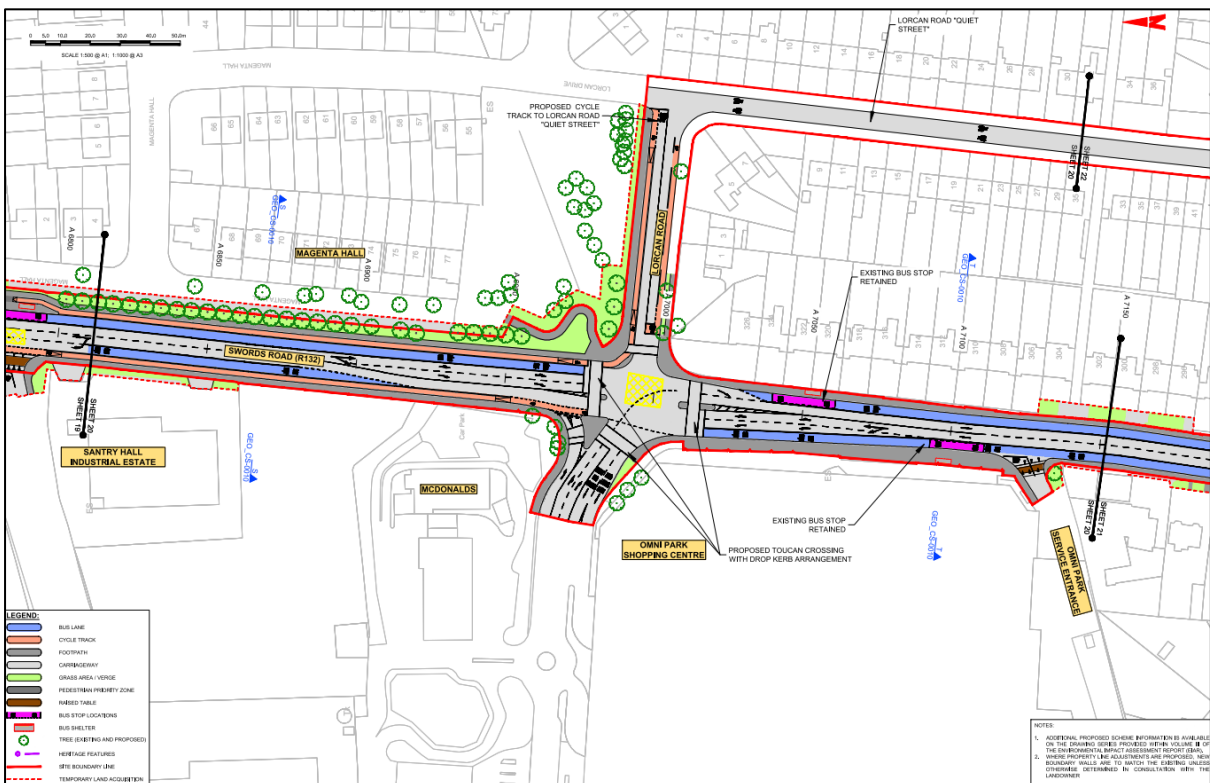


Figure 2.68 Extract of the Proposed Scheme General Arrangement Drawings (Sheet 20)

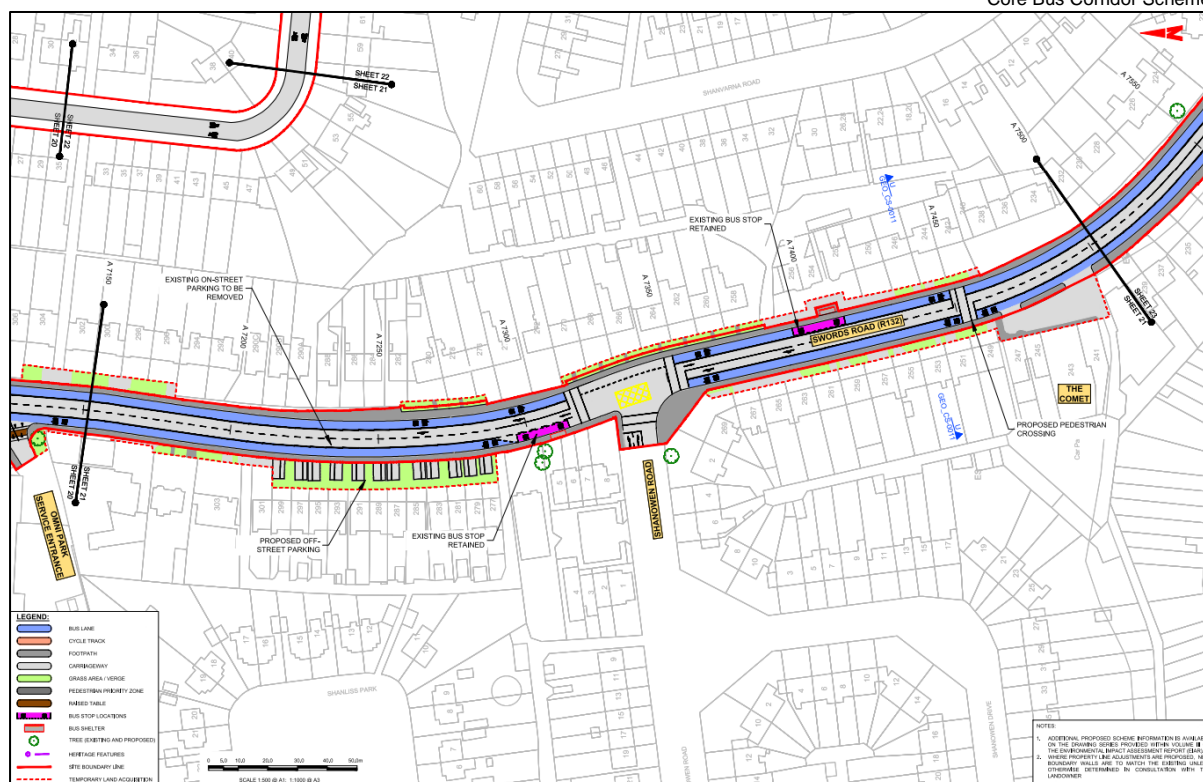


Figure 2.69 Extract of the Proposed Scheme General Arrangement Drawings (Sheet 21)

2.6.3.6 Administrative discrepancy

Summary of issue raised

It was noted within a submission that the 'administrative discrepancy' in this case involved the omission of seven separate items. The submission commented that these errors render the application entirely invalid and they are of the opinion that the Bord should reject this application on this ground alone.

Response to issue raised

The application as submitted to An Bord Pleanála on 12 May 2023 was fully in accordance with the requirements of section 51 of the Roads Act 1993 (as amended) and the Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014. Specifically, the application as submitted included Mainline Plan and Profile drawings, Proposed Surface Water Drainage Works drawings, Architectural Heritage Figures and Traffic and Transport Maps in Volume 3 Figures and Volume 4 Appendices to the EIAR, the Proposed Surface Water Drainage Works drawings in the Appendices to the NIS and the Mainline Plan and Profile drawings and Proposed Surface Water Drainage Works drawings in the Appendices to the Preliminary Design Report (which Preliminary Design Report was submitted to An Bord Pleanála as Supplementary Information at the time of the application).

Due to an administrative error, some very limited information such as the omission of 5 side road plan and profile drawings, 6 drainage catchment drawing, Figure 16.1 Architectural Heritage Sheets 1 to 18 and Volume 4, Part 2, Chapter 6, Sub Appendix 3 – Maps were missing from the copies of the drawings listed above that were available for inspection during the first 6 weeks of the period for public consultation that began on 23 May 2023. Therefore, as explained in the newspaper notice dated 6 July 2023, the period for public consultation was extended beyond the original end date of 18 July 2023 to 12 September 2023 so as to ensure full and effective public participation.

Section 51(3)(a)(iii) of the Roads Act 1993 (as amended) requires that a period of not less than 6 weeks be provided for public consultation in relation to a proposed road development such as this but here there was a total period of 16 weeks which ran from 23 May 2023 to 12 September 2023.

In addition to the newspaper notice dated 6 July 2023, the NTA sent an email on 6 July 2023 to 312 Public Representatives, and 1471 Community Forum Members to inform them directly of the extension to the period of public consultation. The individual who made the submission was one of those who received this email.

2.6.4 08 – Carmel Sherry and Celine Byrne

Overview of submission

A number of issues were raised and these are listed below and described below:

1. Impact to Our Lady's Park
2. Wheelchair Parking Relocation
3. Bus Stop Relocation
4. Green Embankment Areas on Drumcondra Road Lower
5. Dorset Street Junction with Eccles Street/Hardwicke Place
6. Cycle lanes in general

2.6.4.1 Impact to Our Lady's Park

Summary of issue raised

Concerns were raised regarding Our Lady's Park will be seriously impacted during and after the construction phase, suggesting the current bridge be widened to avoid the park being eliminated.

The submission referred to the changes to the bridge, commenting that the area under and on the Drumcondra Road side of the new bridge will no longer be accessible and has the potential to attract antisocial behaviour. Further concerns were raised commenting that the bridge has made no effort to demonstrate any empathy with the historic boundary treatments surrounding the area, despite comments in Volume 4 Part 3 Chapter 16.3 of the EIAR, concerns were also raised regarding the white steel and glass panels will be much more open to graffiti than the traditional walls in the area.

The Our Lady Statue relocation also raised concerns, submissions commented there was a lack of consultation and the statue will no longer be placed in a prominent location.

Response to issue raised

The Statue of Our Lady will not be permanently relocated, if the statue requires temporary removal to facilitate the construction of the proposed bridge on the west side of Frank Flood Bridge, it will be returned to its current setting and as close as possible to its current location. The impact on Our Lady's Park and the Statue of Our Lady within the park has been assessed within the EIAR, particularly in Chapter 15 (Archaeological & Cultural Heritage), Chapter 16 (Architectural Heritage) and Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 as outlined below.

- Chapter 15 assesses the impact of the removal and reinstatement of the statue from a cultural heritage perspective (Reference Number CBC0002CH022, also included in Appendix A15.2 (Archaeological and Cultural Heritage Inventory) in Volume 4 of the EIAR) stating the following, '*A mid-20th century Marian statue is located within a small park known as 'Our Lady's Park'. There will be a temporary impact on the setting of the memorial during construction phase. The memorial will require protection from any adverse impacts for the duration of the works and if necessary, it can be temporarily removed to ensure its protection. This cultural heritage feature has a low sensitivity value and the magnitude of impact is low therefore the potential impact is Negative, Slight, Temporary*'. It is not intended to relocate the statue, Section 15.5.1.8.2 states, '*The Marian Statue at Our Lady's Park in Drumcondra (CBC0002CH022; Figure 15.1 Sheet 15 of 18 in Volume 3 of this EIAR) will be protected from any adverse impacts during construction works and if necessary for its protection, it will be removed under archaeological supervision. This will be undertaken in accordance with a method statement agreed with the statutory authorities. It will be returned to its current setting and as close as possible to its current location following completion of the works.*'

- Chapter 16 assesses the impact of the removal and reinstatement of the statue from an architectural heritage perspective, and specifically as it is recorded on the National Inventory of Architectural Heritage (NIAH Reference Number 50130158, also included in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 of the EIAR). The chapter states that *'The Statue of Our Lady (NIAH 50130158) will be temporarily removed to facilitate the construction of the proposed cycle and pedestrian bridge on the west side of Frank Flood Bridge. The statue is of Medium sensitivity. There is potential for loss or damage to sensitive fabric during its removal, transport, storage and reinstatement, the magnitude of which is High. The predicted Construction Phase impact will be Direct, Negative, Significant and Temporary'*. However with the appropriate mitigation (recording, removal, safe storage and reinstatement) the impact reduces to Direct, Negative, Slight and Temporary.
- Chapter 17 assesses the impact on the amenity of Our Lady's Park during construction and operation of the Proposed Scheme. During the Construction Phase the Chapter describes the impact on Our Lady's Park as Negative, Significant and Temporary / Short-Term. For the Operational Phase the Chapter states that *'The new bridge will provide much improved cycle and pedestrian access across the River Tolka, improving the functionality of the open space, and arguably also provide increased amenity space for the park. There will be improvements to the open space with improved paving, footpaths and additional seating, and the setting of the relocated Marian statue will be enhanced. Effects will become positive over time as replacement planting matures and the bridge becomes an accepted part of the townscape'*. The impact following construction is described as Neutral, Moderate / Significant and Short-Term, improving to Positive, Moderate and Long-Term at 15 years post-construction.

Regarding concerns raised about antisocial behaviour, Section 10.4.4.1.1 of EIAR Chapter 10 Population considers the Community Amenity and for Our Lady's Park, Drumcondra community area this is assessed a Negative, Moderate/Significant and Short-Term impact.

'These environmental impacts have been considered together to identify if there will be in-combination impacts acting upon the same community facilities.

The assessment concluded that there would be a range of impacts on community amenity as a result of the Operational Phase of the Proposed Scheme. The impact on community amenity in community areas predominantly along the Proposed Scheme (Swords, River Valley, Larkhill – Whitehall – Santry, Marino, Drumcondra, Glasnevin, Iona Road, North William Street, Gardiner Street, Berkeley Road, Dominick Street and Pro Cathedral) differs depending on location, however, is expected to range between Negative, Slight and Long Term to Positive, Not Significant and Long-Term. A summary of the findings of the community amenity assessment of the Operational Phase of the Proposed Scheme is as follows: • Negative, Slight and Long-Term – Swords, Larkhill – Whitehall – Santry, Marino, Drumcondra, Glasnevin, Iona Road, Gardiner Street, Berkeley Road and Pro Cathedral; • Negative, Not Significant and Long-Term – Swords and Larkhill – Whitehall – Santry; • Positive, Not Significant and Long-Term – Iona Road, North William Street, Gardiner Street, Berkeley Road, Dominick Street and Pro Cathedral.

It should be noted that the impacts outlined above are considered to be localised, and as such, the wider community areas located along the Proposed Scheme (Swords, River Valley, Larkhill – Whitehall – Santry, Marino, Drumcondra, Glasnevin, Iona Road, North William Street, Gardiner Street, Berkeley Road, Dominick Street and Pro Cathedral) are expected to experience a Neutral to Positive, Not Significant and Long-Term impact on community amenity during the Operational Phase.'

Additional information in relation to the potential community impacts arising from crime and antisocial behaviour is set out in EIAR Chapter 10 Population Appendix A10.2 Economic Impact of the Core Bus Corridors, which notes the following:

'Good infrastructure has also been shown to have a positive impact on levels of crime, particularly low level crimes such as theft and vandalism. There is evidence from a wide range of studies that redesigned public realm, especially those which are better lit and more visible, see significant reductions in the level of crime.'

Access to Our Lady's Park will still be possible from Botanic Avenue. The design intent for the Frank Flood Bridge is to provide a well-detailed structure that complements the existing historical bridge and local surroundings. A number of landscaping and urban realm improvements are proposed for the

area as described in Section 4.5.4.8.2 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR.

The proposed bridge would require the removal of two Poplar trees within Our Lady's Park which are a different variety to one another and six Silver Birch trees adjacent to Millmount Terrace. Six new smaller-sized trees have been proposed surrounding the square paved area in Our Lady's Park, subject to underground utilities. Three new small canopy trees are proposed at the west end of the bridge adjacent to Millmount Terrace.

The existing square area of paving surrounding the statue on the south side of the river will be replaced and enhanced with a combination of stone and concrete paving together with new seating as a local area enhancement. The path close to the river will be re-aligned and re-surfaced to meet with the new paved square. Additional planting is to be provided on the eastern side of the path to prevent access to the narrow embankments leading to the river side beneath the structure.

The bridge structure and its parapets have been designed to be slender and visually 'light' to enable views of the existing road bridge to be retained. A two-tone colour scheme has been adopted which will create distinction between the central girder and the edge member preventing it appearing monolithic. The parapet top rail, posts and edge member are proposed to be painted light grey. The central girder is to be coloured oxide red which reflects the dark red brick colour in some of the buildings in proximity to the bridge. The proposed mesh panel of the parapet is to be stainless steel. The soffit of the bridge shall be painted black to create a shadow effect further improving the slender appearance of the edge member.

The bridge deck is proposed to be an anti-slip surface consisting of aggregate bonded together with an epoxy resin. This surface continues to the junction with Millmount Terrace to provide a consistent application of the same material. The cycle way section will be coloured 'Tuscan Terracotta' resin or similar in order that it appears as a tone that complements the standard cycle ways. The footway section will be coloured in a grey resin in order that it complements the new paved footways in the area',



Figure 2.70 West Elevation of Proposed Bridge with an Oxide Red Colour Scheme

Further details of the design considerations for the bridge can be found in Appendix J – Structures Preliminary Design Report of the Preliminary Design Report provided in the Supplementary Information.

Regarding the suggestion to widen the existing bridge, it was determined in the options report that it would not be feasible to directly widen the existing masonry arch structure and therefore a new independent structure is to be provided to accommodate the wider highway cross section desired at this location.

Regarding the comment raised about lack of consultation with local people regarding the changes to the community space. The Public Consultation Report 2018-2022 provided in the Supplementary Information for the Proposed Scheme outlines the extensive public consultation and stakeholder engagement undertaken during that period, with three rounds of non-statutory public consultation undertaken.

Throughout the three rounds a number of consultation tools were used, including:

- a dedicated website, launched in May 2017;
- an individual brochure for the Proposed Scheme (updated at all 3 rounds);
- public information events (in person for first and second rounds, virtual for third round),
- Community Forum events, to create a two-way communication process with representatives of local communities, (in person for first and second rounds, virtual for third round)
- range of digital channels, including Twitter and Facebook;
- traditional published material;
- press and radio advertising;
- outdoor advertising;
- presentations; and
- infographics.

The public events took place in accessible venues chosen to maximise the level of local engagement and attendance where possible. These events allowed members of the public to speak directly and in detail with members of the BusConnects Infrastructure team about the proposals. These non-statutory Public Information Events were advertised in local newspapers, through radio, on the BusConnects website, through extensive email reminders to public representatives, Local Authorities' Public Partnership Networks (PPN's), emails to Community Forum members, promoted through social media and digital channels.

It is acknowledged by the NTA that the change in design from an initial proposal to widen the existing bridge to a parallel structure was introduced at the third round of public consultation in November 2020.

The third round of public consultation took place from 4 November 2020 to 16 December 2020.

With the continuing effect of the COVID-19 pandemic and associated restrictions, the third Public Consultation was held largely virtually. A virtual consultation room for the Proposed Scheme was developed and virtual access to the room was facilitated. Along with offering a call back facility, the room provided a description of the Preferred Route from start to finish with supporting maps and included information of all revisions made since the previous rounds of public consultation, as well as other supporting documents. Over the six weeks of the consultation, 234 unique users visited the virtual information room for the Proposed Scheme. A third Community Forum virtual consultation call was also held on 16 November 2020, as part of the third round of non-statutory consultation.

As per the previous rounds, those properties continuing to be either potentially impacted; newly potentially impacted; or no-longer potentially impacted were written to directly to receive information on the consultation in advance of any wider publication of the proposals. One-to-one meetings were offered via Zoom or over the phone for those who wished to discuss the proposals further in relation to their own property with the minutes being recorded as part of the consultation process. In total, 243 letters were sent between 1 and 3 November.

As per previous rounds the public were invited to make written submissions in relation to the published proposals to the BusConnects Infrastructure team either through an online form, by email or by post. In addition, virtual meetings were resumed with residents' groups to provide updates on aspects of the Proposed Scheme. There were 231 submissions over the second and third phase of public consultation (March / April 2020 and November / December 2020).

The scheme drawings in the consultation brochure highlighted the revised arrangement for the proposed bridge at the existing Frank Flood Bridge, see Figure 2.71 below.

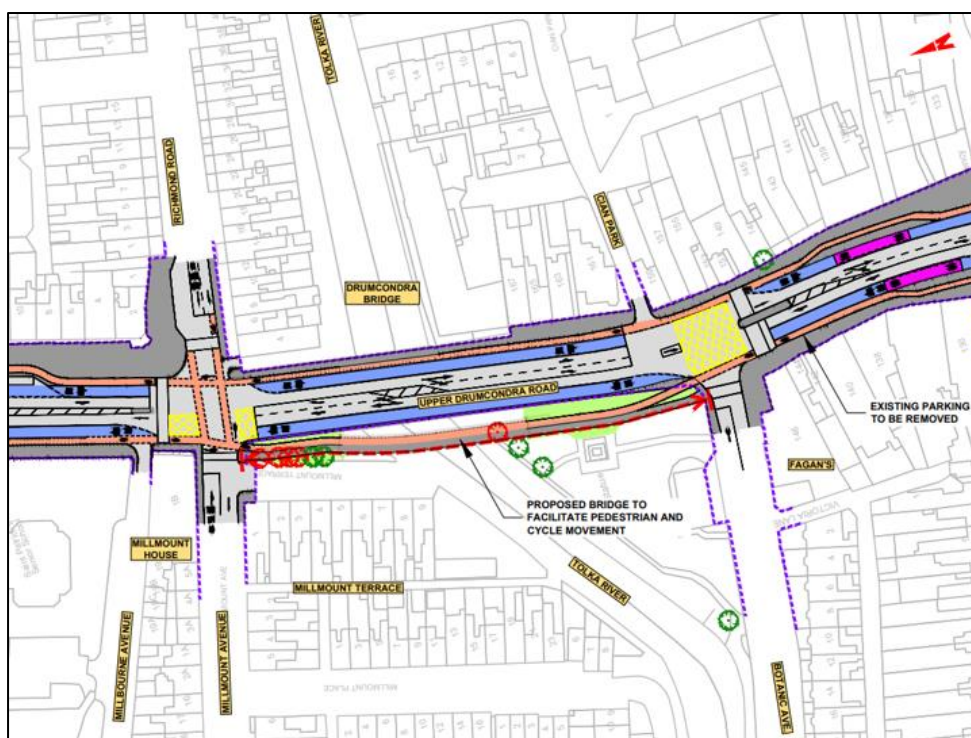


Figure 2.71 Extract from Updated Draft PRO Drawings - Third round of non-statutory consultation

Advertisements detailing where interested parties could access further information on the CBC including viewing the proposals, making a submission and attending information events were placed in local and national newspapers, online and in highly visible areas around the Greater Dublin Area. There were 200 submissions relating to the Proposed Scheme during this round of non-statutory public consultation.

2.6.4.2 Wheelchair Parking Relocation

Summary of issue raised

The submission suggested the relocation of a disabled parking bay to the end of Hollybank Road due to the proposed relocation of wheelchair parking from Drumcondra Road onto Botanic Avenue increasing safety risks because of the insufficient sight lines when turning.

Response to issue raised

In relation to the relocation of the disabled parking bay outside Markey's shop on Drumcondra Road Lower, this parking bay has been relocated approximately 25m away to facilitate the segregated cycle track along Drumcondra Road Lower. The suggestion to relocate the parking bay to Hollytree Road is not feasible given that there already is a segregated cycle track and relocated bus stop proposed at this location. There is sufficient space outside Fagan's on Botanic Avenue to provide this parking bay plus a compliant footpath and the desirable minimum forward visibility requirements are achieved at this location. The wheelchair accessible parking bays will be designed in accordance with the requirement of the Building Regulations TGD Part M as described in Section 6 of the BusConnects Preliminary Design Guidance Booklet (included in EIAR Volume 4, Appendix A4.1).

The impact of the scheme on parking and loading is assessed in Chapter 6 Traffic and Transport in Volume 2 of the EIAR. The conclusion of these assessments is summarised below,

Section 4 (Shantalla Road to Botanic Avenue) – *'With the change in parking provisions north of R132 Swords Road / Iveragh Road Junction, the Proposed Scheme will be able to provide significant improvements to walking, cycling and bus facilities, and encourage the use of sustainable modes of transport, which will ultimately reduce the demand for public parking spaces. Considering the overall*

retention of 265 parking spaces compared to a loss of four spaces and the potential shift to sustainable modes, the anticipated impact on parking and loading in Section 4 during the Operational Phase will be Negative, Slight and Long Term.'

Section 5 (Botanic Avenue to Granby Row – 'With the change in parking provisions at the locations specified, the Proposed Scheme will be able to provide significant improvements to walking, cycling and bus facilities, and encourage the use of sustainable modes of transport, which will ultimately reduce the demand for public parking spaces. Considering the overall retention of 686 parking spaces compared to a loss of 19 spaces and the potential shift to sustainable modes, the anticipated impact on parking and loading in Section 5 during the Operational Phase will be Negative, Slight and Long Term)'

2.6.4.3 Bus Stop Relocation

Summary of issue raised

The submission raised concerns with the relocation of Bus Stop 19 due to the reduced sightline when turning right, the respondent suggested to relocate the bus stop to the location of Bus Stop 17.

The respondent commented that there are currently no bus lane markings between Hollybank Road and Botanic Avenue on Drumcondra Road, as is now proposed.

Response to issue raised

The NTA notes the support of the relocation of Bus Stop 17. Regarding Bus Stop 19, the design of the Proposed Scheme at this location complies with the visibility requirements set out in Section 4.4.5 of DMURS. The Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided in the Supplementary Information did not highlight any safety issues with the proposed arrangement in this regard.

2.6.4.4 Land acquisition

Summary of issue raised

The respondent commented it is unclear who will be responsible for the maintenance of the green areas during the period from their acquisition and the commencement and completion of the BusConnects works, it is noted that any approval of the Proposed Scheme plans should include conditions relating to the maintenance of these green areas.

It continued to query why land acquisition of green areas is needed between Hollybank Road and St Alphonsus Road on Drumcondra Road for a cycle lane, commenting that currently cycle lanes exist alongside footpaths and will continue that way in the designs proposed.

Response to issue raised

Regarding the point raised about maintenance, the NTA will continue the close liaison with the relevant local authority that has been in place during the planning and design stage of the Proposed Scheme, during and throughout the subsequent construction stage. This will include engaging and collaborating on the construction arrangements, the road maintenance arrangements during construction and the standard to which the Proposed Scheme will be completed prior to transfer back to the relevant local authority, together with record retention, all in full accordance with the EIAR. Given the legislative framework that is in place, these are matters that can, and will, be successfully addressed between local authority and the NTA, in the absence of any approval condition.

Regarding the query as to why land acquisition of the green areas is needed between Hollybank Road and St Alphonsus Road, Temporary and permanent land acquisition is required in order to widen the existing shared pedestrian and cycle path along the west side of Drumcondra Road Lower. These sections of offline cycle track will be upgraded as part of the Proposed Scheme to improve the cycle track quality of service. The proposed cycle track is indicated in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 03. General Arrangement drawings Sheets 31 and 32, see Figure 2.72 and Figure 2.73.

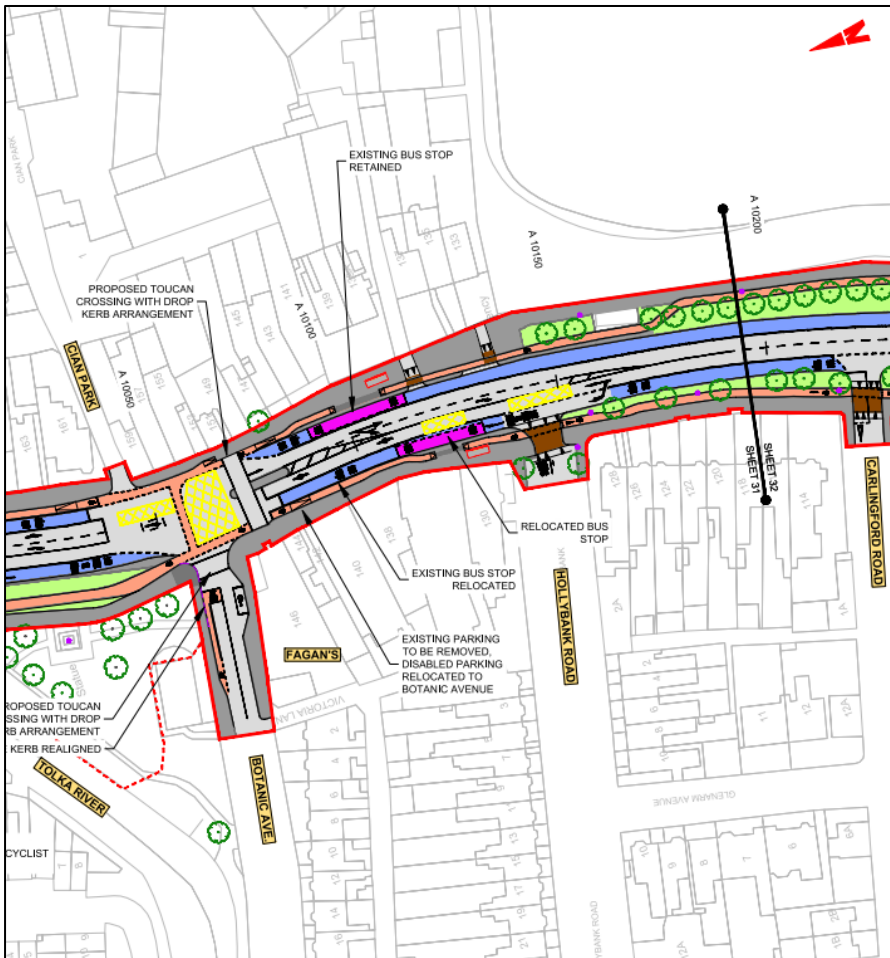


Figure 2.72 Extract from General Arrangement Drawing (Sheet 31)

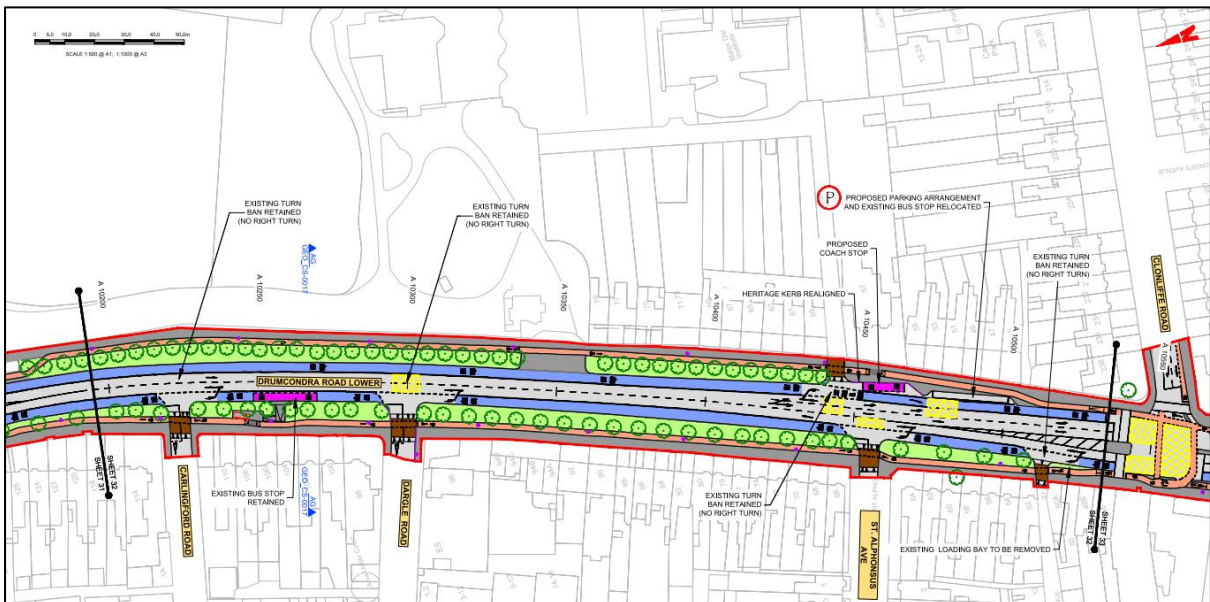


Figure 2.73 Extract from General Arrangement Drawing (Sheet 32)

2.6.4.5 Dorset Street Junction with Eccles Street/Hardwicke Place

Summary of issue raised

This submission raised concerns regarding the introduction of a no right turn into Eccles Street and a no left turn into Hardwicke Place noting that would restrict access to Temple Street and the Mater Hospital.

The submission requested at the very least the left turn into Hardwicke Place is retained with a roundabout close to St. George's church that would facilitate access to Eccles Street. It is noted that there is no indication of what alternative detour is available. It is questioned why it is necessary to remove important access points to local services.

Response to issue raised

The observed left-turns delivery vehicles from Dorset Street onto Temple Street (Hardwicke Place) is quite low (less than 12 vehicles/ hr) during the morning peak periods. The turning traffic from Dorset Street onto Temple Street can turn left at the Gardiner Street Upper to service Temple Street commercial activities.

The no-left-turn from Dorset Street onto Temple Street (Hardwicke Place) and right-turn onto Eccles Street is adopted as per the BusConnects Preliminary Design Guidance Booklet to enhance cyclist, bus priority infrastructure, and minimise travel delays at this junction by all modes.

2.6.4.6 Cycle lanes in general

Summary of issue raised

This submission believes that some footpaths are proposed to be narrowed too much to facilitate cycle tracks. They are also concerned about the speed of e-scooters using the cycle lanes. They believe that e-scooters and electric bikes should be directed away from shared footpaths and cycle lanes.

The submission goes on to say that cycle lanes should be clearly marked and maintained with a different colour and/or texture to differentiate from the footpaths.

Response to issue raised

Section 4.6.2.1 of EIAR Chapter 4 Proposed Scheme Description states: *'The desirable minimum width for a footpath is 2.0m. This width should be increased in areas catering for significant pedestrian volumes where space permits. DMURS defines the absolute minimum footpath width for road sections as 1.8m based on the width required for two wheelchairs to pass each other. Building for Everyone: A Universal Design Approach (NDA 2020), defines acceptable minimum footpath widths at specific pinch points as being 1.2m wide over a two-metre length of path.'*

In line with the Road User Hierarchy designated within DMURS, at pinch points the width of the general traffic lane should be reduced first, then the width of the cycle track should be reduced before the width of the footpath is reduced where practicable.

Throughout the Proposed Scheme, footpath widths of two metres or wider have been proposed, however where this has not been achieved, deviations from standard have been required as outlined in Section 4.5.'

The NTA acknowledges the comments raised in relation to e-scooters and electric bikes. Enforcement of road traffic laws is a matter for An Garda Síochána.

Regarding marking of the cycle lanes, as described in Section 5.5 Appendix A4.1 Preliminary Design Guidance Booklet (PDGB) of the EIAR, a key feature of the Proposed Scheme is to utilise colour contrasting pavement on the cycle track:

'the use of machine laid asphalt for the cycle track has proven to be an effective way of providing a high level of service with a safe, smooth and continuous surface. This, however, offers very little contrast to the adjacent carriageway, and depends on the type of edge kerb and the presence of road markings to offer a visual differentiation between the carriageway and the cycle track. Consideration should be given to including an additional colour contrast to the cycle track in the form of an

alternative coloured asphalt (e.g. red, buff, etc) or adding coloured chips to the asphalt surface during installation (e.g. red chip).'

This proposal is also in line with Section 5.6.6 of the National Cycling Manual which proposes the use of red coloured surfacing as shown below in Figure 2.74.

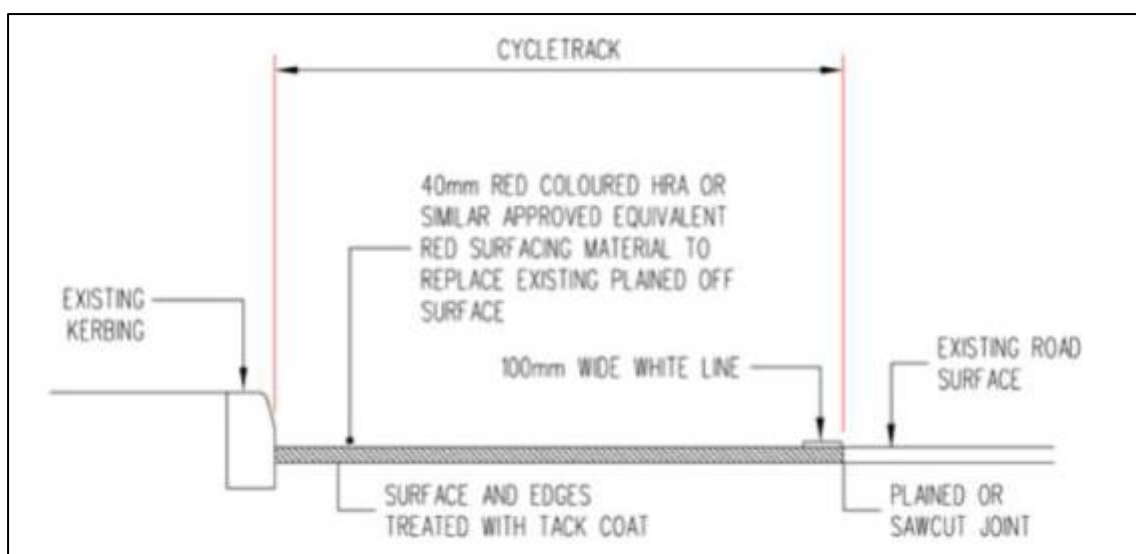


Figure 2.74 Typical cycle track surfacing detail from the National Cycle Manual

In summary, the use of red coloured asphalt, or red coloured epoxy resin has been specified for all cycle tracks across the BusConnects Infrastructure Works to ensure legibility and conspicuity of the proposed cycle tracks and to ensure safety for vulnerable road users.

2.6.5 14 – Development Applications Unit

Overview of submission

1. Archaeology and cultural heritage

2.6.5.1 Archaeology and cultural heritage

Summary of issue raised

The submission states that the Department has reviewed the EIAR and is “broadly in agreement with the findings in relation to Archaeology and Cultural Heritage as set out therein.” It goes on to recommend four conditions of any grant of permission, relating to:

- All mitigation measure in relation to archaeology and cultural heritage as set out in the EIAR to be implemented in full;
- A Project Archaeologist shall be appointed;
- The CEMP shall include the location of any and all archaeological or cultural heritage constraints as set out in the EIAR;
- A final archaeology report to be provided following completion of all archaeological work on site.

Response to issue raised

The NTA welcomes the Department’s review.

As part of the EIAR, a CEMP has been prepared for the Proposed Scheme and is included as Appendix A5.1 in Volume 4 of the EIAR. The CEMP will be updated by the NTA prior to finalising the Construction Contract documents for tender, so as to include any additional measures required pursuant to conditions attached to An Bord Pleanála’s decision. The CEMP contains the construction phase mitigation measures, which are also set out in the EIAR and NIS. All of the measures set out in

this CEMP will be implemented in full by the appointed contractor and its finalisation will not affect the robustness and adequacy of the information presented and relied upon in the EIAR and NIS.

Table 5.2 of the CEMP (refer to entries relating to Chapters 15 and 16 within the table) list out the locations of all archaeological and cultural heritage constraints which require monitoring, along with proposed actions associated with each location.

The NTA note the proposed condition to appoint a Project Archaeologist and confirm that Section 15.5.1.1 of Chapter 15 of the EIAR sets out that:

'The NTA will procure the services of a suitably-qualified archaeologist as part of its Employer's Representative team administering and monitoring the works. The appointed contractor will make provision for archaeological monitoring to be carried out under licence to the DHLGH and the NMI, and will ensure the full recognition of, and the proper excavation and recording of, all archaeological soils, features, finds and deposits which may be disturbed below the ground surface. All archaeological issues will have to be resolved to the satisfaction of the DHLGH and the NMI.'

Mitigation related to archaeological management is outlined in Chapter 15 of the EIAR (Section 15.5.1.1.1) and also summarised in Chapter 22 of the EIAR and Table 5.2 of the CEMP. The issue of funding with respect to archaeological excavation is acknowledged by the NTA in Section 15.5.1.1.1:

'As part of the licensing requirement and in accordance with the funding letter, adequate funds to cover excavation, post-excavation analysis, and any testing or conservation work required will be made available.'

With regard to the provision of a final archaeology report, it is acknowledged in Section 15.5.1.1 that when archaeological excavation takes place, there will be a paper and digital archive of the works:

"Archaeological excavation ensures that the removal of any archaeological soils, features, finds and deposits is systematically and accurately recorded, drawn and photographed, providing a paper and digital archive and adding to the archaeological knowledge of a specified area (i.e. preservation by record)....."

2.6.6 16 – Donal O'Brolchain

Overview of submission

1. Need for the Proposed Scheme
2. Defective Data is a feature of this proposal
3. Impact to trees

2.6.6.1 Need for the Proposed Scheme

Summary of issue raised

The submission raised objections to the Proposed Scheme due to its need to meet the need of the Greater Dublin area, commenting that the NTA predictions of the Proposed Scheme reaching 1.5 million people by 2040 is not comparable to the 1.5 million people who live in the area as recorded in the 2022 census. The submission went on to comment that the NTA previously decided a bus-based transport system could not meet demand on this corridor during the third round of public consultation.

The respondent commented that the Proposed Scheme does not service local people, is outdated, fit the intended purpose, or represent a good use of public resources.

Response to issue raised

The need for the Proposed Scheme is comprehensively outlined in Chapter 2 Need for the Proposed Scheme in Volume 2 of the EIAR. It outlines the policy context for the Proposed Scheme as well as the regional and local transport need for the Proposed Scheme. Section 2.1 notes the following:

'The key radial traffic routes into and out of Dublin City Centre are characterised by poor bus and cycle infrastructure in places. Effective and reliable bus priority depends on a combination of continuous bus lanes and signal control priority at pinch-points and junctions. Currently bus lanes are

available for 72% of the Swords to City Centre, with no signal control priority for buses. Cyclists must typically share space on bus lanes or general traffic lanes with only 28% of the route providing segregated cycle tracks. Furthermore, there are key sections of the current bus lanes that are not operational on a 24-hour basis in addition to being shared with both formal and informal parking facilities and cyclists which compromises the reliability and effectiveness of the bus services in these areas.

Private car dependence has resulted in significant congestion that has impacted on quality of life, the urban environment and road safety. The population of the Greater Dublin Area (GDA) is projected to rise by 25% by 2040 (National Planning Framework (Government of Ireland 2018b)), reaching almost 1.5 million. This growth in population will increase demand for travel necessitating improved sustainable transport options to facilitate this growth.

Without intervention, traffic congestion will lead to longer and less reliable bus journeys throughout the region and will affect the quality of people's lives. The Proposed Scheme is needed in order to enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor through the provision of enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region'.

In terms of alternative solutions, Chapter 3 of the EIAR sets out the reasonable alternatives studied and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that:

'the appropriate type of public transport provision in any particular case is predominantly determined by the likely quantum of passenger demand along the particular public transport route.

For urban transport systems, bus-based transport is the appropriate public transport mode for passenger demand levels of up to 4,000 passengers per hour per direction (International Association of Public Transport (UITP) 2009). Light rail provision would generally be appropriate to cater for passenger demand of between 3,500 and about 7,000 passengers per hour per direction. Passenger demand levels above 7,000 passengers per hour per direction would generally be catered for by heavy rail or metro modes, which would usually be expected to serve a number of major origins or destinations along a particular corridor. In the case of both the bus and light rail modes, higher levels of passenger demand than the above stated figures can be accommodated under specific conditions.

The development of the prior GDA Transport Strategy (NTA 2016a) considered the likely public transport passenger demand levels across the region using the NTA's transport model and took into account the other studies referenced above, in addition to studies that had been carried out to investigate a potential light rail scheme within the area of this corridor. Likely passenger flows were identified to be within the capacity of bus transport, without reaching the quantum of passenger demand which would support the provision of a higher capacity rail solutions in addition to a Metrolink.

Section 3.2.1 set out various studies undertaken for the prior GDA Transport Strategy. Arising from these studies and the specific assessment and transport modelling work undertaken for the prior Strategy, it was concluded that a bus-based transport system would be the proposed public transport solution in the corridor of the Proposed Scheme. The proposed transport solution would be supplemented by Metro, to provide more passenger capacity and enhanced interchange between the Luas Red and Green Line Services, proposed Metrolink Station at Fosterstown, Sligo/Maynooth Line Heavy Rail Services at Drumcondra Station and the Suburban Interchange between the Orbital and Radial Routes at Coolock Lane. It was considered that there would be insufficient demand to justify the provision of an additional light rail alternative beyond what is proposed above, particularly given the low to medium density nature of development in this corridor. Similar to BRT, the light rail option would be worse for the environment in terms of construction impacts, including flora and fauna, heritage, air and noise, compared to the CBC proposal. Light rail requires continuous unbroken physical lane infrastructure to achieve high-priority. This would involve significantly more land take and potentially involve demolition of buildings at pinch-points. In the case of the CBC proposals, bus-priority can be achieved through short lengths at pinch-points by the use of signal controlled priority.

Given the consideration of light rail provision, and the level of likely public passenger use along this overall corridor assessed in the transport modelling work, the development of the prior GDA Transport Strategy (NTA 2016a) identified that a Metro solution would be economically justified within the area

covered by this corridor. Therefore, it is intended to develop the light rail Metro system along this corridor through the implementation of the following project: New Metro North (now MetroLink).

This new Metro line will provide a high-speed, high-capacity, high-frequency public transport link from the City Centre to Dublin Airport and Swords. The new Metro North (MetroLink) will serve a large number of significant destinations, including Fosterstown, Dublin Airport, Dublin City University and the Mater Hospital, and will interchange with other rail and bus services in the vicinity of Drumcondra, O'Connell Street and St. Stephen's Green.

Arising from the various studies and analysis that had been carried out, and the specific assessment and transport modelling work undertaken for the prior GDA Transport Strategy (NTA 2016a), it was concluded that a high quality bus-based transport system, supplemented by the implementation of MetroLink, would be part of the proposed public transport solution in the corridor of the Proposed Scheme. This is because the development of an underground Metro would not remove the need for additional infrastructure to serve the residual bus needs of the area covered by the Proposed Scheme, nor would it obviate the need to develop the cycling infrastructure required along the route of the Proposed Scheme.

With respect to congestion charging, section 3.2.8 of the EIAR states that a key success factor of demand management is greater use of alternative travel modes, in particular public transport. In the case of Dublin, the existing public transport system does not currently have sufficient capacity to cater for larger volumes of additional users.

'In advance of a significant uplift in overall public transport capacity in the Dublin metropolitan area, the implementation of major demand management measures across that area would be unsuccessful. Effectively constraining people from making journeys by car and requiring them to use other modes, without those modes having the necessary capacity to cater for such transfer, would not deliver an effective overall transport system. Instead, the capacity of the public transport system needs to be built up in advance of, or in conjunction with, the introduction of major demand management measures in the Dublin metropolitan area. This is especially true in the case of the bus system where a major increase in bus capacity through measures such as the Proposed Scheme would be required for the successful implementation of large-scale demand management initiatives.

While the foregoing addresses the dependency of demand management measures on public transport capacity, it is equally correct that the provision of greatly enhanced cycling facilities will also be required to cater for the anticipated increase in cycling numbers, both in the absence of demand management measures and, even more so, with the implementation of such measures. Demand management initiatives by themselves will not deliver the level of segregated cycling infrastructure required to support the growth in that mode. Consequently, the progression of demand management proposals will not secure the enhanced safe cycling infrastructure envisaged under the Proposed Scheme.

Accordingly, the implementation of demand management measures would not remove the need for additional infrastructure to serve the bus transport needs of the corridor covered by the Proposed Scheme, nor would it obviate the need to develop the cycling infrastructure required along the route of the Proposed Scheme.'

Finally it is noted that park and ride and cashless fares both form part of the broader BusConnects programme and will be implemented to complement improvements to the overall bus system, including the Proposed Scheme infrastructure.

2.6.6.2 Defective Data is a feature of this proposal

Summary of issue raised

The submission commented that Chapter 10 Population of the EIAR does not mention Santry Stadium and Tolka Park underneath community and recreational receptors.

Additionally it noted in the submission that a number of residential developments have been approved or proposed for the Drumcondra area.

Appendix B showing main attractors and generators could not be found.

The submission has also referenced specific discrepancies in the GA drawings:

- Major developments are omitted on drawing 25 (ABP PL29N.238685)
- Drawing 27 does not contained Clonturk Community College
- Drawing 28 contains the closed Garda Station
- Drawing 29 does not contain the new LIDL

Response to issue raised

In response to Point 3.1 in the submission, Chapter 10 (Population) in Volume 2 of the EIAR describes the assessment of impacts of the Proposed Scheme on population. With respect to the list of community and recreational receptors included within the Chapter under Section 10.3.2.1, the list provided is non-exhaustive and provides examples of such receptors along the Proposed Scheme, as stated in the text. Chapter 10 also includes a table immediately preceding the list of examples (Table 10.4) which provides the number of community receptors in the vicinity of the Proposed Scheme, broken down by community area and type of receptors (i.e. Place of Worship, Hospital / Health Centre, Schools, and Recreation), with the total number of community receptors within the assessment being 197. It should also be noted that, given its location immediately adjacent to the Proposed Scheme, Santry Stadium (Morton Stadium) is listed in the Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of the EIAR as entry number 48. Tolka Park is not included within Appendix A10.1 as it is not directly on the Proposed Scheme, or *'on a road that is expected to experience a negative moderate or above traffic impact from displaced traffic in the AM and PM peak hours'*.

In response to Point 3.2 in the submission regarding the residential developments that have been approved or proposed for the Drumcondra area, Chapter 21 (Cumulative Impacts & Environmental Interactions) in Volume 2 of the EIAR assesses the potential for cumulative impacts between the Proposed Scheme and other proposed developments. The list provided in the respondent's submission have been included within the assessment as follows:

- SHD ABP-303296-18: as this development has been built, it has not been included within the cumulative impact assessment, and will have formed part of the normal baseline which informed the EIAR assessments as relevant to each topic's study area;
- LRD6015/22-S3 ABP-315584-23: this proposed development is included within the cumulative assessment, where it is an entry in Appendix A21.1 (Record of Stages 1 & 2 of Cumulative Effects Assessment (Longlist to Shortlist)) in Volume 4 of the EIAR. It was not identified as a development with the potential to cause significant cumulative impacts;
- SHD ABP-312352-21: this proposed development is included within the cumulative assessment, where it is an entry in Appendix A21.1. It was identified as having the potential to cause cumulative impacts on water and was therefore brought forward into the shortlist of developments for further assessments as described in Appendix A21.2 (Stage 4 Specialist Assessments) in Volume 4 of the EIAR. The further assessment carried out concluded that there would be no significant cumulative impact between the Proposed Scheme and this development;
- LRD6006/23-S3 ABP-317136-23: this proposed development is included within the cumulative assessment, where it is an entry in Appendix A21.1. It was identified as having the potential to cause cumulative impacts on population and was therefore brought forward into the shortlist of developments for further assessments as described in Appendix A21.2. The further assessment carried out concluded that there would be no significant cumulative impact between the Proposed Scheme and this development;
- LRD6009/23-S3 ABP-317438-23: this development was not included within the cumulative impact assessment undertaken for the EIAR given that the application for this proposed development was lodged subsequent to the final round of planning application reviews to inform the Proposed Scheme's cumulative impact assessment, and was therefore too late to be captured within the EIAR. A review of this planning application has now been undertaken and no significant residual cumulative impacts have been identified in cumulation with the Proposed Scheme; and

- DCC 3406/23: this development is included within the cumulative assessment under the older reference number 4105/15 (with the current planning application comprising revisions to 4105/15), where it is an entry in Appendix A21.1. It was identified as having the potential to cause cumulative impacts on air quality and water, and was therefore brought forward into the shortlist of developments for further assessments as described in Appendix A21.2. The further assessment carried out concluded that there would be no significant cumulative impacts for either air quality or water between the Proposed Scheme and this development.

In response to Point 3.3 in the submission regarding the projects and developments listed in the submission which have been refused or quashed, the approach within the cumulative impact assessment and what projects or developments were included is described in Chapter 21, Section 21.2.2. Where a project or development has been refused permission the Chapter states, *'Applications which have been refused or annulled were discounted from the preliminary long list on the basis that they are unlikely to progress, unless through successful appeal'*. Specifically with respect to the three developments listed in the submission:

- SHD ABP-310860-21: this development is included within the cumulative assessment where it is an entry in Appendix A21.1, as the planning permission for this development was quashed subsequent to the assessment having already been carried out on this development. It was identified as having the potential to cause cumulative impacts on air quality, population, human health, water, and landscape (townscape) and visual, and was therefore brought forward into the shortlist of developments for further assessments as described in Appendix A21.2. The further assessment carried out concluded that there would be no significant cumulative impacts for air quality, population, human health or water between the Proposed Scheme and this development, however if the construction of that development overlaps with the Proposed Scheme there is potential for localised moderate, temporary / short-term cumulative landscape (townscape) and visual impacts;
- DCC 4353/19: this development was refused permission in January 2020 and was refused permission on appeal in August 2020. It was therefore not included within the cumulative assessment; and
- DCC 3143/22: this development was refused permission in March 2022 and the application for an appeal was subsequently withdrawn. It was therefore not included within the cumulative assessment.

In response to Point 3.4 in the submission regarding Drumcondra schools being understated in Table 10.4 of Chapter 10, it should be noted that the 'community areas' used for the population assessment were *'informed by the Central Statistics Office (CSO) 2016 Census parish boundaries'*. These community areas are mapped in Figure 10.1 in Volume 3 of the EIAR. In this respect, the Drumcondra community area as listed in Table 10.4 of Chapter 10 encompasses the area west of the Drumcondra Road between Griffith Avenue and the River Tolka. Of the schools listed in the submission, a number are located within the Marino community area (which encompasses the area east of the Drumcondra Road between Collins Avenue and the River Tolka), namely Drumcondra National School, Educate Together National School on Grace Park Road, Pobalscoil Rosmini, Dominican College, Maryfield College, and Child Vision; while Clonturk College is in the Larkhill – Whitehall – Santry community area.

In response to Point 3.5 in the submission, the photograph included in Figure 2 is Page 68 of the Preliminary Design Report, Appendix I (Accessibility Audit Report), which is contained within the supplementary information included with the application. On this page reference is made to Appendix B to that report, which is a series of maps provided at the end of Appendix I, entitled Key Facilities and Services Along the Swords Scheme. This Appendix B to Appendix I was included within the documentation submitted to An Bord Pleanála, starting on Page 107 of Appendix I.

Regarding the point raised about the discrepancies in the GA drawings, the labels indicated on the General Arrangement drawings are included as high-level identifiers to aid with understanding the drawings. Not all developments or land marks are depicted on the drawings.

2.6.6.3 Impact to trees

Summary of issue raised

This submission raised concerns about the removal of 180 individual trees, 19 tree groups, and 9 full or part hedges. Of these 208 known carbon sequesters, less than 10% are assessed as having to be removed irrespective of the proposal.

The submission considers that the Proposed Scheme will remove trees in the centre of the Lower Drumcondra Road from the Railway Bridge to the Royal Canal for road widening, yet the same criteria is not applied to trees in the centre of Dorset Street. It is questioned what kind of analysis underlies this proposal.

There is little confidence that the trees will actually be replaced or translocated.

Response to issue raised

As described in Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4 of the EIAR, the losses are as described in the submission. However, replacement planting is proposed as part of the Proposed Scheme design. The Landscape General Arrangement drawings in Volume 3 of the EIAR show the landscaping proposals for the Proposed Scheme, showing the locations of proposed new trees and planting, as well as information on the specific areas of tree removal. Section 12.5.1.2.1 of Chapter 12 (Biodiversity) in Volume 2 of the EIAR provides the quantities of proposed new and replacement planting as shown in the Landscape General Arrangement drawings. These proposed quantities to be planted are:

- 91 street trees;
- 1,160m² of woodland trees;
- 758m of hedgerow;
- 14,479m² of species rich grassland;
- 1,789m² of ornamental planting;
- 1,159m² of native planting; and
- 31,460m² of amenity grass.

Regarding the claim that trees will be removed in the centre of the Lower Drumcondra Road from the Railway Bridge to the Royal Canal for road widening, this is not accurate. The proposal is for the trees to be transplanted into the realigned median as indicated in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 05 Landscape General Arrangement drawings, Sheet 33, see Figure 2.75

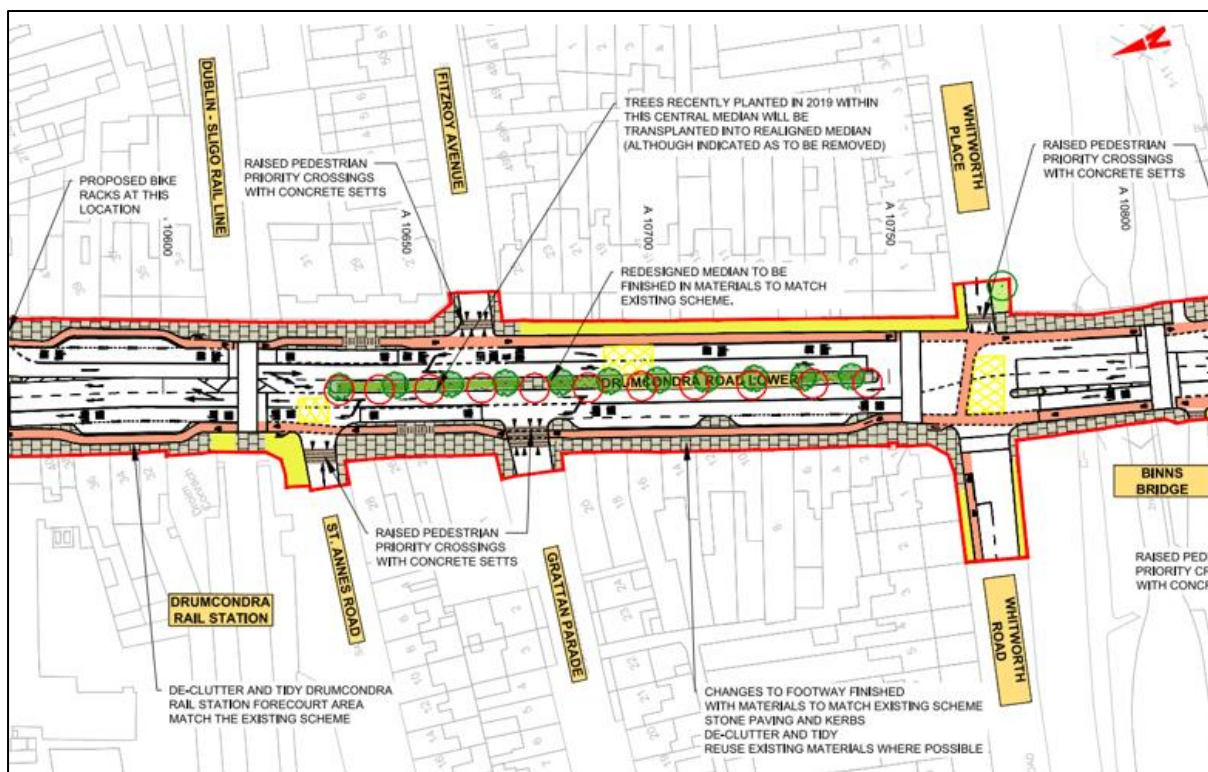


Figure 2.75 Proposed Landscape General Arrangement at the Drumcondra Road Lower (Sheet 33)

2.6.7 18 – Dublin Commuter Coalition

Overview of submission

1. Support for the Proposed Scheme
2. Enforcement
3. Bus lane operating hours
4. Pedestrian Crossings
5. Junction Design
6. Bus Stop Design
7. Shared Space
8. Bicycle Parking
9. Specific Comments
 - a) South Corballis Road Junction
 - b) Millmount Avenue Junction
 - c) Dorset Street Median
 - d) Dorset Street Junctions

2.6.7.1 Support for the Proposed Scheme

Summary of issue raised

The submission considers that the Dublin Commuter Coalition has been engaging with the NTA over the last three years and they believe the project will be a catalyst for greater usage of public transport and active travel.

Response to issue raised

The NTA recognises the benefit of the continued engagement with the Dublin Commuter Coalition and other advocacy groups through the three rounds of non-statutory public consultation, community forums and one to one meetings in developing the Proposed Scheme. The NTA welcomes the support from the advocacy group for the Proposed Scheme. Requests to modify particular detailed design aspects of the Proposed Scheme are noted and the NTA provides responses to those requests as set out in the following sections. The NTA looks forward to continuing to collaborate with the Dublin Commuter Coalition in achieving the Proposed Scheme objectives which have many synergies with the Dublin Commuter Coalition members vision in creating a Dublin that works for all users of sustainable transport.

2.6.7.2 Enforcement

Summary of issue raised

The submission outlined its views in relation to the importance of enforcement for lawful use of bus lanes, cycle lanes and other measures such that the benefits of the Proposed Scheme will be realised by bus passengers. Without a plan for camera enforcement, the effects of the improvements proposed in the scheme will not be seen by bus users.

Response to issue raised

The NTA acknowledges the comments raised in relation to camera enforcement. Whilst enforcement for the lawful use of bus lanes is currently a matter for An Garda Síochána the NTA is separately exploring proposals and methods for bus lane enforcement as set out under *Measure INT20 – Enforcement of Road Traffic Laws of the Greater Dublin Area Transport Strategy 2022-2042*. Notwithstanding this, specific measures have been considered in the development of the Proposed Scheme that will help deter inappropriate and unlawful use of bus lanes including advanced bus signal detection systems which will activate green signals at traffic lights for authorised vehicles only.

2.6.7.3 Bus lanes operating hours

Summary of issue raised

The submission outlined its view that all proposed bus lanes and bus gates should be operational on a 24/7 basis.

Response to issue raised

All bus lanes will operate 24 hours a day 7 days a week. The NTA and local authorities will co-operate in good faith to address any issues with the hours of operation that may arise during the lifetime of the Proposed Scheme.

2.6.7.4 Pedestrian Crossings

Summary of issue raised

The submission highlighted the inclusion of staggered crossings, which goes against DMURS advice, at the following locations:

- Pinnock Hill Roundabout (S1)
- Airside Junction (S3)
- Cloghran Junction (S6)

- Green Long Term Car Park (S9)- 3 and 4 stage crossings with slip lanes
- South Corballis Road (S10)
- Old Airport Road (S12)
- Turnapin Line (S15)
- Coolock Lane (S18)
- Santry Ave (S19)
- Omni Shopping Centre (S20)
- Collins Ave (S25)
- Griffith Ave (S28)
- Clonliffe Road (S33)
- Whitworth Road (S33)
- North Circular Road (S34)
- Gardiner St Upper (S34)

Concerns were also raised regarding some three or four arm junctions which are missing pedestrian crossings entirely on one or more arms, going against DMURS advice:

- Kettles Lane (S5)
- Cloghran Junction (S6)
- Long term parking/ Kealy's Pub (S9)
- Old Airport Road (S12)
- Coolock Lane (S18)
- Seven Oaks (S28)
- Millmount Ave (31)
- Botanic Avenue (31)
- Clonliffe Road (33)
- Whitworth Road (33)
- Belverdere Road (34)
- North Circular Road (34)
- Gardiner St. Upper (34)
- Parnell Sq W (36)

Protected junctions were requested to be used throughout the project in line with TL501 from the Cycle Design Manual, also known as Dutch style junctions.

Concerns were also highlighted that South Corballis Road junction is unsafe for pedestrians and cyclists as there are up to 5 crossings to get from one side to the other, the crossings are thought to be indirect and time consuming.

There was an additional request for Millmount Avenue to be completely redesigned, in order to provide safe and simple infrastructure for pedestrians and cyclists through all arms of the junction.

The submission raised concerns that the Dorset Street junctions are not suitable and safe for all abilities or ages and the request is to put in fully segregated Dutch junctions and protected junctions.

Response to issue raised

The NTA acknowledges the comments raised in the submission and note that as described in Section 6.4.6.1.7.1 of Chapter 6 Traffic and Transport of Volume 2 of the EIAR, *'the Proposed Scheme will increase the number of controlled pedestrian crossings from 86 in the Do Minimum to 125 in the Do Something scenario, equating to a 45% increase.'*

The summary level design rationale for each of the junctions on the Proposed Scheme is set out in Appendix A6.3 Junction Design Report of the Traffic Impact Assessment Report of Volume 4 Part 2 of 4 of the EIAR whilst the signal arrangements can be seen in the Junction System Design drawings in Appendix B10 of the Preliminary Design Report provided in the Supplementary Information.

As noted in section 5.7 of Appendix A4.1 PDGB:

'Where a refuge island is provided, straight crossings are desirable and the refuge island should be 4m wide or more. At a staggered crossing, islands of less than 4m in width may be provided, and these should have a minimum effective width of 2m between obstacles such as signal poles.'

For the pedestrian crossings at the junctions listed above, direct single movement crossings were explored in accordance with the approach set out in Section 5.6 of the PDGB. However, at these locations two stage crossings are the preferred design as a straight across would result in a crossing distance of greater than 19m. As such the overall junction performance and people movement would be reduced by introducing direct single stage crossings on all arms which is not desirable at these locations.

At the Green Long Term Car Park, the existing 3 arm signalised junction, with left turn slips, is to be retained due to low pedestrian count and also to maintain access to the long term car park considering the strategic location of the junction. Bi-directional cycle track proposed along the R132 west side to facilitate north-south cyclists and to avoid cycles having to cross the slip lanes at the junction. Existing staggered toucan crossing are to be straightened to address the pedestrians crossing in between the traffic stream.

As above for the South Corballis Road junction, the existing 4 arm signalised junction layout, with left slip lanes, is to be maintained due to low pedestrian counts. Existing staggered toucan crossings, on the CBC, are straightened to enhance pedestrian and cyclist connectivity. Existing toucan crossing on the sides is to be maintained.

At Old Airport Road junction, the existing 4 arm signalised junction and slip road is proposed to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure. Removal of the existing left turn slip and splitter island on Old Airport Road will provide improved pedestrian crossing opportunities. The key design rationale was to enhance pedestrian crossing facilities on all arms of the junction, provide protected cycle infrastructure and crossing facilities, whilst improving bus priority. Full policy outcomes for CBC route can be achieved by Junction Type 1 and signal operation, giving priority to bus and improved facilities for pedestrians and cyclists.

2.6.7.5 Junction Design

Summary of issue raised

The submission states that the junction design in the Proposed Scheme does not follow international best practice in junction design and is widely regarded as unsafe. The submission requests that the NTA use protected junction TL501 of the NTA's own Cycle Design Manual (Dutch-style junctions) throughout the project.

Response to issue raised

(i) Principles of Protected Junction Design for BusConnects

It is important to note that no two junctions are the same. Junctions on the Proposed Scheme have broadly been categorised into 4 types of junction as set out in Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR and specifically set out at each location in the Junction Design Report which have been included in Appendix A6.3 of Volume 4 Part 2 of 4 of the EIAR and summarised in Table 4.4, Table 4.7, Table 4.13, Table 4.18 and Table 4.22 in Chapter 4

Proposed Scheme Description of Volume 2 of the EIAR. A more detailed description of the junction types on the Proposed Scheme is provided in Sections 5.3.3.1, 5.3.3.2, 5.3.3.3 and 5.3.3.4 of the Preliminary Design Report with a detailed summary of the junction types along the Proposed Scheme also provided in Table 5-2 of the Preliminary Design Report.

The junction types set out in the PDGB directly align to the Proposed Scheme core aim and objectives. One of the core aims of the Proposed Scheme is to:

“Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.”

The proposed scale of the BusConnects CBC Infrastructure Works will be transformational for cycling in Dublin, delivering a large number of the primary cycling routes identified in the Greater Dublin Area Cycle Network plan. With proposals of this scale, it is critical that the overall design approach matches the stated ambition, and can achieve a longevity that such investment deserves. With this in mind, the NTA set about developing ‘Design Principles’ for the project. These principles would complement existing documents and standards such as the National Cycle Manual and DMURS. The PDGB was developed to outline the agreed design principles and to enable consistency of design.

Documents such as the National Cycle Manual and DMURS continue to serve the engineering and development industry well and over the past 7-10 years and have played an important role in allowing Ireland to follow international best practice. The PDGB, like all guidance documents, was developed to be cognisant of the everchanging nature of society, including commuting patterns and behaviours. To acknowledge the expected increase in cycling numbers and to set about achieving the necessary ‘step change’ to cater for this increase, international best practice from countries which have already experienced this transition successfully was consulted. The ambition of the PDGB was to take the benefits of the traditional junction layout from the National Cycle Manual and supplement this with a range of measures aimed at increasing protection for cyclists and reducing uncontrolled conflict with pedestrians.

The Netherlands has one of the highest rates of bicycle use in the world, provides the widest range of cycling know-how and is famous worldwide for its cycling infrastructure. The ‘Ontwerprijzer Fietsverkeer’ (Dutch Cycle Design Guide) was used during the development of the PDGB. Of particular interest to the NTA, was how the design of junctions could be improved to offer better protection to cyclists.

The typical protected junction layout, as shown in Figure 2.76, offers significant safety improvements compared to the traditional junction layout. The deflection of the cycle track at the junction allows the protection kerb (Note 4) to be positioned on the corner of the junction. In urban locations subject to spatial constraints, the protection kerb provides a tighter turning radius for vehicles and will force the left-turning motorist to reduce speed before making the tighter turn. This design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, avoiding any cyclist-vehicle conflict at weaving and merging lanes, for example, where access to a dedicated left-turn lane would previously have necessitated a vehicle to cross the cycle lane. Right-turning cyclists will navigate the cycle lane on the junction and turn right (in a controlled manner) after it crosses the side arm. Other benefits to this junction design include:

- e) Traffic Signal arrangement removes any uncontrolled pedestrian-cyclist conflict;
- f) Raised and protected cycle track approaching junction;
- g) Reduced risk of side-swipe due to the removal of cyclist-vehicle conflict at weaving and merging lanes on all approaches;
- h) Improved right-turning safety; and
- i) Improved sight lines for left turning traffic.

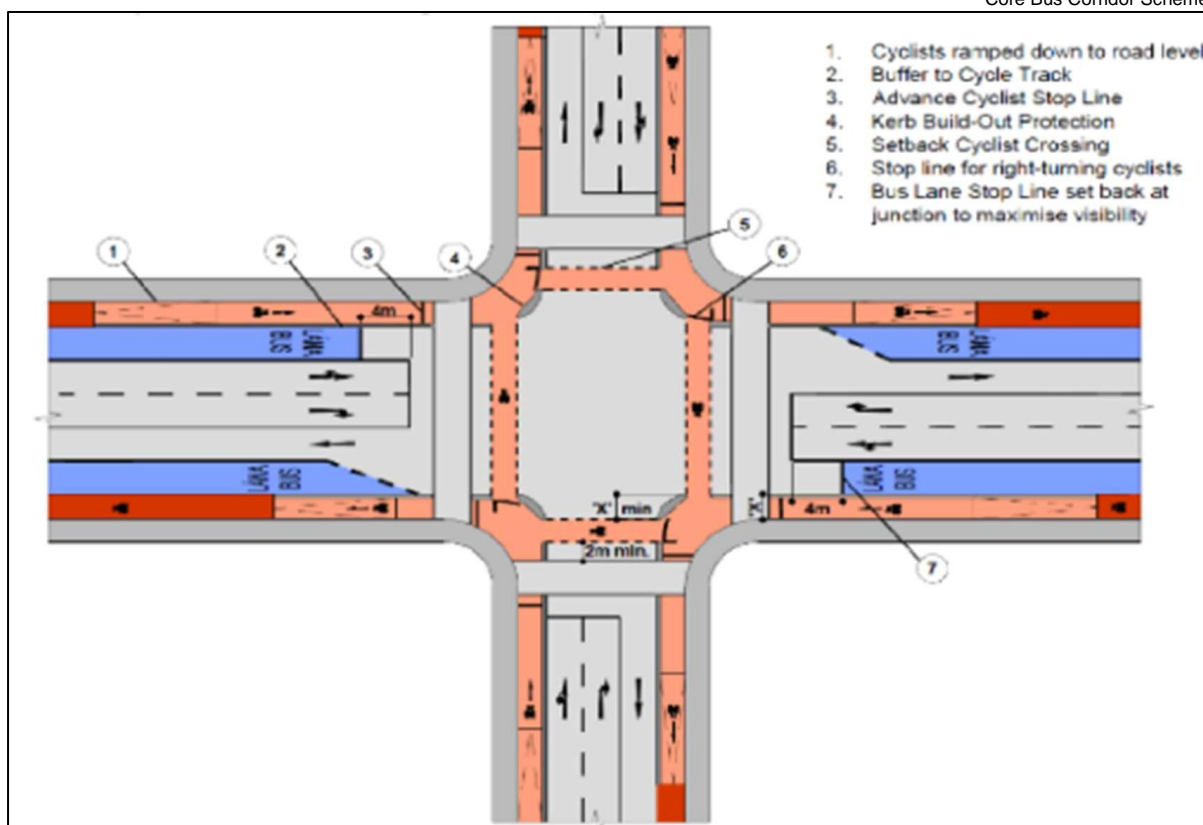


Figure 2.76 Typical Junction layout from BusConnects Design Guidance Booklet

(ii) Pedestrian-cyclist conflict

Spatial constraints are an important factor in determining any junction design. This is especially the case in urban settings. Where possible, the protected junction has been proposed to be retrofitted into all existing junctions, taking into consideration the best practice from international settings including the Netherlands. The NTA notes the Dublin Commuter Coalition has set out their preference for the ‘Dutch style’ junction type as described within the submission. There are, however, legislative, behavioural and other practical considerations that need to be taken into account when looking at these international examples. Consideration for all of these elements has led to the development of the four junction types described in the PDGB.

An important consideration during the development of the PDGB was implementation of measures to mitigate pedestrian-cyclist conflict. The ‘dutch-style’ junction described in the submission is typical of many junctions in the Netherlands and it allows for a potential un-signalised conflict between pedestrians and cyclists, which depends on a level of courtesy to ensure that collisions are avoided. Following discussions with Irish disability groups, the issue of this potential conflict was raised as a significant concern along the core bus corridors for the visually impaired and for the mobility impaired, based on their members’ experiences. Pedestrians are the most vulnerable of road users, and the addition of disability exacerbates this vulnerability. The four junction types within the PDGB have specifically been set out to mitigate these potential conflicts insofar as is reasonably practicable.

Similarly, the layout of the ‘dutch style’ junctions described in the submission can result in a reduced level of service for pedestrians. The layout of these junctions requires a multi-movement, sometimes multi-directional, non-continuous crossings for pedestrians required with at least 3 crossing movements (2 x cycle track crossing, 1x carriageway) to cross a side road of a typical junction. The intermediate landing area for pedestrians between the cycle track and carriageway requires a suitably sized holding area for pedestrians to wait before crossing the road, this can require a significant space for urban locations. Junction types 1-3 in the PDGB aim to consolidate and segregate/confine this waiting area to within the footpath, thus creating a more legible and functional use of the available space for all users with direct crossing facilities that align to the principles of DMURS.

It is for these reasons that the layout of the ‘dutch style’ junctions described in the submission have not been adopted for junctions on the Proposed Scheme.

(iii) Use of traffic signals to yield to cyclists

The concept of allowing both cyclists and general traffic to proceed together in the same direction is not uncommon and the same traffic signals arrangement also caters for left-turning traffic. In the Netherlands, there are scenarios where the equivalent right-turn movement can be green whilst cyclists are also green. There is, however, an additional requirement to yield to cyclists in this Dutch scenario, see Figure 2.77.

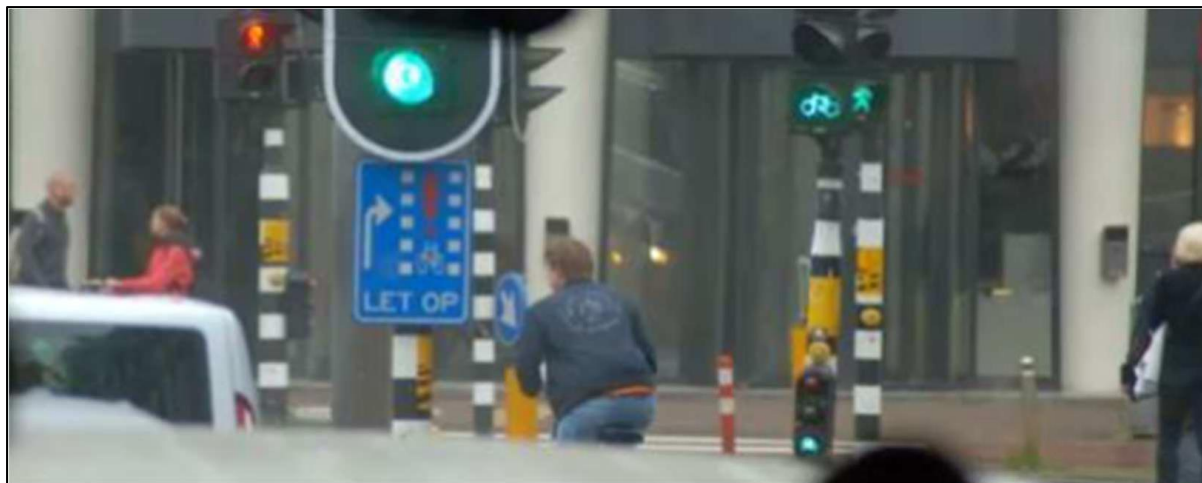


Figure 2.77 Example from the Netherlands of traffic signals + give way signage controlling turning traffic and cyclists (Source: Dutch Design Guide Ontwerpwijzer Fietsverkeer)

The arrangement depicted above from the Netherlands is beneficial for cyclists in that it minimises delay time but should be subject to design thresholds such as heavy turning volumes, HGV movements (difficulty with blind spots), high speed environments etc. which have been considered during the design of junctions as part of the Proposed Scheme. The PDGB also includes guidance on appropriate signage to be provided to reinforce the requirement for motorists to yield to straight ahead traffic in such locations.

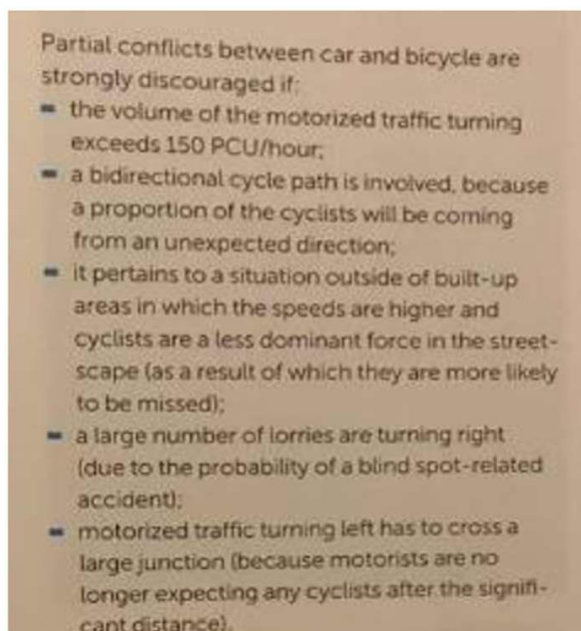


Figure 2.78 Extract from Dutch Design Guide Ontwerpwijzer Fietsverkeer

Dutch authorities have a suite of solutions for different scenarios – no one solution works everywhere. For junctions to operate safely and effectively, it is critical that the control of all movements is considered. All road users can have their own traffic signals at junctions (pedestrians, cyclists, buses, vehicles). To achieve optimum operational efficiency including the efficient movement of cyclists, it is also possible for some movements to occur safely at the same time. To assist with these design decisions, thresholds for turning movements have been used. Chapter 6 (Page 153) of the Dutch

Design Guide Ontwerprijzer Fietsverkeer discourages partial conflicts between cyclists and vehicles if the volume of turning vehicular traffic exceeds 150 PCUs per hour. See the above extract from Ontwerprijzer Fietsverkeer which identifies the above threshold in Figure 2.78.

To put the above turning thresholds into context, 150 PCUs per hour equates to approximately 5 cars on average turning per 120 second cycle, or between 3 and 4 cars turning on average per 90 second cycle. The Proposed Scheme also provides other measures such as kerb segregation, advanced position cycle stop lines and early starts for cyclists which will further segregate and reduce the number of interactions between cyclists and vehicles. All these elements form the basis of a typical junction design and operation, thus no one element of a junction design should be considered in isolation.

30 of the 34+1 (including Collinstown Business Park revised junction layout) key junctions on the Proposed Scheme have implemented this approach to achieve optimum operational effectiveness including the efficient movement of cyclists. Introducing separate signal phases will increase delay for cyclists at junctions. This arrangement will promote the sustainable mode hierarchy for cyclists at junctions by providing priority to ahead cyclists over left turning vehicles. At each of these junctions the left turning vehicle traffic volumes in these locations are estimated to be less than the 150PCU threshold and similarly low HGV volumes are estimated in line with the principles established by international guidance. The Proposed Scheme has also been subject to Road Safety Audits at different stages that have informed the design development of the Proposed Scheme.

Separately, the NTA, Fingal County Council and Dublin City Council will continue to promote the already established driver awareness campaign that seeks to promote driver awareness in line with the Road Safety Authority rules of the road as noted below.

'When turning left, or right, all drivers must watch out for cyclists going ahead or turning. When making a turn, watch out for cyclists in front of you or coming up on your left or right. Do not overtake a cyclist as you approach a junction if you are turning left or right, as the cyclist may be continuing straight ahead.'

2.6.7.6 Bus Stop Design

Summary of issue raised

The submission raised concerns about the proposed width of bus stop islands and noted that they will lead to conflict between pedestrians and cyclists.

Response to issue raised

The NTA welcomes Dublin Commuter Coalition's comments in relation to the importance of considering the pedestrian/cyclist interaction at bus stops. Section 11 of Appendix A4.1 Preliminary Design Guidance Booklet (PDGB) of Volume 4 of the EIAR sets out the key measures to address the concerns raised in relation to vulnerable users at these locations which is further elaborated in section 4.14 of the Preliminary Design Report in the Supplementary Information. These details have evolved as a result of direct consultation between the NTA and representative mobility groups, accessibility audits and road safety audits which have been carried out during the development of the Proposed Scheme.

As described in PDGB section 11.1 Island Bus Stop, these types are the preferred bus stop option to be used as standard on the CBC scheme where space constraints allow. Island bus stops reduce the potential for conflict between pedestrians, cyclists and stopping buses by deflecting cyclists behind the bus stop, thus creating an island area for boarding and alighting passengers. On approach to the bus stop island the cycle track is intentionally narrowed, with yellow bar markings also used to promote a low-speed single file cycling arrangement on approach to the bus stop. Similarly, a horizontal cycle track deflection is proposed on the approach to the island to reduce cyclists' speed on approach to the controlled pedestrian crossing point on the island. To address the potential pedestrian/cyclist conflict, a pedestrian priority crossing point is provided for pedestrians accessing the bus stop island area.

Where space constraints do not allow for an island bus stop, PDGB section 11.2 Shared Bus Stop Landing Zone provides an option consisting of a shared bus stop landing zone that may be

considered. This proposed arrangement will remove the conflict between cyclists and stopping buses by ramping cyclists up to the footpath level where they continue through the stop.

Section 11.2 goes on to explain that to address the pedestrian/cyclist conflict, which would apply to wheelchair users also, the cycle track should be narrowed on approach to the bus stop and yellow bar markings should be provided to alert cyclists to the potential conflict ahead. In addition to this, at the bus stop, the cycle track should be deflected to provide a 1.0m wide boarding/alighting zone for bus passengers, including wheelchair users. Also, appropriate tactile kerbing should be provided to ensure that visually impaired users are aware of crossing areas.

Section 4.12.2 Preliminary Design Report in the Supplementary Information lists the locations where island bus stops are proposed. Section 4.13.3 of the same document lists the locations where shared bus stop landing zones are proposed.

2.6.7.7 *Shared Space*

Summary of issue raised

The submission notes that the Proposed Scheme includes for the provision of shared space for pedestrians and cyclists at a number of junctions and asserts that this is an unsuitable arrangement for busy urban junctions. The submission requests that pedestrians and cyclists be segregated at all junctions for the safety and comfort of everyone.

Response to issue raised

The National Cycle Manual notes that where practicable, the segregation of pedestrians and cyclists is desirable, and shared facilities should not be considered as a first option. The National Cycle Manual recognises, however, that in some cases, shared facilities are appropriate. The design of the Proposed Scheme has been undertaken such that pedestrians and cyclists are segregated wherever practicable and shared spaces are only used in specifically constrained locations, typically at junctions where there is insufficient space to provide a protected junction thereby requiring cyclists to make turning movements via toucan crossings.

Provision of signage and road markings will encourage cyclists to carefully negotiate these areas such that safety of pedestrians is not compromised.

2.6.7.8 *Bicycle Parking*

Summary of issue raised

The submission states the Proposed Scheme does not state where bike parking will be located, nor does it appear in the general arrangement drawings. The submission suggests that to encourage a significant modal shift for walking and cycling, that in addition to the proposed cycle infrastructure, it is important to provide for the best quality bicycle cycle parking facilities at bus stops and public transport interchanges.

The submission recommends that conditions be set to provide for additional identified areas of dedicated cycle parking and inclusion of stands and storage locations which complement the provided cycle lanes and interface with public transport stops and interchanges.

Response to issue raised

As noted in Section 4.6.3 of Chapter 6 of Volume 2 of the EIAR, bike racks will generally be provided, where practicable, at Bus Stops and key additional locations as noted in the Landscaping General Arrangement drawings in Volume 3 of this EIAR and in accordance with the cycle parking provision shown in the bus stop arrangements shown in Appendix A4.1 Preliminary Design Guidance Booklet (PDGB) for BusConnects Core Bus Corridors of Volume 4 Part 1 of 4 of the EIAR.

2.6.7.9 Specific Comments

Summary of issue raised

a) South Corballis Road Junction

The submission claims that this junction is unsafe for pedestrians and cyclists and clearly does not enable sustainable modes of travel.

b) Millmount Avenue Junction

The submission claims that this junction needs to be completely redesigned as it is perceived to be incoherent and unsafe.

c) Dorset Street Median

The submission claims that this is an excellent opportunity to remove the dual carriageway median on Dorset Street to create a proper urban street.

d) Dorset Street Junctions

The submission claims that the unsegregated and poorly segregated junctions on Dorset Street are not safe and suitable for all ages and abilities. It is requested that these junctions be replaced with fully segregated Dutch junctions.

Response to issue raised

a) South Corballis Road Junction

The NTA acknowledges the comments raised in relation to the environment for pedestrians and cyclists. An assessment of the existing arrangement compared to the Proposed Scheme has been set out in Appendix A6.4.1 and 6.4.2 of the Transport Impact Assessment and summarised in Section 8 of the Transport Impact Assessment main report. The results of the assessment demonstrate that there are negligible impacts to the quality of pedestrian infrastructure at the Swords Road (R132) / Corballis Road South four-arm signalised junction.

As set out in Chapter 4, Section 4.6.7, junctions have been designed to ensure a high degree of comfort and priority for sustainable modes of travel, including cyclists. The cycling infrastructure assessment in Appendix A6.4.2 demonstrates that the Level of Service of the Do Minimum (existing infrastructure) scenario is typically of B rating. For the Do Something (Proposed Scheme) scenario, the Level of Service is predominantly of the highest A rating. The improvements will have an overall Negligible, Low, Not Significant Impact for this junction. Additional information in relation to the Level of Service Impact assessment can be found in Section 4.2.3.1 of the Transport Impact Assessment Report.

b) Millmount Avenue Junction

The NTA acknowledges the comments raised in relation to the environment for pedestrians and cyclists. An assessment of the existing arrangement compared to the Proposed Scheme has been set out in Appendix A6.4.1 and 6.4.2 of the Transport Impact Assessment and summarised in Section 8 of the Transport Impact Assessment main report. The results of the assessment demonstrate that the Level of Service of the Do Minimum (existing infrastructure) scenario is typically of D rating. For the Do Something (Proposed Scheme) scenario, the Level of Service is a B rating. The improvements will have a Medium Positive, High, Very Significant Impact for this section of the Proposed Scheme. Additional information in relation to the Level of Service Impact assessment can be found in Section 4.2.3.1 of the Transport Impact Assessment Report.

As set out in Chapter 4, Section 4.6.7, junctions have been designed to ensure a high degree of comfort and priority for sustainable modes of travel, including cyclists. The cycling infrastructure assessment in Appendix A6.4.2 demonstrates that the Level of Service of the Do Minimum (existing infrastructure) scenario is typically of D rating for the section of the R132 between Richmond Road Junction and Botanic Avenue Junction. For the Do Something (Proposed Scheme) scenario, the Level of Service is predominantly an A rating. The improvements will have an overall High, Positive, High Profound Impact for this section.

Additional information in relation to the Level of Service Impact assessment can be found in Section 4.2.3.1 of the Transport Impact Assessment Report.

c) Dorset Street Median

Removal of the central reserve in order to accommodate the cycle tracks and widen the footpaths on either side was considered during the design, but was determined to be contrary to the needs of the Proposed Scheme, as discussed in Section 3.4.1.2 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR:

With the removal of one traffic lane in each direction between Clonliffe Road and Eccles Street, adequate space was available to meet the BusConnects desirable minimum requirements for 3m wide bus lanes, minimum 2m wide footpaths and fully segregated, 2m wide cycle tracks, without the necessity to remove the tree-lined central reserve between Gardiner Street Upper/Synott Place and Hardwicke Place/Eccles Street, as shown in Figure 2.79.

In line with the government's Climate Action Plan, reducing the construction carbon footprint has been a key consideration in the layout development of the Proposed Scheme. The removal of the existing tree-lined central reserve along Dorset Street Lower (involving trees and paving that would otherwise be unaffected by the works) was considered unnecessarily disruptive and undesirable.

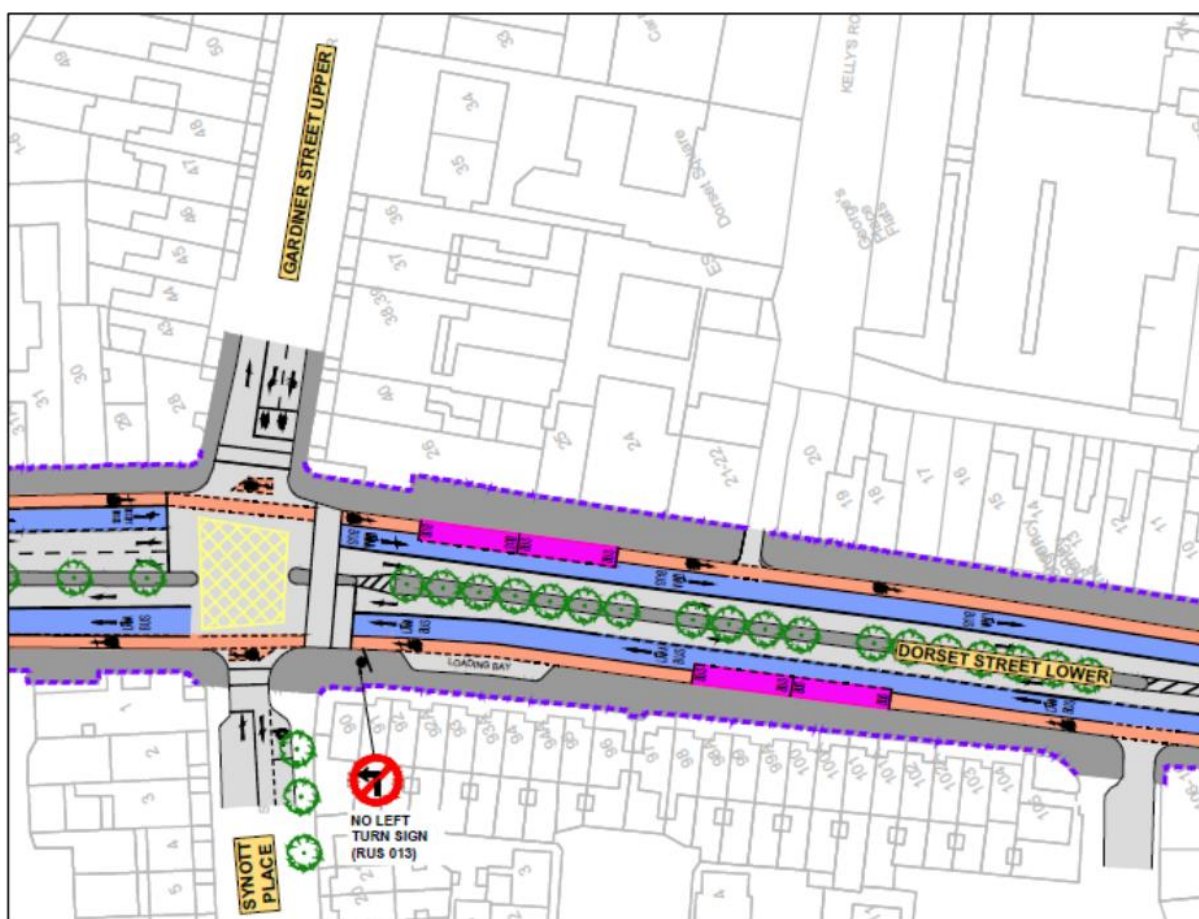


Figure 2.79 Gardiner Street Upper/Synott Place to Hardwicke Place/Eccles

Street Replacement of trees from the central reserve with new trees in the footpaths is not straightforward. It was evident from the available utilities information that the footpaths on both sides of the carriageway are very significantly congested with services, particularly in comparison with the central reserves.

It was considered that removal of the central reserve and trees and the disruption of the existing footpaths that are generally in good condition would have a negative impact on the urban realm and carbon footprint of the Proposed Scheme. The design strategy adopted was

to retain the existing kerb lines and drainage regimes, where possible. This has been accomplished everywhere, apart from bus stop locations, where the footpaths will be widened out to accommodate Shared Landing Area bus stops. In this way, the depth of excavation required, and the waste generated, is minimised. Most of the construction required will involve raising carriageway levels and installation of segregating kerbs or flexible bollards.

Under the Draft Preferred Route Option, the central reserve was retained everywhere apart from the section between Whitworth Road/Whitworth Place and Belvedere Road/Innisfallen Parade.

d) Dorset Street Junctions

The NTA acknowledges the comments raised in relation to the environment for pedestrians and cyclists along Dorset Street. An assessment of the existing arrangement compared to the Proposed Scheme has been set out in Appendix A6.4.1 and 6.4.2 of the Transport Impact Assessment and summarised in Section 8 of the Transport Impact Assessment main report. The results of the assessment demonstrate that the Level of Service of the Do Minimum (existing infrastructure) scenario is typically of C rating for the section of Dorset Street between North Circular Road and Granby Row. For the Do Something (Proposed Scheme) scenario, the Level of Service is a A rating. The improvements will have a Medium Positive, High, Very Significant Impact for this section of the Proposed Scheme. Additional information in relation to the Level of Service Impact assessment can be found in Section 4.2.3.1 of the Transport Impact Assessment Report.

As set out in Chapter 4, Section 4.6.7, junctions have been designed to ensure a high degree of comfort and priority for sustainable modes of travel, including cyclists. The cycling infrastructure assessment in Appendix A6.4.2 demonstrates that the Level of Service of the Do Minimum (existing infrastructure) scenario is typically of D rating for the section of Dorset Street between North Circular Road and Granby Row. For the Do Something (Proposed Scheme) scenario, the Level of Service is predominantly of the A rating. The improvements will have an overall Low Positive, High and Profound for this section of the Proposed Scheme. Additional information in relation to the Level of Service Impact assessment can be found in Section 4.2.3.1 of the Transport Impact Assessment Report.

2.6.8 19 – Dublin Cycling Campaign

Overview of submission

1. Support for the Proposed Scheme
2. Design review of the cycling and walking provision between both airport junctions
3. Consistency in junction design
4. Exits on to main design route
5. Cycle track widths
6. Health Economic Benefit
7. Other Issues
 - a. Quiet streets
 - b. Break in bus lane
 - c. Yellow box at CH 5150
 - d. Church Avenue and Ormond Road side roads
 - e. Width of cycle tracks along Dorset Street
 - f. General traffic on North Frederick Street and Parnell Square East

- g. Raised tables
- h. Parnell Street Junction

2.6.8.1 Support for the Proposed Scheme

Summary of issue raised

The submission commented that the improvements were welcomed and will significantly improve the existing situation. The submission voiced their support for changes across the Proposed Scheme, stating improvements would be made for cyclists, whilst noting that changes still needed to be made in the vicinity of Dublin Airport.

Response to issue raised

The NTA recognises the benefit that the continued engagement with the Dublin Cycling Campaign and other advocacy groups through the three rounds of non-statutory public consultation, community forums and one to one meetings, has had in developing the Proposed Scheme. The NTA notes that the Dublin Cycling Campaign are generally happy with the proposal, apart from certain elements, and welcomes the support from the charity for implementing the Proposed Scheme. Requests to modify particular detailed design aspects of the Proposed Scheme are noted and the NTA has provided responses to those requests as set out in the following sections. The NTA looks forward to the continuation of collaboration with the Dublin Cycling Campaign in achieving the Proposed Scheme objectives which have many synergies with the Dublin Cycling Campaign's vision for a vibrant city where people of all ages and abilities can choose to cycle as part of their everyday life.

2.6.8.2 Design review of the cycling and walking provision between both airport junctions

Summary of issue raised

The submission requested a design review of cycling and walking provisions between Cloghran Roundabout and the Corballis Road Junction. It states that cyclists and pedestrians are forced to make numerous and complicated crossings of slip roads and main traffic roads in navigating the crossings. Slip lanes are against the standard recommendations of the National Cycle Manual and the designs for this section promote the private car above the vulnerable road user.

Response to issue raised

The NTA acknowledges the comments raised in relation to the environment for pedestrians and cyclists. An assessment of the existing arrangement compared to the Proposed Scheme has been set out in Appendix A6.4.1 and 6.4.2 of the Transport Impact Assessment and summarised in Section 8 of the Transport Impact Assessment main report. The results of the assessment demonstrate that the Level of Service of the Do Minimum (existing infrastructure) scenario between Cloghran Roundabout and the Old Airport Road Junction is typically of E rating. For the Do Something (Proposed Scheme) scenario, the Level of Service is a B rating. For Section 2 of the Proposed Scheme the improvements will have a Medium Positive, Negligible, Not Significant Impact for this section of the Proposed Scheme. Additional information in relation to the Level of Service Impact assessment can be found in Section 4.2.3.1 of the Transport Impact Assessment Report.

As set out in Chapter 4, Section 4.6.7, junctions have been designed to ensure a high degree of comfort and priority for sustainable modes of travel, including cyclists. The cycling infrastructure assessment in Appendix A6.4.2 demonstrates that the Level of Service of the Do Minimum (existing infrastructure) scenario is typically of D-B rating for the section of the R132 between Cloghran Roundabout and the Old Airport Road Junction. For the Do Something (Proposed Scheme) scenario, the Level of Service is predominantly an A-B rating. The improvements will have an overall High, Positive, Not Significant Impact for this section. Additional information in relation to the Level of Service Impact assessment can be found in Section 4.2.3.1 of the Transport Impact Assessment Report.

2.6.8.3 Consistency in junction design

Summary of issue raised

The submission raised concerns that while the majority of the improved junction design along this route are consistent in their general approach in relation to all modes, but particularly in relation to cycling, there are a number of junctions, which, for unknown reasons, are dealt with in a different manner. It is not clear why this is happening.

- **Northwood Avenue Junction**

Cyclists are advised to use the toucan crossings to navigate entering or leaving the main Swords Road, despite being against Cycle Design Manual (CDM) advice.

- **Santry Avenue Junction**

Poor pedestrian crossing facilities on the southern arm and no clear cycle route into Santry Avenue for cyclists coming from the northern end, the use of toucan crossing and shared facilities goes against CDM advice

- **Omni Park Junction**

Request to remove slip lane to improve crossing for pedestrians, inclusion of specific bicycle access to the Omni Centre, for the crossing by cyclists exiting Lorcan Road needs to be very clearly marked with coloured asphalt and an advance green light provided. Request for the consideration of a full cycle protected junction at this point.

- **Shanrath Road/Shantalla Road Junction**

Request to see a clearer and more direct route between the Shanrath Road proposed 'quiet street; and the existing old Swords Road 'quiet street'. There is a lack of coherence and legibility in this junction design, particularly for cyclists.

- **Collins Avenue Junction**

Request for left turn slip lane from Collins Avenue West should be eliminated.

- **Griffith Avenue and other Junctions**

Concern for the differing junction designs on Griffith Avenue, Richmond Road, Whitworth Road, North Circular Road, Gardiner St, Gardiner Row, and Granby.

Response to issue raised

It is important to note that no two junctions are the same. Junctions on the Proposed Scheme have broadly been categorised into 4 types of junction as set out in Appendix A4.1 Preliminary Design Guidance Booklet (PDGB) of the EIAR and specifically set out at each location in the Junction Design Report which have been included in Appendix A6.3 and summarised in Table 4.5, Table 4.7, Table 4.13, Table 4.18 and Table 4.22 in Chapter 4 of the EIAR. A more detailed description of the junction types on the Proposed Scheme is provided in Sections 5.3.3.1, 5.3.3.2, and 5.3.3.3 of the Preliminary Design Report provided in the Supplementary Information with a detailed summary of the junction types along the Proposed Scheme also provided in Table 5.1 and 5.2 of the Preliminary Design Report.

The junction types set out in the PDGB directly align to the Proposed Scheme core aim and objectives. One of the core aims of the Proposed Scheme is to:

“Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.”

Heavy turning volumes, HGV movements (difficulty with blind spots), high speed environments etc. have been considered during the design of junctions as part of the Proposed Scheme. The PDGB also includes guidance on appropriate signage to be provided to reinforce the requirement for motorists to yield to straight ahead cyclists in such locations.

The typical protected junction layout in Figure 2.80 below offers significant safety improvements compared to the traditional junction layout. The deflection of the cycle track at the junction allows the protection kerb (Note 4) to be positioned on the corner of the junction. In urban locations subject to spatial constraints, the protection kerb provides a tighter turning radius for vehicles and will force the left-turning motorist to reduce speed before making the tighter turn. This design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, avoiding any cyclist-vehicle conflict at weaving and merging lanes, for example, where access to a dedicated left-turn lane would previously have necessitated a vehicle to cross the cycle lane. Right-turning cyclists will navigate the cycle lane on the junction and turn right (in a controlled manner) after it crosses the side arm. Other benefits to this junction design include:

- Traffic Signal arrangement removes any uncontrolled pedestrian-cyclist conflict;
- Raised and protected cycle track approaching junction;
- Reduced risk of side-swipe due to the removal of cyclist-vehicle conflict at weaving and merging lanes on all approaches;
- Improved right-turning safety; and
- Improved sight lines for left turning traffic.

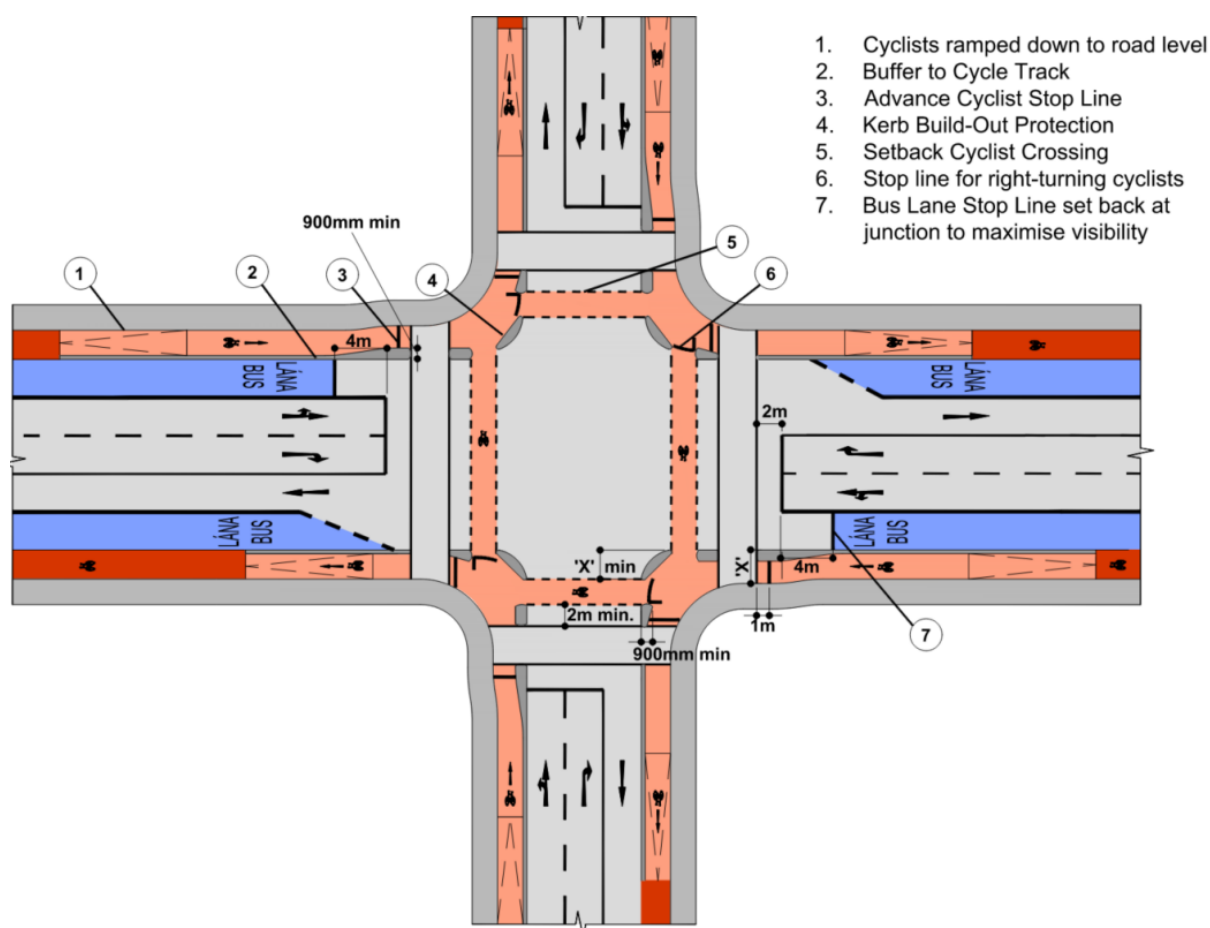


Figure 2.80 Typical Junction Layout from BusConnects Design Guidance Booklet

2.6.8.4 Exits on to main design route

Summary of issue raised

The submission raised concerns about a large number of major exit points from industrial estates and various business and leisure premises along the proposed route which do not provide any detail on the issue of assumed right of way for pedestrians and cyclists. Ideally these exits/entrances should be of a design similar to the side road junction with raised tables to signal clear priority for crossing

pedestrians and cyclists. This is flagged as a particular problem along the stretch from Dardistown Cemetery (CH 4100) to Northwood Avenue (CH 5700)

Response to issue raised

The intention in the proposed design is to provide raised tables at all junctions that are not signal-controlled. A few very minor side streets are not shown on the General Arrangement drawings, but it is intended that they would be treated in the same way as all other side roads. These platforms are not required at private entrances which will have footpath crossings as indicated in the Preliminary Design Guidance Booklet for BusConnects.

Raised table treatments are provided on priority side roads where the stop/ yield line is located behind the raised table and footpath crossing to encourage a “courtesy crossing” for pedestrians. The design of the raised table treatments for priority junctions has been undertaken in accordance with Section 8.1 of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 of EIAR Volume 4 Part 1 of 4.

- *‘The key design features and considerations relating to this junction type are listed below:*
- *The minor arm stop/yield line is located behind the raised table and footpath crossing to encourage a “courtesy crossing” for pedestrians.*
- *Splayed kerbs provide a step change between the carriageway and cycle track and the cycle track and footpath.*
- *Cycle symbol markings are to be used on the cycle track across the junction.*
- *Consideration must also be given to cyclists crossing the mainline to enter or exit the side road. Where a significant demand is found for these movements then consideration should be given to provision of a signal crossing.*
- *Tactile paving may be required to alert visually impaired persons of the crossing point at busier side streets. However, the preferred arrangement is for the footpath to continue across the junction without a break and for pedestrian priority to be maintained (as shown in The National Cycle Manual on Page 136).’*

2.6.8.5 Cycle Track Widths

Summary of issue raised

The submission raised concerns that cycle track widths are below the Cycle Design Manual recommended widths in many areas throughout the scheme. It is also believed that any cycle track proposed to be constructed at less than 2.0m is not being built for the envisaged future capacity.

Response to issue raised

The NTA recognises the importance of accommodating the full range of cycles to ensure routes are accessible to all cyclists. The NTA notes the comments raised in the submission and notes that Section 2 of the PDGB outlines the objectives of the design guidance document. Within this section the following statement is made:

‘In the approach to cycle infrastructure design, the BusConnects project not only aims to cater for existing cyclists, but more particularly for younger and older cyclists, mobility impaired cyclists and new cyclists as well as those who currently do not cycle but would be prepared to, subject to improved safety and greater cycle infrastructure provision.’

One of the main outcomes of the Proposed Scheme is safe, segregated cycling facilities which are accessible to all along the corridor. As set out in the PDGB and in accordance with the NCM width calculator, the desirable minimum width for a single-direction, with-flow, raised adjacent cycle track is 2.0m, to provide a high Quality of Service and allow for overtaking within the cycle track, as well as to cater for larger cycles. Notwithstanding this aspiration, it is acknowledged that the Proposed Scheme is to be delivered in constrained urban environments, and the delivery of a 2.0m+ wide cycle track may not always be practicable. As such, the cycle track widths have been reduced to typically 1.8m or 1.5m wide where the provision of 2.0m wide cycle tracks is not practicable.

Whilst cycles can come in a range of shapes and sizes (for example standard, tandem, recumbent, cargo, handcycle, wheelchair user tricycle, articulated bikes with additional child trailer or trailer bikes), these cycles are typically less than 1m in width and will be accommodated by the Proposed Scheme.

2.6.8.6 Health Economic Benefit

Summary of issue raised

The submissions considers that nowhere in BusConnects documentation is a full economic assessment of the population-level effects on health carried out. The EIAR chapters of BusConnects planning application, which cover human health impacts, are inadequate and generalised.

The respondent calls on the applicants to furnish detailed assessment to WHO HEAT standards based on the best available modelling of projected modal shift from sedentary travel to active travel.

Response to issue raised

Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4 of the EIAR provides an economic assessment of the Core Bus Corridors. The assessment includes a chapter on Community Health and Wellbeing (Chapter 4). With specific reference to the impact on community health, the conclusion states:

'Analysis undertaken by the NTA shows that there will be a rapid shift towards more active modes of travel. This will in turn lead to improvements in health as people adopt a more healthy lifestyle. Over time this will begin to impact both mental and physical health and will be particularly important for the lower socio-economic areas along the routes. Whilst the changes in travel choices should happen relatively soon after the opening, it is anticipated that it will take time for individuals to gain the full health benefits (in particular to lose weight and gain the associated benefits). It will be particularly beneficial to the 49% of overweight individuals who state they are trying to lose weight.'

Chapter 4 of Appendix A1.2 also goes on to look at the impact on productivity, with that section concluding:

'The proposed investments in walking and cycling infrastructure will not just benefit individuals but also all of the businesses whose workers live along the corridors. This will be due to the improved health and productivity of their work force. As with the wider health benefits this will build up over time as employee health improves. Retail and leisure businesses in the community centres along the route could therefore gain a double benefit from both increased sales and improved staff productivity.'

2.6.8.7 Other issues

Summary of issues raised

a. Quiet streets

Design of quiet streets has not been fully clarified.

b. Break in bus lane

Why is there a bus lane break at CH 4300.

c. Yellow box at CH 5150

The function and design layout of the yellow junction box at CH5150 is unclear.

d. Church Avenue and Ormond Road side roads

Disappointed at the opportunity to reduce general traffic manoeuvres at the Church Avenue and Ormond Road side roads.

e. Width of cycle tracks along Dorset Street

Widths of proposed cycle tracks along Dorset Street are compromised. The decision to provide no cycle infrastructure along Dorset Street Lower even where private motorist parking spaces are to be preserved is deplorable.

f. **General traffic on North Frederick Street and Parnell Square East**

The continued allowing of general traffic along North Frederick St and Parnell Square East compromises the functioning of the bus lanes in this area and should be reviewed.

g. **Raised tables**

Raised tables at side road junctions is broadly welcomed, however there is confusion by the outlined road marking arrangements at these junctions, whereby, in many instances, pedestrians and cyclists are advised to yield to crossing traffic and at the same time crossing road vehicles are also advised to yield.

h. **Parnell Street Junction**

Greater design clarity is required for the Parnell St junction in relation to access by private traffic, bus priority and clarity on provision for cycling movements connecting to ongoing routes.

Response to issues raised

a. **Quiet streets**

As noted in Section 4.6.3.4 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR:

'Where the Proposed Scheme cannot facilitate cyclists without significant impact on bus priority, alternative cycle routes are explored for short distances away from the Proposed Scheme bus route. Such offline options may include directing cyclists along streets with minimal general traffic other than car users who live on the street. Guidance in this regard has been provided within the PDGB which states:

'Diversions of proposed cycle facilities on to quieter parallel routes, to avoid localised narrowing of cycle tracks on the main CBC route, is to be considered in the context of the CBC route being listed as a primary cycle route as per the Greater Dublin Area Cycle Network Plan. These diversions, however, may also be considered where appropriate cycle facilities cannot be provided along the CBC route without significant impact.'

So-called Quiet Streets (due to the low amount of general traffic) are deemed suitable for cyclists sharing the roadway with the general traffic, without the need to construct segregated cycle tracks or painted cycle lanes. The Quiet Street Treatment would involve appropriate advisory signage for both the general road users and cyclists.

A Quiet Street cycle route has been proposed from the Omni Park Shopping Centre/Lorcan Road junction, through Lorcan Road concluding at the Larkhill Road/Shantalla Road/Shanrath Road junction. This Quiet Street cycle route avoids the pinch point at Santry Village.

Another Quiet Street cycle route commences at the Larkhill Road/Shantalla Road/Shanrath Road junction and concludes at the Collins Avenue Junction where the cyclist re-joins the mainline. This Quiet Street cycle route avoids the section of N1 with high volumes of traffic.'

b. **Break in bus lane**

The break in the bus lane at this location is because this is a signalised junction. As noted in Chapter 7 of the PGDB (Appendix A4.1 in Volume 4 of the EIAR), as a

principle, cycle facilities should be coloured through junctions. Bus lanes are not to be coloured.

c. **Yellow box at CH 5150**

The yellow box at CH5150 is provided to facilitate any buses turning right onto Furry Road.

d. **Church Avenue and Ormond Road sideroads**

It was not considered necessary or beneficial to alter general traffic manoeuvres at the Church Avenue and Ormond Road side roads under the Proposed Scheme.

e. **Width of cycle tracks along Dorset Street**

The NTA recognises the importance of accommodating the full range of cycles to ensure routes are accessible to all cyclists. The NTA notes the comments raised in the submission and notes that Section 2 of the PDGB outlines the objectives of the design guidance document. Within this section the following statement is made:

'In the approach to cycle infrastructure design, the BusConnects project not only aims to cater for existing cyclists, but more particularly for younger and older cyclists, mobility impaired cyclists and new cyclists as well as those who currently do not cycle but would be prepared to, subject to improved safety and greater cycle infrastructure provision.'

One of the main outcomes of the Proposed Scheme is safe, segregated cycling facilities which are accessible to all along the corridor. As set out in the PDGB and in accordance with the NCM width calculator, the desirable minimum width for a single-direction, with-flow, raised adjacent cycle track is 2.0m, to provide a high Quality of Service and allow for overtaking within the cycle track, as well as to cater for larger cycles. Notwithstanding this aspiration, it is acknowledged that the Proposed Scheme is to be delivered in constrained urban environments, and the delivery of a 2.0m+ wide cycle track may not always be practicable. As such, the cycle track widths have been reduced to typically 1.8m or 1.5m wide where the provision of 2.0m wide cycle tracks is not practicable.

Whilst cycles can come in a range of shapes and sizes (for example standard, tandem, recumbent, cargo, handcycle, wheelchair user tricycle, articulated bikes with additional child trailer or trailer bikes), these cycles are typically less than 1m in width and will be accommodated by the Proposed Scheme.

Regarding the comment regarding the provision of no cycle infrastructure along Dorset Street Lower, this is inaccurate. Cycle lanes are provided throughout Dorset Street Lower as indicated in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 03. General Arrangement drawings, Sheet 33 to 35, see Figure 2.81, Figure 2.82, and Figure 2.83.

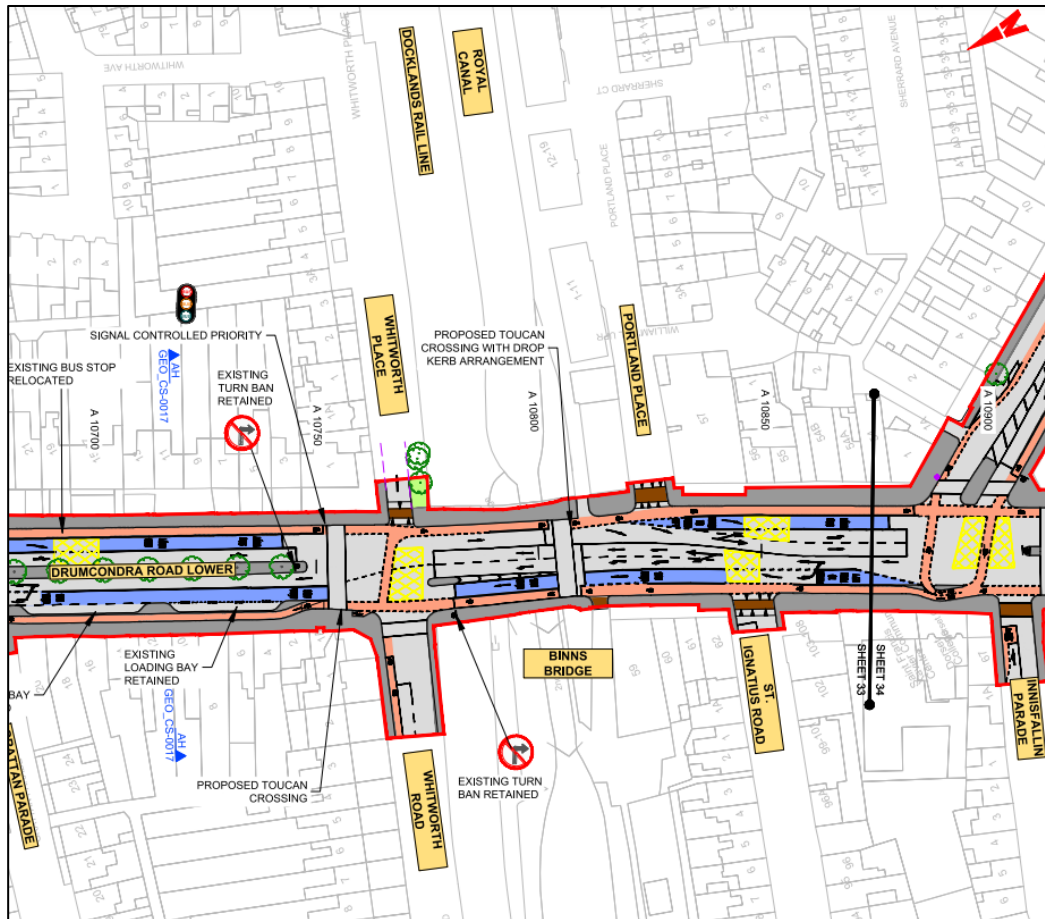


Figure 2.81 Extract from General Arrangement Drawing (Sheet 33)

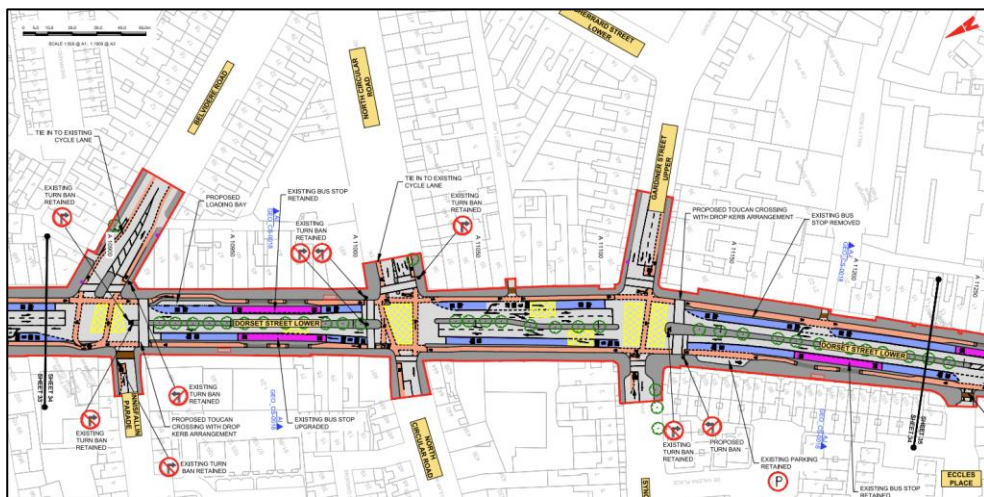


Figure 2.82 Extract from General Arrangement Drawing (Sheet 34)

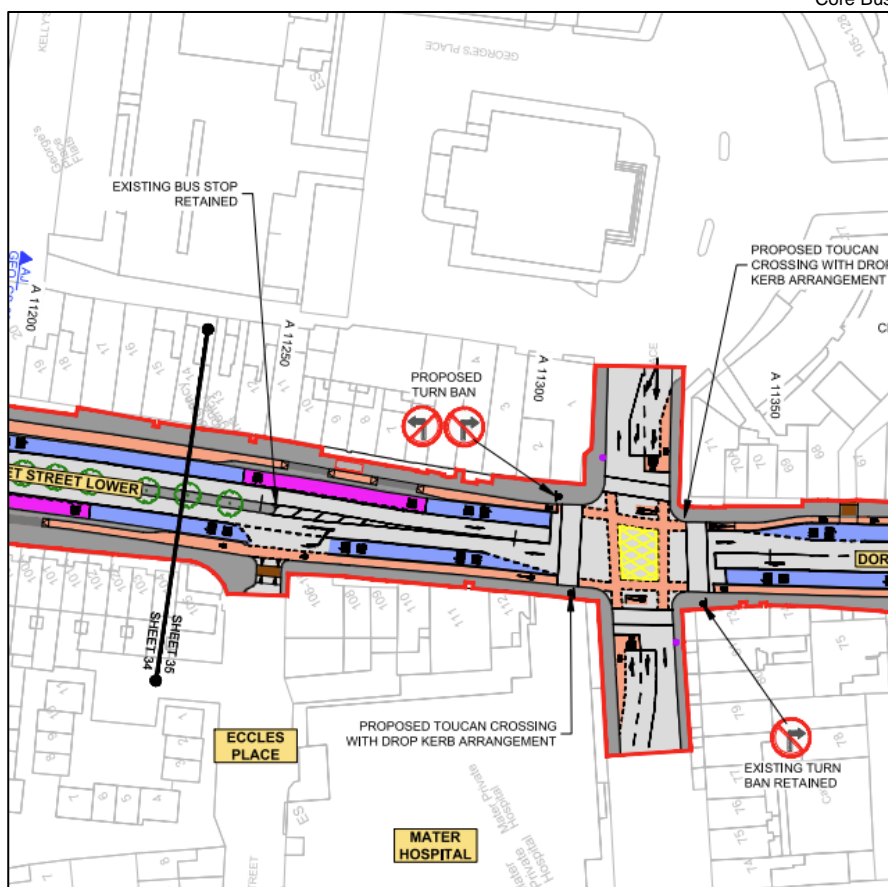


Figure 2.83 Extract from General Arrangement Drawing (Sheet 35)

f. General traffic on North Frederick Street and Parnell Square East

The submission gives no indication of why the continued allowing of general traffic along North Frederick St and Parnell Square East is considered to compromise the functioning of the bus lanes in this area. The arrangement on North Frederick St and the bus lane on Parnell Square East appear to be performing satisfactorily. Alterations to the existing arrangements would likely cause unwarranted traffic dispersal onto adjacent streets.

g. Raised tables

Raised table treatments are provided on priority side roads where the stop/ yield line is located behind the raised table and footpath crossing to encourage a “courtesy crossing” for pedestrians. The design of the raised table treatments for priority junctions has been undertaken in accordance with Section 8.1 of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 of EIAR Volume 4 Part 1 of 4.

‘The key design features and considerations relating to this junction type are listed below:

- *The minor arm stop/yield line is located behind the raised table and footpath crossing to encourage a “courtesy crossing” for pedestrians.*
- *Splayed kerbs provide a step change between the carriageway and cycle track and the cycle track and footpath.*
- *Cycle symbol markings are to be used on the cycle track across the junction.*
- *Consideration must also be given to cyclists crossing the mainline to enter or exit the side road. Where a significant demand is found for these movements then consideration should be given to provision of a signal crossing.*

e. Drainage

2.6.9.1 Support for the Proposed Scheme

Summary of issue raised

FCC declared their support for the Proposed Scheme and welcomed the opportunity to engage with the NTA to ensure that the Proposed Scheme is designed and implemented to take full account of the existing and future needs of the citizens, businesses and communities of Fingal and ensure that the final layout is the optimal design alignment within Fingal.

FCC stated that their objective is to see the provision of a sustainable, high quality and efficient transport corridor that will underpin the future sustainable development of the Swords Road corridor and the wider area including a strong connection with Dublin Airport. FCC stated that the coordination of the proposed CBC proposals with the various other transport proposals being considered by FCC and the NTA in this area will be a critical aspect in ensuring that the overall capacity of the corridor is maintained both during construction and in the longer-term operational stage.

Response to issue raised

FCC's support for the scheme is noted and welcomed by the NTA. The NTA acknowledges FCC's comment that they welcome the continued engagement with the NTA to ensure the Proposed Scheme is designed and implemented to take account of the needs of citizens, businesses, and communities of Fingal, ensuring an optimal design alignment.

The NTA note FCC's objective for the provision of a sustainable, high quality and efficient transport corridor, which should be coordinated with other transport proposals, to ensure the overall capacity of the corridor is maintained during the construction and operational stages.

2.6.9.2 Policy Context

Summary of issue raised

FCC outlines various national level policy context and objectives that are relevant to the Proposed Scheme such as the *Climate Action Plan 2023 (CAP23)*, *Project Ireland 2040 – National Planning Framework (NPF)*, *the National Development Plan 2021-2030*, *the National Sustainable Mobility Policy*, *The National Investment Framework for Transport in Ireland (NIFTI)*. The submission also goes on to outline regional level policy context including the *Regional Spatial and Economic Strategy for the Eastern and Midland Region 2019-2031 (RSES)*, *the Transport Strategy for the Greater Dublin Area 2022-2043*, *Fingal Development Plan 2023-2029* and local level policy context such as the *South Fingal Transport Study 2019*, *Sustainable Swords 2022* and *Your Swords: An Emerging City, Strategic Vision 2035*.

Response to issue raised

NTA acknowledge FCC comments around their need for the scheme and note that reference is made to the *Fingal Development Plan 2023 – 2029*, the *National Development Plan and Transport Strategy for the Greater Dublin Area*, along with a number of other local, regional, national and international policies in Chapter 2 Need for the Proposed Scheme of Volume 2 of the EIAR and in the Planning Report (Appendix A2.1 in Volume 4 of the EIAR).

2.6.9.3 Built Heritage

Summary of issue raised

The submission considers that the protection, maintenance and enhancement of the built heritage of Fingal is a key strategic objective of the *Fingal Development Plan 2023-2029* and included supportive policy and objectives relating to the protection and enhancement of protected structures, historic building stock, historic bridges, historic designed landscapes and character landscapes of high value and significance.

The submission noted that Chapter 10 of the *Fingal Development Plan 2023-2029* lays out a number of protected and/or historic features within the Fingal area. Comment that a careful balance is

required between the need to preserve and enhance the built heritage features on or adjoining the Proposed Scheme.

It was requested that the project should be designed to minimise the impact on architectural and archaeological heritage assets.

The submission also notes that the Fingal Protected Structures are not depicted in Figure 16.1 in Volume 3 of the EIAR.

The following specific locations were listed in the submission:

1. BusConnects Bus Stop North of Airside Junction (heading northwards)

Concern that the bus stop requires temporary removal and then repositioning of the existing 18th century milestone. Comment that the position of the stone is an integral part of its significance, referring to the old Irish mile.

When planning permission for a SHD development directly adjoining the bus stop was granted a condition was added by the Bord to safeguard the milestone in its current location.

Request for the bus stop to be repositioned and a buffer area erected during construction to ensure no damage is made to the stone.

2. Temporary restriction of access to Stockhole Lane

Note that the boundary wall of the graveyard is of historical significance due to WW2 amendments, care needs to be taken to ensure there are no impacts on the boundary of Cloghran Church & Graveyard from vibrations during the construction phase.

3. Clarification of Changes Fronting Castlemoate House

Request that the replacement trees to the south of Castlemoate House are mature trees and that the new planted buffer is of sufficient depth and height to substantially screen the tall hangar structures to the west.

Clarification of whether the roadside boundary and vehicular entrance to Castlemoate House is to be altered to allow for the proposed cycle and footway changes. The existing is not the original boundary treatment.

Request for clarification on proposed changes to the eastern boundary of Castlemoate to determine if any additional land take is needed at this location, request that both plan and elevation drawings are provided to the Fingal Conservation Officer for agreement.

4. Impact on Front Boundary of Protected Structure RPS No 604 Thatched Cottage, Collinstown

In the EIAR there is proposed land take at this location to facilitate a cycle track and footpath altering the cottage's setting, this is considered highly problematic and it is requested that this proposal is redesigned to avoid impacting on the protected cottage and setting.

5. Clarity on Extent of Impact on Boundary Wall of Santry Demesne

The EIAR indicated this is one of the most substantial surviving historic landscape that interfaces with the Proposed Scheme. There is a number of protected structures and areas as well as the protection of mature trees.

Concern that the Proposed Scheme proposes to widen a gateway to make a cycle path connection and 'cut back' the demesne wall.

The impact suggested by the Proposed Scheme is proposed to be different to the cut back/demolition of the demesne wall. Request for clarity of the proposed changes to the eastern boundary of Santry Demesne. A photomontage would also assist in evaluation of the potential impact.

Response to issue raised

NTA acknowledges the various historical features along the route that will be respected and protected where feasible in the Proposed Scheme. Monitoring during the construction phase will be undertaken to identify any below ground remains that may be uncovered during the works, in which case the mitigation measures proposed in EIAR Chapter 16 will be implemented.

Protected Structures, or Groups of Protected Structures, were identified in the study area, as outlined in Sections 16.3.1.2 and 16.3.1.3 of Chapter 16 of the EIAR and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. Section 16.4.3.1 outlines the Construction Stage Impacts on these Protected Structures. Section 16.4.4.1 outlines the Operational Stage Impacts on these Protected Structures. Section 16.5.1.1 of the EIAR sets out the proposed mitigation measures during the construction phase.

With respect to the omission of the Fingal Protected Structures within Figure 16.1 in Volume 3 of the EIAR, the error occurred in the Figure only, with the relevant features recorded on the Record of Protected Structures (RPS) being fully assessed within Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR. In total there are four features recorded on the Fingal Record of Protected Structures located within or in the immediate vicinity of the Proposed Scheme. These four structures are described within Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 of the EIAR, on Pages 11-13, with each having their own entry, including a photograph, within the inventory.

In summary, the four features are assessed as follows:

- The milestone (RPS Number 866) at Pinnock Hill is assessed as having a Direct, Negative, Slight, Temporary impact during the Construction Phase following mitigation measures to remove, protect and reinstate it as described in Chapter 16, Section 16.5.1.6.3;
- Castlemoate House (RPS Number 611) is assessed as having an Indirect, Negative, Slight, Long-Term impact as a result of the alteration of its surrounding landscape as described in Chapter 16, Section 16.4.4.1;
- Cloghran Church (in ruins) and Graveyard (RPS Number 609) is also on the Record of Monuments and Places (RMP) as Reference Number DU014-009001, and is referenced within Chapter as such. This feature is mostly outside the study area with only part of the graveyard falling within the 50m buffer around the Proposed Scheme. This feature is partly included in Figure 16.1, with the parts of its Zone of Notification on the RMP which overlap with the study area shown on Sheet 4 of 18. It was assessed as having a predicted Direct, Negative, Light, Temporary Construction Phase impact in Chapter 16, Section 16.4.3.1; and
- The Thatched Cottage (RPS Number 604) at Collinstown Cross is assessed as having a Direct, Negative, Slight, Temporary impact during the Construction Phase following mitigation measures for the removal, storage and reinstatement of the existing boundary as described in Chapter 16, Section 16.5.1.1. As this feature is also recorded on the National Inventory of Architectural Heritage, it is shown on Figure 16.1 on Sheet 7 of 18 where it is labelled with its NIAH reference number (11349003).

With respect to the individual areas outlined in the submission, the following assessment has been described within the EIAR:

1. BusConnects Bus Stop North of Airside Junction (heading northwards)

Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR includes an assessment of the impact on this milestone (FCC Record of Protected Structures Reference Number 866). Section 16.4.3.7.3 describes the Construction Phase impact, stating that it *'will be temporarily removed to ensure its protection, before being reinstated within the vicinity of the existing. There is potential for damage of the sensitive fabric during its removal, transport, storage, and reassembly. The magnitude of this impact is High. There will also be an adverse, indirect, visual impact on the settings of the milestone during the Construction Phase, the magnitude of which is Low. The predicted Construction Phase impact will be Direct, Negative, Significant and Temporary'*.

Section 16.5.1.6.3 goes on to describe the mitigation measures required during the Construction Phase as including *'recording, protection, and monitoring prior to and during the*

Construction Phase. The milestone has been painted over, and the paint should be removed. Recording, overseeing of protective measures and monitoring is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor and in accordance with the methodology provided in Appendix A.16.3 in Volume 4 of the EIAR' with the post-mitigation impact described as Direct Negative, Slight and Temporary.

With respect to the proposed SHD at this location, the potential for cumulative impacts has also been assessed within the EIAR as described in Chapter 21 (Cumulative Impacts & Environmental Interactions) in Volume 2 of the EIAR, with it listed within Appendix A21.1 (Record of Stages 1 & 2 of Cumulative Effects Assessment (Longlist to Shortlist)) in Volume 4 of the EIAR, and brought forward into the shortlist for additional assessment within Appendix A21.2 (Stage 4 Specialist Assessments) in Volume 4 of the EIAR. The assessment undertaken with respect to architectural heritage concluded that no significant cumulative impacts were likely with respect to this proposed SHD given the mitigation measures proposed within Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR (as outlined above).

Regarding the location of this bus stop Appendix H of the Preliminary Design Report included in the Supplementary Information includes the Bus Stop Review Report. This report sets out a comprehensive exercise which has been carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice principles related to bus stop placement. These principles include:

- Driver and waiting passengers are clearly visible to each other;
- Located close to key local facilities;
- Located close to main junctions without affecting road safety or junction operation;
- Located to minimise walking distance between interchange stops;
- Where there is space for a bus shelter;
- Located in pairs, 'Tail to tail' on opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and
- Adequate footway width.

A main consideration in the siting of bus stops is to minimise walking distance between interchange stops. This exercise was carried out with cognisance of the interface with orbital routes proposed as part of the Dublin Area Bus Network Redesign, which involved significant liaison with the BusConnects Dublin Area Bus Network Redesign team.

The scope of the Proposed Scheme includes the provision of infrastructure for bus services routed along the main corridor to the City Centre. Infrastructure for orbital bus routes, if required, will be delivered as part of a separate orbital core bus corridor scheme, whereby the provision of bus stops, including their location, can be assessed on a holistic basis along the orbital corridor, taking into account the location of existing nearby bus stops which are outside the red line boundary of the Proposed Scheme.

The bus stop locations were reviewed at each stage of the design process with a view to ensuring that the objectives of the Proposed Scheme were met. Feedback from each of the non-statutory consultations was also considered in reviewing the bus stop locations as part of the design of the scheme.

As a result of the Proposed Scheme, there have been gains in population across the whole route for catchments within 10 and 15 minutes from the bus stops. This is also completed with fewer bus stops along the Proposed Scheme.

The analysis also concludes,

'It is recommended to relocate 14 of the 41 bus stops inbound and 12 of the 31 bus stops outbound along the route. In addition, it is proposed to remove 2 of the inbound bus stops and 1 of the outbound bus stops, but to add 1 new stop inbound and 2 new stops outbound.

2. *It is anticipated that the overall journey time along these routes will reduce as a result of these changes. The removal of stops will lead to less time lost due to dwell times at stops and the associated time lost due to deceleration and acceleration before and after the stops. Additionally, operational improvement such as the placement of stops after junctions should serve to reduce journey times.* **Temporary restriction of access to Stockhole Lane**

As outlined in Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR, the study areas for both assessments covered an area up to 50m on either side of the Proposed Scheme boundary. As shown in Figure 15.1 (Archaeological & Cultural Heritage), Sheet 4 in Volume 3 of the EIAR, the church and graveyard (Record of Monuments and Places Reference DU014-009001 and DU014-009002) are located outside of this study area and therefore have not been specifically assessed given that the distance from the Proposed Scheme means that significant impacts are not likely on those features. However, Chapter 15 does assess the potential impact on the stone walls on Old Stockhole Road (Reference CBC0002CH003) including those providing access to the church and graveyard site. Chapter 15, Section 15.4.3.2.2 states that there is no potential impact to the walls given that there are no proposed works to the walls.

With respect to the potential for vibration impacts, the assessment is described within Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR. This assessment included the potential for impact on "Protected and Historic Buildings". Section 9.4.3.3 assessed the potential Construction Phase vibration impacts associated with surface breaking activities given that these activities give the highest potential for vibration during construction. The assessment states that *'vibration impacts during ground breaking activities using heavy breakers have the potential to generate Negative, Slight to Moderate, Temporary effects at distances of 10m from the activity. Beyond 50m from this type of activity, impacts are reduced to Not Significant to Slight and Temporary. For all other works, vibration impacts will be below those associated with perceptible vibration and will be Imperceptible to Not Significant and Temporary. All construction works are orders of magnitude below limits values associated with any form or cosmetic or structural damage for structurally sound or protected or historical buildings or structures'*. It should be noted that the walls surrounding the church and graveyard are approximately 50m from the Proposed Scheme at their closest point, with the majority being at a distance of more than 50m from the Proposed Scheme boundary. As outlined in Section 9.5.1.2 with respect to mitigation measures for vibration impacts during the Construction Phase, *'Vibration from construction activities will be limited to the values set out in Table 9.13 to avoid any form of potential cosmetic damage to buildings and structures'*. Table 9.13 (Chapter 9, Page 13) is provided below.

Table 9.13: Recommended Construction Vibration Thresholds for Buildings

Vibration Limits for Buildings (PPV) at the Closest Part of the Building to the Source of Vibration, at a Frequency of 4Hz		
Building Type	Transient Vibration	Continuous Vibration
Reinforced or framed structures. Industrial and heavy commercial buildings	50mm/s	25mm/s
Unreinforced or light framed structures. Residential or light commercial-type buildings	15mm/s	7.5mm/s
Protected and Historic Buildings ^{*Note 1}	6mm/s – 15mm/s	3mm/s – 7mm/s
Identified Potentially Vulnerable Structures and Buildings with Low Vibration Threshold	3mm/s	

Note 1: The relevant threshold value to be determined on a case-by-case basis. Where sufficient structural information is unavailable at the time of assessment, the lower values within the range will be used, depending on the specific vibration frequency.

3. Clarification of Changes Fronting Castlemoate House

An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4 of the EIAR. As per the Tree Schedule in that report, that location, north and south of Castlemoate House, require the partial removal of a mixed species group (Tree Number

G0092) in order to allow for road widening. The tree group is described as a 'Mixed species group comprising leylandii, ash, hawthorn, sycamore and elder on raised bank c.1m above footpath', which has been categorised as Category B 'having moderate value and conservation'. Approximately 2,747m² of this tree group will require removal, which will only be a portion of the total group, with existing trees to be retained where possible within the wooded area. New planting is also proposed to repair that affected wooded edge. Given the depth of the wooded area at this location, the retained trees will continue to provide visual screening of the hangar structures to the west.

The Proposed Scheme will not impact on the existing wall and vehicular entrance at Castlemoate House, with those features to be retained in situ during the Construction Phase. Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR assesses the impact on Castlemoate House in Section 16.4.4.1, stating the following: 'At Castlemoate House (FCC RPS 611), where the Proposed Scheme includes the removal of trees to the south of the historic house which will have a negative impact on its setting. The roadside trees are semi-mature and do not appear to be historic boundary planting, but the affected area was part of the historic designed landscape and is shown as planted on historic maps. The historic landscape has been previously altered with the original entrance, gate lodge and part of the avenue demolished. The house and its associated landscape are of Medium sensitivity. The magnitude of impact is Low. The predicted Operational Phase impact will be Indirect, Negative, Slight and Long Term'.

With regards to the eastern boundary of Castlemoate House, the existing boundary stone wall will not be impacted by the Proposed Scheme. Figure 2.85 shows an extract from the Fencing and Boundary Treatment Drawings in the EIAR, Volume 3, Part 1 of 3, Chapter 4 indicating Castlemoate House. As can be seen from this figure there are no alterations proposed to the exiting boundary wall and entrance.

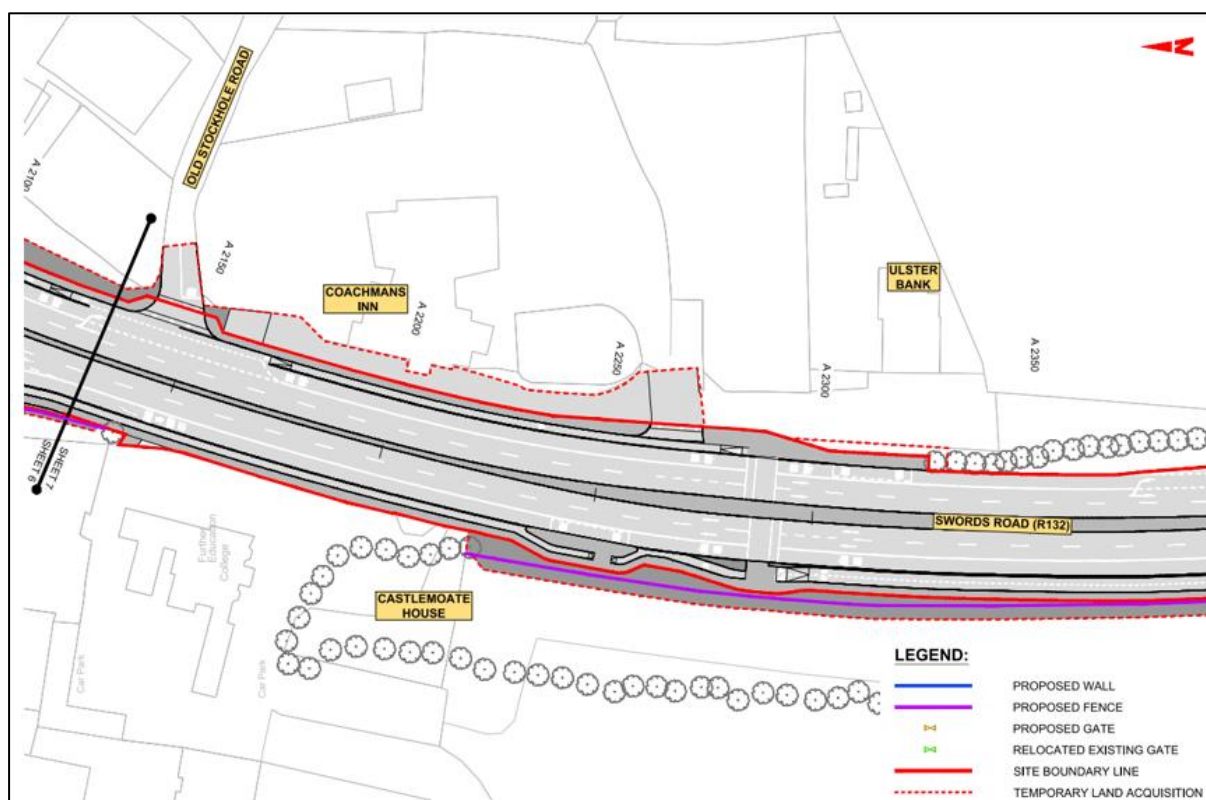


Figure 2.85 Extract from Fencing and Boundary Treatment Drawings at Castlemoate House (Sheet 07)

4. Impact on Front Boundary of Protected Structure RPS No 604 Thatched Cottage, Collinstown

Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR describes the assessment of the impact on the thatched cottage. Section 16.4.3 describes the Construction Phase impact as

follows: 'At a thatched cottage in Collinstown, Swords Road (FCC RPS 604) where a land-take is proposed to accommodate segregated cycle tracks, widened footpaths and additional road space. The cottage is a Medium sensitivity structure. The existing boundary comprises dash rendered dwarf walls with concrete or granite cappings, and simple iron railings. There are tall piers either side of the pedestrian entrance which is completed with an iron gate with spiral detail. To the south side of the pedestrian gate the boundary has been altered by raising the wall. The gate is of note, and there may be historic masonry concealed beneath the modern finishes. The removal of the boundary will have a negative impact on the setting of the cottage. The land-take will also reduce the amenity of the cottage which will have a negative impact. The magnitude of impact is High. The predicted Construction Phase impact will be Direct, Negative, Significant and Temporary'.

Given the potential significant impact, mitigation measures have been laid out for the location as described in Section 16.5.1.1, namely 'The mitigation will include recording the existing boundaries in position prior to the commencement of construction works. The affected masonry, railings, gates, gate posts and capping stones are to be labelled prior to their careful removal to safe storage and their reinstatement on new lines, reinstating the existing details, and the relationships between the entrances and the historic buildings. Recording will be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee the labelling, taking down and reinstatement of the affected gates, railings, piers, and masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, the impact magnitude will be reduced from High to Low. The predicted post mitigation impact will be Direct Negative, Slight and Temporary'.

Figure 17.2 in Volume 3 of the EIAR provides existing and proposed photomontages for the Proposed Scheme at this location, see Figure 2.86 and Figure 2.87. In summary, the EIAR demonstrates that there will be no significant impact on the Protected Structure as a result of the construction and operation of the Proposed Scheme whilst meeting the scheme objectives set out in Chapter 1 (Introduction).



Figure 2.86 Photomontage Proposed View 02 Existing (Figure 17.2 in Volume 3 of the EIAR)



Figure 2.87 Photomontage Proposed View 02 Proposed (Figure 17.2 in Volume 3 of the EIAR)

Clarity on Extent of Impact on Boundary Wall of Santry Demesne

Chapter 17 (Landscape (Townscape) & Visual) describes the impact on Santry Demesne as follows in Section 17.4.3.2.5, *'The iterative design process has eliminated most impacts on Santry Demesne/Park and the historic sections of boundary wall, main entrance and main tree groups are unaffected by the works. The construction of the Proposed Scheme is limited to the southern corner of Santry Demesne with associated removal of one mature Category C (low value) tree, three early mature trees and an impact on the existing (modern) wall/railing boundary which will be set back and reinstated. The sensitivity is high/very high and the magnitude of change is low/medium'*. Section 17.5.1, Table 17.9 summarises the Construction Phase impacts on Santry Demesne, with the impact with respect to its Amenity Designation being Negative, Moderate, Temporary / Short-Term, and with respect to its Tree Preservation Orders / Tree Protection Objectives being Negative, Slight / Moderate, Temporary / Short-Term. Section 17.5.2, Table 17.10 summarises the Operational Phase impacts on Santry Demesne, with the impact with respect to its amenity designation being Negative, Slight / Moderate, Short-Term at one year post-construction, improving to Positive, Slight, Long-Term at 15 years post-construction; and with respect to Tree Preservation Orders / Tree Protection Objectives being Negative, Slight / Moderate, Short-Term at one year post-construction improving to Neutral, Slight, Long-Term at 15 years post-construction.

With respect to the request for photomontages, Figure 17.2 in Volume 3 of the EIAR provides a series of photomontages for the Proposed Scheme. There are four photomontages within the set that show the boundary of Santry Demesne, namely:

- View 8 looking south along the Swords Road adjacent to Santry Demesne, north of Morton Stadium (Figure 2.88 below);
- View 11 looking south along the Swords Road adjacent to Santry Demesne, south of Morton Stadium (Figure 2.89 below);
- View 13 looking across the Swords Road / Coolock Lane junction towards the vehicular entrance to Santry Demesne (Figure 2.90 below); and
- View 17 at the southern corner of Santry Demesne, looking northwards towards the pedestrian entrance on the corner of Swords Road and Santry Avenue (Figure 2.91 below).



Figure 2.88 Photomontage Proposed View 8 (Figure 17.2 in Volume 3 of the EIAR)



Figure 2.89 Photomontage Proposed View 11 (Figure 17.2 in Volume 3 of the EIAR)



Figure 2.90 Photomontage Proposed View 13 (Figure 17.2 in Volume 3 of the EIAR)



Figure 2.91 Photomontage Proposed View 17 (Figure 17.2 in Volume 3 of the EIAR)

2.6.9.4 Transportation

Summary of issue raised

a. Modification of Junctions

The submission suggests that the proposed signalisation will result in much needed safety improvements for pedestrian and cyclists. It goes on to say that the size of some of the resulting junctions will need staging to minimise wait times for all users. It also considers that some of the junction treatments indicate continuous footpaths on less busy industrial or commercial accesses and any interface with traffic would need warning signage/colour material differentiation to warn pedestrian and cyclists that they are in an interface zone.

b. Pinnock Hill Junction

The final tie in point for the Fosterstown Link Road may result in some layout changes in the vicinity of this junction. NTA should note the requirement to liaise with FCC in this regard.

c. **Airport Roundabout**

The cycleway is incoherent for this part of the scheme and will result in some southbound cyclists remaining in the bus lane. This is not considered to provide an acceptable level of safety and comfort through this bus junction.

d. **Integration with Cycling**

Cycle parking was a key theme within the submission, it was request that cycle parking be discussed in more detail, requesting at least 10-20 cycle stands to be provided at all CBC bus stops as standard to facilitate multi-modal trips and increase the catchments of bus services, the scheme would then therefore be consistent with Objective DMSO114. They then further requested for this to be a condition of granting planning permission.

e. **Drainage**

FCC noted that the Flood Risk Assessment (FRA) summarised the entirety of the CBC to be at high risk of fluvial flooding, particularly around the R132 and low risk of costal, estuarine, pluvial and groundwater flooding.

The present risk of fluvial flooding will be maintained and not increased by the Proposed Scheme. FCC noted that the pluvial flooding risk along the route, albeit low, should be reduced by the introduction of any Sustainable Urban Drainage Systems (SuDS) or nature based solutions to reduce surface water runoff. It is welcomed that new drainage infrastructure provided will include new SuDS such as swale/grass surface water channels, filter drains, tree pits and attenuation pond, providing water storage and reducing the risk of pluvial flooding.

Response to issue raised

a. **Modification of Junctions**

With regard to the comments raised about wait time for all users, the proposed signal stage/phase plans are optimised for general traffic, buses, pedestrians and cyclists, incorporating an 'on-demand' pedestrian stage at all approaches of the junction with non-conflicting cycle movements. The optimised signal plan is a result of designs developed in accordance with Section 8.1 of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 of EIAR Volume 4 Part 1 of 4.

With regard to the comments raised about continuous footpaths on less busy industrial or commercial accesses, raised table treatments are provided on priority side roads where the stop/ yield line is located behind the raised table and footpath crossing to encourage a "courtesy crossing" for pedestrians. The design of the raised table treatments for priority junctions has been undertaken in accordance with Section 8.1 of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 of EIAR Volume 4 Part 1 of 4.

'The key design features and considerations relating to this junction type are listed below:

- *The minor arm stop/yield line is located behind the raised table and footpath crossing to encourage a "courtesy crossing" for pedestrians.*
- *Splayed kerbs provide a step change between the carriageway and cycle track and the cycle track and footpath.*
- *Cycle symbol markings are to be used on the cycle track across the junction.*
- *Consideration must also be given to cyclists crossing the mainline to enter or exit the side road. Where a significant demand is found for these movements then consideration should be given to provision of a signal crossing.*

- *Tactile paving may be required to alert visually impaired persons of the crossing point at busier side streets. However, the preferred arrangement is for the footpath to continue across the junction without a break and for pedestrian priority to be maintained (as shown in The National Cycle Manual on Page 136).'*

b. Pinnock Hill Junction

The NTA notes the comments raised about Fosterstown Link Road. As noted in Section 4.5.1 and Section 4.6.6.3.3 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR *'the proposed fully signalised junction has been designed to integrate with the aspirations of the Fosterstown Local Area Plan which recognises the requirement for the provision of the Fosterstown Link Road.'*

The NTA will continue to liaise closely with FCC on this and will take their requirements into consideration where aligned and consistent with the EIAR.

c. Airport Roundabout

As described in the Junction Design Report which has been included in EIAR Volume 4 Appendices Part 1 of 2 Appendix A6.3 *'Dublin Airport roundabout is proposed to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure. The design rationale was to improve cycle facilities and provide bus priority on the CBC mainline. Bus Connects Junction Type 1 on the southbound approach and Junction Type 2 on the northbound approach to provide greater bus priority reliability. Bi-directional cycle track have been proposed running along west side of the R132 to facilitate north - south cyclists to avoid the need for southbound cyclists to negotiate through the roundabout. Provision of new bi-directional cycle crossing facilities on the west arm, parallel to the existing pedestrian crossing.'*

Table 6.34 (See Figure 2.92) of Chapter 6 Traffic and Transport of the EIAR Volume 2, outlines the cycling qualitative assessment along Section 2 of the Proposed Scheme, which sets out the overall Do Minimum Level of Service (LoS) and the Do Something LoS and the description of impact. Please refer to Appendix A6.4.2 (Cycling Infrastructure Assessment) which outlines in further detail the methodology behind each LoS rating given to the Do Minimum and Do Something scenarios

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R132 Dublin Road: Airside Junction to Cloghran Roundabout	A820 - A2050	D	A	High	High	Positive Profound
R132 Dublin Road: Cloghran Roundabout to Dublin Airport Roundabout	A 2050 - A2750	D	A	High	Medium	Positive Very Significant
R132 Swords Road: Dublin Airport Roundabout to Old Airport Road Junction	A2750 - A4120	B	B	Negligible	Low	Not Significant
R132 Swords Road: Old Airport Road Junction to Carlton Dublin Airport Hotel Junction	A4120 - A4360	C	B	Low	Negligible	Positive Not Significant
R132 Swords Road: Carlton Dublin Airport Hotel Junction to Turnapin Lane Junction	A4360 - A5200	C	B	Low	Negligible	Positive Not Significant
R132 Swords Road: Turnapin Lane Junction to Northwood Avenue Junction	A5200 - A5700	C	A	Medium	Low	Positive Moderate
Section Summary	-	C	B	Low	Low	Positive Slight

Figure 2.92 Section 2 Cycling Impact During Operational Phase

*'The contents of Table 6.34, demonstrates the anticipated impact on cycle infrastructure in Section 2 during the Operational Phase will be **Positive, Slight and Long-Term.***

The LoS across the six sub-sections in the Do Minimum scenario has been assessed as ranging from B to D with five of the six being assessed as a C or lower indicating that generally the existing facilities are not of a particularly high standard.

The LoS in the Do Something scenario show improvements on every sub-section except between Dublin Airport Roundabout to Old Airport Road Junction where the LoS is assessed as B in both the Do Minimum and Do Something scenarios. Three of the sub sections are brought up to a LoS of A by the Proposed Scheme, and the remaining three are assessed as a B. In Section 2, the improvements arise from the provision of dedicated cycle facilities on links where there are either shared pedestrian / cycle facilities, or no cycle facilities currently exist.

The findings of the cycling assessment align with the objective of the CBC Infrastructure Works, applicable to the Traffic and Transport assessment of the Proposed Scheme, to 'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.'

d. Integration with Cycling

As noted in section 4.6.3.6 of Chapter 4 of Volume 2 of the EIAR:

'Cycle stands will be provided, where practicable, at island bus stops and key additional locations.'

Section 5.4 of Spatial considerations for geometric layout of Appendix A of Bus Stop Review Report which is included in Appendix H of the Preliminary Design Report states the following:

'The provision of high-quality bus stop infrastructure that is customer orientated is considered an essential part of the BusConnects offering, including:

Being fully accessible for all bus passengers;

- *Having a bus shelter for waiting passengers;*
- *Having both timetable and real time passenger information (RTPI) available to passengers;*
- *Having sufficient footpath space to allow the free movement of pedestrians passed the bus stop;*
- *Continuous cycle lane past the bus stop; and*
- *Provision of Cycle Parking at, or close to, the bus stop.*

All of which requires significant space along the already congested radial routes that the Core Bus Corridors run along. Therefore, an important aspect of locating bus stops is identifying locations that have sufficient space to accommodate all, or most, of these elements.

Providing cycle parking at bus stops has the potential to increase the catchment area of a bus corridor by providing a safe place for cyclists to secure their bike for the duration of their trip. ED's should look to provide cycle parking at all bus stops along the BusConnects Corridors where space permits. The minimum provision is 3 Sheffield Stands (accommodating 6 bicycles) in the vicinity of a bus stop. Where larger numbers of cyclists can be expected consideration should be given to providing a larger covered area of approximately 10 Sheffield Stands (accommodating 20 bicycles).'

As outlined in section 4.6.2.1 of Chapter 4, Proposed Scheme Description of Volume 2 of the EIAR, relevant design standards have been adhered to in relation to footpath widths.

'DMURS defines the absolute minimum footpath width for road sections as 1.8m based on the width required for two wheelchairs to pass each other. Building for Everyone: A Universal Design Approach (NDA 2020), defines acceptable minimum footpath widths at specific pinch points as being 1.2m wide over a two-metre length of path.'

Consequently, it is anticipated that cycle stands will be provided at bus stops where minimum unimpeded footpath widths will be achieved.

e. Drainage

As noted in Section 4.6.15.1 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR:

'The design basis statement was developed whilst taking the Greater Dublin Regional Code of Practice (GDRCoP), Greater Dublin Strategic Drainage Study (GSDSDS), Planning requirements of Local Authorities within the Dublin region, Transport Infrastructure Ireland (TII) requirements and international best practices such as CIRIA The SuDS Manual (C753) (CIRIA 2015).'

As noted in Section 2.1 Relevant Standards and Guidance of Appendix K Drainage Design Basis of the Preliminary Design Report in the Supplementary Information:

'It is noted that the purpose of this report is to complement, and not supersede, existing guidance documents relating to the design of drainage in Greater Dublin. A non-exhaustive list of these guidelines is outlined below:

- *Greater Dublin Regional Code of Practice (GDRCoP)*
- *Greater Dublin Strategic Drainage Study (GSDSDS)*
- *CIRIA The SuDS MANUAL (C753)*
- *DCC Drainage Planning Section for schemes running completely through greenfield sites'*

The Proposed Scheme will also take cognisance of "Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas, March 2022" document where practicable.

2.6.10 39 – Neasa Hourigan TD

Overview of submission

1. Illegal parking/driving
2. Statue at Our Lady's Park Drumcondra
3. Right turn to Eccles Street
4. Loading bay provision
5. Appropriate separation
6. Disability review
7. Greater Dorset Street Together Plan
8. New pedestrian/cycle bridge at Frank Flood Bridge
9. Richmond Road
10. Path at junction of Richmond Road and Frank Flood Bridge
11. Greening of section from Griffith Avenue to Richmond Road
12. Enforcement Illegal parking/driving

2.6.10.1 *Illegal parking/driving*

Summary of issue raised

The submission raised concerns for the illegal parking/ driving that is currently the cause of many delays on the bus network, the submission went on to say that automated enforcement will be a large part of improving the effectiveness of the proposed BusConnects Network.

Response to issue raised

The NTA acknowledges the comments raised in relation to automated enforcement. Whilst enforcement for the lawful use of bus lanes is currently a matter for An Garda Síochána the NTA is separately exploring proposals and methods for bus lane enforcement as set out under *Measure INT20 – Enforcement of Road Traffic Laws of the Greater Dublin Area Transport Strategy 2022-2042*. Notwithstanding this, specific measures have been considered in the development of the Proposed Scheme that will help deter inappropriate and unlawful use of bus lanes including advanced bus signal detection systems which will activate green signals at traffic lights for authorised vehicles only.

2.6.10.2 *Impact to Our Lady's Park, Drumcondra*

Summary of issue raised

The submission commented on the residents' concerns with the moving/storing of the statue in Our Lady's Park, Drumcondra due to the value to the local community.

Response to issue raised

The Statue of Our Lady will not be permanently relocated, if the statue requires temporary removal to facilitate the construction of the proposed bridge on the west side of Frank Flood Bridge, it will be returned to its current setting and as close as possible to its current location. The impact on Our Lady's Park and the Statue of Our Lady within the park has been assessed within the EIAR, particularly in Chapter 15 (Archaeological & Cultural Heritage), Chapter 16 (Architectural Heritage) and Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 as outlined below.

- Chapter 15 assesses the impact of the removal and reinstatement of the statue from a cultural heritage perspective (Reference Number CBC0002CH022, also included in Appendix A15.2 (Archaeological and Cultural Heritage Inventory) in Volume 4 of the EIAR) stating the following, '*A mid-20th century Marian statue is located within a small park known as 'Our Lady's Park'. There will be a temporary impact on the setting of the memorial during construction phase. The memorial will require protection from any adverse impacts for the duration of the works and if necessary, it can be temporarily removed to ensure its protection. This cultural heritage feature has a low sensitivity value and the magnitude of impact is low therefore the potential impact is Negative, Slight, Temporary*'. It is not intended to relocate the statue, Section 15.5.1.8.2 states, '*The Marian Statue at Our Lady's Park in Drumcondra (CBC0002CH022; Figure 15.1 Sheet 15 of 18 in Volume 3 of this EIAR) will be protected from any adverse impacts during construction works and if necessary for its protection, it will be removed under archaeological supervision. This will be undertaken in accordance with a method statement agreed with the statutory authorities. It will be returned to its current setting and as close as possible to its current location following completion of the works.*'
- Chapter 16 assesses the impact of the removal and reinstatement of the statue from an architectural heritage perspective, and specifically as it is recorded on the National Inventory of Architectural Heritage (NIAH Reference Number 50130158, also included in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 of the EIAR). The chapter states that '*The Statue of Our Lady (NIAH 50130158) will be temporarily removed to facilitate the construction of the proposed cycle and pedestrian bridge on the west side of Frank Flood Bridge. The statue is of Medium sensitivity. There is potential for loss or damage to sensitive fabric during its removal, transport, storage and reinstatement, the magnitude of which is High. The predicted Construction Phase impact will be Direct, Negative, Significant and Temporary*'. However with the appropriate mitigation (recording, removal, safe storage and reinstatement) the impact reduces to Direct, Negative, Slight and Temporary.
- Chapter 17 assesses the impact on the amenity of Our Lady's Park during construction and operation of the Proposed Scheme. During the Construction Phase the Chapter describes the

impact on Our Lady's Park as Negative, Significant and Temporary / Short-Term. For the Operational Phase the Chapter states that *'The new bridge will provide much improved cycle and pedestrian access across the River Tolka, improving the functionality of the open space, and arguably also provide increased amenity space for the park. There will be improvements to the open space with improved paving, footpaths and additional seating, and the setting of the relocated Marian statue will be enhanced. Effects will become positive over time as replacement planting matures and the bridge becomes an accepted part of the townscape'*. The impact following construction is described as Neutral, Moderate / Significant and Short-Term, improving to Positive, Moderate and Long-Term at 15 years post-construction.

2.6.10.3 Right turn to Eccles Street

Summary of issue raised

The submission also raised concerns with the removal of the right turn from Dorset Street Lower inbound to Eccles Street, it is unclear how people will access the Mater Hospital complex.

Response to issue raised

The no-right-turn from Dorset Street onto Eccles Street is adopted as per the BusConnects Preliminary Design Guidance Booklet to enhance cyclist, bus priority infrastructure, and minimise travel delays at this junction by all modes. People travelling from Dorset Street bound for Eccles Street/ Mater Hospital complex need to turn left at the Gardiner Street Upper and use Temple Street (Hardwicke Place) to access Eccles Street.

2.6.10.4 Loading bay provision

Summary of issue raised

Adequate loading bay provision was requested along the Proposed Scheme, especially from Griffith Avenue to the city centre where there are a high number of businesses. Concern was noted if these are not provided delivery drivers will block the bus and cycle lanes.

Response to issue raised

The NTA notes the suggestions made regarding loading bay for commercial properties at this location. Such a proposal is not required to achieve the Proposed Scheme objectives. It is also noted that the Proposed Scheme would not preclude the future introduction of such a measure at a future date should the local authority wish to give consideration to this.

2.6.10.5 Appropriate separation

Summary of issue raised

The submission requests an appropriate separation mechanism between cyclists and pedestrians. Concerns have been raised about the existing cycle lane/pedestrian shared space on both sides between Hollybank Road and St. Alphonsus' Road Lower.

Response to issue raised

As described in Section 5.4 of Appendix A4.1 Preliminary Design Guidance Booklet of EIAR Chapter 4 Proposed Scheme Description, one of the core objectives of the CBC project is to provide segregated cycling facilities along the routes. Physical segregation ensures that cyclists are protected from motorised traffic as well as providing segregation from pedestrians. This latter segregation is achieved by the inclusion of a 60mm high minimum vertical kerb is required on the footpath side of the cycle track to ensure that the kerb is properly detectable by visually impaired pedestrians using the footpath. This removes the risk of errant cyclists straying on to the footpath.

Figure 2.8.3.1 is an extract from Section 4.6.3.1 Cycle Tracks of Chapter 4 of Volume 2 of the EIAR showing the "preferred cross-section template" for the Proposed Scheme which includes protected cycle tracks, providing vertical segregation from the carriageway to the cycle track and vertical segregation from the cycle track to the footpath.

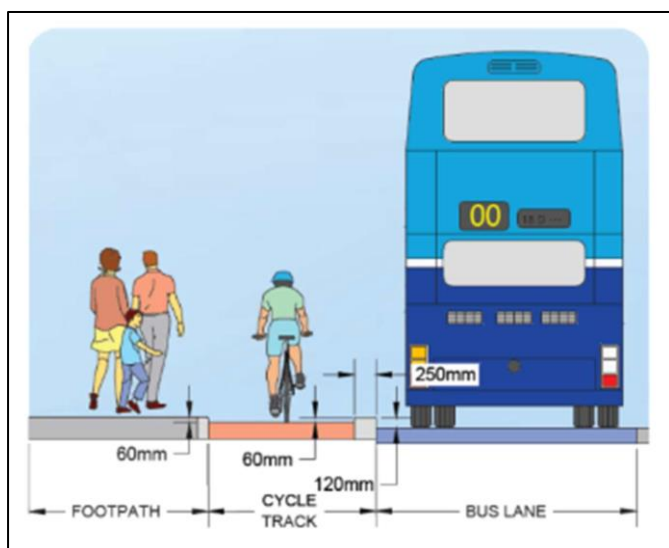


Figure 2.93 Extract from Section 4.6.3.1 Cycle Tracks of Chapter 4 of Volume 2 of the EIAR (Image 4.17)

The General Arrangement Drawings can be viewed in conjunction with the Typical Cross Sections Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR to inform road cross-sections indicating vertical separation of carriageway elements, see Figure 2.94.

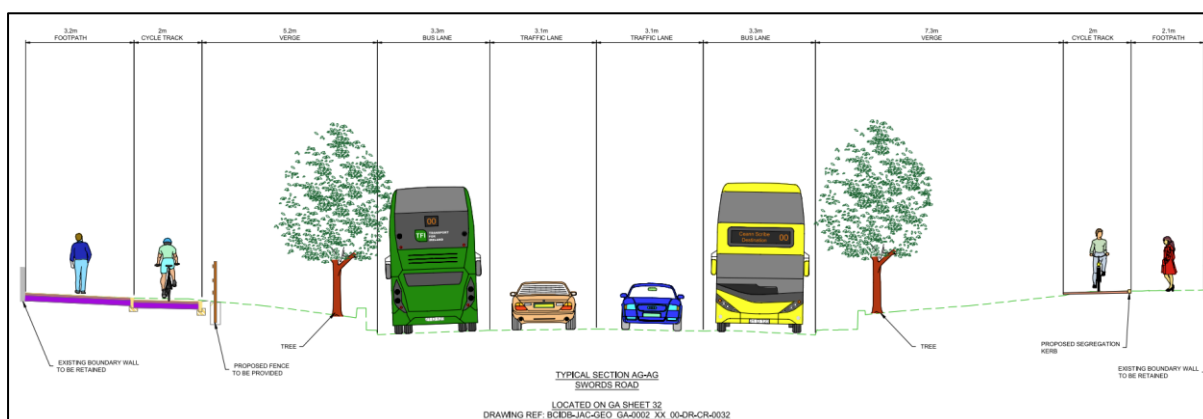


Figure 2.94 Extract from Typical Cross Section Drawing (Sheet 17) showing kerb segregation between pedestrians and cyclists between Hollybank Road and St. Alphonsus' Road Lower

2.6.10.6 Disability review

Summary of issue raised

Within the submission a full formal disability review of the proposals was requested and any recommendations from the review are actioned as part of the Proposed Scheme, the submission requested specific elements were considered under the review including shared space separation, relocation of disabled parking, and cycle lanes going behind bus stops.

Response to issue raised

The NTA welcomes the comments in relation to the consideration of people with disabilities throughout the scheme. Section 11 of Appendix A4.1 (PDGB) in Volume 4 Part 1 of 4 of the EIAR sets out the key measures to address the concerns raised in relation to vulnerable users at bus stop locations which is further elaborated in Section 4.14 of the Preliminary Design Report in the Supplementary Information. These details have evolved as a result of direct consultation between the NTA and representative mobility groups, accessibility audits and road safety audits which have been carried out during the development of the Proposed Scheme.

The Disability Act 2005 (as amended) places a statutory obligation on public service providers to consider the needs of disabled people. An Accessibility Audit of the existing environment along the Proposed Scheme was undertaken, as per Appendix I of the Preliminary Design Report.

The Accessibility Audit provided a description of the key accessibility features and potential barriers to mobility impaired people based on good practice. The Accessibility Audit was undertaken in the early design stages with the view to implementing any key measures identified as part of the design development process. Measures to address the noted issues are noted in the Accessibility Audit - Designers Response, also in Appendix I.

In achieving the enhanced pedestrian facilities there has been a concerted effort made to provide clear segregation of modes at key interaction points along the Proposed Scheme which was highlighted as a potential mobility constraint in the Accessibility Audit. In addressing one of the key aspects to segregation, the use of the 60mm set down kerb between the footway and the cycle track is of particular importance for guide dogs, whereby the use of white line segregation is not as effective for establishing a clear understanding of the change of pavement use and potential for cyclist/pedestrian interactions.

One of the other key areas that was focused on was the interaction between pedestrians, cyclist and buses at bus stops. As described in Section 11.1 Island Bus Stop of the PDGB, these types are the preferred bus stop option to be used as standard on the Proposed Scheme where space constraints allow. Island bus stops reduce the potential for conflict between pedestrians, cyclists and stopping buses by deflecting cyclists behind the bus stop, thus creating an island area for boarding and alighting passengers. On approach to the bus stop island the cycle track is intentionally narrowed, with yellow bar markings also used to promote a low-speed single file cycling arrangement on approach to the bus stop. Similarly, a horizontal cycle track deflection is proposed on the approach to the island to reduce cyclists' speed on approach to the controlled pedestrian crossing point on the island. To address the potential pedestrian/cyclist conflict, a pedestrian priority crossing point is provided for pedestrians accessing the bus stop island area.

Where space constraints do not allow for an island bus stop, Section 11.2 Shared Bus Stop Landing Zone of the PDGB provides an option consisting of a shared bus stop landing zone that may be considered. This proposed arrangement will remove the conflict between cyclists and stopping buses by ramping cyclists up to the footpath level where they continue through the stop, but cyclists will be required to give way to pedestrians crossing the cycle track. Section 11.2 goes on to explain that to address the pedestrian/cyclist conflict, which would apply to wheelchair users also, the cycle track should be narrowed on approach to the bus stop and yellow bar markings should be provided to alert cyclists to the potential conflict ahead. In addition to this, at the bus stop, the cycle track should be deflected to provide a 1.0m wide boarding/alighting zone for bus passengers, including wheelchair users. Also, appropriate tactile kerbing should be provided to ensure that visually impaired users are aware of crossing areas.

Section 4.14.4 Preliminary Design Report in the Supplementary Information outlines the location where island bus stops are proposed. Section 4.14.5 of the same document outlines the locations where shared landing area bus stops are proposed. In most cases the shared landing zone is proposed at minor stops with low usage, or where alighting occurs more than boarding, which shortens the time duration of activity at the stop and where there will be few passengers waiting and less need for a generous waiting area.

2.6.10.7 Greater Dorset Street Together Plan

Summary of issue raised

The submission went on to comment that little of the Greater Dorset Street Together Plan has been implemented along the Proposed Scheme and it is requested that, as a minimum, the median is removed and the space redistributed for more productive use. It was further requested that the local community are regularly engaged with the process in order to make their area a more liveable, walkable, and safe neighbourhood.

It was then requested that the local community are regularly engaged with the process in order to make their area a more liveable, walkable, and safe neighbourhood.

Response to issue raised

Removal of the central reserve in order to accommodate the cycle tracks and widen the footpaths on either side was considered during the design, but was determined to be contrary to the needs of the Proposed Scheme, as discussed in Section 3.4.1.2 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR:

With the removal of one traffic lane in each direction between Clonliffe Road and Eccles Street, adequate space was available to meet the BusConnects desirable minimum requirements for 3m wide bus lanes, minimum 2m wide footpaths and fully segregated, 2m wide cycle tracks, without the necessity to remove the tree-lined central reserve between Gardiner Street Upper/Synott Place and Hardwicke Place/Eccles Street, as shown in Figure 2.95.

In line with the government's Climate Action Plan, reducing the construction carbon footprint has been a key consideration in the layout development of the Proposed Scheme. The removal of the existing tree-lined central reserve along Dorset Street Lower (involving trees and paving that would otherwise be unaffected by the works) was considered unnecessarily disruptive and undesirable.

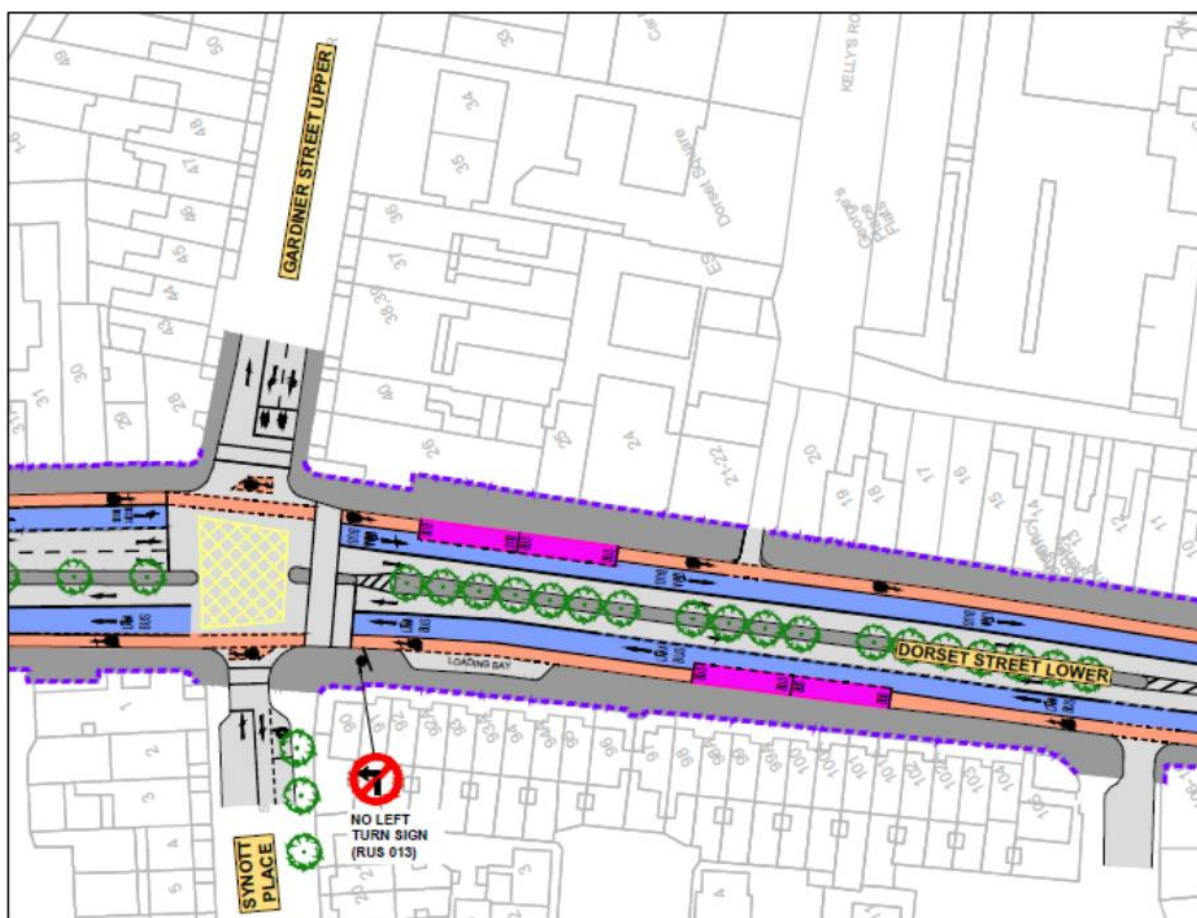


Figure 2.95 Gardiner Street Upper/Synott Place to Hardwicke Place/Eccles Street

Replacement of trees from the central reserve with new trees in the footpaths is not straightforward. It was evident from the available utilities information that the footpaths on both sides of the carriageway are very significantly congested with services, particularly in comparison with the central reserves.

It was considered that removal of the central reserve and trees and the disruption of the existing footpaths that are generally in good condition would have a negative impact on the urban realm and carbon footprint of the Proposed Scheme. The design strategy adopted was to retain the existing kerb lines and drainage regimes, where possible. This has been accomplished everywhere, apart from bus stop locations, where the footpaths will be widened out to accommodate Shared Landing Area bus stops. In this way, the depth of excavation required, and the waste generated, is minimised. Most of the construction required will involve raising carriageway levels and installation of segregating kerbs or flexible bollards.

Under the Draft Preferred Route Option, the central reserve was retained everywhere apart from the section between Whitworth Road/Whitworth Place and Belvedere Road/Innisfallen Parade.

2.6.10.8 New pedestrian/cycle bridge at Frank Flood Bridge

Summary of issue raised

The submission discussed concern for the modern design of the new pedestrian/cycle bridge at Frank Flood Bridge is not in keeping with the architectural style of the area or the existing bridge, requesting the design to be altered to be more appropriate.

Response to issue raised

The design intent for the Frank Flood Bridge is to provide a well-detailed structure that complements the existing historical bridge and local surroundings. A number of landscaping and urban realm improvements are proposed for the area as described in Section 4.5.4.8.2 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR.

'The proposed bridge would require the removal of two Poplar trees within Our Lady's Park which are a different variety to one another and six Silver Birch trees adjacent to Millmount Terrace. Six new smaller-sized trees have been proposed surrounding the square paved area in Our Lady's Park, subject to underground utilities. Three new small canopy trees are proposed at the west end of the bridge adjacent to Millmount Terrace.

The existing square area of paving surrounding the statue on the south side of the river will be replaced and enhanced with a combination of stone and concrete paving together with new seating as a local area enhancement. The path close to the river will be re-aligned and re-surfaced to meet with the new paved square. Additional planting is to be provided on the eastern side of the path to prevent access to the narrow embankments leading to the river side beneath the structure.

The bridge structure and its parapets have been designed to be slender and visually 'light' to enable views of the existing road bridge to be retained. A two-tone colour scheme has been adopted which will create distinction between the central girder and the edge member preventing it appearing monolithic. The parapet top rail, posts and edge member are proposed to be painted light grey. The central girder is to be coloured oxide red which reflects the dark red brick colour in some of the buildings in proximity to the bridge. The proposed mesh panel of the parapet is to be stainless steel. The soffit of the bridge shall be painted black to create a shadow effect further improving the slender appearance of the edge member.

The bridge deck is proposed to be an anti-slip surface consisting of aggregate bonded together with an epoxy resin. This surface continues to the junction with Millmount Terrace to provide a consistent application of the same material. The cycle way section will be coloured 'Tuscan Terracotta' resin or similar in order that it appears as a tone that complements the standard cycle ways. The footway section will be coloured in a grey resin in order that it complements the new paved footways in the area',



Figure 2.96 West Elevation of Proposed Bridge with an Oxide Red Colour Scheme

Further details of the design considerations for the bridge can be found in Appendix J – Structures Preliminary Design Report of the Preliminary Design Report provided in the Supplementary Information.

2.6.10.9 Richmond Road

Summary of issue raised

The submission requested that BusConnects does not prevent the implementation of a filtered permeability scheme on Richmond Road and changes required to any of the streets joining the Drumcondra Road Upper, north of Richmond Road due to the increasing traffic levels on the narrow road.

Response to issue raised

While the junction of Swords Road / Richmond Road will be upgraded to enhance safer pedestrian and cycling use, there are no plans under the Proposed Scheme to make changes to the environs of Richmond Road.

It is noted in Section 6.4.6.2.2.1 of Chapter 6 (Traffic & Transport) of Volume 2 of the EIAR that the modelled forecasts for the 2028 opening year indicate that one of the impacts of the proposed Swords to City Centre Core Bus Corridor Scheme is that there is forecasted to be a reduction of 31% in the number of people travelling via car along the scheme corridor towards the city centre at AM peak hour. Similarly, in the PM peak hour, there is a reduction of 32% in the number of people travelling via car.

The Proposed Scheme provides a balance between ensuring that the use of these side streets by through traffic is discouraged at all times, while also ensuring that access by car to local streets, schools and businesses is maintained, via the surrounding road network.

Section 6.4.6.2.8 of EIAR Chapter 6 Traffic and Transport provides details of the General Traffic Assessment. Section 6.4.6.2.9.1 provides an overview and states: *'The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is, however, recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.'*

Section 6.4.6.2.8.1 goes on to state that *'The purpose of this Section is to assess the overall impact that any redistributed general traffic will have on both the direct and indirect study areas. It should be*

noted that the impacts presented in this Chapter are based on the final Preliminary Design for the Proposed Scheme which includes embedded mitigation to limit environmental and traffic and transport impacts to a minimal level as part of the iterative design development work described previously above.'

Section 6.4.6.2.8.2 discusses the significance of the General Traffic Impact and states: *'To determine the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and indirect study areas, the LAM Opening Year 2028 model results have been used to identify the difference in general traffic flows between the Do Minimum and Do Something scenarios and the associated level of traffic flow difference as a result of the Proposed Scheme. The assessment has been considered with reference to both the reductions and increases in general traffic flows along road links.'*

Direct Study Area

AM Peak Hour

Section 6.4.6.2.8.3 of Chapter 6 summarises the General Traffic Flow Difference in the AM Peak Hour and notes the following:

'The contents of Table 6.67 demonstrate that there is a slight to profound reduction of between -129 and -1644 in general traffic flows along the direct study area during the AM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. Therefore, the anticipated impact on general traffic during the Operational Phase will be Positive, Significant and Long-Term on the direct study area.'

There are no increases in traffic flows along the direct study area during the AM Peak Hour of the 2028 Opening Year.'

PM Peak Hour

Section 6.4.6.2.8.4 of Chapter 6 summarises the General Traffic Flow Difference in the AM Peak Hour and notes the following:

'The contents of Table 6.71 demonstrate that there is a slight to significant reduction of between -161 and -986 general traffic flows along the direct study area during the PM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. Therefore, the anticipated impact on general traffic during the Operational Phase during the AM peak hour will be Positive, Moderate and Long-Term on the direct study area.'

Direct Increases in General Traffic: There are no increases to general traffic flows along the direct study area during the PM Peak Hour of the 2028 Opening Year.'

Indirect Study Area

AM Peak Hour

'The results of the junction analysis illustrated in Appendix A6.4.8 demonstrates that the majority of local / regional road junctions during the AM Peak Hour of the 2028 Opening Year are operating with a maximum V / C ratio of below 85% during both scenarios and that the impact of the Proposed Scheme is negligible at the majority of these local / regional road junctions within the indirect study area.'

In summary, the effect of redistributed traffic associated with the Proposed Scheme is expected to result in a Low Positive and Long-Term effect at five of the 121 assessed junctions, a Not Significant and Long-Term effect at 100 of the 121 assessed junctions, an Imperceptible and Long-Term effect at 11 of the 121 assessed junctions and to result in a Negative, Moderate and Long-Term effect at five of the 121 assessed junctions.

The redistribution of traffic during the 2028 AM Peak Hour raises no impacts assessed as significant or greater impact.'

PM Peak Hour

'The results of the junction analysis illustrated in Appendix A6.4.8 demonstrates that the majority of local / regional road junctions during the PM Peak Hour of the 2028 Opening Year are operating with a maximum V / C ratio of below 85% during both scenarios and that the impact of the Proposed Scheme is negligible at the majority of these local / regional road junctions within the indirect study area.

In summary, the effect of redistributed traffic associated with the Proposed Scheme is expected to result in a Low Positive and Long term effect at two of the 145 assessed junctions, a Not Significant and Long-Term effect at 114 of the 145 assessed junctions, an Imperceptible and Long-Term effect at 27 of the 145 assessed junctions and to result in a Negative, Slight and Long-Term effect at two of the 145 assessed junctions.

The redistribution of traffic during the 2028 PM Peak Hour raises no impacts assessed as significant or greater impact.'

Summary

Section 6.4.6.2.8.7 provides a summary of the General Traffic Impact Assessment and states:

"Given the improvements to bus priority, walking and cycling as a result of the Proposed Scheme, there will likely be an overall reduction in operational capacity for general traffic along the direct study area. This may in turn result in some redistribution of general traffic away from the main corridor onto the surrounding road network.

Using the TII guidelines as an indicator for best practice, the LAM Opening Year 2028 model results were used to identify the difference in traffic flows between the Do Minimum and Do Something scenarios. The following thresholds have been used to identify where further assessment is required:

- **Local / Regional Roads:** *Traffic redistribution results in an increase above 100 combined flows (i.e. in a two-way direction) along residential, local and regional roads in the vicinity of the Proposed Scheme in the AM and PM peak hours; and*
- **National Roads:** *Traffic exceeds 5% of the combined turning flows at junctions with/ on/or with national roads in the AM and PM peak hours as a result of traffic redistribution comparing the Do Minimum to the Do Something scenario with the Proposed Scheme in place.*

The overall results of this assessment can be summarised as follows:

- *The majority of assessed junctions have V / C ratios of below 85%, i.e. they are operating well within capacity for all assessed years in both the Do Minimum and Do Something scenarios. This indicates that these junctions will be able to accommodate any additional general traffic volumes redistributed as a result of the Proposed Scheme. The effect of the Proposed Scheme on the majority of junctions is deemed imperceptible to not significant and long-term; and*
- *No junctions are predicted to experience a significance of effect that is significant or higher.*

It should be noted that while there are low impacts to the operational capacity in the indirect study area, this level of congestion is acceptable according to national guidance. Section 3.4.2 of DMURS (2019) recognises that a certain level of traffic congestion is an inevitable feature within urban networks and that junctions may have to operate at saturation levels for short periods of time during the peak hours of the day. Chapter 1 of the Smarter Travel Policy Document (DTTAS 2019b) also acknowledges that it is not feasible or sustainable to accommodate continued demand for car use.

Therefore, it can be concluded that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area. Therefore, the anticipated impact on general traffic during the Operational Phase will be Negative, Slight and Long-Term. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no further mitigation measures have been considered to alleviate the impact outside of the direct study area.

It should therefore be considered that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area in the context of the increased movement of people overall and on sustainable modes in particular.'

Based on the result of the above assessment, no interventions are proposed at Richmond Road.

2.6.10.10 Path at junction of Richmond Road and Frank Flood Bridge

Summary of issue raised

The path at the corner of Richmond Road and Frank Flood Bridge disappears. It is not clear from the drawings how this section will be treated but as drawn it looks unsuitable for pedestrians and people with a disability or any kind of reduced mobility.

Response to issue raised

At the location highlighted in the submission, there is an existing vehicular access to the back of a small number of residential and commercial properties on Richmond Road. The proposed design facilitates this access.



Figure 2.97 Existing Street View of the corner of Richmond Road and Frank Flood Bridge (Image Source: Google)

2.6.10.11 Greening of section from Griffith Avenue to Richmond Road

Summary of issue raised

The submission requested the medians on Griffith Avenue to Richmond Road are planted with suitable trees and shrubs.

Response to issue raised

The NTA notes the suggestions made regarding planting of the medians. Such a proposal is not required to achieve the Proposed Scheme objectives. It is also noted that the Proposed Scheme would not preclude the future introduction of such a measure at a future date should the local authority wish to give consideration to this.

2.6.11 48 – Stephen Hall

Overview of submission

1. Support for the Proposed Scheme
2. Protection of existing trees and green spaces on Drumcondra Road
3. Planting new trees and greening
4. Discreet design of new pedestrian/cycle bridge in Drumcondra
5. Expediting process and delivery
6. Enhancing public realm and optimal material selection
7. Dorset Street / Parnell Square
8. Impact to trees and greenery
9. Pedestrian and cycle bridge, Drumcondra
10. Request for public realm improvements

2.6.11.1 Support for the Proposed Scheme

Summary of issue raised

This submission expressed support for the scheme noting that it can create a well-connected transportation system that not only meets the needs of commuters but also enhances the quality of life for residents and promotes environmental wellbeing.

Response to issue raised

The support for the scheme is noted and welcomed by the NTA.

2.6.11.2 Protection of existing trees and green spaces on Drumcondra Road

Summary of issue raised

The submission noted that it is essential to prioritise the preservation of the existing trees and green spaces along Drumcondra Road as they provide numerous benefits such as improving air quality, reducing noise pollution and creating a pleasant environment. The existing embankment and mature trees between Alphonsus Road and Hollybank Road and opposite side at Archbishops House and Our Lady's Park proposed to be temporarily CPO'd. The submission requests that trees and adjoining green space/park benches be kept as much as possible.

Response to issue raised

Regarding the protection of trees and green areas along Drumcondra Road, temporary and permanent land acquisition is required along here in order to widen the existing shared pedestrian and cycle path along the west side of Drumcondra Road Lower. These sections of offline cycle track will be upgraded as part of the Proposed Scheme to improve the cycle track quality of service. The proposed cycle track is indicated in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 03. General Arrangement drawings Sheets 31 and 32, see Figure 2.98 and Figure 2.99, and in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, 05 Landscape General Arrangement drawings, Sheet 31 and 32.

In summary, the existing cycle track will be widened and the existing trees will be retained. As can be seen in these drawings, the green spaces will be maintained as per existing, apart from the area that will be utilised for widening of the cycle track.

At Our Lady's Park, as noted in Section 17.4.1.3.4 of Chapter 17 Landscape (Townscape) and Visual there is an 'area of land acquisition at Millmount Terrace and from Our Lady's Park at Tolka River for provision of new cycle and pedestrian bridge along west side of Frank Flood Bridge. Acquisition will

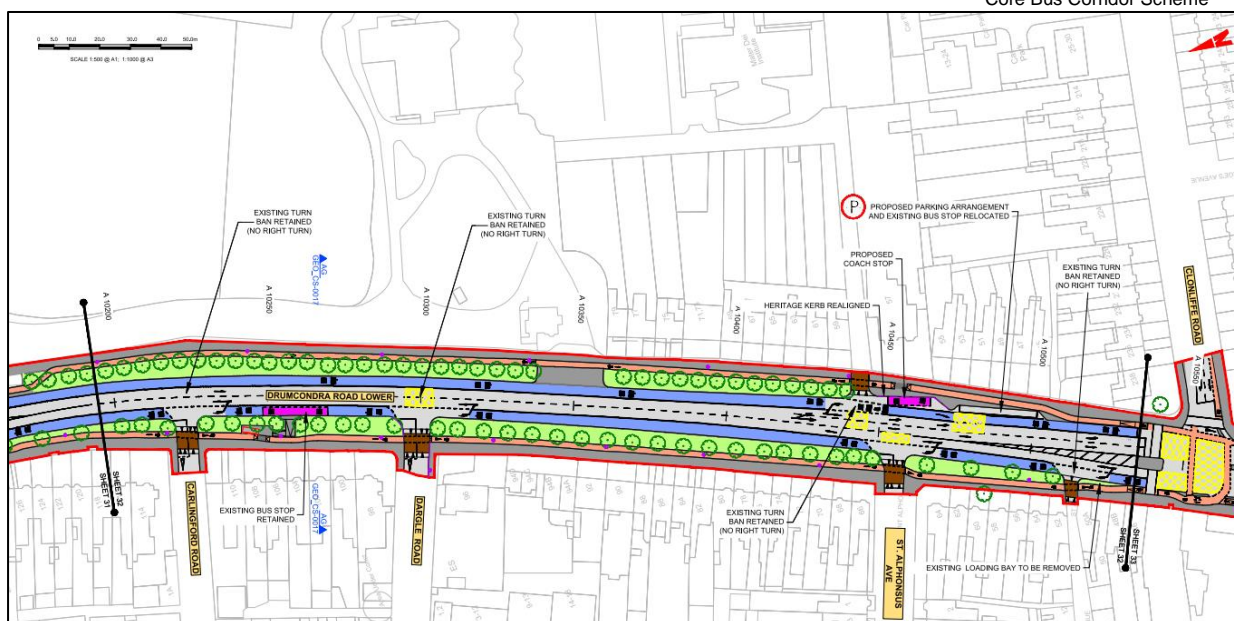


Figure 2.99 Extract from General Arrangement Drawing (Sheet 32)

2.6.11.3 Planting new trees and greening

Summary of issue raised

This submission requested planting of new trees and greening on Dorset Street and at the corner of Richmond Road and Drumcondra Road to further enhance the environmental aspects of the plan.

Additionally the consideration of tree planting at bus stops has been proposed.

Response to issue raised

Section 4.6.12.3.1 of EIAR Chapter 4 Proposed Scheme Description sets out the planting strategy for the Proposed Scheme has been developed to meet the needs of the Dublin City Tree Strategy and the Dublin Biodiversity Action Plan which promotes a positive influence on the local environment to improve amongst others air quality, stormwater runoff, health and wellbeing, and habitat provision. As a consequence, the routes have made the following:

- Where possible the initial conservation of existing biodiversity has been considered. The Arboricultural Survey identified the quality of existing trees. The information was overlaid on the proposed routes to inform the design process;
- Opportunities have been identified to enhance biodiversity through green infrastructure;
- Promote the role of street tree planting consistent with the recommendations of the Dublin City Tree Strategy; and
- Develop the role of SuDS opportunities within the Proposed Scheme in coordination with the drainage engineers. (Refer the Drainage, Hydrology and Flood Risk section of this report)

2.6.11.4 Discreet design of new pedestrian/cycle bridge in Drumcondra

Summary of issue raised

This submission emphasises the importance of the design of the new bridge in Drumcondra. It considers that it is crucial to ensure that the bridge seamlessly integrates with the existing streetscape. The use of materials that match the surrounding environment will help maintain the area's aesthetic appeal. For instance, avoiding a metal bridge which is susceptible to graffiti.

Response to issue raised

The design intent for the Frank Flood Bridge is to provide a well-detailed structure that complements the existing historical bridge and local surroundings. A number of landscaping and urban realm

improvements are proposed for the area as described in Section 4.5.4.8.2 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR.

'The proposed bridge would require the removal of two Poplar trees within Our Lady's Park which are a different variety to one another and six Silver Birch trees adjacent to Millmount Terrace. Six new smaller-sized trees have been proposed surrounding the square paved area in Our Lady's Park, subject to underground utilities. Three new small canopy trees are proposed at the west end of the bridge adjacent to Millmount Terrace.

The existing square area of paving surrounding the statue on the south side of the river will be replaced and enhanced with a combination of stone and concrete paving together with new seating as a local area enhancement. The path close to the river will be re-aligned and re-surfaced to meet with the new paved square. Additional planting is to be provided on the eastern side of the path to prevent access to the narrow embankments leading to the river side beneath the structure.

The bridge structure and its parapets have been designed to be slender and visually 'light' to enable views of the existing road bridge to be retained. A two-tone colour scheme has been adopted which will create distinction between the central girder and the edge member preventing it appearing monolithic. The parapet top rail, posts and edge member are proposed to be painted light grey. The central girder is to be coloured oxide red which reflects the dark red brick colour in some of the buildings in proximity to the bridge. The proposed mesh panel of the parapet is to be stainless steel. The soffit of the bridge shall be painted black to create a shadow effect further improving the slender appearance of the edge member.

The bridge deck is proposed to be an anti-slip surface consisting of aggregate bonded together with an epoxy resin. This surface continues to the junction with Millmount Terrace to provide a consistent application of the same material. The cycle way section will be coloured 'Tuscan Terracotta' resin or similar in order that it appears as a tone that complements the standard cycle ways. The footway section will be coloured in a grey resin in order that it complements the new paved footways in the area',



Figure 2.100 West Elevation of Proposed Bridge with an Oxide Red Colour Scheme

Further details of the design considerations for the bridge can be found in Appendix J – Structures Preliminary Design Report of the Preliminary Design Report provided in the Supplementary Information.

2.6.11.5 *Expediting process and delivery*

Summary of issue raised

This submission urges the relevant authorities to streamline the process and expedite the delivery of the Swords to City Centre Bus Connects plan. By minimising bureaucratic delays and employing effective project management strategies, the benefits of the plan can be realised in a timely manner.

Response to issue raised

The Proposed Scheme is one of 12 schemes to be delivered under the BusConnects Dublin – Core Bus Corridors Infrastructure Works within the NTA's overall BusConnects programme. The planning application for the Proposed scheme includes the full extents of the Swords to City Centre Core Bus Corridor Scheme and will be delivered in its entirety.

2.6.11.6 *Enhancing public realm and optimal material selection*

Summary of issue raised

This submission encourages collaboration with Dublin City Council to enhance public realm throughout the area.

Response to issue raised

As described in Sections 4.5.4 and 4.5.5 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR a number of landscape and urban realm proposals are planned for the Drumcondra area, as detailed below:

'Along Drumcondra Road Upper, the design proposes to make footway surfaces consistent in appearance using poured concrete and concrete kerbs with repairs to match existing as needed. Reinstatement of grass verges and enlarging existing tree surrounds is proposed to support future tree health. No-dig construction methods are to be utilised where works could otherwise impact on existing tree roots.

The DCU area is proposed as a local area of enhancement with the proposed design including high-quality grey concrete slabs interspaced with darker grey linear bands of paving that continue along the DCU boundary to the west for visual continuity. Granite kerbs are proposed along this area utilising existing granite kerbs where possible. A general declutter and unified street furniture use is proposed for this area. Parking bays are proposed to be finished in concrete setts to visually integrate with pedestrian areas, or as inset parking bays at footway level to provide wider footways when not in use. The private forecourts have the potential to be repaved in concrete block paving in consultation with landowners. Edge kerbs are proposed to mark the boundary of private forecourts. The commemorative flower post features are to be retained or relocated in consultation with Local Authorities.

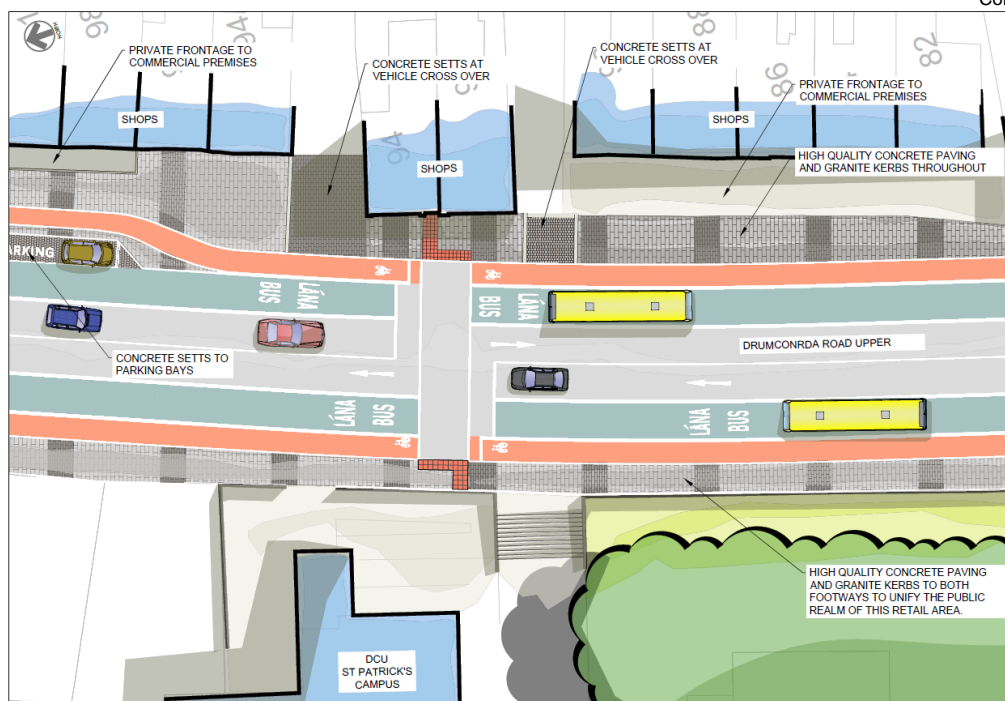


Figure 2.101 DCU Area Indicative Design

The footway in front of Cat and Cage pub to be finished in concrete paving slabs and granite kerbs. The banding feature starts at the edge of the pub. The pedestrian crossing at the side street is finished in concrete setts to enhance pedestrian priority. The residential area footways are to feature concrete paving slabs and granite kerbs of the same type as the retail area but without the banding feature.

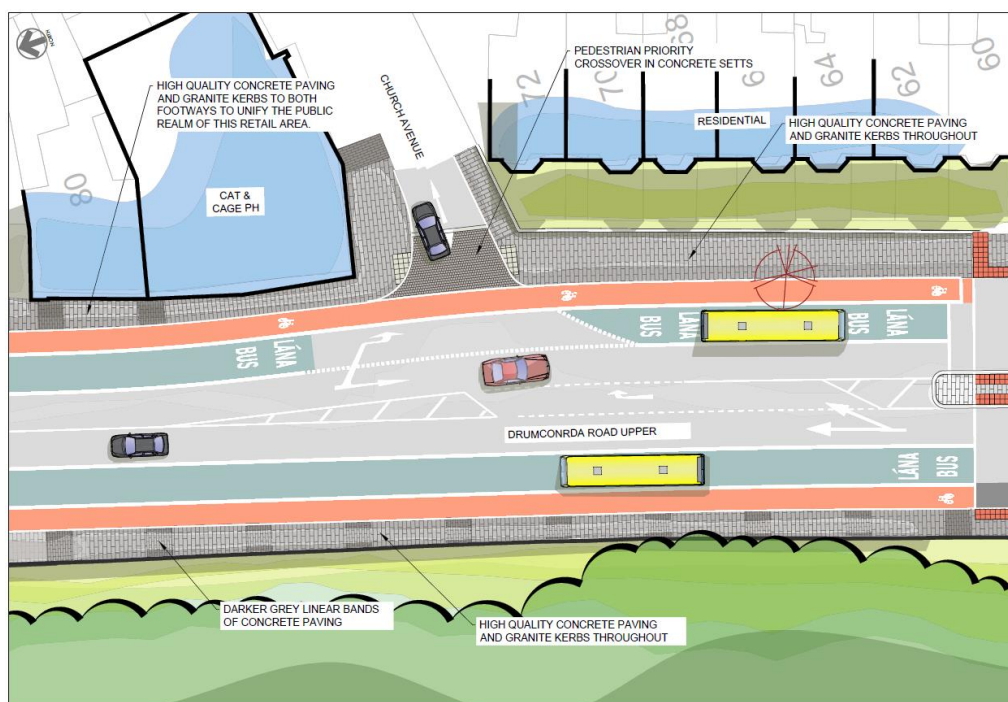


Figure 2.102 Footways in the Vicinity of the Cat and Cage Pub Indicative Design

The Drumcondra Road Upper shopping parade is also identified as a local enhancement opportunity to improve the image of the urban realm. The design proposed is to reflect the same design style and materials as the DCU area in order to make the two retail areas visually unified. The design includes footway enhancements with high-quality grey concrete slabs interspaced with darker grey linear paving units as feature bands. Granite kerbs are proposed along this area reusing exiting granite kerbs where possible. The refreshed paving and banding are proposed in the private forecourt areas up to the edge

of the shops but will need to be agreed with landowners. Parking bays are proposed to be finished in concrete setts to visually integrate with adjacent pedestrian areas or as inset parking bays at footway level to provide wider footways when not in use. The commemorative flower post features are to be retained or relocated within the darker banding feature paving in consultation with Local Authorities.

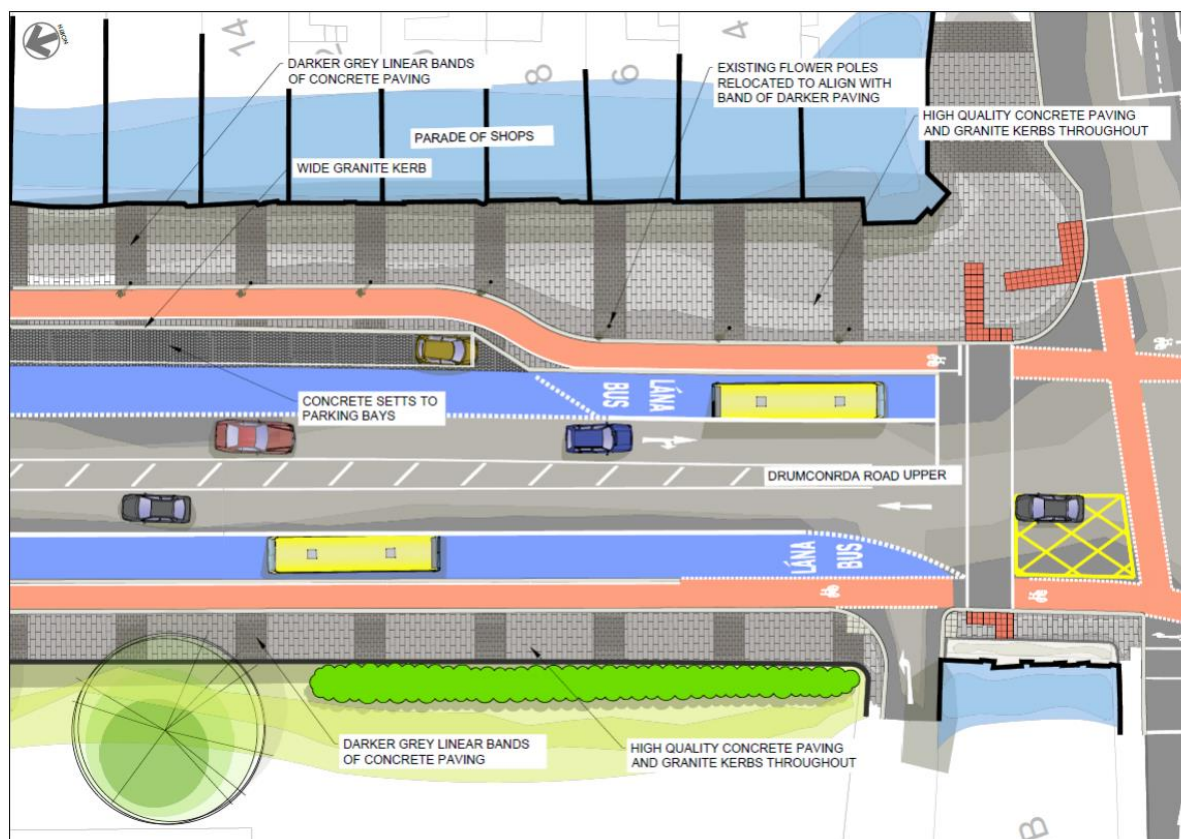


Figure 2.103 Drumcondra Road Upper Shopping Parade Indicative Design

A new pedestrian and cycle bridge is proposed along the western edge of Frank Flood Bridge leading into Our Lady's Park.

The proposed bridge would require the removal of two Poplar trees within Our Lady's Park which are a different variety to one another and six Silver Birch trees adjacent to Millmount Terrace. Six new smaller-sized trees have been proposed surrounding the square paved area in Our Lady's Park, subject to underground utilities. Three new small canopy trees are proposed at the west end of the bridge adjacent to Millmount Terrace.

The existing square area of paving surrounding the statue on the south side of the river will be replaced and enhanced with a combination of stone and concrete paving together with new seating as a local area enhancement. The path close to the river will be re-aligned and re-surfaced to meet with the new paved square. Additional planting is to be provided on the eastern side of the path to prevent access to the narrow embankments leading to the river side beneath the structure.

The bridge structure and its parapets have been designed to be slender and visually 'light' to enable views of the existing road bridge to be retained. A two-tone colour scheme has been adopted which will create distinction between the central girder and the edge member preventing it appearing monolithic. The parapet top rail, posts and edge member are proposed to be painted light grey. The central girder is to be coloured oxide red which reflects the dark red brick colour in some of the buildings in proximity to the bridge. The proposed mesh panel of the parapet is to be stainless steel. The soffit of the bridge shall be painted black to create a shadow effect further improving the slender appearance of the edge member.

The bridge deck is proposed to be an anti-slip surface consisting of aggregate bonded together with an epoxy resin. This surface continues to the junction with Millmount Terrace to provide a consistent application of the same material. The cycle way section will be coloured 'Tuscan Terracotta' resin or

similar in order that it appears as a tone that complements the standard cycle ways. The footway section will be coloured in a grey resin in order that it complements the new paved footways in the area.

The space between the bridge soffit and ground is to feature pebbles set in mortar to discourage anti-social behaviour.

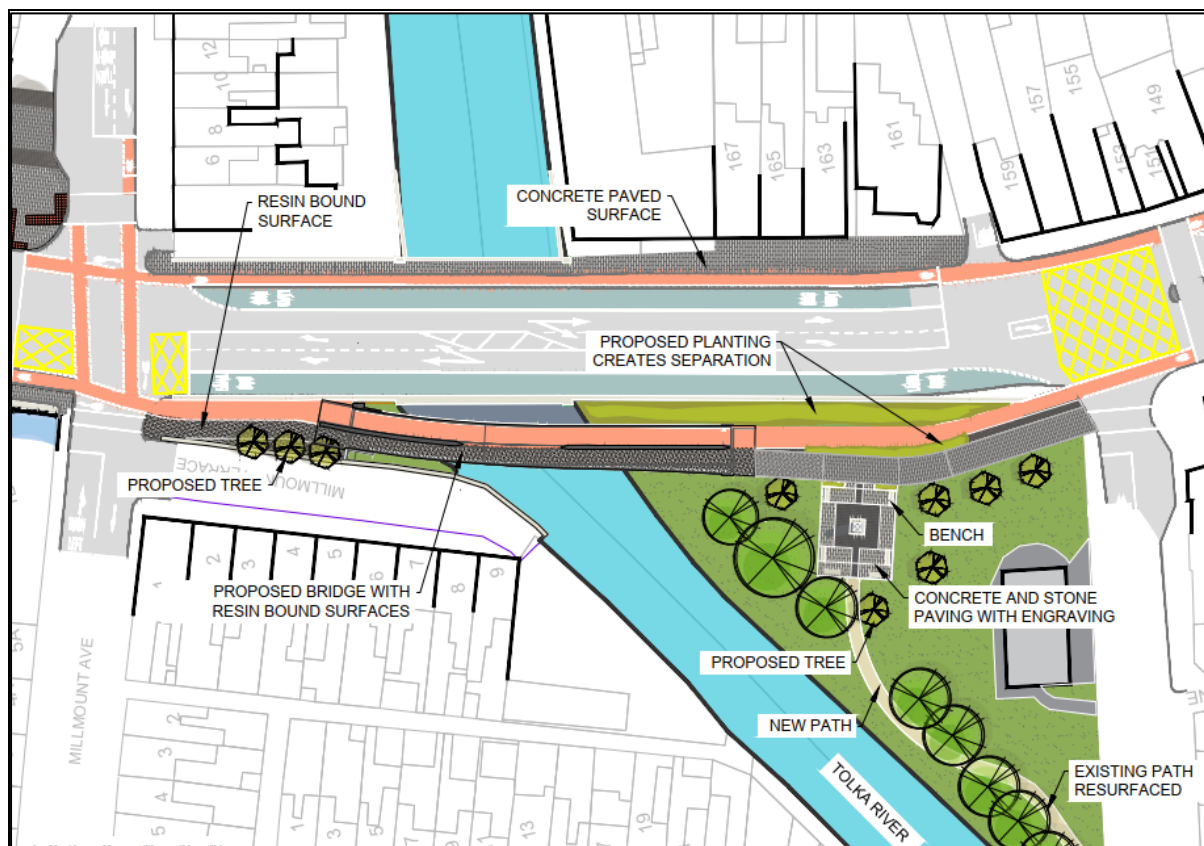


Figure 2.104 Frank Flood Bridge Indicative Design

The remaining footways along this section south of Botanic Avenue are proposed to be resurfaced in asphalt and concrete kerbs to match existing. The footways along the residential area in Drumcondra Road Lower repaired and resurfaced as needed. Maintenance works are proposed for the existing brick structure at the northern end of Drumcondra Road Lower to remove the graffiti which will in turn enhance the street scene and perception of safety in the area.

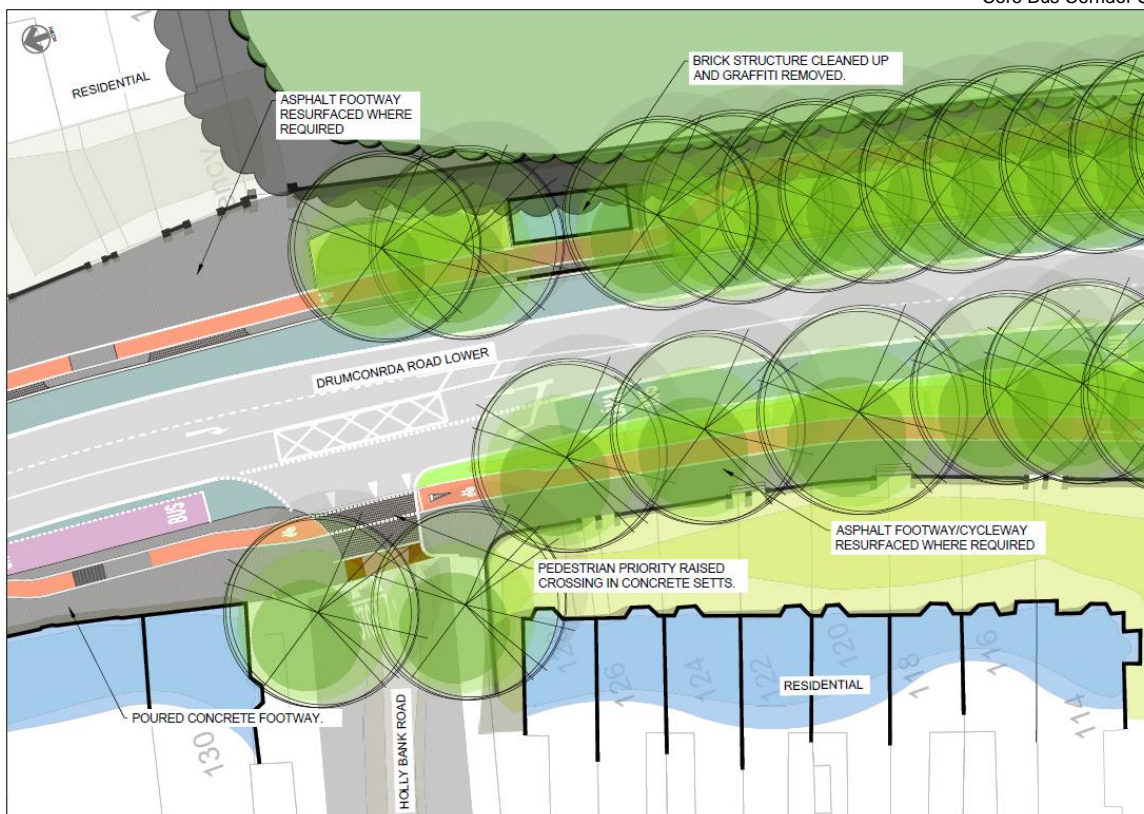


Figure 2.105 Northern End of Drumconrda Street Lower Indicative Design

Although not required to deliver the Proposed Scheme, there is the potential to include a local area enhancement to the paved area outside the café in the residential area west of Drumconrda Road Lower. The concept proposal includes high quality grey concrete paving and granite kerbs.

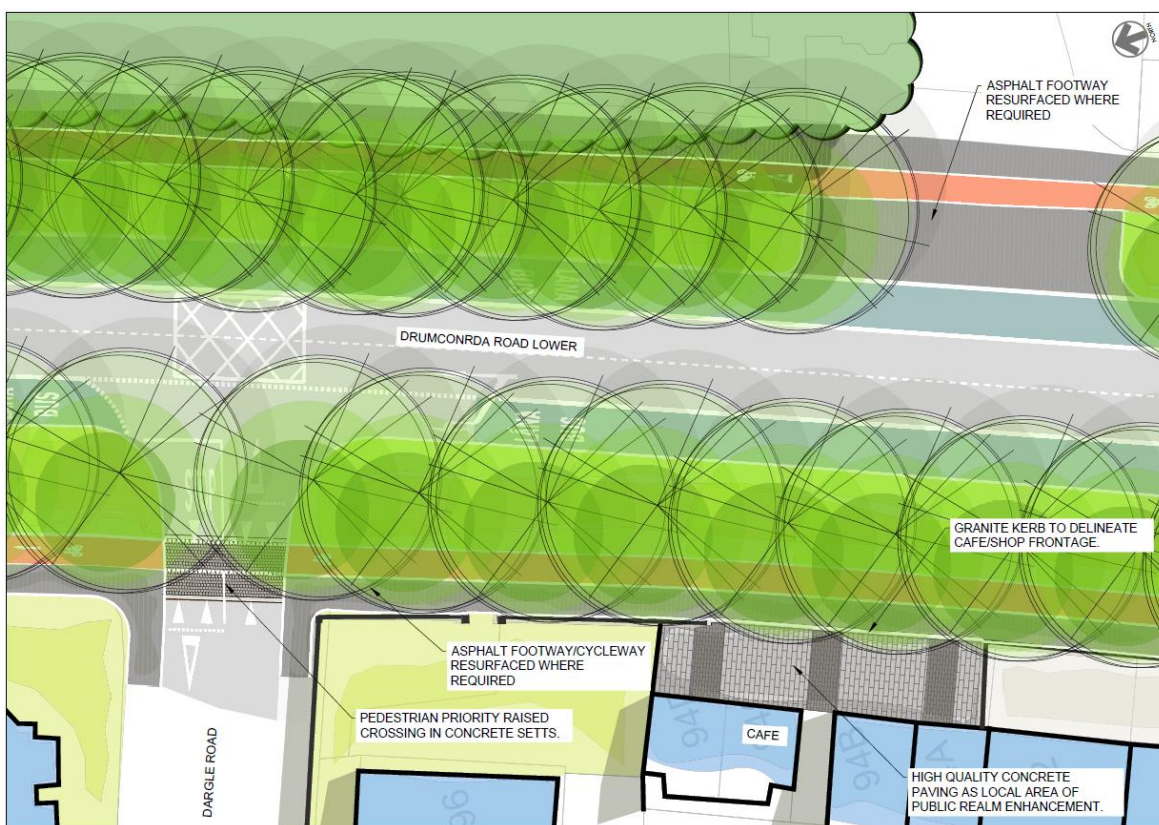


Figure 2.106 Café and Footways in the Residential Area West of Drumconrda Street Lower Indicative Design

The urban realm in the Drumcondra Rail Station and Bridge area is to be improved by de-cluttering the footways. Any realignment to footways due to proposed works would be reinstated with materials to match the existing materials. The retention and reuse of paving and quality kerb materials is proposed where possible.'

2.6.11.7 Dorset Street / Parnell Square

Summary of issue raised

This submission requests that consideration is given to making Dorset Street/Parnell Square as safe as possible and enhancing public realm as this is the gateway into the city centre. The respondent considers the extensive plan done with the city council to improve the area that has gone nowhere, they request if the city council / NTA / ABP work together to try to incorporate some of this plan to improve the area.

Response to issue raised

As described in Sections 4.5.4 and 4.5.5 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR a number of landscape and urban realm proposals are planned for the Dorset Street / Parnell Square area, as detailed below:

'Any footways affected by kerb realignments are proposed to be resurfaced in materials to match the existing footways using high quality granite paving and kerbs as required with the retention and reuse of paving and kerb materials proposed in this section.'

The redesigned median at the northern part of the section is proposed to be finished in materials to match the existing scheme. Existing tree species and tree pits will be reviewed as a result of recent failures. Replanting of these tree avenues with a more appropriate resilient species is proposed and will be detailed in consultation with the authority. Pruning for maintenance is also proposed to other existing street trees.'

Good quality concrete paving and granite kerbs are proposed for North Frederick Street and Granby Row. Retention and reuse of existing granite kerbs are proposed where possible.'

Regarding the suggestion to incorporate some of the DCC plan to improve Dorset Street, Chapter 2 Core Strategy of the Dublin City Development Plan 2022-2028 identifies the 'Greater Dorset Street Plan' an example of a local initiative that could be used to inform a future Local Environmental Improvement Plan (LEIP) for the area. Table 2-15 proposes that a LEIP be prepared for Dorset Street, however no such Plan is in place at present.

2.6.12 51 – Transport Infrastructure Ireland

Overview of submission

1. Support for the scheme

The submission is then structured in three parts:

2. Summary of potential interactions
3. National Roads
 - a. Interactions;
 - b. Mitigation requirements; and
 - c. Recommendations.
4. Light Rail
 - d. Interactions;
 - e. Mitigation requirements; and
 - f. Recommendations.

1. Support for the scheme

Summary of issue raised

The submission expressed support for the Proposed Scheme. Transport Infrastructure Ireland (TII) wishes to acknowledge and support the BusConnects Project in playing a key part of the Government's policy to improve public transport and address climate change in Dublin and other cities across Ireland.

Response to issue raised

The NTA welcome TII's support for the scheme. The NTA is grateful for the positive and constructive liaison that has occurred with TII throughout the design and planning process to date regarding the progression of the Proposed Scheme, which has been achieved through a number of briefings to the TII representatives and direct liaison with the various sections of TII.

The NTA will continue the very positive and constructive liaison with TII throughout the procurement and construction process and respond below to the points included in their submission.

2. Summary of potential interactions

Summary of issues raised

This submission tabulates the summary of interactions the national road and light rail networks and makes the following points:

- a) TII consider that mitigation of potential impacts for the protection of the national and light rail networks should have been included in Chapter 22 Summary of Mitigation and Monitoring Measures
- b) TII submit that while mitigation (traffic management provisions) for the light rail network are included in Appendix A5.1 no such mitigation is recorded in relation to the maintenance and protection of the national road network

Response to issue raised

As outlined in Section 22.1 of Chapter 22 of the EIAR (Summary of Mitigation & Monitoring Measures) the design of the Proposed Scheme has been progressed taking account of environmental constraints and considerations that have been identified in assessments. These constraints and considerations include national and light rail networks insofar as the Proposed Scheme interacts with these networks. Chapter 22 notes that the contents of the chapter should be read in conjunction with the Construction Environmental Management Plan (CEMP), included as Appendix A5.1 to the EIAR, which provides more detail on construction-phase management and mitigation, and specifically addresses traffic management provisions for the light rail network in Table 5.4. The reader is also directed to the CEMP in Table 22.2 of Chapter 22.

Section 6.4.5.3 of EIAR Chapter 6 Traffic and Transport describes the envisaged dedicated construction vehicle routes, and notes that *'it is anticipated that the exporting and delivery of materials will be executed as efficiently as possible along the National roads such as the close by M50 and from the Regional road network. It is assumed that all National and Regional roads including the Regional routes in the immediate vicinity of the Proposed Scheme will be used to supply / remove this material where practicable, to minimise use of the local road network.'*

Section 6.4.5.3 goes on to list the M1, M50 and N1 as the national roads that will be utilised as construction vehicle routes during the construction period while the R102, R016 and R125 will be the regional roads utilised as construction vehicle routes during the construction period.

Section 6.4.5.4.6.2 of Chapter 6 discusses construction traffic generation, and quantifies traffic arising from site operatives and heavy goods vehicles. It notes that the *'CTMP will control vehicular movement along the construction route, including restrictions on the number of HGVs accessing and egressing the construction works throughout the day to mitigate the impacts to general traffic on the surrounding road network.'*

Based on construction activities associated with the Proposed Scheme, the maximum number of HGVs expected to be in operation across the Proposed Scheme during peak haulage activities is 36

vehicles. This occurs during Q2 and Q3 of construction when sections 1, 2b, 3a, 3b, 4b and 5c are all operational.

In a typical hour during peak haulage activity of the Proposed Scheme, 40% of HGVs are anticipated to be in operation which equates to approximately 14 HGVs in operation total.

Section 6.4.5.4.6.2 concludes as follows: 'Given that the above impacts are below the thresholds set out in TII's Guidelines for Transport Assessments, it is considered appropriate to define the potential significance of traffic impacts of the Construction Phase to be Negative, Slight and Temporary. Therefore, no further analysis is required for the purpose of this assessment.'

a) The maintenance and protection of all roads (including the national road network) is addressed in the Construction Environmental Management Plan (CEMP), included as Appendix A5.1 to the EIAR. Section 5.2.3.14 of the CEMP includes details of the measures to be taken by the appointed contractor where practicable, as follows:

- 'Loads of materials leaving each works area will be evaluated and covered if considered necessary to minimise potential dust impacts during transportation;
- Take all reasonable measures while transporting waste or any other materials likely to cause fugitive losses from a vehicle during transportation to and from the works areas, including but not limited to:
 - Covering of all waste or material with suitably secured tarpaulin / covers to prevent loss; and
 - Utilisation of enclosed units to prevent loss.
- Undertake pavement condition surveys along roads forming part of the Construction Access Route, based on consultation with the NTA and professional judgement regarding the condition of the route, pre-construction. These surveys will record the baseline structural condition of the road being surveyed immediately prior to construction; and
- Throughout the course of construction of the Proposed Scheme, undertake on-going visual inspections and monitoring of the Construction Access Routes to ensure any damage caused by construction traffic is recorded. Arrangements can then be made to repair any such damage to an appropriate standard in a timely manner such that any disruption is minimised.

Upon completion of construction of the Proposed Scheme, the surveys carried out pre-construction shall be repeated, and a comparison of the pre-construction and post-construction surveys will be carried out.'

3. National Roads

Summary of issue raised

a. Interactions

The submission considers the following interactions:

1. Interactions with the M1 at the R132 Airport Roundabout;
2. Interactions with the M50 at M50 Turnapin Bridge;
3. Interactions with the M50 by proposed works adjacent to junction 2 of the M50; and
4. Interactions with Dublin Tunnel by proposed works to the R132 between Shantalla Road to the north and Whitehall (R103) to the south.

b. Mitigation requirements

TII considers that Chapter 5 and Chapter 6 and the CEMP do not appear to fully identify specific methods for mitigation for works traversing or in proximity to the national road network.

c. Recommendations

TII make 5 suggested recommended conditions.

a. Interactions

Response to issue raised

1. Interactions with the M1 at the R132 Airport Roundabout

TII advise that the Airport Roundabout, M1 and the M50 to the tunnel is subject to a MMaRC Network A Scheme. Any works within this area will require prior consultation with TII and compliance with all relevant TII standards as detailed within the TII publications. TII advises that consultation and appropriate protocol agreement with the MMaRC Network A Contractor is required in relation to any works proposed including signage, traffic management, lining, timetabling etc. TII is unable to ascertain from the material submitted if these matters have been considered.

As set out in Section 4.5.2.1 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR, *'It is proposed to maintain the Airport Roundabout as a signalised junction with some amendments. To provide bus priority southbound through the Airport junction, it is proposed to provide a new signal-controlled priority on the northern approach to the roundabout. The cycle facilities through the Airport junction will be upgraded and cyclists will be accommodated in a two-way cycle track on the western side of the junction, crossing the airport access road via a signalised toucan crossing. South of the Airport Roundabout the existing northbound shared cycle lane and pedestrian lane is converted to a dedicated footpath and two-way cycle track as far as the South Corballis Road and from this point the cyclists will cross the R132 to return to the eastern side of the road.'*

The relevant extract from the General Arrangement drawings provided in EIAR Volume Part 1 of 3 proposed arrangement is shown in Figure 2.107.



Figure 2.107 Extract of General Arrangement Drawing at Airport Roundabout (Sheet 08)

The NTA acknowledges that close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

It is the intention of the NTA that the works will follow the maintenance contractor's third party access protocol in advance of carrying out any works.

2. Interactions with the M50 at M50 Turnapin Bridge

The scheme proposes to cross under the M50 on the R132 at a single point, Turnapin Bridge, which is an underbridge carrying the M50. TII notes that minor modification to the verge underneath has been agreed with the NTA. However TII advise:

- a) There is a necessary requirement for the protection of the national road network function that all of the works proposed under and in vicinity of the bridge be identified and undergo detailed design and execution in accordance with TII Publications standard. The applicant should continue to follow TII structures technical approvals as required under TII publication DN-STR-03001.
- b) Any works that require access to the national road network maintained by a contractor, M50 PPP Contractor at this location, must follow the maintenance contractor's third-party access protocol in advance of carrying out any works.

As set out in Table 8.2 of the Preliminary Design Report provided in the Supplementary Information, Turnapin Bridge carries the M50 over the R132 and there is proposed widening of the highway corridor below the structure however there is no impact to structural elements.

3. Interactions with the M50 by proposed works adjacent to junction 2 of the M50

The BusConnects proposals include works adjacent to Junction 2 of the M50 including works to Coolock Lane. In recognition of the proximity of the proposed works to the MMaRC Network Area A boundary, and the requirement for the maintenance of the safe and efficient operation of the M50 throughout the construction and operation of the Proposed Scheme, prior consultation with TII in accordance with TII publications will be required for any works that may impact the national road network including pavement, structures and infrastructure including drainage.

As set out in Section 4.5.3.1 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR, *'A new bus terminus will be provided in the green space opposite the group of retail premises at the junction of the Swords Road and Coolock Lane. Between Coolock Lane and the entrance to Omni Park Shopping Centre, it is proposed to extend continuous bus lanes and cycle tracks in both directions. This will require some limited land take from adjacent properties on both sides of the existing road and the removal of existing on-street car parking.'*

The relevant extract from the General Arrangement drawings provided in EIAR Volume Part 1 of 3 proposed arrangement is shown in Figure 2.108.

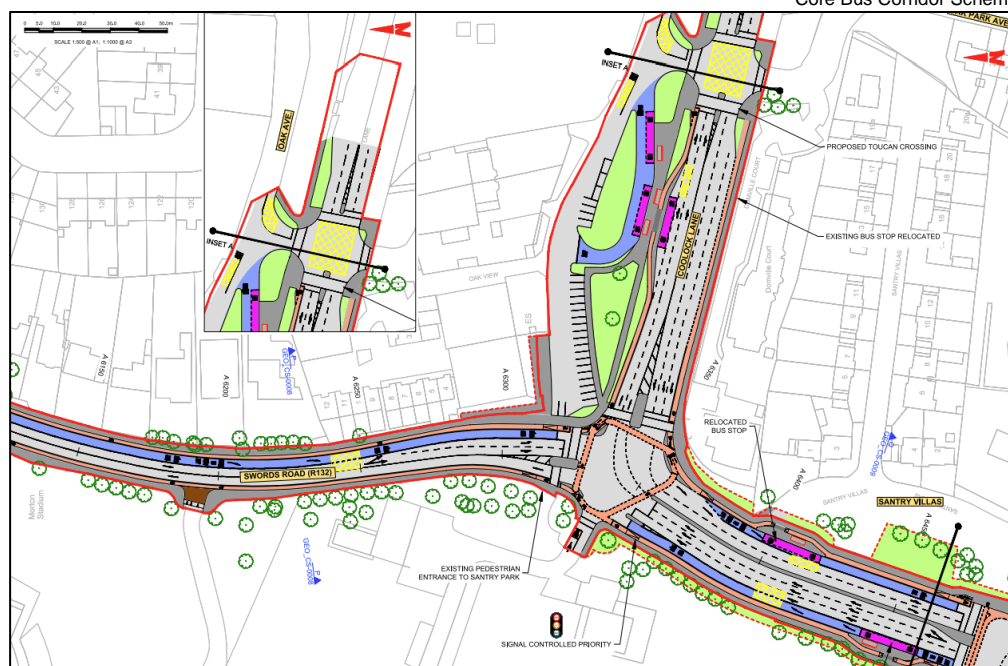


Figure 2.108 Extract of General Arrangement Drawing at Coolock Lane (Sheet 18)

The NTA acknowledges that close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

It is the intention of the NTA that the works will follow the maintenance contractor's third party access protocol in advance of carrying out any works.

4. Interactions with the Dublin Tunnel by proposed works to the R132 between Shantalla Road to the north and Whitehall (R103) to the south

Due to the location of the works associated with the scheme relative to the Dublin Tunnel asset, there is potential for impacts and interactions between this section of the national road network and the BusConnects scheme which, based on material submitted does not appear to have been evaluated.

Under Policy SMT31 of Dublin City Development Plan, development proposals in the vicinity of the Dublin Tunnel are required to undergo specific development assessment for Tunnel integrity.

TII advises that the proposed BusConnects scheme must be subject to co-ordination with and the prior approval of TII in accordance with TII Publications and also the City's Development Plan.

b. Mitigation requirements

Response to issues raised

The submission expresses the view that Chapter 5, Chapter 6 and the CEMP do not appear to fully identify specific methods or techniques proposed for mitigation of potential impact for works traversing or in proximity to the national road network. The submission goes on to assert that because the national road network will be utilised for construction haul routes and for construction undertakings there is a need for mitigation of potential construction stage impacts to protect the safe and efficient operation of the national road network.

Section 6.4.5.3 of EIAR Chapter 6 Traffic and Transport describes the envisaged dedicated construction vehicle routes, and notes that *'it is anticipated that the exporting and delivery of materials will be executed as efficiently as possible along the National roads such as the close by M50 and from the Regional road network. It is assumed that all National and Regional roads including the Regional routes in the immediate vicinity of the Proposed Scheme will be used to supply / remove this material where practicable, to minimise use of the local road network.'*

Section 6.4.5.3 goes on to list the M1, M50 and N1 as the national roads that will be utilised as construction vehicle routes during the construction period while the R102, R016 and R125 will be the regional roads utilised as construction vehicle routes during the construction period.

Section 6.4.5.4.6.2 of Chapter 6 discusses construction traffic generation, and quantifies traffic arising from site operatives and heavy goods vehicles. It notes that the *'CTMP will control vehicular movement along the construction route, including restrictions on the number of HGVs accessing and egressing the construction works throughout the day to mitigate the impacts to general traffic on the surrounding road network.'*

Based on construction activities associated with the Proposed Scheme, the maximum number of HGVs expected to be in operation across the Proposed Scheme during peak haulage activities is 36 vehicles. This occurs during Q2 and Q3 of construction when sections 1, 2b, 3a, 3b, 4b and 5c are all operational.

In a typical hour during peak haulage activity of the Proposed Scheme, 40% of HGVs are anticipated to be in operation which equates to approximately 14 HGVs in operation total.

Overall Peak Hour Impacts: Table 6.21 (Table 2.16) identifies the anticipated maximum construction traffic generation by site operatives and HGVs during the AM and PM Peak Hours.

Table 2.16 Table 6.21 of EIAR Chapter 6

Peak Hour	Arrivals (veh)		Departures (veh)		Total Two-Way Traffic Flows (vehicles)
	Car / Van (1 pcu)	HGV (2.3 pcu)	Car / Van (1 pcu)	HGV (2.3 pcu)	
AM Peak Hour	10	32	0	32	74
PM Peak Hour	0	32	10	32	74

Section 6.4.5.4.6.2 concludes as follows: *'Given that the above impacts are below the thresholds set out in TII's Guidelines for Transport Assessments, it is considered appropriate to define the potential significance of traffic impacts of the Construction Phase to be Negative, Slight and Temporary. Therefore, no further analysis is required for the purpose of this assessment.'*

It should be noted that further detail on the restrictions to construction vehicle movements during the peak periods of the day will be contained within the appointed contractor's CTMP prior to construction.'

In summary, it is considered that the construction of the Proposed Scheme will not impact the safe and efficient operation of the national road network.

c. Recommendations

Response to issues raised

Proposed Condition 1

Development shall be undertaken in accordance with TII publications. Prior to commencement of development, plans and details of works on, or in the vicinity of the national road network under TII Publications shall be submitted for the written agreement of the planning authority in consultation with TII.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 2

The long term maintenance of permanent elements of the proposed development, within areas currently managed by the Motorway Maintenance and Renewal Contracts (MMaRC) or the M50 PPP Contractor shall be agreed between the relevant local authority / NTA and TII.

This proposed condition seeks the enactment of an agreement between the relevant local authority, TII and the NTA, subsequent to the completion of the construction of the Proposed Scheme, addressing issues related to maintenance costs.

The Proposed Scheme upon its completion reverts to the status of a public road under the management of the relevant local authority, in this case Dublin County Council (DCC) and Fingal County Council (FCC). The funding of costs associated with the maintenance of public roads can involve a number of parties depending on the status of the road – for instance, in the case of a national road Transport Infrastructure Ireland would have an involvement. Funding of regional and local roads fall under the ambit of the relevant local authority and the Department of Transport.

The Exchequer does not currently provide the NTA with funds for dispersal to local authorities for maintenance activities and the NTA does not have a role in overseeing or organising general public road maintenance activities. However, the NTA does retain responsibility for bus fleet, bus stops and bus shelters, and maintenance of these elements falls within its remit.

The NTA will continue its collaboration with TII, and DCC, to ensure the delivery of an appropriate maintenance regime. As part of this collaboration, the NTA will support the provision of the necessary funding by the relevant parties to ensure that the benefits of the Proposed Scheme are not inappropriately eroded. These are matters that can be successfully addressed between TII, DCC, FCC and the NTA, in the absence of any approval condition.

Proposed Condition 3

Where relevant, Design reports for any works on, over or within the motorway reservation will be required to be prepared and submitted as a Departure Application in accordance with TII publication GE-GEN-01005 and PE-PMG-02041. Works to

structure forming part of the national road network requires TT Technical Acceptance in accordance with TII publication DN-STR-03001.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

Specifically, in respect of the interaction with the M50 at Turnapin Bridge, the design of the corridor beneath the bridge has been developed in accordance with TII publications DN-STR-03001 & AM-STR-06042 and this has included liaison and consultation with TII. This is evidenced by the Record of Structural Review Form for the modification to the verges beneath the structure, which has been signed off by the relevant signatory in TII Structures team.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition. The detailed design will be subject to the requirements of DN-STR-03001, and the agreed recommendations included in the Record of Structural Review Form.

Proposed Condition 4

Prior to the commencement of development, the Construction Environmental Management Plan (CEMP) shall be submitted for the written agreement of the planning authorities subject to the written agreement of TII for national road elements. The CEMP will include mitigation and monitoring for the national road network and resolution Dublin Tunnel interfaces including an appropriate TII approved risk assessment for works associated with these interfaces.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 5

Prior to the commencement of development, the construction traffic management plan including access to services, shall be submitted for the written agreement of the planning authorities subject to the written agreement of TII and shall:

- a) *demonstrate consultation with the relevant MMarC and PPP Contractors, via TII and the relevant road authorities,*
- b) *demonstrate contact with thirdpartyworks@tii.ie in advance, as a works specific Deeds of Indemnity will be required by TII where temporary works within any MMarC Contract Boundary are required to facilitate construction haulage, and*
- c) *include detailed information on traffic management, including signage (static and VMS) to ensure the strategic function of the national road network is protected.*

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

4. Light Rail

Summary of issue raised

a. Interactions

The submission notes the following interactions:

1. Interactions with the Luas at the junction of Parnell Square East and Parnell Square West

b. Mitigation requirements

TII considers that Chapter 5 and Chapter 6 and the CEMP do not appear to fully identify specific methods or techniques for mitigation of potential impact on Luas infrastructure or service.

c. Recommendations

TII make 6 suggested recommended conditions.

a. Interactions

Response to issue raised

1. Interactions with the Luas at the junction of Parnell Square East and Parnell Square West

The BusConnects proposals includes works adjacent to the Luas line running along Parnell Street. Potential road closures, and under and overground works have the potential to impact Luas infrastructure. In accordance with TII's '*Code of practice of engineering practice for works on, near, or adjacent to the Luas light rail system*', the proposed works will require commensurate specific construction methodology approach co-ordinated with TII and the Luas operator to ensure protection of the asset and minimal disruption.

As set out in Section 19.4.3.1.1 of EIAR Chapter 19 Material Assets, '*the Proposed Scheme will cross a number of pieces of major infrastructure, namely two railway lines and the Royal Canal, and the Proposed Scheme will end adjacent to the Luas Green Line. The railway lines will not be impacted by the Proposed Scheme. There will be no works required to the railway bridge over the Proposed Scheme at Drumcondra Station or to Binns Bridge over the railway line and the Royal Canal. There will also be no interaction between the Proposed Scheme and the Luas Green Line. As a result of the lack of direct interaction between the Proposed Scheme and the major infrastructure located along the Proposed Scheme, there is predicted to be no significant impact to any of these major infrastructure assets during the Construction Phase.*'

No alterations to the Luas infrastructure and associated services are proposed as part of the Proposed Scheme along this section of the route.

The relevant extract from the General Arrangement drawings provided in EIAR Volume Part 1 of 3 proposed arrangement is shown in Figure 2.109.

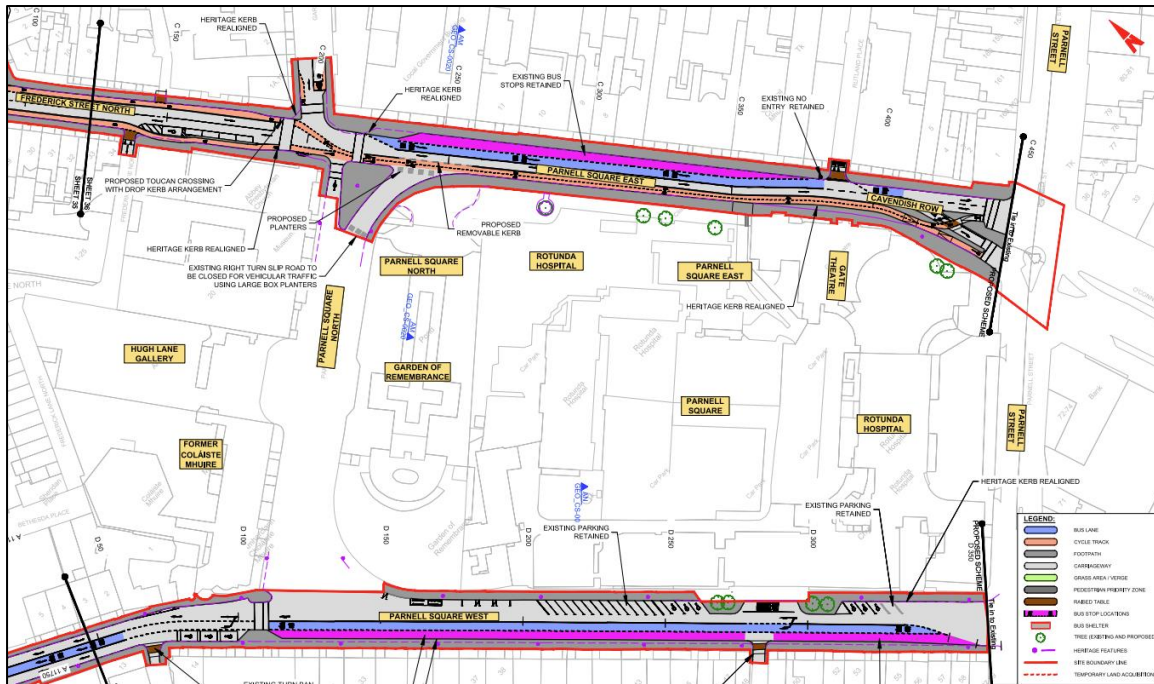


Figure 2.109 Extract of General Arrangement Drawings at Parnell Square (Sheet 36)

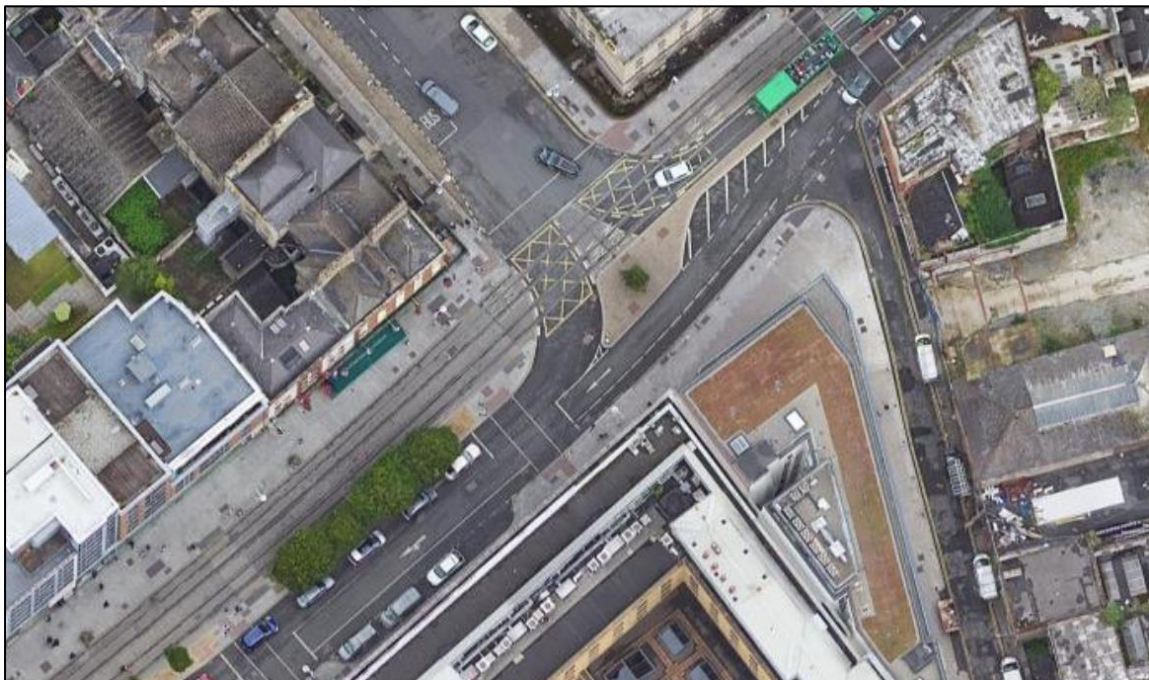


Figure 2.110 Existing arrangement at Luas Green Line at Parnell Square West (Image Source: Google)

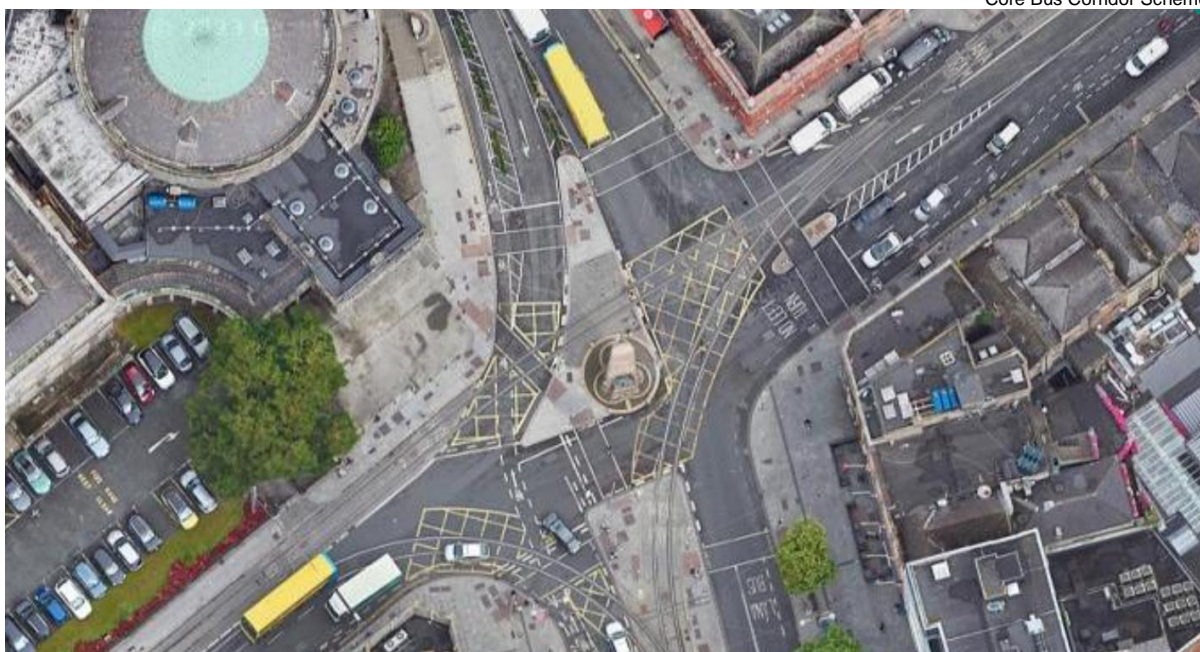


Figure 2.111 Existing arrangement at Luas Green Line at Parnell Square East (Image Source: Google)

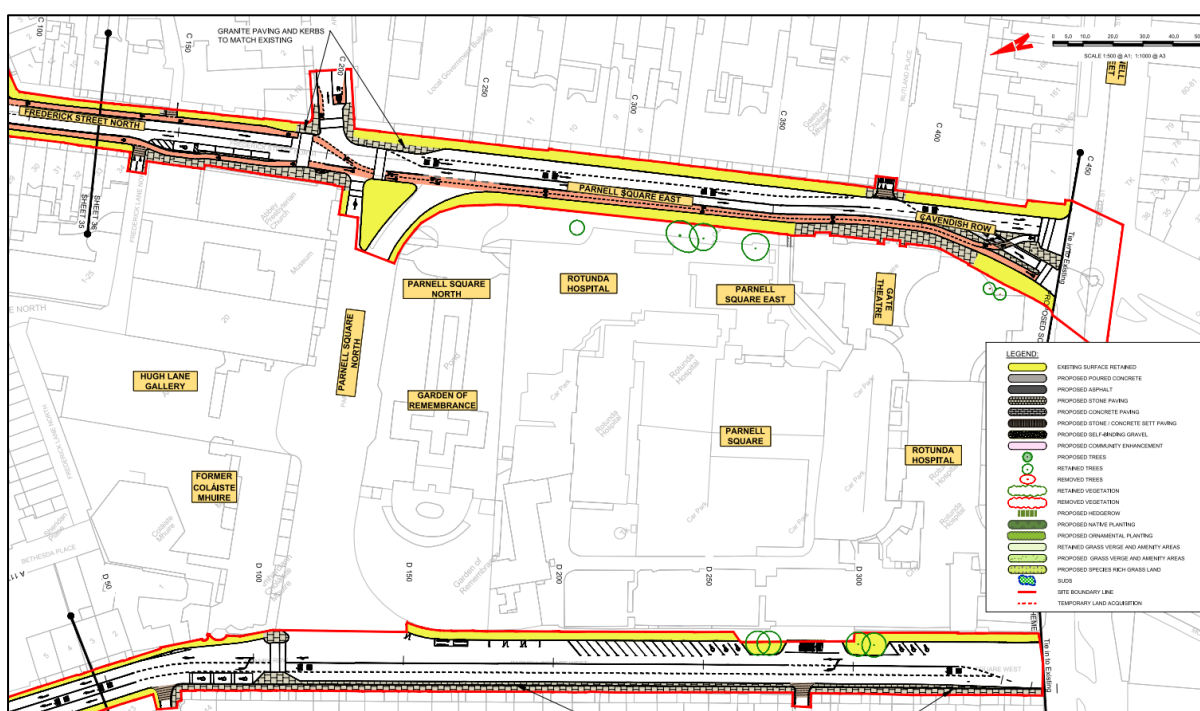


Figure 2.112 Extract of Landscape General Arrangement Drawing at Parnell Square (Sheet 36)

Figure 2.112 shows the relevant extract from the Landscape General Arrangement drawing provided in EIAR Volume Part 1 of 3 proposed arrangement. This shows that there are no amendments to the existing kerb lines on Parnell Street. No alterations to the Luas infrastructure and associated services are proposed as part of the Proposed Scheme at this location.

Section 5.3.1.3 of EIAR Chapter 5 Construction describes the works required for Section 5c of the Proposed Scheme which encompasses Parnell Square including North Frederick Street 'Section 5c encompasses a length of approximately 700m along North Frederick Street and Parnell Square East, and along Granby Row and Parnell Square West, between Dorset Steet Upper and Parnell Street. The construction activities at Section 5c will comprise minor pavement reconstruction and resurfacing of the roads, footpaths, and cycle tracks, and new kerbs. Construction

activities will also consist of additional signage, new road markings, new and amended traffic signal infrastructure, new street furniture and landscaping works. The expected construction duration will be approximately 6 months.'

For this section of the Proposed Scheme, as set out in Table 5.8 of EIAR Chapter 5 no temporary road closures are envisaged for Section 5c and it is not anticipated that there will be any impact on Luas Green line services, with access to the Luas Tram stop maintained at all times.

One of the key objectives of the Proposed Scheme is to enhance interchange between the various modes of public transport operating in the city and wider metropolitan area. The Proposed Scheme facilitates improved existing and new interchange opportunities with other transport services including Luas services.

The NTA will co-ordinate the proposed works with TII and the Luas Operator in line with TII's '*Code of practice of engineering practice for works on, near, or adjacent the Luas light rail system*'.

b. Mitigation requirements

Response to issue raised

The submission expresses the view that the EIAR does not appear to fully identify specific mitigation of the potential impacts on Luas network infrastructure and services beyond the traffic management provisions provided in Table 5.8 of EIAR Chapter 5.

The submission also considers that any alteration to tramway and associated services and signalisation, including the overhead bridge, will require pre-development assessment at the two interfaces identified.

The submission states that TII consider it appropriate that specific mitigation and monitoring commitments for potential impact on Luas that have regard to TII's '*Code of Engineering Practice for Works on, near or adjacent to the LUAS Light Rail System*' are reflected in the CEMP provided as Appendix A5.1 of the EIAR.

For this section of the Proposed Scheme, as set out in Table 5.8 of EIAR Chapter 5 no temporary road closures are envisaged for Section 5c and it is not anticipated that there will be any impact on Luas Green line services, with access to the Luas Tram stop maintained at all times.

One of the key objectives of the Proposed Scheme is to enhance interchange between the various modes of public transport operating in the city and wider metropolitan area. The Proposed Scheme facilitates improved existing and new interchange opportunities with other transport services including Luas services.

The NTA will co-ordinate the proposed works with TII and the Luas Operator in line with TII's '*Code of practice of engineering practice for works on, near, or adjacent the Luas light rail system*'.

c. Recommendations

Response to issue raised

Proposed Condition 1

Overhead Conductor System (OCS) poles are located on / adjacent to the Proposed Scheme. Prior to commencement of development, the following plans and details shall be submitted for the written agreement of the planning authority subject to the written agreement of TII:

- i) OCS pole protection and safety distances, and /or*
- ii) Existing, temporary and subsequent permanent fixings.*

The developer shall be liable for all costs associated with the removal and reinstatement of the Luas related infrastructure.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 2

Prior to the commencement of development, the Construction Environmental Management Plan (CEMP) shall be submitted for the written agreement of the planning authorities subject to the written agreement of TII. The CEMP will include a method statement to resolve all Luas interface issues that shall:

- i) Identify all Luas interfaces,*
- ii) contain a risk assessment for works associated with the interfaces, including all electrification fault scenarios and*
- iii) Contain mitigation measures for unacceptably high risks, including electromagnetic interference (EMI) and vibration and settlement monitoring regime if necessary.*

The method statement shall be in accordance with TT's "Code of engineering practice for works on, near, or adjacent to Luas light rail system."

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 3

All works associated with removal, temporary and final installation of Luas infrastructure are to be undertaken outside of Luas operational hours, under system shutdown and Overhead Conductor System isolation with prior agreement with TII and the Luas Operator as required.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR.

These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 4

Prior to the commencement of development, a Construction Traffic Management Plan including access to services, shall be submitted for the written agreement of the planning authorities subject to the written agreement of TII. The Construction Traffic Management Plan shall include identification of mitigation measures to protect operational Luas infrastructure.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 5

The Luas operator/TII will require 24hr access to Luas infrastructure. Prior to the commencement of development, the developer shall enter into an access and maintenance agreement with TII.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 6

The developer or contractor will be required to apply for a works permit from the Luas Operator by virtue of the Light Railway (Regulation of Works) Bye-laws 2004 (S.I. number 101 of 2004) which regulates works occurring close to the Luas infrastructure in accordance with TII's "Code of engineering practice for works on, near, or adjacent to Luas light rail system." The developer shall be liable for all of TII's costs associated with the removal and reinstatement of the Luas related building fixings and infrastructure. The permit application will require prior consultation, facilitated by the Luas operator, Transdev.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR.

These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

2.7 Individual Properties

2.7.1 Overview of Submissions

Sixteen submissions were made in respect of individual properties / locations; these are listed below with ABP submission reference number and detailed in the following sub-sections.

- 04 Brendan Collins
- 09 Clondev Properties Limited
- 10 Collinstown Caravans Limited
- 11 Conor O'Scanaill, O'Scanaill Veterinary Surgeons
- 13 Deirdre and Pamela Scully
- 17 Dublin Airport Authority
- 27 JJ Breen
- 28 Julia Boland and Others
- 30 Kathleen McKee
- 31 Kealy's of Cloghran
- 34 Lesley Henderson
- 35 Maxol Limited
- 40 Nesta Limited
- 42 O'Scanaill Veterinary Surgeons
- 43 Patrick Fitzsimons and Parfit
- 49 Tesco Ireland

2.7.2 4 – Brendan Collins

2.7.2.1 Summary of issues raised

This submission raised that the Proposed Scheme would have the following impacts on their clients property:

- i) Significant extent of land acquisition for temporary use – directly compromising the short-term accessibility of Collinstown Business Park. No clarity has been provided as to an expected time period for the temporary land acquisition will begin or the length of time the land will be subject to the temporary acquisition.
- ii) The submission requests detailed information regarding the construction management plan which should confirm details regarding the extent of time for which land upon their site will be subject of the temporary acquisition. The CMP should also provide details in relation to noise, dust, vibrations and any additional construction elements which may compromise the unobstructed operation of Collinstown Business Park.
- iii) Revised entrance arrangement to Collinstown Business Park – compromising the long-term accessibility of Collinstown Business Park. The submission states that it is their position that the existing entrance/exit arrangement should be maintained in situ insofar as the subject site does not prejudice the delivery of the primary objective of the Proposed Scheme. The submission suggests an amendment to the Proposed Scheme and expresses willingness to engage with the

NTA on relation to accommodating pedestrian/cycle infrastructure and facilitating the provision of a signalised junction.

- iv) The submission considered that the subject proposal will compromise the residential amenity of their client. The site is zoned under the current Fingal Development Plan 2023-2039 GE 'General Employment'. It is also noted as being located in the Dublin Airport Noise Zone A and B as designated by Fingal County Council. This zoning provides the following objective which must be considered for any development on/adjoining such sites:

'Provide opportunities for general enterprise and employment'

The submission submits that the subject site is operating lawfully with all existing commercial operations permitted in principle based on the applicable 'GE' zoning objective. It is thus considered reasonable to request that the NTA duly consider the necessity of the proposed works upon our clients site given the potential impact of the works on the ability of the business park to continue to provide opportunities for general enterprise and employment.

- v) The submission considered that in the absence of comprehensive mitigation measures to prevent undue accessibility impacts arising as a result of the subject scheme, their client would seek compensation to offset potential impacts to the monetary value of their property.

2.7.2.2 Response to issues raised

The NTA are applying for approval of a minor modification to the Proposed Scheme in terms of a minor modification to the design of a junction at the entrance to the Collinstown Business Park to introduce a signalised junction which is discussed in more detail in section iii) below of this Response Document and as shown in the drawings BCIDB-JAC-GEO_GA-0002_XX_00-DR-CR-0013 and BCIDB-JAC -TSM_SJ-0002_XX_00-DR-TR-0012 at Appendix A to this Response Document.

In the context of the EIA to be conducted by the Board on the application for approval of the proposed road development it is noted that the Board has the jurisdiction to consider modifications to a proposed road development pursuant to section 51(6) of the Roads Act 1993 (as amended). Indeed, the Board is expressly empowered to "approve a proposed road development, with or without modifications and subject to whatever environmental conditions (...) it considers appropriate".

Accordingly, it is clear that the Board has jurisdiction to modify the proposed road development, whether on the application of the NTA, or otherwise. In this regard, the NTA is proposing a minor modification to the Proposed Scheme and requests the Board to approve the proposed road development with this proposed modification namely an additional signalised junction at the entrance to Collinstown Business Park as identified on the drawing BCIDB-JAC-GEO_GA-0002_XX_00-DR-CR-0013 at Appendix A.

An assessment of this proposed minor modification has been conducted by all relevant experts as is set out in section iii) of this Response Document. Each expert assessed the new signalised junction and the conclusion is that there are no significant impacts arising from this minor modification and there is no change to the assessment conducted in the EIAR.

Further, the NTA notes that no additional lands are required to facilitate this proposed minor modification beyond those lands already included in the Swords to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2023 as submitted to the Board for confirmation.

- i) This property is located within Section 2c of the Proposed Scheme, as described in Section 5.3.2.3 of Chapter 5 Construction of Volume 2 of the EIAR, *'Section 2c encompasses a length of approximately 1,620m along Swords Road, between Old Airport Road and Northwood Avenue. The construction activities at Section 2c will comprise pavement reconstruction, widening, resurfacing of the roads, and construction of new footpaths, and cycle tracks, and new kerbs. Construction activities will also consist of additional signage, new road markings, new and amended traffic signal infrastructure, new street furniture and landscaping works. A principal retaining wall (RW010) will be constructed along Swords Road, north of Northwood Avenue, approximately 70m in length and maximum 2m in retained height. A minor retaining wall (RW008) will be constructed at Great Gas Express, approximately 40m in length. A minor retaining wall (RW009) will be constructed at Royal College of Surgeons Sports Ground, approximately 50m in*

length. Boundary walls, and fencing will be constructed along Swords Road, and multiple gates will be relocated. The entrance to Collinstown Cross Industrial Estate will be relocated. The Construction Compound (SW2) will be located at Old Airport Road, Swords Road Junction. Various utility diversions and/or protections will be required; including electricity overhead lines and underground cables, gas mains and telecommunications infrastructure. The expected construction duration will be approximately 18 months. It should be noted however, that construction activities at individual plots will have shorter durations than outlined in the general overview of construction works presented Section 5.3 of the EIAR.

When roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times. As described in Section 5.5.3.2 of Chapter 5 Construction of Volume 2 of the EIAR, *'details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times'*.

- ii) The Construction Environmental Management Plan (CEMP) for the Proposed Scheme is included as Appendix A5.1 of EIAR Volume 4 Part 1 of 4. In Section 5.1.1 of Appendix A5.1 it states that *'The CEMP will be updated by the National Transport Authority (NTA) (the Employer for the construction works) prior to the commencement of the Construction Phase, so as to include any additional measures required pursuant to conditions attached to any decision to grant approval. The NTA shall set out the Employer's Requirements in the Construction Contract including all applicable mitigation measures identified in this EIAR, as well as additional measures required pursuant to conditions attached to any decision to grant approval.'*

Section 5.2 of the CEMP relates to the required Construction Traffic Management Plan, and Section 5.2.3 notes that the appointed contractor will be responsible for developing a CTMP to effectively manage traffic and transport during the Construction Phase of the Proposed Scheme. Section 5.2.3 also lists a number of aspects that the appointed contractor will address during the preparation of the CTMP. Further details of the aspects listed are provided in Section 5.2.3.1 to Section 5.2.3.19 of the CEMP.

With regards to noise, air and vibration during construction, these have specifically been assessed as follows:

Chapter 7 (Air Quality) in Volume 2 of the EIAR assess the impact on air quality of the Construction Phase at the nearest sensitive receptors to the Proposed Scheme. Figures 7.6 to 7.8 in Volume 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the modelled change in annual mean concentration of NO₂ and particulate matter (PM₁₀ and PM_{2.5}) during the Construction Phase. For the area at Collinstown Business Park (Sheet 2 in each Figure), the significance of the change in air quality is negligible for NO₂, PM₁₀ and PM_{2.5}.

With regards to dust, Chapter 7 (Air Quality) has assessed the potential impacts related to dust during the Construction Phase of the Proposed Scheme. Section 7.2.4.4 of Chapter 7 describes the approach to the Construction Phase assessment undertaken and specifically describes dust as follows: *'The greatest potential impact on air quality during the Construction Phase is from construction dust emissions, PM₁₀/PM_{2.5} emissions and the potential for nuisance dust. Dust is characterised as encompassing PM with a particle size of between 1 micron and 75 microns (1µm to 75µm). Deposition of dust typically occurs in close proximity to the source and with IAQM Guidance (IAQM 2014) defining a maximum impact area of 350m from the dust-generating activity. Sensitivity to dust depends on the duration of the dust deposition, the dust-generating activity, and the nature of the deposit. Therefore, a higher tolerance of dust deposition is likely to be shown if only short periods of dust deposition are expected and the dust-generating activity is either expected to stop or move on'*. The assessment considered the sensitivity to dust soiling with respect to people and property, human health, and ecology; and assessed four major dust-generating activities, namely demolition, earthworks, construction, and trackout.

Section 7.4.2.1 describes the impact assessment and conclusions with respect to construction dust. The summary of the assessment states *'In accordance with the EPA Guidelines (EPA 2022) the impacts associated with the Construction Phase dust emissions pre-mitigation are overall negative,*

not significant and short-term, and provides a summary table (Table 7.24, shown below) of the risk of dust impacts in order to inform the need for mitigation.

Table 7.24: Summary of Dust Impact Risk Used to Define Site-Specific Mitigation

Potential Impact	Dust Emission Magnitude			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Low Risk	High Risk	Low Risk	Medium Risk
Human Health	Low Risk	Medium Risk	Low Risk	Medium Risk
Ecological	Low Risk	Medium Risk	Low Risk	Medium Risk

Section 7.5.1 describes the required Construction Phase mitigation measures, with specific dust mitigation listed as follows:

'In order to minimise dust nuisance impacts, a series of mitigation measures that are applicable to the Construction Phase of the Proposed Scheme will be implemented by the appointed contractor. In summary, the mitigation measures will include:

- *Public roads affected by the Proposed Scheme will be regularly inspected for soiling associated with construction activities and cleaned as necessary;*
- *Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays (or similar dust suppression methods) will be used as required if particularly dusty activities associated with the construction contract are necessary during dry or windy periods;*
- *During movement of dust-generating materials both on and off site, trucks will be covered with tarpaulin and before entrance onto public roads, trucks will be checked to ensure the tarpaulins are properly in place; and*
- *The appointed contractor will provide a site hoarding of 2.4m height along noise-sensitive boundaries, at a minimum, at the Construction Compounds which will assist in minimising the potential for dust impacts off site.*

The appointed contractor will keep the effectiveness of the mitigation measures under review and revise them as necessary. In the event of dust nuisance occurring outside the works boundary associated with the Proposed Scheme, movements of materials likely to raise dust will be curtailed and satisfactory procedures implemented to rectify the problem.'

Section 7.6.1 describes the predicted residual impacts following the implementation of the proposed mitigation measures. Specifically with respect to dust it states, *'When the dust minimisation measures detailed in the mitigation section of this Chapter are implemented, fugitive emissions of dust from the site will be insignificant and pose no nuisance at nearby receptors. Thus, there will be no significant residual Construction Phase dust impacts'*. It should be noted that the dust mitigation measures as outlined above are also replicated within Appendix A5.1 (CEMP) in Volume 4 of the EIAR, where Table 5.2 lists all Construction Phase mitigation measures for the Proposed Scheme.

Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme during the Construction Phase. As part of the baseline noise surveys undertaken for the Proposed Scheme, there were two noise monitoring locations in close proximity to Collinstown Business Park, namely an attended monitoring location in a green area north of the Carlton Hotel (Reference Number CBC0002ANML006) and an unattended monitoring location in a residential front garden north of the respondent's property (Reference Number CBC0002UNML003), as shown in Figure 9.2 (Sheet 4) in Volume 3 of the EIAR. Figure 9.3 in Volume 3 of the EIAR maps the potential noise impacts associated with the predicted Construction Phase traffic, with Collinstown Business Park (Sheet 2) mapped with an impact significance rating of Imperceptible / Positive, therefore there will not be any significant changes at that location as a result of construction traffic. With respect to the noise from construction activities (e.g. plant noise and roadworks) occurring in close proximity to Collinstown Business Park, the noise levels perceived will be variable through the Construction Phase and will be dependent on distance from the noise sources. Section 9.4.3.2 of

Chapter 9 describes the indicative noise levels for different plant and different activities based on distance from the noise source, while Section 9.5.1 describes the proposed mitigation measures to reduce the potential for Construction Phase noise impacts. Construction Phase noise mitigation measures in Section 9.5.1 (and also replicated in Table 5.2 of Appendix A5.1 (CEMP) in Volume 4 of the EIAR) include:

- Selection of quiet plant;
- Noise control at source;
- Screening;
- Appropriate scheduling of working hours;
- Liaison with the public; and
- Monitoring.

The post-mitigation impacts have been summarised within Table 9.48 in Chapter 9, with daytime noise levels Monday to Friday at the nearest receptors (generally within 15m of the proposed works) anticipated to be Negative, Slight to Moderate and Temporary. Where evening or Saturday works are required, there is the potential for Negative, Significant and Temporary impacts at the nearest receptors (within 10 to 15m). Generally beyond 15-20m from the proposed works the impacts reduce to Not Significant. As stated in Section 9.6.1 of Chapter 9, *'Given the linear nature of the works, noise emissions related to construction works will be of temporary impact at any one area as the works progress along the length of the Proposed Scheme. The application of the proposed noise thresholds and restricted hours of operation, along with implementation of appropriate noise control measures, will ensure that noise impact is controlled within acceptable limit values'*. With respect to daytime noise it states, *'Once the various mitigation measures are put in place, noise impacts associated with the Construction Phase will be Negative, Not Significant to Slight to Moderate and Temporary during all key Construction Phases during daytime periods'*, while regarding evening noise it states that *'impacts associated with the Construction Phase will be Negative, Moderate to Significant and Temporary for the majority of scheduled works within 20m of the works. At distances within 10m of road widening / utility diversion works, the noise impact will be Negative, Significant to Very Significant and Temporary. As per DMRB Noise and Vibration (UKHA 2020), in cases of moderate to major magnitude of impacts, the duration of works determines the overall significance rating. As part of the mitigation measures, the durations advised in the DMRB Noise and Vibration will be followed, where feasible, to reduce overall significance effects (i.e. scheduling works to occur for periods of less than 10 days / nights over 15 consecutive day / night periods and less than 40 days over six consecutive months where significant effects are identified). Once the CNL [Construction Noise Level] and duration of works is considered in line with the DMRB Noise and Vibration, all key Construction Phase residual noise levels will be Not Significant'*.

With respect to Construction Phase vibration impacts, Section 9.4.3.3 of Chapter 9 assessed the potential Construction Phase vibration impacts associated with surface breaking activities given that these activities give the highest potential for vibration during construction. The assessment states that *'vibration impacts during ground breaking activities using heavy breakers have the potential to generate Negative, Slight to Moderate, Temporary effects at distances of 10m from the activity. Beyond 50m from this type of activity, impacts are reduced to Not Significant to Slight and Temporary. For all other works, vibration impacts will be below those associated with perceptible vibration and will be Imperceptible to Not Significant and Temporary. All construction works are orders of magnitude below limits values associated with any form or cosmetic or structural damage for structurally sound or protected or historical buildings or structures'*. As outlined in Section 9.5.1.2 with respect to mitigation measures for vibration impacts during the Construction Phase, *'Vibration from construction activities will be limited to the values set out in Table 9.13 to avoid any form of potential cosmetic damage to buildings and structures'*. Table 9.13 (Chapter 9, Page 13) is provided below.

Table 9.13: Recommended Construction Vibration Thresholds for Buildings

Vibration Limits for Buildings (PPV) at the Closest Part of the Building to the Source of Vibration, at a Frequency of 4Hz		
Building Type	Transient Vibration	Continuous Vibration
Reinforced or framed structures. Industrial and heavy commercial buildings	50mm/s	25mm/s
Unreinforced or light framed structures. Residential or light commercial-type buildings	15mm/s	7.5mm/s
Protected and Historic Buildings ^{*Note 1}	6mm/s – 15mm/s	3mm/s – 7mm/s
Identified Potentially Vulnerable Structures and Buildings with Low Vibration Threshold	3mm/s	

Note 1: The relevant threshold value to be determined on a case-by-case basis. Where sufficient structural information is unavailable at the time of assessment, the lower values within the range will be used, depending on the specific vibration frequency.

- iii) In response to the request from the landowner for consideration of a signalised junction at this location, as outlined above in Section 2.7.2.2, the NTA are applying for approval of a minor modification to the Proposed Scheme by the introduction of a signalised junction design at this location as identified in Figure 2.113. As stated in the Introduction, the Board is expressly empowered by section 51(6) of the Roads Act 1993 (as amended) to “*approve a proposed road development, with or without modifications and subject to whatever environmental conditions (...) it considers appropriate*”. In this regard, the NTA has proposed a minor modification to the Proposed Scheme and requests the Board to approve the proposed road development with the proposed minor modification of an additional signalised junction at the entrance to Collinstown Business Park as identified on the drawing BCIDB-JAC-GEO_GA-0002_XX_00-DR-CR-0013 at Appendix A. As detailed below, each relevant expert has considered and assessed the new signalised junction and the conclusion is that there are no significant impacts arising from this minor modification and that there is no change to the assessments in the EIAR.

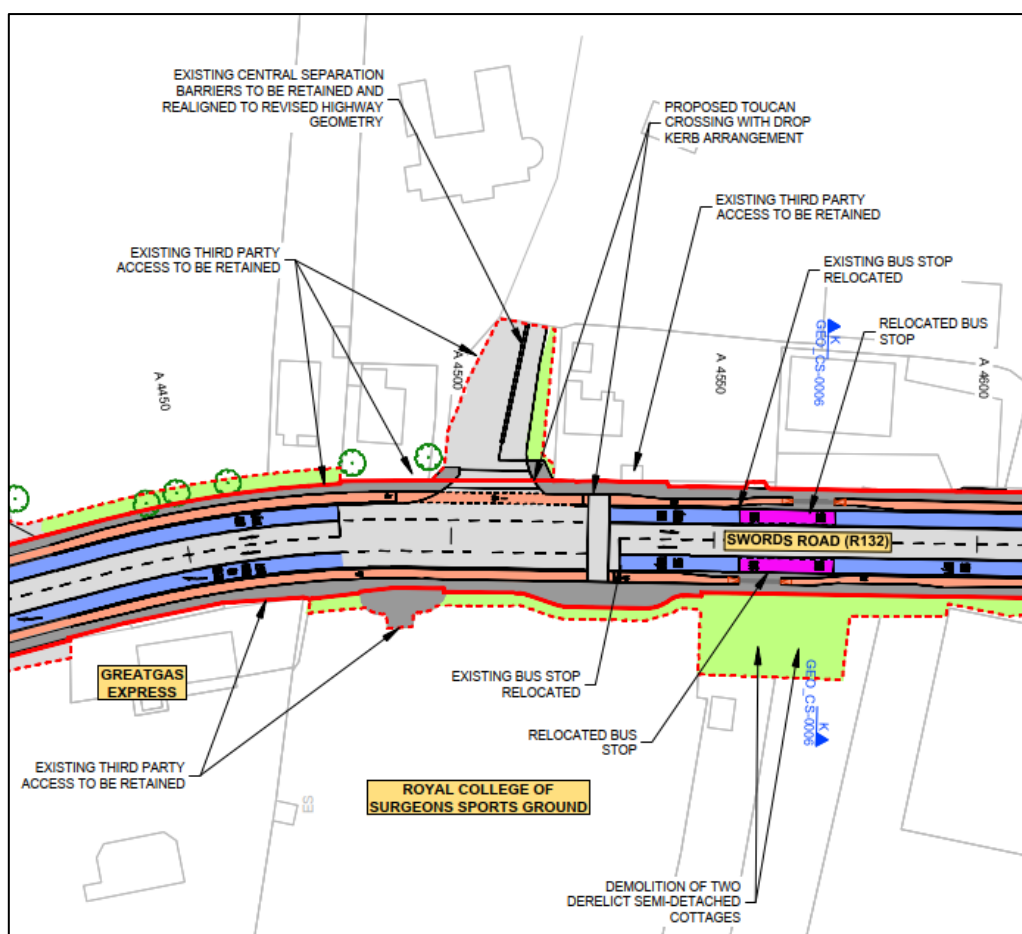


Figure 2.113 Collinstown Business Park proposed signalised junction layout

This accompanying junction system design layout is shown in Figure 2.114 below.

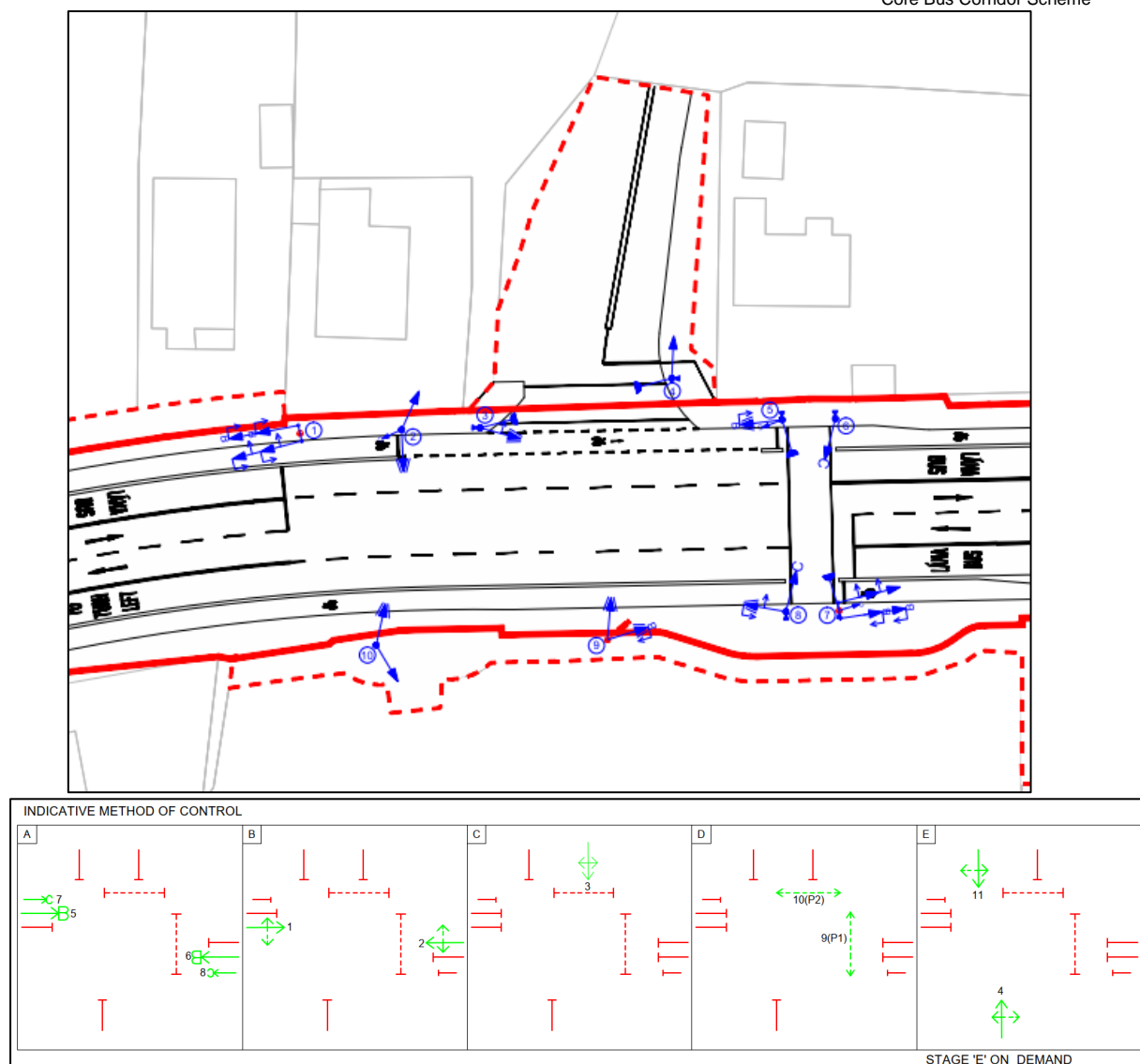


Figure 2.114 Collinstown Business Park proposed junction system design layout and indicative method of control

The introduction of this proposed additional signalised junction at the entrance to Collinstown Business Park has been considered in relation to the outcomes of the assessment of the Proposed Scheme outlined in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. The additional signalised junction will not result in any impacts beyond those assessed and reported in Chapter 6 and there are no changes to the overall conclusions and significance of effects. The reasons for this are set out in the paragraphs below. The Junction System Design drawing BCIDB-JAC -TSM_SJ-0002_XX_00-DR-TR-0012 included in Appendix A provides a more detailed overview of the proposed junction arrangements for pedestrians, cyclists, buses and general traffic with an indication of the proposed junction staging and associated signal head arrangements for the signalised junction and toucan crossings.

Pedestrian Infrastructure

Through the inclusion of pedestrian crossings within the signal control of the junction, the design offers a slight improvement when assessed using the method for pedestrian infrastructure set out in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. However, this improvement is not significant and does not change the overall pedestrian infrastructure rating for the junction or significance of effects for pedestrian impact during Operational Phase of Section 2 of the Proposed Scheme as assessed in section 6.4.6.1.3 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR.

Cycling Infrastructure

Through the inclusion of cycling crossings within the signal control of the junction, the design offers a slight improvement when assessed using the method for cycling infrastructure set out in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. However, this improvement is not significant and does not change the overall cycling infrastructure rating for Section 2 of the Proposed Scheme as assessed in section 6.4.6.1.3 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR.

Bus Infrastructure

The relocation of the bus stops to accommodate the proposed signalisation does not change the bus infrastructure rating for Section 2 of the Proposed Scheme as assessed in section 6.4.6.1.3 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. Key features such as the provision of real time and timetable information, shelters, seating, and accessible kerbs at the stops will not be impacted by the relocation. Therefore, the assessment remains valid under this category as set out in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR for the Proposed Scheme.

Parking and Loading

The potential introduction of an additional signalised junction results in no changes to the parking and loading arrangements as assessed in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. Therefore, the assessment of parking and loading remains valid as set out in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR for the Proposed Scheme.

Strategic and Microsimulation Modelling

The potential change from a priority-controlled junction to that with signal control will introduce a small amount of delay to the overall traffic network as through traffic will occasionally be required to stop for side road traffic to enter the network.

Traffic Modelling of the potential signal-controlled junction using LinSig software was undertaken. A representative scenario was developed in which the on-demand green from the Royal College of Surgeons Sports Ground is called every other signal cycle. The modelling predicts that the highest average delay per Passenger Car Unit for traffic on the Swords Road during the 2028 AM and PM peak periods are just 40 seconds and 25 seconds respectively.

A peak average delay of this magnitude will not cause any perceptible redistribution of traffic as the possible alternative routes, using, in part, the M50/M1 or the R108, would add appreciably more time to a journey than the delay caused by the signalisation. The results of any rerun of the strategic Local Area Model (LAM) would show negligible change compared to those outlined in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, and therefore, the reported significance of effects remain valid.

Bus Operations

The signalisation of the junction has the potential to cause a slight increase in bus journey times compared to those outlined in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. However, this delay would be negligible, potentially in the magnitude of 10s per vehicle following the implementation of on demand green signal for public transport. When considering microsimulation modelling, which was used to establish the impact on bus journey times in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, such a small variation in journey times is within the accepted tolerances of the Proposed Scheme and thus would have an inconsequential impact upon its outputs. Therefore, the results of any rerun of the microsimulation model would show minimal change compared those outlined in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, and therefore, the reported significance of effects remain valid.

In conclusion, having undertaken an updated assessment (which takes account of the proposed additional signalised junction at the entrance to Collinstown Business Park), no additional significant changes across the environmental topic of traffic and transport are anticipated when compared to the original assessment that was undertaken in the submitted EIAR.

In addition, the operation of the Proposed Scheme does not result in any significant noise or vibration impacts with or without the proposed change to the junction layout at the Collinstown

Business Park in place. In terms of air quality impacts as a result of the Proposed Scheme's operation and with the inclusion of the modified junction arrangements are considered neutral and long-term and are consistent with those as outlined in Chapter 7 of the EIAR (without the proposed junction changes). Consequently this would not require any changes to the conclusions reached in the any of the EIAR Volume 2 chapter, the Appropriate Assessment or the Natura Impact Statement.

- iv) Chapter 10 (Population) in Volume of the EIAR assessed community and economic impacts of the Proposed Scheme, including as assessment of the impacts due to land take at the commercial properties along the route of the Proposed Scheme. Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of the EIAR provides a list of all commercial properties along lining the Proposed Scheme which have been included within the assessment, with Collinstown Business Park being included as entry 34 in the schedule. The population assessment did not identify any significant impact on the Collinstown Business Park either during Construction Phase (Section 10.4.3.2.2.1 of Chapter 10) or during the Operational Phase (Section 10.4.4.2.2.1 of Chapter 10).
- v) If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation

2.7.3 9 – Clondev Properties Limited

2.7.3.1 Summary of issue raised

The submission raised the following issues:

- i. Support for the Proposed Scheme

The respondent noted that the delivery of such high frequency public transport infrastructure is essential to the sustainable development of North Dublin, which will enhance, unlock and sustain the growth of the area.

- ii. Integration with development of Hollytree House

The respondent wishes to note that the development of BusConnects is near the proposed development of lands known as Hollytree House, which is currently subject to Notification of Decision to grant planning permission for 82 apartments and a creche.

The submission seeks to ensure that due regard is had in granting of accommodation of provision of works for BusConnects that does not prejudice the delivery of the granted scheme of Hollytree House in anyway.

- iii. Integration with development of lands at Pinnock Hill

The respondent wishes to note that the development of BusConnects is in close proximity to the granted Pinnock Hill SHD.

The submission states to ensure that due regard is had in granting of accommodation of provision of works for BusConnects that does not prejudice the delivery of the granted scheme of Pinnock Hill SHD in anyway.

- iv. Oral Hearing

The respondent requests that an oral hearing be held in respect of this application.

2.7.3.2 Response to issues raised

- i. Support for the Proposed Scheme

The support for the scheme is noted and welcomed by the NTA.

- ii. Integration with development of Hollytree House

The NTA confirms its awareness of this planning application. In developing the Proposed Scheme, the NTA has engaged with FCC and the developers regarding this proposed development and therefore are aware of the plans for the development at this site.

iii. Integration with development of lands at Pinnock Hill

The NTA confirms its awareness of this planning application as noted in Table 2.1 (reference F22A/0687) of the Planning Report in A2.1 of Volume 4 Appendices of the EIAR. In developing the Proposed Scheme, the NTA has engaged with FCC regarding this proposed development and therefore are aware of the plans for the development at this site.

iv. Oral Hearing

The request for an Oral Hearing is a matter for An Bord Pleanála to consider.

2.7.4 10 – Collinstown Caravans Limited

2.7.4.1 Summary of issue raised

This submission raised that the Proposed Scheme would have the following impacts on their clients property:

- i) Dwelling rendered inaccessible – review of the general arrangement drawing would suggest that there will be no new boundary treatment provided and, as such, the existing dwelling will be separated from the roadway by a grass verge adjoining its front garden. The submission considers that without a means of accessing the subject site, this would effectively necessitate the abandonment of the subject property for which the residential use was intended to be maintained.
- ii) Visual Impact – given the limited nature of the general arrangement drawings available for review in connection with the subject scheme, their client has concerns in relation to the visual impact of the scheme. The primary impact relates to the reduced separation distance between the western boundary of their clients property and the Swords Road which is considered to bring the boundary 3m closer to their client's property.
- iii) Noise and vibration - Increased noise levels are considered to represent a direct impact arising as a result of the subject scheme. It is considered reasonable to assume that existing noise levels arising due to the site's proximity to Swords Road will be exacerbated to a degree that could compromise health and wellbeing of their client.

It is considered by the submission that the extended Swords Road will impact our client by virtue of vibrations arising from vehicular movements. With vehicular movements taking place in closer proximity, c. 5m closer. This could compromise the health and wellbeing of their client through loss of sleep.

- iv) Lighting - The submission recognises that there is no change in the quantum/type of street lighting infrastructure within the immediate vicinity of their clients site, it is submitted that this property will be impacted by severe light pollution in the interim period between the removal of existing vegetation and the planting/growth of replacement vegetation to mature stage where it can provide similar screening from lighting on Swords Road. It is considered the extent of light pollution arising as a result of the necessary works could compromise the health and wellbeing of their client.
- v) Development Plan Policy – The submission considers the subject scheme to be non-compliant with the following objectives of the Fingal Development Plan 2023-2029.
 - Objective LP01 – Require that the design of lighting schemes minimises the incidence of light spillage or pollution into the surrounding environment. New schemes shall ensure that there is no unacceptable adverse impact on neighbouring residential or nearby properties; visual amenity and biodiversity in the surrounding areas.

- Objective DMS86 – Ensure boundary treatment associated with private open spaces for all residential unit types is designed to protect residential amenity and visual amenity.
 - Objective NP03 – Require all developments to be designed and operated in a manner that will minimise and contain noise levels. Objective NP04 - Ensure that future developments are designed and constructed to minimise noise disturbance and take into account the multifunctional uses of streets including movement and recreation as detailed in the Urban Design Manual (2009) and the DMURS (2013). Objective NP05 - Ensure that the development complies with the NRA's design goal for sensitive receptors exposed to road traffic noise or as updated by any subsequent guidelines published by Transport Infrastructure Ireland.
- vi) Alternative design option – the submission considers appropriate to suggest an alternative design option for review by the NTA. In this regard the submission confirms their clients willingness to facilitate the provision of a left-in left-out entrance/exit arrangement.
- vii) Mitigation and compensation – the submission considers that in the absence of comprehensive mitigation measures to prevent undue accessibility impacts arising as a result of the subject scheme, our client would seek compensation to offset potential impacts to the monetary value of their property.

2.7.4.2 Response to issues raised

- i) Reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like for like basis and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. Figure 2.115 shows an extract from the Fencing and Boundary Treatment Drawings in the EIAR, Volume 3, Part 1 of 3, Chapter 4 indicating the subject property, as indicated in this figure, a wall is proposed at this location and the existing entrance/exit will also be maintained on a like for like basis.

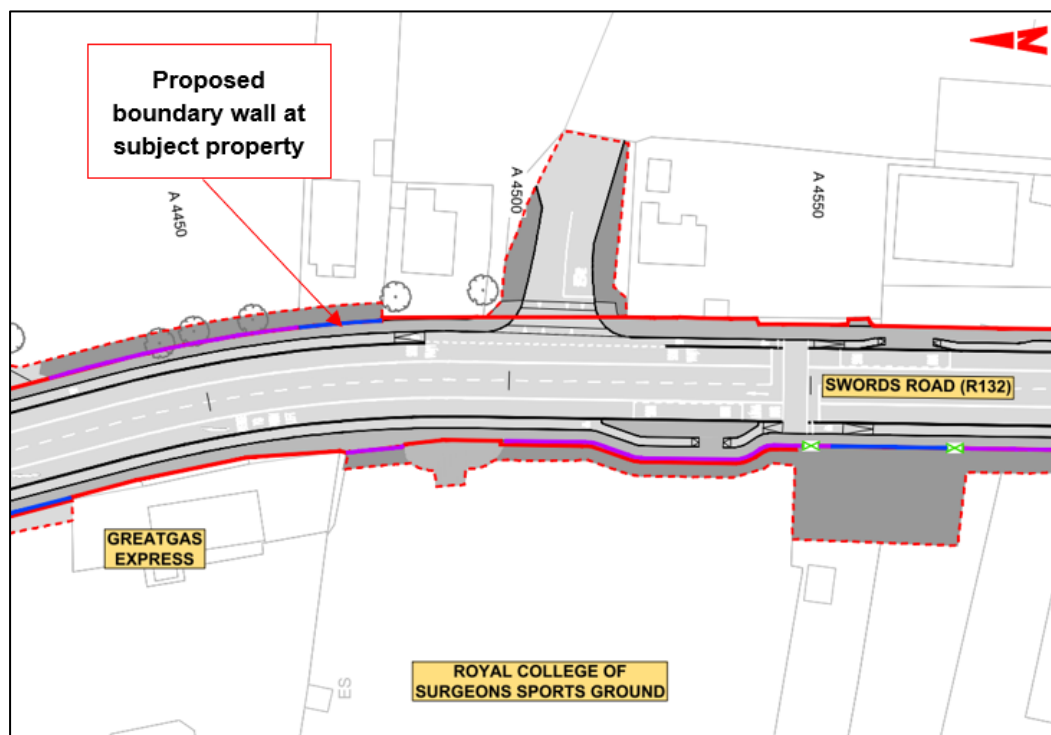


Figure 2.115 Extract from Fencing and Boundary Treatment Drawings (Sheet 13)

- ii) The Proposed Scheme will result in the boundary wall being repositioned 0.95m to 1.8m closer to the property than the existing wall, not 3m as suggested by the submission. Typically along the Proposed Scheme a 2.0-3.0m working room offset for temporary land take is required to ensure there is sufficient space available to construct the Proposed Scheme and boundary treatments. Any land that is temporarily acquired will be returned to the owner.

Chapter 17 (Landscape (Townscape) & Visual in Volume 2 of the EIAR describes the assessment of the visual impact of the Proposed Scheme during both the Construction and Operational Phases. The property is located within Section 2 of the Proposed Scheme (Airside Junction to Northwood Avenue), with the Construction Phase impact with respect to the Streetscape Character along this section being assessed as Negative, Slight / Moderate, Temporary / Short-Term. On completion of the Construction Phase, the impact is assessed as being Negative, Slight and Short-Term, improving to Positive, Slight and Long-Term as the Proposed Scheme becomes established and increasingly integrated within its setting. Figure 17.2 in Volume 3 of the EIAR provides the photomontages for the Proposed Scheme. There is no view that shows the respondent's property, however there is one which was taken from the van rental property across the road. Viewpoint 03 (Figure 2.116) looks north from approximately 50m north-west of the property, showing what the Swords Road will look like at that location close to the property. The main change visible in the proposed view in the photomontage is the addition of the segregated cycle tracks on each side of the road.



Figure 2.116: Photomontage Proposed View 03 (Figure 17.2 in Volume 3 of the EIAR)

- iii) As noted above the Proposed Scheme will result in the boundary wall being repositioned 0.95m to 1.8m closer to the property than the existing wall. The traffic lane will not be brought any closer to the property than the existing situation. The boundary wall is being repositioned to facilitate the inbound cycle track.

Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there were two noise monitoring locations in close proximity to the respondent's property, namely an attended monitoring location in a green area north of the Carlton Hotel (Reference Number CBC0002ANML006) and an unattended monitoring location in a residential front garden north of the respondent's property (Reference Number CBC0002UNML003), as shown in Figure 9.2 (Sheet 4) in Volume 3 of the EIAR. Figure 9.3 in Volume 3 of the EIAR maps the potential noise impacts associated with the predicted Construction Phase traffic, with the respondent's property (Sheet 2) mapped with an impact significance rating of Imperceptible / Positive. Figures 9.4 and 9.5 in Volume 3 of the EIAR map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043)

respectively, with the modelling for the Opening Year giving an impact significance rating of Imperceptible / Positive along the Swords Road at the respondent's property. The modelled impact remains the same in the Design Year. Therefore given that the actual trafficked part of the roadway (bus lanes and general traffic lanes) will not be any closer to the front of the property (as outlined above), and that the noise assessment has modelled an imperceptible change to the traffic noise along this stretch of the road once the Proposed Scheme is operational, there will be no perceptible rise in noise levels relative to the current situation at the property.

- iv) The submission claims that their clients property will be impacted by severe light pollution in the interim period between the removal of existing vegetation and the planting/growth of replacement vegetation to a mature stage where it can provide similar screening from lighting on Swords Road. As indicated in the Landscape General Arrangement drawing, see Figure 2.117, there is no existing vegetation to be removed at this property.

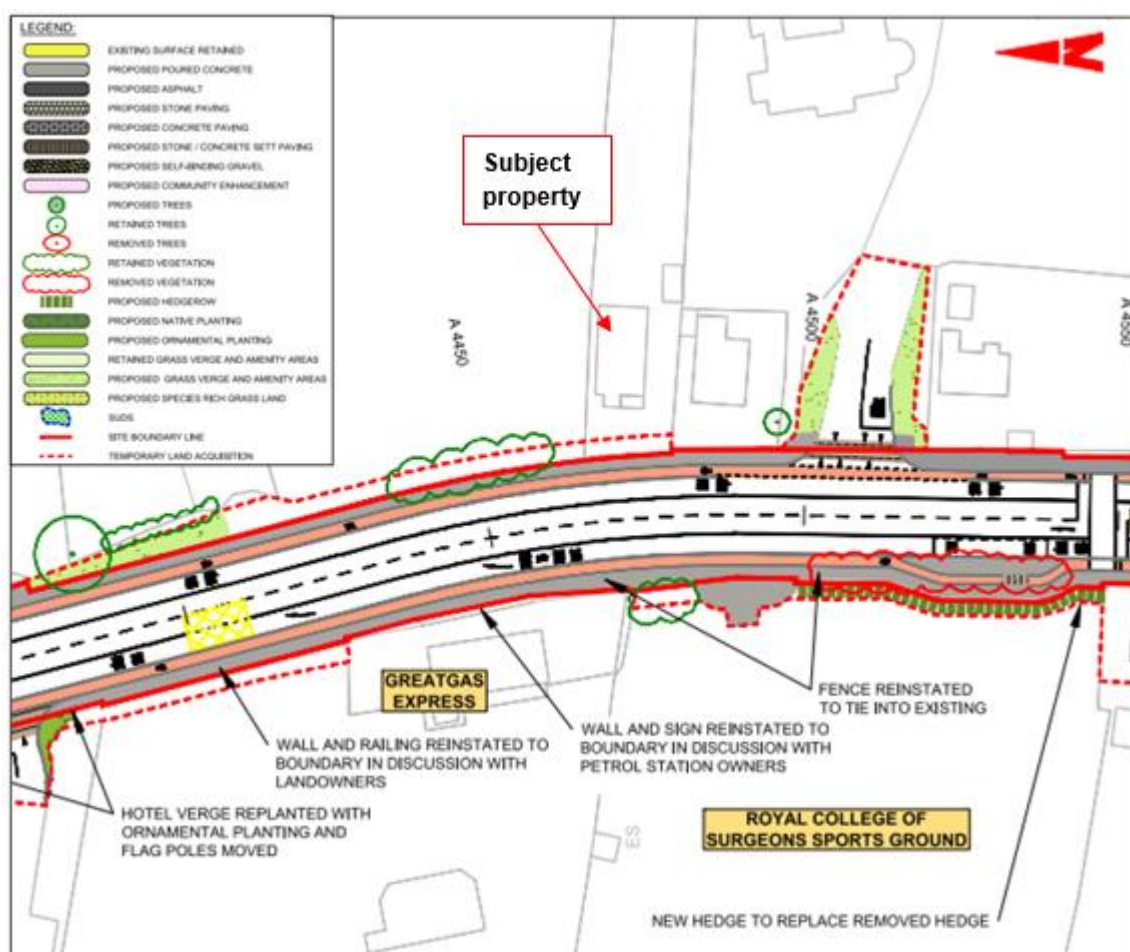


Figure 2.117 Extract of Landscape General Arrangement Drawing (Sheet 13)

- v) Objective LP01 - There will be no change to the lighting impact as part of the Proposed Scheme

Objective DMSS86 - Reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like for like basis.

Objective NP03, NP04, NP05 – As noted in the response above, given that the actual trafficked part of the roadway (bus lanes and general traffic lanes) will not be any closer to the front of the property, and that the noise assessment has modelled an imperceptible change to the traffic noise along this stretch of the road once the Proposed Scheme is operational, there will be no perceptible rise in noise levels relative to the current situation at the property.

- vi) Reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like for like basis.

- vii) If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

2.7.5 11 – Conor O’Scaill, O’Scaill Veterinary Surgeons

2.7.5.1 Summary of issue raised

i) Access and Egress

The submission states that the scheme proposes to change the current access arrangements for the site by removing the 2 no. existing access points and replacing them with 1 no. new access point and considers that any alteration to access points could have severe implications for the facility's ability to maintain its parking operations effectively. The submission considers that the works illustrated on the general arrangement drawings will result in the loss of 5 no vehicular parking spaces and will require all vehicles to perform excessive reverse manoeuvres creating traffic hazard. This is apparently based on a perception that Heavy Goods Vehicles (HGVs) can only enter and exit the premises via the proposed mini roundabout to the north of the premises.

ii) Noise and Vibration

The submission considers that as part of the CPO, the portion of lands to be acquired, including the dense hedgerows to the front of the property, currently provides protection against noise and dust from the existing road. During the construction phase it is considered that noise, vibration and dust levels will increase for approximately 12 months. The submission questions why this potential disruption has not been considered as part of the Noise and Vibration chapter.

2.7.5.2 Response to issues raised

i) Access and Egress

The NTA has actively engaged with the landowner since 2018 in respect to the Emerging Preferred route at Pinnock Hill and will continue to do so with respect to specific details. This engagement has included Teams meetings, phone calls and on-site meetings with the engineering design team relating to access provisions with revisions made to the Proposed Scheme to take account of concerns.

As part of the Proposed Scheme, it is proposed to upgrade the existing roundabout at Pinnock Hill Roundabout to a signalised junction to provide improved bus priority, and pedestrian and cyclist facilities.

Vehicles will not be required to reverse to exit the premises. Access to the practice will continue to be maintained from the R132 as requested in the submission. This will also ensure that the access to the paddocks will be maintained.

The existing access/egress to the Swords Veterinary Hospital at the Pinnock Hill roundabout is to be extinguished under the Proposed Scheme. Alternative access and egress will be provided by means of upgrading the existing R132 access, which will serve both the business and residential properties, and the creation of a new exit onto the R125, as indicated in Figure 2.118.

Under the Proposed Scheme all clients, including cars, SUVs, LGVs and HGVs, will enter the business by means of the upgraded R132 access. HGVs, and clients travelling west to Swords or northbound on the R132, will leave the practice via the R125 exit. Clients travelling southbound will use the R132 access/exit.

HGVs can continue to enter the practice via the existing R132 access under the Proposed Scheme, but instead of exiting via the proposed mini roundabout as described in the submission, they will leave through the proposed R125 exit.

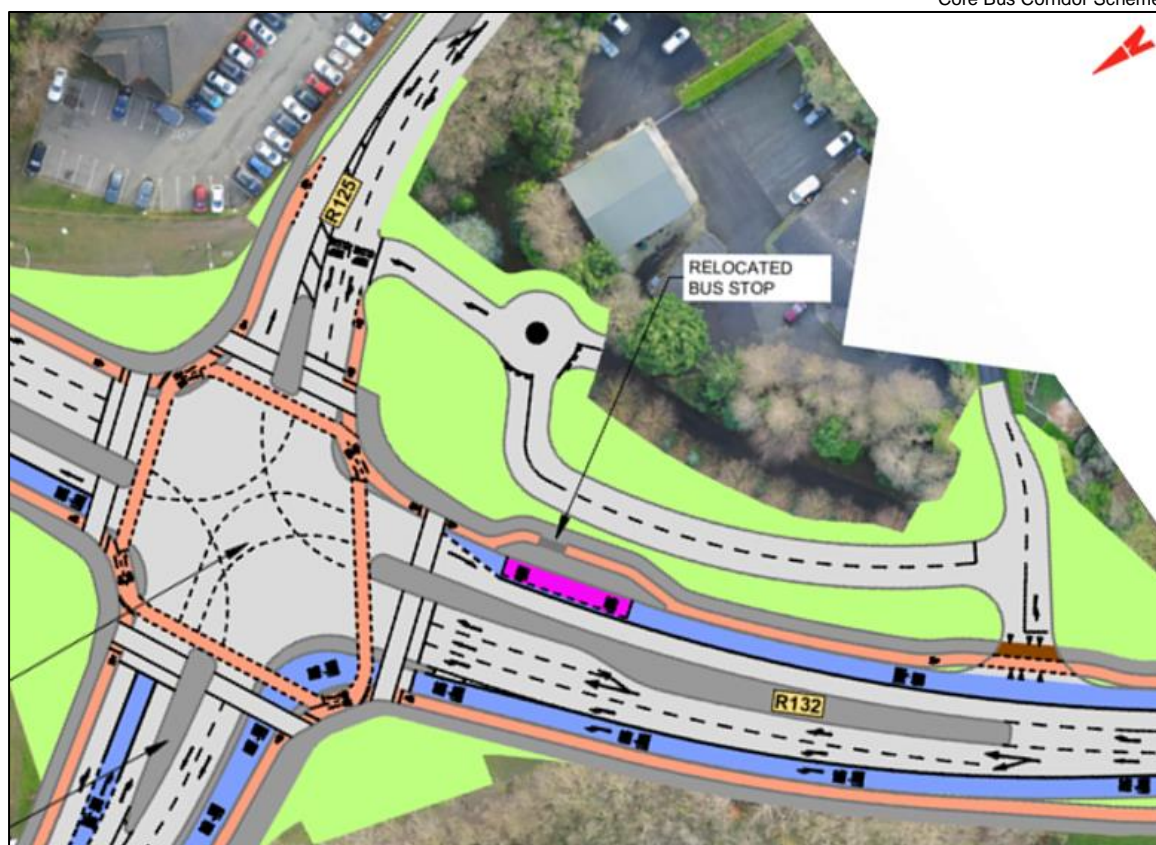


Figure 2.118: Proposed Access/Egress Arrangement at Ó'Scanail Veterinary Hospital

Under the Proposed Scheme, a mini roundabout will tie in with the existing access to the car park of the veterinary practice along with a new 2-way access road that will link the mini roundabout to the R132 access/exit. All vehicles will thus be able to continue to execute the manoeuvres described in the Impact Report presented with the submission.

HGVs will not be required to turn within the carpark. Instead as described above, HGVs will be able to enter via the R132 access and then continue on to exit via the R125. Therefore there is no anticipated impact on the existing vehicular parking for the practice.

ii) Noise and Vibration

EIAR Volume 2 Chapter 9 Noise and Vibration Sections 9.4 to 9.6 discuss the potential impacts, mitigation measures and residual impacts of the construction and operational phases of the Scheme. EIAR Volume 2 Chapter 5 Construction Section 5.3.2.2 lays out the construction that will take place in Section 1, commenting that construction near this plot will last approximately 12 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented Section 5.3.

Section 9.5.1 of Chapter 9 describes the noise and vibration mitigation measures during the Construction Phase. All of these measures are also recorded in Chapter 22 (Summary of Mitigation and Monitoring Measures) in Volume 2 of the EIAR, and are listed in Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4 Part 1 of the EIAR.

Section 9.4.3.2 of Chapter 9 sets out the calculated construction noise levels associated with various phases of work. For each element of work, noise levels are calculated for varying distances from an activity in the absence of noise mitigation. Under each activity it is noted that the identified NSLs is not an exhaustive list of properties at varying distances. For a long linear project of this nature, it is not possible to list each building in the vicinity of a working area, however it is intended that the reader can interpret impacts at their properties based on NSLs at similar distances. The impacts are further described in full in Table 9.44 for each collection of properties depending on their distance from the works.

A noise survey was undertaken within the ground of the veterinary hospital, adjacent to the residential property and hence both the residential property and the veterinary hospital form part of the assessment and have been considered as part of the overall impact assessment based on the approach discussed above.

Section 9.5.1.1 of Chapter 9 describes a number of measures including selection of quiet plant, noise control at source, screening, managing work hours, liaison with the public and monitoring of noise levels. It states that '*The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas (i.e. based on the construction threshold values for noise and vibration set out in Table 9.10 and Table 9.13). Reference to Table 9.44 indicates that intrusive works occurring within 75m of NSLs with a direct line of sight to work will need specific noise control measures to reduce impacts depending on time period over which they will occur (i.e. daytime or evening)*'.

It is noted the existing hedgerows which bound the property and R132 are not relied upon for noise screening. From a noise point of view, due to the porous nature of vegetation, they provide a minimal level of noise screening. During the construction phase, the use of screening via site hoarding or localised demountable screens will be used to control noise emissions which are significantly more effective compared to vegetation. The landscaping plan for the proposed project includes replanting of trees to and hedgerows along the site boundary.

Highest residual construction noise levels at the veterinary hospital buildings will occur during road widening and utility diversion works. There is potential for a negative, slight to moderate and temporary impact within 20m from the proposed works during daytime periods and negative, moderate to significant and temporary within 20m during evening or Saturday periods. During other activities, impacts will be lower and hence over the full 12 month construction duration, the majority of works will result in a not significant to moderate and temporary noise impact. The paddock area extends between approximately 40m to 150m from the works boundary. Residual construction noise levels for all phases at these distances are below the construction noise thresholds or the baseline noise environment and hence the impact is negative, not significant and temporary.

2.7.6 13 – Deirdre and Pamela Scully

2.7.6.1 Summary of issue raised

The submission raised the following issues:

1. Health issue

The submission considers that the proposal to place a CPO on part of their front garden will result in an unacceptable hazard to human health. It is claimed that the buses will be 4 to 5 meters from the respondents front door. Any disturbing activity on a constant basis through the human auric field has a detrimental effect on the cells in the body and in time lead to cancers.

2. Destruction of village streetscape and acceleration of climate breakdown

The submission claims that the proposed development will cause destruction of the natural street landscape. It is claimed that taking meters from residents gardens is going to accelerate climate change, however marginally.

3. One way system (reducing congestion and saving money) / Why 'two motorways'?

- i) The destruction of Santry Village could have been avoided if the original proposal for a one-way system had been adopted.
- ii) The respondent attended an information evening delivered online by the NTA on 7th December during which they outlined four particular elements underpinning their policies. It is claimed that the below mentioned statements are being ignored by the NTA in relating to opting for a motorway through Santry Village:

- (a) Pedestrians need to be supported for safe walking
- (b) Cars will have to take longer journeys to facilitate other road users

- (c) 90% of respondents to their consultations agree that there needs to be a reduction of the reliance on the private car for travel
- (d) Climate change requirements must be taken into consideration.

4. Why widen in the first place

The submissions questions why widen in the first place as the buses move out of the bus lane as it exists at the moment and into the car lane. No matter how wide the road is made the buses will still have to move into the car lane to cross the Shantalla Road bridge.

It is also queried why is the tree canopy beside the bridge being lifted for a cycle lane. It is claimed that cyclists will still use the main road.

2.7.6.2 *Response to issues raised*

1. Health issue

It should be noted in the first instance that in the existing situation the edge of the nearest carriageway is approximately 10.3m from the front door of this property. With the Proposed Scheme the carriageway will be approximately 9.2m from the front door of this property, not 4-5m as suggested by the submission. The extent of change proposed at this location will result in only a reduction of 1.1m to the distance between the front door and the street. Typically along the Proposed Scheme a 2.0-3.0m working room offset for temporary land take is required to ensure there is sufficient space available to construct the Proposed Scheme and boundary treatments. At this location, additional temporary land take is proposed to reinstate the boundary wall and to regrade the access to tie into the levels of the Proposed Scheme as depicted in General Arrangement Drawing Sheet 07 of 37 and Landscape General Arrangement Sheet 21 of 37 (see Figure 2.119) of the EIAR Volume 3 Figures Chapter 4 Proposed Scheme Description drawings. Any land that is temporarily acquired will be returned to the owner. It is intended that boundaries and accesses will be replaced on a like for like basis.

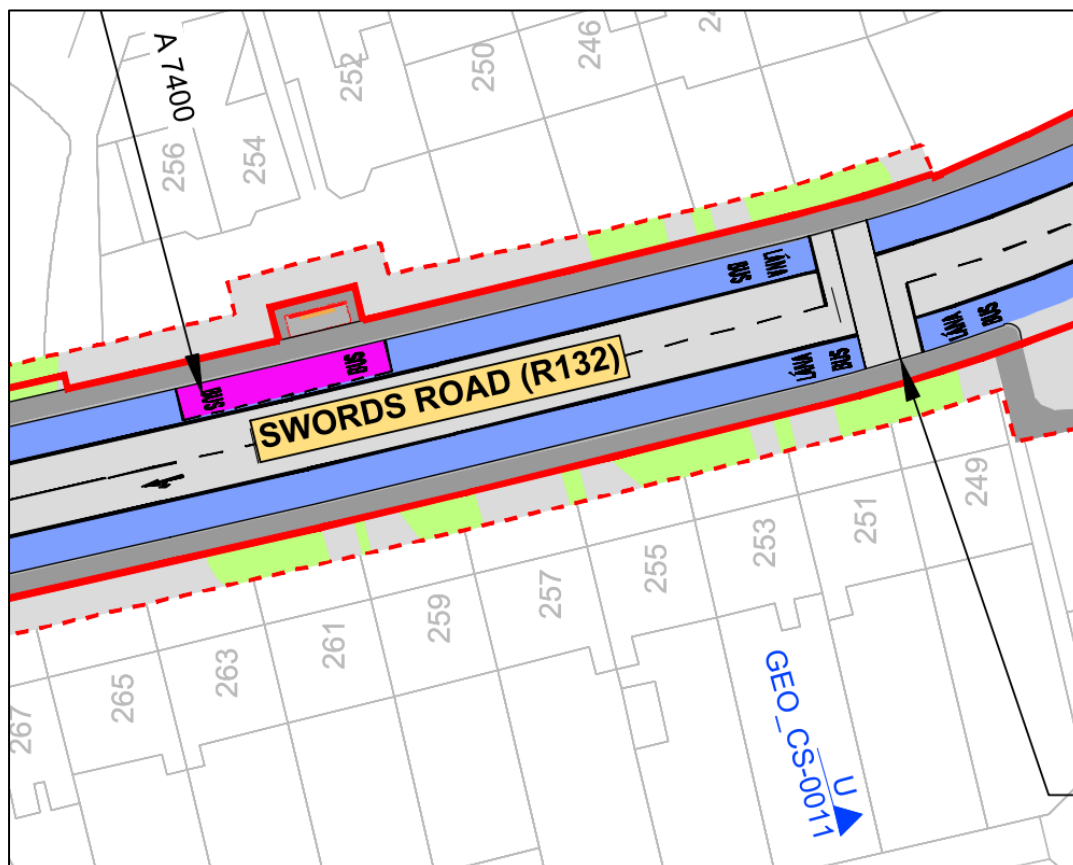


Figure 2.119 General Arrangement of Proposed Scheme at Respondents House (Sheet 21)

Figure 17.2 (Photomontages) in Volume 3 of the EIAR includes a viewpoint looking south along the Swords Road which shows the location of the respondent's house (View 26, Figure 17.2.2.25 for the existing view and Figure 17.2.2.26 for the proposed view (Figure 2.120 below)).



Figure 2.120: Photomontage Proposed View 26 (Figure 17.2 in Volume 3 of the EIAR)

Chapter 11 (Human Health) in Volume 2 of the EIAR describes the assessment of the potential health impacts of the construction and operation of the Proposed Scheme. With respect to the Construction Phase, Section 11.4.3 of Chapter 11 describes the potential impacts of the Proposed Scheme. The most likely health impacts (as summarised in Table 11.6 in Chapter 11) will be psychosocial effects (frustration, annoyance and stress), potential sleep disturbance for shift workers, risk of injury from road collisions as a result of construction traffic management, and potential exacerbation of respiratory conditions due to dust and emissions. All of these impacts would be short-term or temporary while construction is occurring, and will be Not Significant to Moderate impacts.

With respect to the Operational Phase, Section 11.4.4 of Chapter 11 describes the potential impacts. With respect to specific conditions such as cancer, the assessment states the following:

'the Proposed Scheme will facilitate increased levels of physical activity among the residential population within the study area. School children may be particular beneficiaries of this new infrastructure due to the presence of schools. The likely level of increase in physical activity to be gained is uncertain but could contribute to approximately 30% to 50% of weekly recommended physical activity on the assumption that the studies can be generalised to this area of Dublin. The health outcomes associated with increased physical activity are:

- *Reduced risk of stroke and heart disease;*
- *Reduced risk of hypertension;*
- *Reduced risk of type 2 diabetes;*
- *Reduced risk of eight types of cancer;*
- *Reduced risk of depression;*
- *Improved cognitive function;*
- *Reduced risk of dementia;*
- *Improved musculoskeletal health;*
- *Improved weight management; and*
- *Improved mental wellbeing.'*

With respect to specific concerns about noise pollution and vibrational impacts on foundations of houses, Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there was an attended noise monitoring location at the Swords Road / Shanrath Road junction approximately 10m from the Swords Road (Reference Number CBC0002ANML011), in close proximity to the respondent's residence as shown in Figure 9.2 (Sheet 6) in Volume 3 of the EIAR. Figure 9.3 in Volume 3 of the EIAR maps the potential noise impacts associated with the predicted Construction Phase traffic, with the Swords Road at the residence (Sheet 4) mapped with an impact significance rating of Slight-Moderate. Figures 9.4 and 9.5 in Volume 3 of the EIAR map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for the Opening Year giving an impact significance rating of Not Significant on the Swords Road at the residence (Figure 9.4, Sheet 4), with the modelling for the Design Year remaining unchanged at Not Significant (Figure 9.5, Sheet 4).

With respect to vibration impacts on buildings specifically, the assessment as described in Chapter 9 considered both Construction and Operational Phase vibration impacts. Section 9.4.3.3 assessed the potential Construction Phase vibration impacts associated with surface breaking activities given that these activities give the highest potential for vibration during construction. The assessment states that *'vibration impacts during ground breaking activities using heavy breakers have the potential to generate Negative, Slight to Moderate, Temporary effects at distances of 10m from the activity. Beyond 50m from this type of activity, impacts are reduced to Not Significant to Slight and Temporary. For all other works, vibration impacts will be below those associated with perceptible vibration and will be Imperceptible to Not Significant and Temporary. All construction works are orders of magnitude below limits values associated with any form or cosmetic or structural damage for structurally sound or protected or historical buildings or structures'*. As outlined in Section 9.5.1.2 with respect to mitigation measures for vibration impacts during the Construction Phase, *'Vibration from construction activities will be limited to the values set out in Table 9.13 to avoid any form of potential cosmetic damage to buildings and structures'*. Table 9.13 (Chapter 9, Page 13) is provided below.

Table 9.13: Recommended Construction Vibration Thresholds for Buildings

Vibration Limits for Buildings (PPV) at the Closest Part of the Building to the Source of Vibration, at a Frequency of 4Hz		
Building Type	Transient Vibration	Continuous Vibration
Reinforced or framed structures. Industrial and heavy commercial buildings	50mm/s	25mm/s
Unreinforced or light framed structures. Residential or light commercial-type buildings	15mm/s	7.5mm/s
Protected and Historic Buildings ^{*Note 1}	6mm/s – 15mm/s	3mm/s – 7mm/s
Identified Potentially Vulnerable Structures and Buildings with Low Vibration Threshold	3mm/s	

Note 1: The relevant threshold value to be determined on a case-by-case basis. Where sufficient structural information is unavailable at the time of assessment, the lower values within the range will be used, depending on the specific vibration frequency.

With respect to specific concerns about air quality, Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases at the nearest sensitive receptors to the Proposed Scheme. As part of the baseline air quality surveys undertaken for the Proposed Scheme, there was an air quality monitoring location close to the residence at 287 Swords Road (Reference Number CBC0002DT004), as shown in Figure 7.1 (Sheet 2) in Volume 3 of the EIAR. Figures 7.6, 7.7 and 7.8 (Sheet 2) in Volume 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the potential Construction Phase impact at that location with respect to NO₂ and particulate matter (PM₁₀ and PM_{2.5}), with the maps showing that the change in pollutant concentrations is Negligible across all three pollutants. Figures 7.3, 7.4 and 7.5 (Sheet 2) in Volume 3 of the EIAR map the same information for the modelled Operational Phase impacts in the Opening Year of 2028, with the impact again showing to be Negligible at that location for particulate matter (both PM₁₀ and PM_{2.5}), and Negligible to Slight Beneficial for NO₂. Regarding the modelling results for the Operational Phase, it is also stated within the Chapter *'The predictions reported are based on conservative assumptions regarding background pollutant concentrations and the improvement in vehicle emission rates. 2019 background pollutant concentrations have been used to represent 2028 and are likely be lower by the Opening Year (2028), than in 2019. Older fleet*

projections were used in the absence of a fleet that incorporates the effects of the 2021 Climate Action Plan (Government of Ireland 2021) measures, including a larger proportion of electric vehicles planned by the Opening Year (2028) than has been modelled. In reality, total concentrations (and magnitude of change) are likely to be lower than those reported here'.

2. Destruction of village streetscape and acceleration of climate breakdown

In Chapter 12 (Biodiversity) in Volume 2 of the EIAR it describes the habitat types within the Proposed Scheme boundaries, with them mapped in Figure 12.5 in Volume 3 of the EIAR. With respect to the loss of habitat (including in green spaces through Santry), these areas are generally categorised as being of '*Local Importance*', and the Chapter categorises the majority of these areas ('improved amenity grasslands (GA2), planted flowers beds (BC4) and ornamental/non-native shrub (WS3), areas of disturbed ground (ED2 and ED3) and scrub (WS1), hard standing (BL3) and dry meadows and grassy verges (GS2) habitat') as being of '*Lower Value*', while trees and hedgerows are generally of '*Higher Value*'. In Table 12.16 the total extent of habitat loss for the whole Proposed Scheme is quantified with respect to permanent and temporary losses, with such losses generally assessed as being significant losses at the local geographic scale, particularly during the Construction Phase. As part of the mitigation measures for the Proposed Scheme, new planting will be done (new street trees, woodland trees, hedgerows, grasses and other planting) as listed in Section 12.5.1.2.1. There are no significant residual impacts identified in the Chapter as a result of the habitat impacts at this location.

In Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR, Section 17.4.3.1.3 outlines the Construction Phase impact on the townscape and streetscape character in the Northwood Avenue to Shantalla Road section of the Proposed Scheme, stating '*While the construction works will not alter the existing townscape character along this section of the Proposed Scheme the works are extensive and will result in changes to elements of the existing streetscape, most notably through the removal of mature trees*' giving it an impact rating of Negative, Significant and Temporary / Short-Term. The impact specifically on trees and vegetation is described in Section 17.4.3.2.9 listing the route through Santry to Shantalla Road as one of the impacted areas, giving an overall assessment of vegetation removal as being Negative, Moderate / Significant and Temporary / Short-Term during construction. It is proposed to replace as many trees and areas of lost vegetation as possible along the route to compensate for the losses during construction. As a result the impact ratings reduce for the Operational Phase as recorded in Table 17.10 of the Chapter, with the impact on the character of the section changing from Negative, Moderate and Short-Term at one year post-construction to Positive, Moderate and Long-Term at 15 years post-construction after new planting has had time to fully establish.

Chapter 8 (Climate) in Volume 2 of the EIAR has assessed the climate impact as a result of both the construction and operation of the Proposed Scheme. Specifically with respect to tree and vegetation clearance, the impact of this has been assessed under the heading of '*Land Use Change*', with the assessment described in Section 8.3.4.1.2 of Chapter 8 as '*The change in land use associated with the Proposed Scheme, including the felling and planting of trees and vegetation, has been calculated using the methodology outlined in Chapter 4 (Forest Land) of the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories (IPCC 2006). Land use change is also appropriately assessed using the same methodology*'. During the Construction Phase the impact from land use change is recorded in Section 8.5.1.4 as '*The Construction Phase of the Proposed Scheme is predicted to result in the temporary removal of grassland to facilitate a Construction Compound. However, overall, there will be a Negligible impact on carbon sequestration as a result of the Construction Phase of the Proposed Scheme, leading to a Not Significant impact*', with the Operational Phase impact being described in Section 8.5.2.3 as '*The Operational Phase of the Proposed Scheme will not result in any significant changes to land use. Thus, there will be an imperceptible positive impact on carbon sequestration as a result of the Operational Phase of the Proposed Scheme*'.

3. One way system (reducing congestion and saving money) / Why 'two motorways'?

- i) The Emerging Preferred Route proposed a northbound one-way traffic system between the Omni Park Shopping Centre and the Shantalla Road junction, along with bus lanes in both directions, and a new slip road allowing southbound traffic onto the bypass to exit onto Shantalla at the N1/M50 bridge. As this section of the Swords Road is not wide enough to provide segregated cycle facilities, it was proposed to redirect cyclists through Coolock

Lane and to an offline, two-way cycle track adjacent to Oak Park Avenue, running parallel to west of Santry Bypass (N1/M50) and connection at the Shanrath Junction. Following consultation feedback received from members of the public following the first non-statutory public consultations held from the 14th of November 2018 to the 29th of March 2019, it became apparent that the one-way proposal for general traffic might affect the existing access/egress arrangements for residents along the Lorcan and Shanrath Roads and impact on commercial deliveries and local business.

Section 3.4.1.1 of Chapter 3 of the EIAR set out that design development and assessment work was carried out at the Draft Preferred Route Option Stage on this section of the Proposed Scheme. This is also documented in Section 6.2.2.2 of the Preferred Route Option Report (provided as part of the Supplementary Information of the EIAR), looked at a one-way option through Santry Village, which was considered.

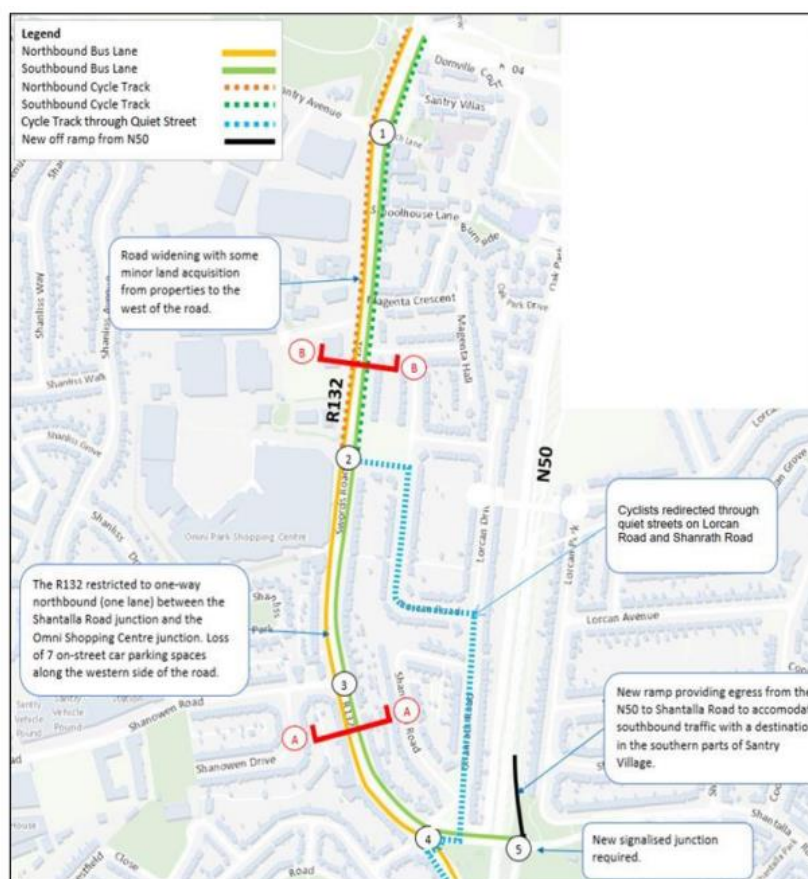


Figure 2.121: One-Way Route Option through Santry Village (Option SY1C)

This option removes southbound traffic between Omni Shopping Centre and Shantalla Road to minimise land acquisition on Swords Road for this section of the scheme. A bus lane would be provided in each direction but only one traffic lane (northbound) would be maintained for general traffic.

Combined with the proposal to redirect cyclists through Lorcan Road and Shanrath Road this option would negate the need for any land acquisition along this section of the scheme.

To allow access from the north to properties in the south of Santry Village, this option would require the construction of a new southbound slip road off the N50 at Shantalla Road. The new slip road would join the Shantalla Road via a new signalled junction.

A cross-section on Swords Road for this scheme option is illustrated in Figure 2.122.

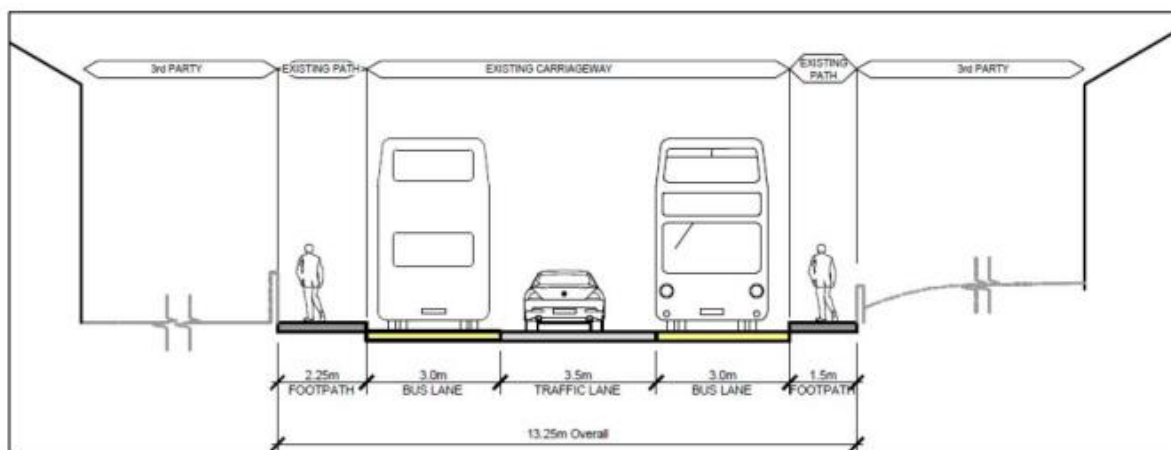


Figure 2.122: SY1C Cross-Section A-A Swords Road South of Omni Shopping Centre

The proposed traffic management changes would have a direct impact on traffic routes to, from and through the southern part of Santry Village.

The Stage 2 Route Options Assessment – Multi-Criteria Analysis table for this section is included in Appendix A of the Preferred Route Option Report.

A summary of the assessment and relative ranking of route options against the five main assessment criteria is presented in Table 2.17 below.

Table 2.17 Santry Village Final Summary of MCA

Assessment Criteria	Option 1 (SY1B) Two-Way Option	Option 2 (SY1C) One-Way Option
Economy	Yellow	Yellow
Integration	Green	Orange
Accessibility and Social Inclusion	Green	Orange
Safety	Yellow	Yellow
Environment	Orange	Green

Signal-controlled bus priority (similar to that adopted at Santry Demesne, see Section 6.2.1 of the Preferred Route Options Report) was also considered as an option through Santry Village, in order to reduce the impact on land take. For signal-controlled bus priority to operate successfully, queue lengths from the next junction cannot be allowed to develop on the shared bus/traffic lane portion, as this would result in delays to the bus service. Junction modelling of this option through Santry Village showed extensive queuing at the Lorcan Road/Omni Park Shopping Centre, Shanowen Road and Shanrath Road junctions, which are in close proximity to each other (300m between the Lorcan Road/Omni Park and Shanowen Road junctions and 250m between the Shanowen Road and Shanrath Road junctions). On this basis, signal-controlled bus priority was discounted as a feasible option through Santry Village.

Based on the following key findings from the Multi-Criteria Assessment undertaken for this section of the study area, Route Option SY1B (two-way option) is the Preferred Route Option for the following reasons:

- It performs more favourably under the Integration criterion because this option requires no changes to the current traffic management regime in Santry. SY1C would require detours and increased journey times for traffic travelling to and from the north with an origin or destination in the southern parts of Santry and people travelling south from the southern parts of Santry;

- It performs more favourably under the Accessibility and Social Inclusion criterion because under Option SY1C, journey times of the regular trips made by local residents living between the Omni Park Shopping Centre and Shantalla Road/Swords Road Roundabout would be increased.

In addition to the above alternative solution which specific to Santry Village, Chapter 3 of the EIAR sets out the reasonable alternatives studies and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route.

'For urban transport systems, bus-based transport is the appropriate public transport mode for passenger demand levels of up to 4,000 passengers per hour per direction. (UITP 2009). Light rail provision would generally be appropriate to cater for passenger demand of between 3,500 and about 7,000 passengers per hour per direction. Passenger demand levels above 7,000 passengers per hour per direction would generally be catered for by heavy rail or metro modes, which would usually be expected to serve a number of major origins or destinations along a Particular corridor. In the case of both the bus and light rail modes, higher levels of passenger demand than the above stated figures can be accommodated under specific conditions.

The development of the prior GDA Transport Strategy considered the likely public transport passenger demand levels across the region using the NTA's transport model and took into account the other studies referenced above, in addition to studies that had been carried out to investigate a potential light rail scheme within the area of this corridor. Likely passenger flows were identified to be within the capacity of bus transport, without reaching the quantum of passenger demand which would support the provision of a higher capacity rail solutions in addition to a Metrolink. Section 3.2.1 set out various studies undertaken for the prior GDA Transport Strategy. Arising from these studies and the specific assessment and transport modelling work undertaken for the prior Strategy, it was concluded that a bus-based transport system would be the proposed public transport solution in the corridor of the Proposed Scheme. The proposed transport solution would be supplemented by Metro, to provide more passenger capacity and enhanced interchange between the Luas Red and Green Line Services, proposed Metrolink Station at Fosterstown, Sligo/Maynooth Line Heavy Rail Services at Drumcondra Station and the Suburban Interchange between the Orbital and Radial Routes at Coolock Lane. It was considered that there would be insufficient demand to justify the provision of an additional light rail alternative beyond what is proposed above, particularly given the low to medium density nature of development in this corridor.

Similar to BRT, the light rail option would be worse for the environment in terms of construction impacts, including flora and fauna, heritage, air and noise, compared to the CBC proposal. Light rail requires continuous unbroken physical lane infrastructure to achieve high-priority. This would involve significantly more land take and potentially involve demolition of buildings at pinch-points. In the case of the CBC proposals, bus-priority can be achieved through short lengths at pinch-points by the use of signal controlled priority.

Given the consideration of light rail provision, and the level of likely public passenger use along this overall corridor assessed in the transport modelling work, the development of the prior GDA Transport Strategy identified that a Metro solution would be economically justified within the area covered by this corridor. Therefore, it is intended to develop the light rail Metro system along this corridor through the implementation of MetroLink.

Arising from the various studies and analysis that had been carried out, and the specific assessment and transport modelling work undertaken for the prior GDA Transport Strategy, it was concluded that a high quality bus-based transport system, supplemented by the implementation of MetroLink, would be part of the proposed public transport solution in the corridor of the Proposed Scheme. This is because the

development of an underground Metro would not remove the need for additional infrastructure to serve the residual bus needs of the area covered by the Proposed Scheme, nor would it obviate the need to develop the cycling infrastructure required along the route of the Proposed Scheme.'

With respect to congestion charging, Section 3.2.8 of the EIAR states that a key success factor of demand management is greater use of alternative travel modes, in particular public transport. In the case of Dublin, the existing public transport system does not currently have sufficient capacity to cater for larger volumes of additional users.

'In advance of a significant uplift in overall public transport capacity in the Dublin metropolitan area, the implementation of major demand management measures across that area would be unsuccessful. Effectively constraining people from making journeys by car and requiring them to use other modes, without those modes having the necessary capacity to cater for such transfer, would not deliver an effective overall transport system. Instead, the capacity of the public transport system needs to be built up in advance of, or in conjunction with, the introduction of major demand management measures in the Dublin metropolitan area. This is especially true in the case of the bus system where a major increase in bus capacity through measures such as the Proposed Scheme would be required for the successful implementation of large scale demand management initiatives.'

While the foregoing addresses the dependency of demand management measures on public transport capacity, it is equally correct that the provision of greatly enhanced cycling facilities will also be required to cater for the anticipated increase in cycling numbers, both in the absence of demand management measures and, even more so, with the implementation of such measures. Demand management initiatives by themselves will not deliver the level of segregated cycling infrastructure required to support the growth in that mode. Consequently, the progression of demand management proposals will not secure the enhanced safe cycling infrastructure envisaged under the Proposed Scheme.'

Finally it is noted that park and ride and cashless fares both form part of the broader BusConnects programme and may be implemented to complement improvements to the overall bus system, including the Proposed Scheme infrastructure.

- ii) The Proposed Scheme has been designed to deliver upon the scheme objectives set out in Chapter 1 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets the scheme objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the scheme objectives and to construct the scheme with permanent and temporary acquisitions respectively.

4. Why widen in the first place

At present, there is no bus lane on the Shantalla Road Bridge. As described in Section 4.5.3 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR, *'A dedicated bus lane is proposed inbound along the Shantalla Road Bridge and a general traffic lane is maintained in both directions. The Shantalla Road junction will be upgraded to accommodate the bus lane and cycle and pedestrian movements'*.

The relevant extract from the General Arrangement drawings provided in EIAR Volume Part 1 of 3 proposed arrangement is shown in Figure 2.107.

Regarding the query as to why the tree canopy is being lifted to provide a cycle lane, it is acknowledged by the NTS that some experienced cyclists may choose to continue to cycle up the main road however the quiet street provides an option to make cycling more accessible to the less confident cyclist. The Proposed Scheme will provide a safe, sustainable transport corridor that can provide a sustainable alternative mode of transport for all ages and abilities.

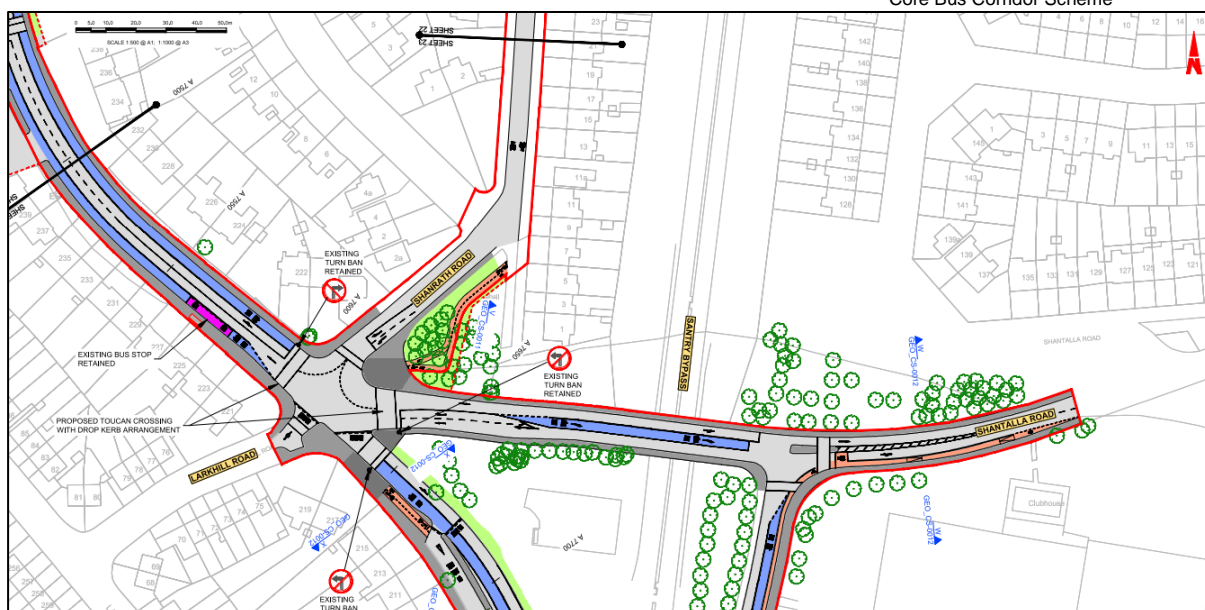


Figure 2.123 Extract of General Arrangement Drawing at Shantalla Road Bridge (Sheet 23)

2.7.7 17 – Dublin Airport Authority

2.7.7.1 Summary of issue raised

The submission raised the following issues:

1. Support for the scheme

daa welcomes the proposed BusConnects Swords to City Centre Bus Corridor Scheme. The submission considers that BusConnects will provide improved infrastructure for active travel and bus priority for both staff and passengers at Dublin Airport.

2. Airport Safeguarding

daa request that a condition is included requiring consultation with and approval by daa regarding Cranes and Construction Plant, Hazardous, Confusing or Misleading Lights, relocation of utilities and amendments to the critical part of the Security restricted Area Fence prior to commencement of development.

3. R132 and Old Airport Road Junction

daa request the R132 and Old Airport Road junction retains the existing left turn lane such that it does not compromise current operations and future development of Dublin Airport and future orbital BusConnects routes.

4. Traffic Impact

There is a concern that BusConnects will create a '*reduction in operational capacity for general traffic*'. daa considers that this will impact passengers by travelling to the airport by private car.

2.7.7.2 Response to issues raised

1. Support for the scheme

The support for the scheme is noted and welcomed by the NTA.

2. Airport Safeguarding

NTA can confirm that the Critical Part of the Security Restricted Area Fence is not impacted by the Proposed Scheme.

Regarding the Public Safety Zones, no proposed bus stops are relocated within the Inner Public Safety Zones.

It is the intention of the NTA to collaborate with daa during the subsequent construction stage of the Proposed Scheme in relation to cranes and construction plant, hazardous, confusing or misleading lights, relocation of utilities. This will include continued liaison with the daa and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between daa and the NTA, in the absence of any approval condition.

3. R132 and Old Airport Road Junction

The junction design in the Proposed Scheme retains a dedicated left turn lane between the Old Airport Road and the R132. As stated in the Junction Design Report, the existing 4 arm signalised junction and slip road is proposed to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure. Removal of the existing left turn slip and splitter island on Old Airport Road will provide improved pedestrian crossing opportunities. The key design rationale was to enhance pedestrian crossing facilities on all arms of the junction, provide protected cycle infrastructure and crossing facilities, whilst improving bus priority. The NTA's design does not prevent daa from applying for any future development of the junction by daa and the NTA will support same provided that it continues to provide satisfactory cycle infrastructure and pedestrian facilities.

4. Traffic Impact

Given the strategic importance of airport traffic flows and accessibility, the BusConnects scheme interventions at the Airport Roundabout vary from those proposed at other junctions along the BusConnects Swords corridor. As a result the BusConnects scheme interventions do not include reducing existing traffic lanes or removal of the left slip lanes at the approaches in both the east-west and north-south directions to maintain airport access effectively.

In addition, the northbound bus lane at the R132 south approach is proposed offside of the left turning lane, to facilitate all vehicular movements together from this approach through the roundabout and to maintain capacity.

Furthermore the traffic assessment has demonstrated that the forecasted traffic flows can be facilitated along the east-west access to the airport.

During the transition period, roundabout capacity will be carefully managed to maintain access to the airport by appropriate traffic management measures.

2.7.8 27 – JJ Breen

2.7.8.1 *Summary of issues raised*

The submission to the CPO raises three potential issues:

i) Construction Impacts

The submission is concerned with the Old Swiss Cottage which is noted as the last of the original Swiss Cottages. The submission states that the building is over 200 years old, the foundations are of unknown quality, and considers that any proposed work will very possibly cause structural damage to this historical building.

ii) Impact to Business (Operation)

The submission considers that the proposed works will cause major disruption to business, works are excessive in nature and duration is too long.

iii) Impact to Business (Parking)

The submission expresses concerns over the proposal to CPO all of the lands in front of Magner's Pharmacy and Eurohouse, taking car parking and loading spaces that have been used by the pharmacy for the past 20 years, without which the owner will struggle to survive.

2.7.8.2 Response to issues raised

i) Construction Impacts

Chapter 16 (Architectural Heritage) of Volume 2 of the EIAR assesses the impact of the Proposed Scheme on structures of Architectural Heritage interest as a result of both construction and operation within a 50m study area around the Proposed Scheme.

The Old Swiss Cottage (Magner's Pharmacy) has no official heritage designation; however it has been identified within the assessment in Chapter 16 under the heading of '*Other Structures of Built Heritage Interest*' and given the Reference Number CBC0002BTH016. Table 16.11 in Chapter 16 describes Magner's Pharmacy as 'Cottages, c. 1800' and gives it a Local Significance and Low Sensitivity. The cottage is marked as a heritage feature in Figure 16.1 (Sheet 10) in Volume 3 of the EIAR, and is included in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 Part 3 of the EIAR (in Section 16.6).

Section 16.4.3.6 of Chapter 16 provides detail on the impact assessment on '*Other Structures of Built Heritage Interest*' during the Construction Phase, with the Magner's Pharmacy building included within the group of 53 structures to have '*Indirect, Negative, Slight, Temporary*' impacts as a result of the construction of the Proposed Scheme.

Appendix A16.3 (Methodology for Works Affecting Sensitive and Historic Fabric) in Volume 4 Part 3 of the EIAR outlines the requirements when working near or on historic fabric. Section 16.3 of Appendix A16.2 specifically describes the requirements for protection of architectural heritage buildings and structures during works.

ii) Impact to Business (Operation)

EIAR Chapter 5 Construction, Section 5.3.3.1 states that Section 3a of the route, which the submission refers to will last approximately 18 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented Section 5.3. EIAR Appendix A5.1 CEMP, Section 5.2.1.2 lists the objectives of the Construction Traffic Management Plan, of which includes:

'Ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme'.

Chapter 10 (Population) in Volume 2 of the EIAR includes an assessment of the impact on commercial properties as a result of land take during both the Construction Phase (Section 10.4.3.2.2.1) and the Operational Phase (Section 10.4.4.2.2.1). The commercial properties which were assessed are listed in the Chapter's Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 Part 3 of the EIAR, of which Magner's Pharmacy in Old Swiss Cottage Building is entry number 59. The facility was not assessed as being significantly impacted by either the construction or operation of the Proposed Scheme as summarised in the aforementioned sections.

iii) Impact to Business (Parking)

The Proposed Scheme has been designed to deliver upon the scheme objectives set out in Chapter 1 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets the scheme objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the scheme objectives and to construct the scheme with permanent and temporary acquisitions respectively. Appendix G (Parking Survey Report) of the Preliminary Design Report notes that retaining the existing layout would result in reduced quality of service for buses, cyclists, and motorised vehicle traffic which would undermine the overall scheme objectives.

Section 6.4.6.1.4.4 of EIAR Volume 2 Chapter 6 Traffic and Transport sets out an assessment of car parking loss in the scheme section between Northwood Avenue to Shantalla Road. Specifically at this location it is stated:

'There are currently six informal parking spaces available in front of commercial sites at Schoolhouse Mews and two spaces at Magner's Pharmacy. It is proposed to remove five parking spaces, to facilitate the implementation of a cycle track and bus lane, which will provide enhanced

bus and cyclist facilities. The loss of these spaces may be mitigated by relocating the existing parking to the side street at Santry Villas / Church Lane, to integrate with the existing parking facilities at this location. However, there may not be a like-for-like replacement due to space constraints. The impact of this loss is deemed to be Negative, Moderate and Long Term;'

2.7.9 28 – Julia Boland and Others

2.7.9.1 Summary of issue raised

The submission to the CPO raises five potential issues:

i) Access to Business

The submission expresses concern regarding access to properties via existing driveways/gateways during works and on completion of works.

The submission expresses concern regarding continuous, permanent access, right of way to enter and exit their properties north and south bound.

The submission expresses concern regarding continuous, permanent access, right of way to park vehicles with particular reference to but not exclusive to plot reference 1011(1).1c, 1011(2).2c, 1007(1).2d, 1008(1).2d.

The submission expresses concern regarding continuous, permanent access, right of way to park outside their properties outside of the current bus line times of 7 to 7, 6 days a week.

ii) Accommodation Works/Boundary Treatment

The submission questioned if the NTA will take full responsibility financially and physically to have the properties fully restored or upgraded to their requirements.

The submission considers concerns regarding uninvited guests at their property and the provision of gates along the boundary.

iii) Construction Impacts

The submission raises concerns regarding the potential for works being undertaken on a 24/7 basis.

iv) Location of Proposed Bus Stop

The submission expresses concerns regarding bus stops being located directly outside their properties and that increased noise levels from people waiting at potential bus stops would greatly impact their lives.

v) Utilities and Drainage

The submission raised concern regarding to disruption to utilities.

The submission also considers that there have been issues with storm drains collapsing. The submission raises concerns regarding replacement storm drains being capable of carrying the extra weight of increased usage by extra buses of a heavier weight.

2.7.9.2 Response to issues raised

i) Access to Business

Regarding construction impact, when roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.1 of Chapter 5 of Volume 2 of the EIAR, details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.

Vehicular access to the premises will not be blocked or restricted as a result of the construction of the Proposed Scheme. During the operational stage, there will be no restrictions to the access as indicated on General Arrangement Drawings in the EIAR, Volume 3, Figures, Chapter 4 Proposed Scheme Description, 03. General Arrangement is shown in Figure 2.124 and Figure 2.125 below.

Regarding the query about the right to park outside their properties outside of the current bus line times of 7 to 7, 6 days a week, bus lanes on the Proposed Scheme will operate 24 hours a day, 7 days a week.

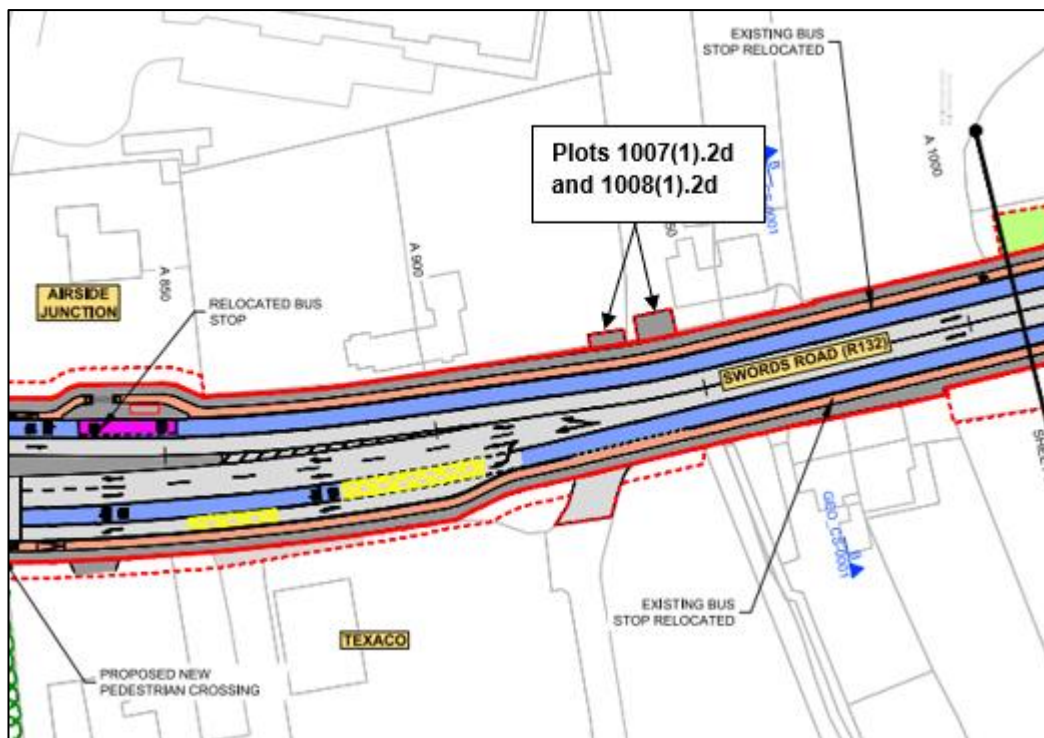


Figure 2.124: General Arrangement of Proposed Scheme at Plots 1007(1).2d and 1008(1).2d (Sheet 03)

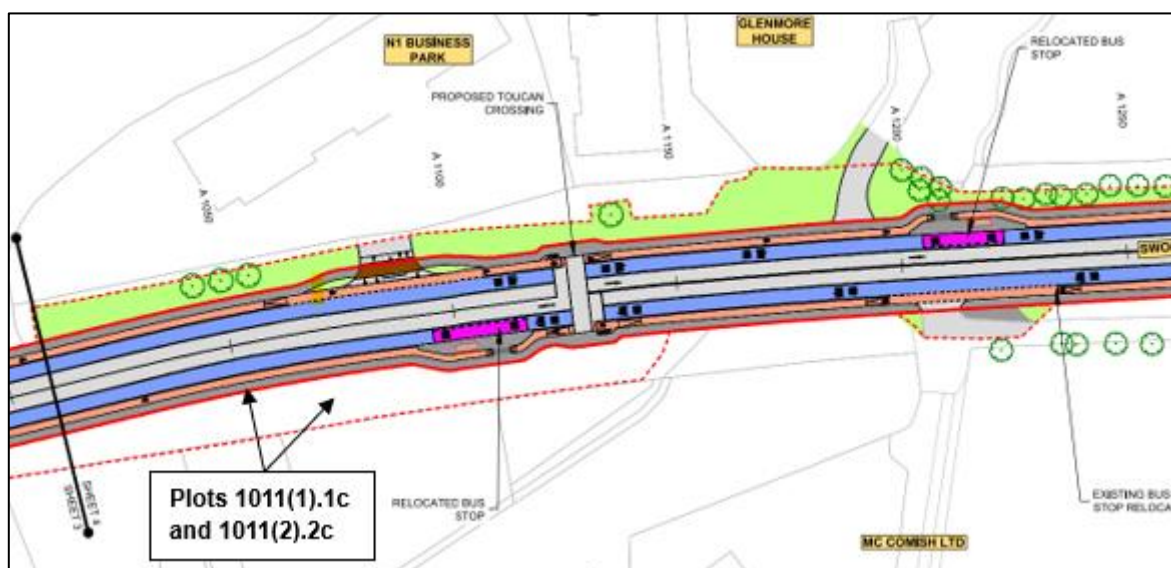


Figure 2.125: General Arrangement of Proposed Scheme at Plots 1011(1).1c and 1011(2).2c (Sheet 04)

ii) Accommodation Works/Boundary Treatment

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be

required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage your its agent / valuer in preparing, negotiating and advising on compensation.

As noted in Chapter 4 Proposed Scheme Description of the EIAR, reinstatement of property frontage including boundary walls, gates, railings driveway, footpath and landscaping will be on a like-for-like basis, and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis.

iii) Construction Impacts

With regard to construction impacts, where reasonably practicable to do so works will be carried out during normal working hours and in consultation with local residents.

Section 9.5.1.1.4 of Chapter 9 of Volume 2 of the EIAR sets out the proposed working hours and states: *'It is envisaged that generally construction working hours will be between 07:00hrs and 23:00hrs on weekdays, and between 08:00hrs and 16.30hrs on Saturdays. Night-time and Sunday working will be required during certain periods to facilitate street works that cannot be undertaken under daytime / evening time conditions.'*

However, the contractor will also have to take account of sensitive receptors (in particular any nearby residential areas). Section 9.5.1.1.4 goes on to state: *'The planning of such works will take consideration of sensitive receptors, in particular any nearby residential areas. Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant items will be considered with respect to their potential to exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g. road widening and utility diversions or activities with similar noise levels identified in Table 9.42), other construction activities will be scheduled to not result in significant cumulative noise levels'*.

As set out in Appendix A5.1 Construction Environmental Management Plan (CEMP) of Volume 4 Appendices Part 1 of 2 of the EIAR, there are a number of specific noise mitigation and monitoring measures that will be implemented including the following:

NV2: The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas i.e., based on the construction threshold values for noise and vibration set out in Tables 9.7 and 9.10 in Chapter 9 (Noise & Vibration) of this EIAR. Reference to Table 9.37 in Chapter 9 (Noise & Vibration) of this EIAR indicates that intrusive works occurring within 25m to 45m of Noise Sensitive Locations (NSLs) will need specific noise control measures to reduce impacts depending on the time period over which they will occur, i.e., daytime or evening.

NV8: Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant or equipment items will be considered with respect to their potential to exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g., road widening and utility diversions or activities with similar noise levels identified in Table 9.22 in Chapter 9 (Noise & Vibration) of this EIAR). Other construction activities associated with the Proposed Scheme will be scheduled to avoid significant cumulative noise levels

NV9: The NTA will establish clear forms of communication that will involve the appointed contractor and NSLs in proximity to the works so that residents or building occupants are aware of the likely duration of activities likely to generate noise or vibration that are potentially significant as set out in Table 9.7 and Table 9.10 in Chapter 9 of this EIAR.

NV10: During the Construction Phase the appointed contractor will carry out noise monitoring at representative NSLs to evaluate and inform the requirement and / or implementation of noise management measures. Noise monitoring will be conducted in accordance with International

Organization for Standardization (ISO) 1996–1 (ISO 2016) and ISO 1996–2 (ISO 2017). The selection of monitoring locations will be based on the nearest representative NSLs to the working area which will progress along the length of the Proposed Scheme.

iv) Location of Proposed Bus Stop

As part of the development of the design of the Proposed Scheme a bus stop review was undertaken and is presented in the Preliminary Design Report Appendix H (Bus Stop Review Report), included in the Supplementary Information. The purpose of the process was to review the locations of the existing Dublin Bus stops and to determine whether a stop should be removed, relocated, or remain where it is. This exercise was carried out to optimise the performance of the bus services on the Proposed Scheme by reducing the journey time of the bus service, increasing the walking catchment of the bus stops and ensuring that key trip attractors located along the route are sufficiently covered within the catchment of bus stops.

The proposed bus stop locations on the Proposed Scheme are indicated on the General Arrangement Drawings in the EIAR, Volume 3, Figures, Chapter 4 Proposed Scheme Description, 03. General Arrangement. Sheet 03 of 37 indicates the Proposed Scheme at Plots 1007(1).2d and 1008(1).2d, see Figure 2.124. There are no bus stops proposed in the vicinity of these plots.

Sheet 04 of 37 indicates the Proposed Scheme at Plots 1011(1).1c and 1011(2).2c, see Figure 2.125. Existing bus stop 3675, which was located outside a property which the NTA understand to be under the objector's ownership, will be relocated away from the property approximately 250m to the north of Airside Junction. As part of this exercise, it is also proposed to relocate bus stop 3674 approximately 130m north to be closer to the proposed mid-block crossing near the N1 Business Park. As noted in Appendix A of the Preliminary Design Report Appendix H (Bus Stop Review), included in the Supplementary Information, the bus stop at the existing location is seldom used and there are no trip attractors nearby, the proposed location is closer to attractors such as N1 Business Park and Glenmore House B&B, and the crossing provides easier access to Kilonan Equestrian Centre. This location is the optimal location for a bus stop in this area which best meets the objectives of the scheme. While this bus stop is being located closer to the residential property it still remains approximately 130m away.

It can therefore be concluded that no bus stops are proposed to be located directly outside the objector's residential properties.

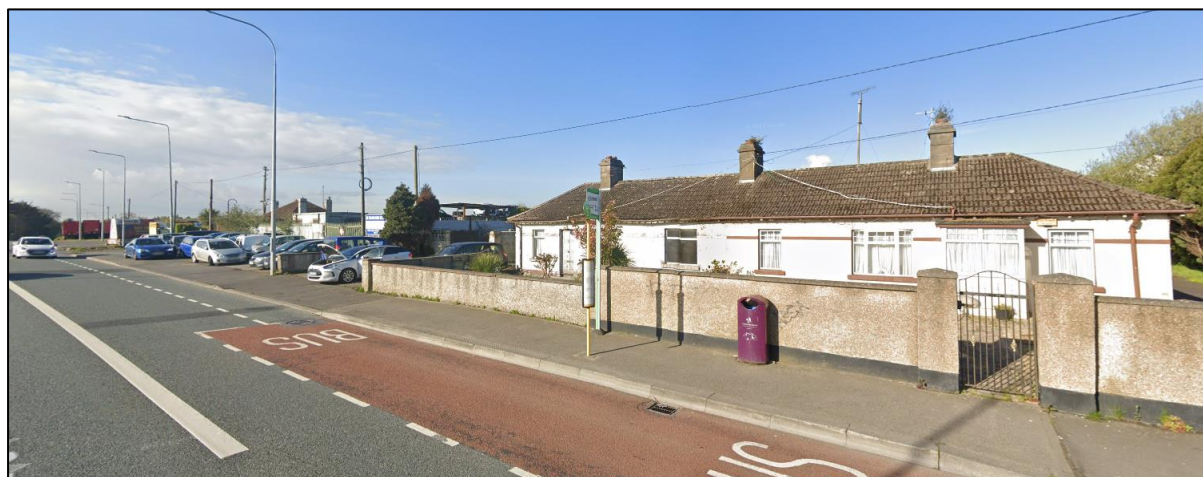


Figure 2.126: Existing Bus Stop 3675, to be relocated away from this property (Image Source: Google)

v) Utilities and Storm Drains

With regards to utilities, as set out in Section 19.5.1.1 of Chapter 5 of Volume 2, all possible precautions will be taken by the appointed contractor to avoid unplanned interruptions to any services during the Construction Phase of the Proposed Scheme. This will include appropriate investigation by the appointed contractor to identify the precise location of all utility infrastructure within the working areas prior to the commencement of excavation works. Where works are required in and around known utility infrastructure, precautions will be implemented by the appointed

contractor to protect the infrastructure from damage, in accordance with best practice methodologies and the requirements of the utility companies, where practicable. Protection measures during construction will include warning signs and markings indicating the location of utility infrastructure, safe digging techniques in the vicinity of known utilities, and in certain circumstances where possible, isolation of the section of infrastructure during works in the immediate vicinity.

With regards to the drainage design, as set out in Section 13.4.1.1 of EIAR Volume 2 Chapter 13 Water:

'The drainage design is based on a number of general principles, which are set out in the document 'BusConnects Core Bus Corridor Drainage Design Basis' (NTA 2020). A SuDS drainage design has been developed as a first preference and in accordance with the SuDS Management Train described in the CIRIA SuDS manual (CIRIA 2015). The CIRIA SuDS Manual recommends that when considering SuDS solutions, the preferred approach is a hierarchy whereby runoff using source control solutions (e.g. pervious surfacing) are considered first. Where source control is not possible or cannot fully address an increase in runoff from a development, residual flows are then managed using site controls (e.g. bioretention / infiltration basins). If this is not practical or residual flows remain above existing runoff rates, regional controls (e.g., oversized pipes) are used. SuDS provide the dual benefits of controlling flow and treating water quality.

In areas where the catchment is proposed to remain unchanged as no additional impermeable areas are proposed, the design consists of relocating existing gullies (where possible) to new locations.'

The Proposed Scheme primarily involves the reallocation of existing road space. Where additional impermeable areas are proposed, a SuDS strategy has been developed to ensure that there will be no increase in existing runoff rates. This is the appropriate surface water management strategy for the Proposed Scheme.

At this location a proposed storm water pipe is to be located in the verge of the inbound carriageway due to the increase in impermeable area as indicated on Proposed Surface Water Drainage Works Drawings in the EIAR, Volume 3, Figures, Chapter 4 Proposed Scheme Description, 11. Proposed Surface Water Drainage Works.

The NTA notes the comments raised in relation to the condition of the existing storm drains. Pre-construction surveys will be undertaken in line with Section 5.5.2.1. of EIAR Chapter 5 Construction.

2.7.10 30 – Kathleen McKee

2.7.10.1 Summary of issue raised

The submission to the CPO challenges the following:

- i) Relevant statutory functions and powers of the NTA.
- ii) Questions the purposes for which the CPO has been made.
- iii) Assertions in relation to Constitutional Rights.
- iv) Effects on the environment of the proposed development.
- v) The potential impact of the presence and operation of the development in terms of health, security, general amenity and property values.
- vi) Disruption during the construction stage has not been addressed properly.
- vii) Potential impact of the disruption as a result of temporary acquisition of lands has not been addressed properly.
- viii) Potential impact of the proposed in terms of long-term impact to climate change has not been properly or adequately assessed.
- ix) The proposed development will result in a negative visual impact for residential property owners and road users.

- x) The Proposed Scheme will result in increased traffic congestion and operational problems on the road networks, the impact has not been properly or adequately assessed.

2.7.10.2 Response to issues raised

i) Relevant statutory functions and powers of the NTA

The submission raises a number of queries in relation to the functions and powers of the NTA, and the statutory bases on which the NTA has made the CPO. It is clear from the CPO itself and on the statutory notice served therein that the lands are being acquired for the purposes of the Swords to City Centre Core Bus Corridor Scheme to facilitate public transport, and such issues have been comprehensively addressed in Chapter 1 Introduction of Volume 2 of the EIAR. They are also explained below in response to this submission.

It is a function of the NTA under section 44(1)(a) of the Dublin Transport Authority Act 2008 (as amended) (the “**2008 Act**”) to “*secure the provision of, or to provide, public transport infrastructure*”, which includes the provision of the Swords to City Centre Core Bus Corridor Scheme.¹

In that regard, and as set out in Section 1.4 of Chapter 1 of the EIAR, the NTA has decided in accordance with Section 44(2)(b) of the 2008 Act that the functions in relation to securing the provision of public transport infrastructure should be performed by the NTA.

Section 44(6) of the 2008 Act goes on to provide as follows in relation to the exercise of these functions by the NTA:-

“(6) Where—

(a) a decision is made by the Authority under subsection (2)(b) or (5)(a) for the performance of a particular function otherwise than through a public transport authority or statutory body, or

(b) the Authority is performing its function of securing the provision of public transport infrastructure in accordance with subsection (2)(e),

the following provisions have effect—

(i) the Authority shall be empowered (notwithstanding any other enactment) to perform the function, including the acquisition of land for that purpose, and to do any other thing which arises out of or is consequential on or is necessary for the purposes of or would facilitate the performance of the function,

(ii) for the purpose of paragraph (a) or (b), land may be acquired by agreement or by means of a compulsory purchase order made by the Authority in accordance with Part XIV of the Act of 2000,

(iii) the provisions of any enactment concerned (other than section 178 of the Act of 2000) apply in relation to the performance of the function subject to such modifications as may be necessary and as if the Authority was named in such enactment in each place where a public transport authority body entitled to exercise the function is named, ...”

Therefore, under section 44(6) of the 2008 Act, the NTA is empowered to acquire lands by agreement or by means of a compulsory purchase order in accordance with Part XIV of the Planning and Development Act 2000 (as amended) (the “**2000 Act**”), for the purposes of performing its function of providing public transport infrastructure (and in this instance providing the Swords to City Centre Core Bus Corridor Scheme), and such compulsory purchase order may, by virtue of section 10(4)(d) of the Local Government (No. 2) Act 1960 (as amended), authorise the NTA to extinguish a public right of way.

Section 44(7) of the 2008 Act goes on to provide that the 2000 Act applies to a compulsory acquisition of land under, for example, section 44(6) of the 2008 Act, as if it were an acquisition

¹ “public transport infrastructure” is defined in section 2 of the 2008 Act as “infrastructure constructed or provided, or proposed to be constructed or provided, in connection with the provision of public passenger transport services, which includes but is not limited to railway infrastructure, metro railway infrastructure, light railway infrastructure, bus infrastructure, rolling stock, buses, busways, bus lanes, bus garages, cycleways, cycle and pedestrian facilities, interchange facilities or such other class of infrastructure, facility, building or vehicle, whether of the same kind as the aforementioned or not, which the Authority has prescribed to be public transport infrastructure under section 44(13)”

under Part XIV of the 2000 Act and for that purpose a reference to a local authority shall be read as a reference to the NTA.

Section 213 of the 2000 Act is contained in Part XIV of the 2000 Act and is referenced on the face of the CPO for the Proposed Scheme. Section 213(1) of the 2000 Act provides that *“the power conferred on a local authority [to be read as the NTA by virtue of section 44 of the 2008 Act] shall be construed in accordance with this section”*.

Section 213(2) of the 2000 Act states:-

‘A local authority [to be read as the NTA by virtue of section 44 of the 2008 Act] may, for the purposes of performing any of its functions (whether conferred by or under this Act, or any other enactment passed before or after the passing of this Act),... do all or any of the following:-

- (i) acquire land, permanently or temporarily, by agreement or compulsorily,*
- (ii) acquire, permanently or temporarily, by agreement or compulsorily, any easement, way-leave, water-right or other right over or in respect of any land or water or any substratum of land,*
- (iii) restrict or otherwise interfere with, permanently or temporarily, by agreement or compulsorily, any easement, way-leave, water-right or other right over or in respect of any land or water or any substratum of land, and the performance of all or any of the functions referred to in subparagraphs (i), (ii) and (iii) are referred to in this Act as an “acquisition of land”.*

Section 213(4) of the 2000 Act states:-

‘a local authority may be authorised by compulsory purchase order to acquire land for any of the purposes referred to in subsection (2) of this section and section 10 (as amended by section 86 of the Housing Act, 1966) of the Local Government (No. 2) Act, 1960, shall be construed so as to apply accordingly and the references to “purposes” in section 10 (1)(a) of that Act shall be construed as including purposes referred to in subsection (2) of this section”.

Having regard to the provisions of section 213 of the 2000 Act, reference is therefore correctly made on the face of the CPO for the Proposed Scheme to *“Section 10 of the Local Government (No. 2) Act, 1960 as substituted by Section 86 of the Housing Act, 1966 as amended by Section 6 and the Second Schedule of the Roads Act, 1993”*.

Further, section 10 of the *Local Government (No. 2) Act, 1960* (the **“1960 Act”**) operates, for example, to apply the provisions of section 76 of the Housing Act 1966 (the **“1966 Act”**), and the Third Schedule thereto. Therefore, reference is correctly made on the face of the CPO for the Proposed Scheme to section 76 of the 1966 Act and the Third Schedule thereto, and the processes and procedures set out in section 76 of the 1966 Act and the Third Schedule to the 1966 Act have, accordingly, been followed by the NTA in submitting the CPO for the Proposed Scheme to An Bord Pleanála (the **“Board”**) for confirmation. Indeed, the statutory notice which was served on the objector is that required by Article 4(b) of the Third Schedule to the 1966 Act.

Finally, reference is also correctly made on the face of the CPO for the Proposed Scheme to section 184 of the *Local Government Act 2001 (as amended)* (the **“2001 Act”**), given that section 184 of the 2001 Act clarifies the rights referenced in section 213(2)(a) of the 2000 Act (referenced above), as including any easement, way-leave, water right or other right to which section 213(2)(a) applies granted by or held from the local authority acquiring the land [the reference to local authority here should, by virtue of section 44 of the 2008 Act, be read as a reference to the NTA].

Therefore, there is no question but that the NTA has relied on the correct statutory bases in making the CPO for the Proposed Scheme, and has followed the correct processes and procedures as set out in the appropriate legislative framework in submitting the CPO for the Proposed Scheme to the Board for confirmation.

ii) Purposes for which the CPO has been made

The submission also raises queries in relation to the purposes for which the NTA has made the CPO. As set out in paragraph 2 of the statutory notice which was served upon the objector, the CPO is “*for the purposes of the construction of the Swords to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*”. Further, the face of the CPO itself also indicates that it is “*for the purposes of facilitating public transport*”.

Further, as set out in paragraph 10 of that notice, the EIA which was prepared in respect of the Swords to City Centre Core Bus Corridor Scheme was available for inspection physically and on the NTA’s dedicated website for this Proposed Scheme, and that EIA contains all of the “*precise details of the proposed construction works*” and all of the “*proposed ancillary and consequential works for the Swords to City Centre Core Bus Corridor Scheme*” as requested in paragraphs 9 and 10 of this submission (CPO-16).

The lands at plot numbers 1133(1).1d and 1133(2).2d are proposed to be compulsorily acquired for the specific purposes of widening of the existing road corridor to facilitate a bus lane in each direction. As a result, the existing boundary wall of 300 Swords Road will be set back from its original position. The temporary land take is to facilitate the construction of this wall and to tie the driveway to any level differences with the Proposed Scheme as depicted in General Arrangement Drawing Sheet 20 of 37 of the EIA Volume 3 Figures Chapter 4 Proposed Scheme Description, General Arrangement drawings and as detailed in Section 4.5.3.1 in Chapter 4 of Volume 2 of the EIA.

Indeed, as the Board is aware, the NTA has also made an application to the Board under section 51 of the Roads Act 1993 (as amended) for approval of the proposed road development, the Swords to City Centre Core Bus Corridor Scheme, which is currently pending before the Board (ABP-Ref No. HA06D.317121).

iii) Assertions in relation to Constitutional Rights

The submission makes a number of assertions that the NTA has acted in breach of the objector’s constitutional rights, has acted *ultra vires*, and has “*failed to act in accordance with the principles of basic fairness of procedures and natural/constitutional justice*” in making this CPO and in serving this statutory notice on the objector.

In addition to the lawfulness of the proposed compulsory acquisitions (as coming within the powers of the NTA as outlined above), the acquisitions are considered proportionate. In this latter regard, the courts have established that the power conferred to compulsorily acquire land must be exercised in accordance with the requirements of the constitution, including respecting the property rights of the affected landowner. The confirming authority (being the Board) must be satisfied that the acquisition of the property is clearly justified by the exigencies of the common good.

Accordingly, in applying the proportionality test, the NTA did (in making the Swords to City Centre Core Bus Corridor Compulsory Purchase Order 2023) ensure, and the Board should (in confirming the CPO) ensure that:

- (i) there is a need that advances the common good which is to be met by the acquisition of the lands in question;
- (ii) the particular property is suitable to meet that need;
- (iii) any alternative methods of meeting the need have been considered; and
- (iv) that the landowner is entitled to be compensated.

Chapter 2 of Volume 2 of the EIA sets out how there is significant evidence to satisfy the requirement that there is a need that advances the common good. It is axiomatic that the acquisition of land and rights over land will result in interference with the use of those lands by owners/leases/occupiers. However, such interference is proportionate to the legitimate aim being pursued in the interests of the common good.

As detailed in Chapter 3 of Volume 2 of the EIA, the NTA considered the reasonable alternatives to meet the need with the requirements of the EIA Directive which requires “*a description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale)*”

studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of environmental effects”

The Emerging Preferred Route proposed a northbound one-way traffic system between the Omni Park Shopping Centre and the Shantalla Road junction, along with bus lanes in both directions, and a new slip road allowing southbound traffic onto the bypass to exit onto Shantalla at the N1/M50 bridge. As this section of the Swords Road is not wide enough to provide segregated cycle facilities, it was proposed to redirect cyclists through Coolock Lane and to an offline, two-way cycle track adjacent to Oak Park Avenue, running parallel to west of Santry Bypass (N1/M50) and connection at the Shanrath Junction. Following consultation feedback received from members of the public following the first non-statutory public consultations held from the 14th of November 2018 to the 29th of March 2019, it became apparent that the one-way proposal for general traffic might affect the existing access/egress arrangements for residents along the Lorcan and Shanrath Roads and impact on commercial deliveries and local business.

Section 3.4.1.1 of Chapter 3 of the EIAR set out that design development and assessment work was carried out at the Draft Preferred Route Option Stage on this section of the Proposed Scheme. This is also documented in Section 6.2.2.2 of the Preferred Route Option Report (provided as part of the Supplementary Information of the EIAR), looked at a one-way option through Santry Village, which was considered.

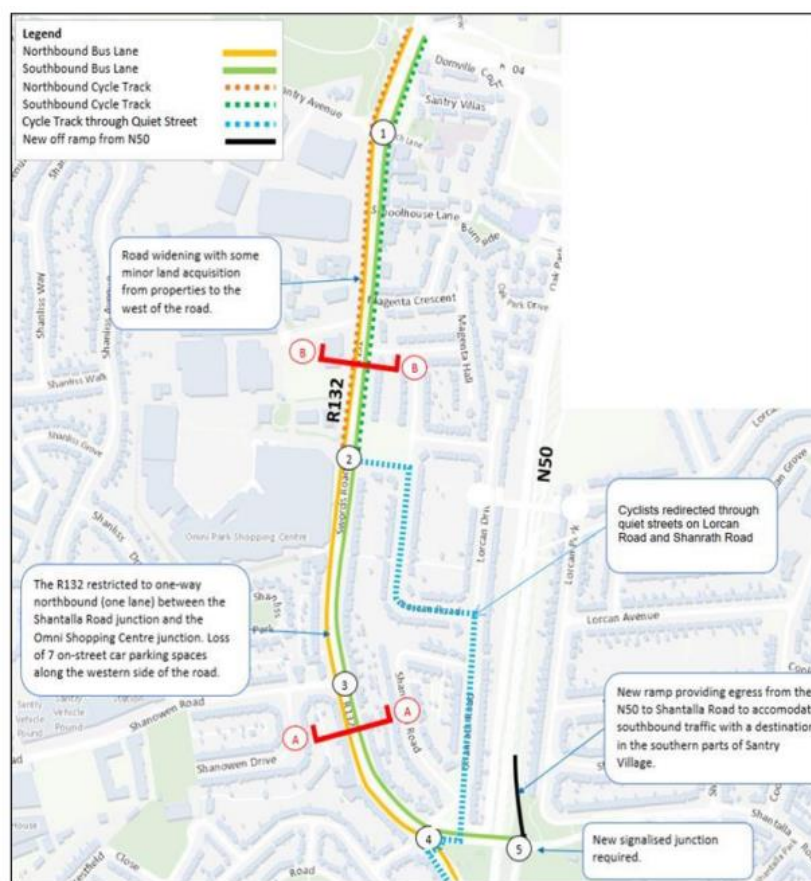


Figure 2.127: One-Way Route Option through Santry Village (Option SY1C)

This option removes southbound traffic between Omni Shopping Centre and Shantalla Road to minimise land acquisition on Swords Road for this section of the scheme. A bus lane would be provided in each direction but only one traffic lane (northbound) would be maintained for general traffic.

Combined with the proposal to redirect cyclists through Lorcan Road and Shanrath Road this option would negate the need for any land acquisition along this section of the scheme.

To allow access from the north to properties in the south of Santry Village, this option would require the construction of a new southbound slip road off the N50 at Shantalla Road. The new slip road would join the Shantalla Road via a new signalised junction.

A cross-section on Swords Road for this scheme option is illustrated in Figure 2.128.

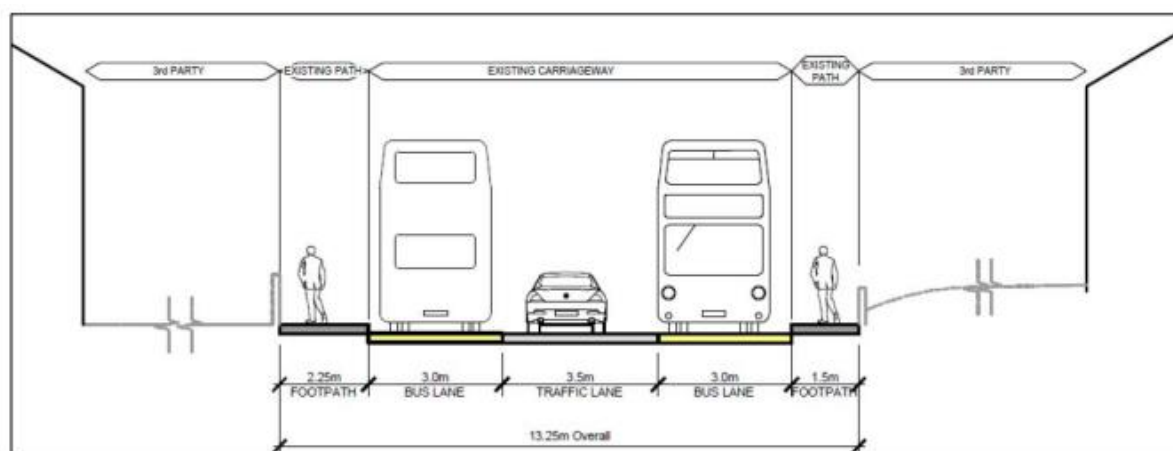


Figure 2.128: One-Way Route Option through Santry Village (Option SY1C)

The proposed traffic management changes would have a direct impact on traffic routes to, from and through the southern part of Santry Village.

The Stage 2 Route Options Assessment – Multi-Criteria Analysis table for this section is included in Appendix A of the Preferred Route Option Report.

A summary of the assessment and relative ranking of route options against the five main assessment criteria is presented in Table 2.18 below.

Table 2.18 Santry Village Final Summary of MCA

Assessment Criteria	Option 1 (SY1B) Two-Way Option	Option 2 (SY1C) One-Way Option
Economy		
Integration		
Accessibility and Social Inclusion		
Safety		
Environment		

Signal-controlled bus priority (similar to that adopted at Santry Demesne, see Section 6.2.1 of the Preferred Route Options Report) was also considered as an option through Santry Village, in order to reduce the impact on land take. For signal-controlled bus priority to operate successfully, queue lengths from the next junction cannot be allowed to develop on the shared bus/traffic lane portion, as this would result in delays to the bus service. Junction modelling of this option through Santry Village showed extensive queuing at the Lorcan Road/Omni Park Shopping Centre, Shanowen Road and Shanrath Road junctions, which are in close proximity to each other (300m between the Lorcan Road/Omni Park and Shanowen Road junctions and 250m between the Shanowen Road and Shanrath Road junctions). On this basis, signal-controlled bus priority was discounted as a feasible option through Santry Village.

Based on the following key findings from the Multi-Criteria Assessment undertaken for this section of the study area, Route Option SY1B (two-way option) is the Preferred Route Option for the following reasons:

- It performs more favourably under the Integration criterion because this option requires no changes to the current traffic management regime in Santry. SY1C would require detours and increased journey times for traffic travelling to and from the north with an origin or destination in the southern parts of Santry and people travelling south from the southern parts of Santry;
- It performs more favourably under the Accessibility and Social Inclusion criterion because under Option SY1C, journey times of the regular trips made by local residents living between the Omni Park Shopping Centre and Shantalla Road/Swords Road Roundabout would be increased.

In addition to the above alternative solution which specific to Santry Village, Chapter 3 of the EIAR sets out the reasonable alternatives studies and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route.

‘For urban transport systems, bus-based transport is the appropriate public transport mode for passenger demand levels of up to 4,000 passengers per hour per direction. (UITP 2009). Light rail provision would generally be appropriate to cater for passenger demand of between 3,500 and about 7,000 passengers per hour per direction. Passenger demand levels above 7,000 passengers per hour per direction would generally be catered for by heavy rail or metro modes, which would usually be expected to serve a number of major origins or destinations along a Particular corridor. In the case of both the bus and light rail modes, higher levels of passenger demand than the above stated figures can be accommodated under specific conditions.

The development of the prior GDA Transport Strategy considered the likely public transport passenger demand levels across the region using the NTA’s transport model and took into account the other studies referenced above, in addition to studies that had been carried out to investigate a potential light rail scheme within the area of this corridor. Likely passenger flows were identified to be within the capacity of bus transport, without reaching the quantum of passenger demand which would support the provision of a higher capacity rail solutions in addition to a Metrolink. Section 3.2.1 set out various studies undertaken for the prior GDA Transport Strategy. Arising from these studies and the specific assessment and transport modelling work undertaken for the prior Strategy, it was concluded that a bus-based transport system would be the proposed public transport solution in the corridor of the Proposed Scheme. The proposed transport solution would be supplemented by Metro, to provide more passenger capacity and enhanced interchange between the Luas Red and Green Line Services, proposed Metrolink Station at Fosterstown, Sligo/Maynooth Line Heavy Rail Services at Drumcondra Station and the Suburban Interchange between the Orbital and Radial Routes at Coolock Lane. It was considered that there would be insufficient demand to justify the provision of an additional light rail alternative beyond what is proposed above, particularly given the low to medium density nature of development in this corridor.

Similar to BRT, the light rail option would be worse for the environment in terms of construction impacts, including flora and fauna, heritage, air and noise, compared to the CBC proposal. Light rail requires continuous unbroken physical lane infrastructure to achieve high-priority. This would involve significantly more land take and potentially involve demolition of buildings at pinch-points. In the case of the CBC proposals, bus-priority can be achieved through short lengths at pinch-points by the use of signal-controlled priority.

Given the consideration of light rail provision, and the level of likely public passenger use along this overall corridor assessed in the transport modelling work, the development of the prior GDA Transport Strategy identified that a Metro solution would be economically justified within the area covered by this corridor. Therefore, it is intended to develop the light rail Metro system along this corridor through the implementation of MetroLink.

Arising from the various studies and analysis that had been carried out, and the specific assessment and transport modelling work undertaken for the prior GDA Transport Strategy, it was concluded that a high quality bus-based transport system, supplemented by the implementation of MetroLink, would be part of the proposed public transport solution in the corridor of the Proposed Scheme. This is because the development of an underground Metro would not remove the need for additional infrastructure to serve the residual bus needs of the area covered by the Proposed Scheme, nor

would it obviate the need to develop the cycling infrastructure required along the route of the Proposed Scheme’.

With respect to congestion charging, Section 3.2.8 of the EIAR states that a key success factor of demand management is greater use of alternative travel modes, in particular public transport. In the case of Dublin, the existing public transport system does not currently have sufficient capacity to cater for larger volumes of additional users.

‘In advance of a significant uplift in overall public transport capacity in the Dublin metropolitan area, the implementation of major demand management measures across that area would be unsuccessful. Effectively constraining people from making journeys by car and requiring them to use other modes, without those modes having the necessary capacity to cater for such transfer, would not deliver an effective overall transport system. Instead, the capacity of the public transport system needs to be built up in advance of, or in conjunction with, the introduction of major demand management measures in the Dublin metropolitan area. This is especially true in the case of the bus system where a major increase in bus capacity through measures such as the Proposed Scheme would be required for the successful implementation of large-scale demand management initiatives.

While the foregoing addresses the dependency of demand management measures on public transport capacity, it is equally correct that the provision of greatly enhanced cycling facilities will also be required to cater for the anticipated increase in cycling numbers, both in the absence of demand management measures and, even more so, with the implementation of such measures. Demand management initiatives by themselves will not deliver the level of segregated cycling infrastructure required to support the growth in that mode. Consequently, the progression of demand management proposals will not secure the enhanced safe cycling infrastructure envisaged under the Proposed Scheme’.

Finally it is noted that park and ride and cashless fares both form part of the broader BusConnects programme and may be implemented to complement improvements to the overall bus system, including the Proposed Scheme infrastructure.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

In light of all of the above, the NTA is satisfied that it has not acted *ultra vires* or in abuse of its powers, and that the making of the CPO is reasonable and justified and does not represent a disproportionate interference with the objectors constitutionally protected property rights.

- iv) Effects on the environment of the proposed development such as noise, traffic volumes, increase in private transport causing harmful emissions and health hazards with living in close proximity to the proposed development.

With respect to construction activities leading to ‘considerable increased traffic volumes and noise’, these potential impacts have been assessed within the EIAR.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR and its Appendix A6.1 (Transport Impact Assessment) in Volume 4 Part 2 of the EIAR provide the impact assessment for traffic and transport for both the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the assessments are described in Section 6.2 of Chapter 6 and Section 4 of Appendix A6.1.

The Construction Phase impact assessment is described in Section 6.4.5 of Chapter 6 and Section 6.5 of Appendix A6.1. As summarised in Chapter 6, Section 6.4.5.5 (Table 6.22) the predicted impact on general traffic during the Construction Phase as a result of ‘Restrictions to general traffic along Proposed Scheme’ is Negative, Moderate and Temporary, while the predicted impact as a result of ‘Additional construction traffic flows upon surrounding road network’ is Negative, Slight and Temporary. Mitigation measures to manage traffic impacts as a result of construction as described in Section 6.4.5.4.6.1 and 6.4.5.4.6.2 of Chapter 6 respectively will include:

- *'The appointed contractor will develop a CTMP that gives due consideration to provision of local access requirements and designates appropriate diversion routes in the case where localised temporary closures are required'; and*
- *'The appointed contractor will prepare a Construction Stage Mobility Management Plan (CSMMP) which will be developed prior to construction, as described in Appendix A5.1 CEMP in Volume 4 of this EIAR, to actively discourage personnel from using private vehicles to travel to site. The CSMMP will promote the use of public transport, cycling and walking by personnel. Private parking at the Construction Compound will be limited. Vehicle sharing will be encouraged, subject to public health guidelines, where travel by private vehicle is a necessity, e.g. for transporting heavy equipment'.*

Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR provides an assessment of the potential noise impacts as a result of the Construction and Operational Phases of the Proposed Scheme. Section 9.4.3 provides the impact assessment for the Construction Phase, with Section 9.4.3.4.1 and Table 9.44 providing the summary of the potential construction noise impacts. The potential impact significance of construction traffic noise along the Proposed Scheme is illustrated in Figure 9.2 in Volume 3 of the EIAR, with the impact significance for the Swords Road in the vicinity of the 300 Swords Road categorised as Slight – Moderate (Sheet 3-4 of 5). Chapter 9 lays out the mitigation measures for the management of noise during the Construction Phase in Section 9.5.1, with all mitigation measures also recorded in Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4 Part 1 of the EIAR. Construction Phase mitigation measures as listed in Table 5.2 of the CEMP will include:

- *NV2: 'The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas i.e., based on the construction threshold values for noise and vibration set out in Tables 9.7 and 9.10 in Chapter 9 (Noise & Vibration) of this EIAR. Reference to Table 9.37 in Chapter 9 (Noise & Vibration) of this EIAR indicates that intrusive works occurring within 25m to 45m of Noise Sensitive Locations (NSLs) will need specific noise control measures to reduce impacts depending on the time period over which they will occur, i.e., daytime or evening';*
- *NV8: 'Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant or equipment items will be considered with respect to their potential to exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g., road widening and utility diversions or activities with similar noise levels identified in Table 9.22 in Chapter 9 (Noise & Vibration) of this EIAR). Other construction activities associated with the Proposed Scheme will be scheduled to avoid significant cumulative noise levels';*
- *NV9: 'The NTA will establish clear forms of communication that will involve the appointed contractor and NSLs in proximity to the works so that residents or building occupants are aware of the likely duration of activities likely to generate noise or vibration that are potentially significant as set out in Table 9.7 and Table 9.10 in Chapter 9 of this EIAR'; and*
- *NV10: 'During the Construction Phase the appointed contractor will carry out noise monitoring at representative NSLs to evaluate and inform the requirement and / or implementation of noise management measures. Noise monitoring will be conducted in accordance with International Organization for Standardization (ISO) 1996–1 (ISO 2016) and ISO 1996–2 (ISO 2017). The selection of monitoring locations will be based on the nearest representative NSLs to the working area which will progress along the length of the Proposed Scheme'.*

With respect to the observations that 'Private transport in the area will increase and take significantly longer to pass through the area causing extra harmful emissions and hazard', this has been assessed within the EIAR.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR provides an assessment of the impact the Proposed Scheme will have on traffic volumes once operational, both directly along the route of the Proposed Scheme, and on the surrounding road network. As described in Section 6.4.6.2.8 of Chapter 6, traffic modelling was carried out to assess the predicted traffic volumes in 2028 once the Proposed Scheme is fully operational, in both the AM and PM peak hours compared to the predicted traffic in the absence of the Proposed Scheme (the Do Minimum scenario). With respect to the Swords Road in the vicinity of this property, the results of the modelling showed a decrease in general traffic during both the AM peak of 807 Passenger Car Units (Table 6.67 in Chapter 6), and the PM peak of 548 Passenger Car Units (Table 6.71 in Chapter 6).

With respect to harmful emissions, Chapter 7 (Air Quality) in Volume 2 of the EIAR describes the assessment of the potential impacts of the Proposed Scheme on air quality during the Construction and Operational Phases. Figures 7.3 to 7.5 show the modelled annual mean impacts to NO₂, PM₁₀ and PM_{2.5} respectively at receptors along the Proposed Scheme once the Proposed Scheme is operational, with the area in which 300 Swords Road is located shown on Sheet 2 of each of those figures. Along that stretch of the Swords Road, Figure 7.3 shows a Negligible to Moderate Beneficial change to NO₂, Figure 7.4 shows a Negligible change to PM₁₀, and Figure 7.5 shows a Negligible change to PM_{2.5}.

With respect to the observations that 'The health effects associated with living in close proximity to the proposed development have not been adequately or properly assessed', this has been assessed within the EIAR.

Chapter 11 (Human Health) of Volume 2 of the EIAR provides an assessment of the potential human health impact of the Proposed Scheme during both the Construction Phase (Section 11.4.3) and the Operational Phase (Section 11.4.4). Section 11.1 (Introduction) states that '*This assessment has been carried out according to best practice and guidelines relating to human health, and in the context of similar large-scale transport infrastructural projects*', with the Chapter going on to state in Section 11.2.4.2 that:

'The characteristics of the Proposed Scheme have been considered and the potential pathways between aspects of the construction and operation of the Proposed Scheme and health outcomes (beneficial and adverse) have been mapped out... Due to the nature of impacts on human health, many of these are indirect. The assessment of the Operational Phase of the Proposed Scheme has focused on those potential impacts most likely to be influenced by the Proposed Scheme, namely air quality, noise, community severance, social use of outdoor space, physical activity levels, access and risk of injuries. For the identification of construction impacts, reference has been made to the other environmental topic assessments to identify the aspects of the environment likely to be affected, and then a further consideration has been made as to whether there is a likely pathway between those impacts and human health outcomes.'

The Construction Phase health impacts are summarised in Section 11.4.3.7 (Table 11.6), while the Operational Phase health impacts are summarised in Section 11.4.4.9 (Table 11.7). A description of the mitigation and monitoring measures proposed during both the Construction and Operational Phases are described in Section 11.5 of the Chapter.

Section 11.6 describes the predicted residual impacts after mitigation measures have been incorporated. With respect to Construction Phase residual impacts the Chapter states:

'No significant residual impacts on health are predicted.'

With respect to Operational Phase residual impacts the Chapter states:

'Three issues were assessed as likely to be associated with significant residual impacts on human health, all of which were considered positive.'

Lack of regular physical activity is a leading cause of chronic disease and premature deaths. The Proposed Scheme will improve opportunities and convenience for walking and cycling, which will support many people in the study area in achieving recommended levels of weekly physical activity, for example as part of an active travel commute to work or education. It will also increase safety and the perception of safety for pedestrians and cyclists, who are more vulnerable to injury and mortality from traffic collisions. Furthermore, by redressing the balance between private car use and other forms of transport, the Proposed Scheme will improve public transport journey times and

reliability, as well as introducing greatly improved active travel infrastructure. This will provide for a more equitable transport experience, including for those without access to a car.

The Proposed Scheme is expected to have a significantly positive contribution on health outcomes related to increased physical activity, equitable access to services and improved safety for vulnerable road users.

The significant positive impacts which are expected to arise in the Operational Phase fully align with the relevant objectives of the Proposed Scheme'.

- v) The potential impact of the presence and operation of the development in terms of health, security, general amenity and property values.

With respect to potential health impact, Chapter 11 (Human Health) of Volume 2 of the EIAR provides an assessment of the potential impact of the Proposed Scheme during both the Construction Phase and the Operational Phase. In particular, Section 11.4.4 of the Chapter covers the potential health impacts of the Proposed Scheme once in place and fully operational. The Operational Phase health impacts are summarised in Section 11.4.4.9 (Table 11.7)

With respect to security, Appendix A10.2 (Economic Impact of Core Bus Corridors) in Volume 4 Part 3 of the EIAR assesses the potential economic impact of the Core Bus Corridors, which includes consideration of the impact on crime and anti-social activity. In Section 5 of the report, and specifically the section on 'The impact of transport infrastructure on crime', the conclusion states that:

'The new infrastructure improvements should have a direct and immediate impact on crime along the corridors. It will provide better, safer and more visible bus stops whilst also improving the wider public realm infrastructure through investments such as improved street lighting. This will act as a direct deterrent to criminal activity and result in a reduction in crime. This in turn has been shown to encourage people onto the streets into the evening which will also support the night time economy in community centres.'

With respect to general amenity, Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the potential impacts during both the Construction and Operational Phases, including an assessment of the residual impacts at one year and 15 years post-construction. The assessment includes potential impacts on visual amenity and amenity designations along the Proposed Scheme. Chapter 10 (Population) in Volume 2 of the EIAR includes assessments of the potential impacts on both community amenity and commercial amenity, during both Construction and Operational Phases. With respect to the potential Operational Phase impacts, these are assessed in Section 10.4.3.1.1 for community amenity and in Section 10.4.3.2.1 for commercial amenity.

With respect to property values, Chapter 10 (Population) Appendix A10.2 (Economic Impact of Core Bus Corridors) in Volume 4 Part 3 of the EIAR assesses the potential economic impact of the Core Bus Corridors, which includes consideration of the impact on property value. In Section 3 of the report, and specifically the section on 'The impact on property values', the conclusion states that:

'The public realm improvements planned by the NTA may lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors. Evidence shows that investing in public realm creates nicer places that are more desirable for people and business to locate in, thereby increasing the value of properties in the area. The evidence suggests that all public realm improvements generate value, regardless of the size of the investment or the neighbourhood. Residents along the corridors will also see a measurable increase in their quality of life, with evidence showing that residents are willing to pay more for an improved public realm.'

- vi) Disruption during the construction stage has not been addressed properly.

The potential Construction Phase impacts have been assessed throughout the EIAR, with mitigation measures proposed where required. A description of the Construction Phase is described in Chapter 5 (Construction) in Volume 2 of the EIAR. This includes description of construction duration, working hours, construction compounds and management of construction. The appendix to the Chapter, Appendix A5.1 (Construction Environmental Management Plan) in Volume 4 Part 1 of the EIAR, provides a description of the measures to be taken and commitments to be made by

the appointed contractor during construction to ensure disruption and impact is minimised as far as reasonably practicable, including Table 5.2 which collates all Construction Phase mitigation measures as identified within the EIAR.

In addition to Chapter 5 (Construction), potential Construction Phase impacts are assessed for each topic within Volume 2 of the EIAR, and mitigation measures proposed where required. Specifically with respect to disruption, the most relevant chapter sections would be:

- Chapter 6 (Traffic & Transport), Section 6.4.5 (Construction Phase impact assessment) and Section 6.5.1 (Construction Phase mitigation);
- Chapter 7 (Air Quality), Section 7.4.2 (Construction Phase impact assessment) and Section 7.5.1 (Construction Phase mitigation);
- Chapter 9 (Noise & Vibration), Section 9.4.3 (Construction Phase impact assessment) and Section 9.5.1 (Construction Phase mitigation);
- Chapter 10 (Population), Section 10.4.3 (Construction Phase impact assessment) and Section 10.5 (Mitigation and Monitoring Measures);
- Chapter 11 (Human Health), Section 11.4.3 (Construction Phase impact assessment) and Section 11.5.1 (Construction Phase mitigation);
- Chapter 17 (Landscape (Townscape) & Visual), Section 17.4.3 (Construction Phase impact assessment) and Section 17.5.1 (Construction Phase mitigation);
- Chapter 18 (Waste & Resources), Section 18.5.3 (Construction Phase impact assessment) and Section 18.6.1 (Construction Phase mitigation); and
- Chapter 19 (Material Assets), Section 19.4.3 (Construction Phase impact assessment) and Section 19.5.1 (Construction Phase mitigation).

In addition to the individual Mitigation and Monitoring Measures section of each chapter, Chapter 22 (Summary of Mitigation and Monitoring Measures) in Volume 2 of the EIAR collates all of those mitigation measures included throughout the EIAR into one chapter.

- vii) Potential impact of the disruption as a result of temporary acquisition of lands has not been addressed properly.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.'

'Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

It goes on to state in Section 5.5.3.2 that:

'The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

Chapter 10 (Population) in Volume 2 of the EIAR assesses the Construction Phase impacts associated with temporary land acquisition on both community (including residential) and commercial property in Sections 10.4.3.1.2.1 and 10.4.3.2.2.1 respectively. Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the Construction Phase impacts associated with temporary land acquisition for all impacted properties in Section 17.4.3.2.8.

- viii) Potential impact of the proposed in terms of long-term impact to climate change has not been properly or adequately assessed.

Chapter 8 (Climate) in Volume 2 of the EIAR assesses the climate impact of the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the climate assessment is described in Section 8.3, with the assessment looking at both the impact of the project on the climate and the vulnerability of the project to climate change as per the guidance from Highways England's (2021) Design Manual for Roads and Bridges (DMRB) LA 114 Climate.

The assessment included both the direct Operational Phase carbon emissions from the Proposed Scheme (Section 8.5.2.4), as well as the indirect Operational Phase carbon emissions (Section 8.5.2.5). The assessment concludes that:

'The Proposed Scheme has the potential to reduce CO_{2e} emissions equivalent to the removal of approximately 21,130 and 22,150 car trips per weekday from the road network in 2028 and 2043 respectively.'

In addition to the climate assessment, Chapter 13 (Water) Appendix A13.2 (Flood Risk Assessment) in Volume 4 Part 3 of the EIAR describes the Flood Risk Assessment (FRA) undertaken for the Proposed Scheme. This FRA includes an assessment of the flood risk due to climate change (Section 5.6) which considers mean sea level rise, river flows, and extreme rainfall depths.

In addition to the FRA undertaken, Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the drainage design for the Proposed Scheme (Section 4.6.15), while the Proposed Surface Water Drainage Works figure in Volume 3 of the EIAR shows the design in more detail. In order to ensure that the increase in impermeable area from the Proposed Scheme does not increase the potential for flooding into the future as a result of climate change, Sustainable Drainage Systems (SuDS) have been included in the Drainage Design and:

'All drainage structures for newly paved areas are designed with a minimum return period of no flooding in 1:30 years with a 20% climate change allowance.'

- ix) The proposed development will result in a negative visual impact for residential property owners and road users.

Chapter 17 (Landscape (Streetscape) & Visual) in Volume 2 of the EIAR describes the results of the assessment undertaken with respect to visual impact as a result of the Proposed Scheme. The Chapter assesses streetscape characteristics and visual impacts under a number of headings (i.e. Architectural Conservation Areas, Conservation Areas, Residential Conservation Areas, Protected Structures, Amenity Designations, Tree Preservation Orders / Tree Protection Objectives, Preserved Views / Scenic Views, Properties, and Trees and Vegetation) for the Construction Phase (Section 17.4.3.2, with the potential impacts summarised in Table 17.7) and Operational Phase one year post-construction (Section 17.4.4.2 with the potential impacts summarised in Table 17.8), while Section 17.5.2 assesses the Operational Phase visual impacts at 15 years post-construction.

The Chapter conclusion (Section 17.7) states that:

'the Proposed Scheme will give rise to some degree of townscape and visual effect, most notably during the Construction Phase. These impacts arise especially where there is temporary and/or permanent acquisition of lands associated with residential or other properties including amenities, and where tree removal is required. The Proposed Scheme includes for replacement of disturbed boundaries, reinstatement of the Construction Compound, return of temporary acquisition areas, and for additional tree and other planting where possible along the Proposed Scheme.'

In the Operational Phase, localised negative residual effects will remain for properties experiencing permanent land acquisition, including the Thatch Cottage at Collinstown (a protected structure). There will be a negative residual effect remaining for the River Tolka Conservation Area resulting from the introduction of a new bridge structure within the designation. There will be overall positive effects for sections of the Proposed Scheme between Northwood Avenue and Granby Row, including Residential Conservation Areas, as the Proposed Scheme provides for improvements in the urban realm, which will provide positive long-term effects for the townscape and visual character. The Proposed Scheme will also provide for a significantly enhanced level of service for public transport and for pedestrian/cycle connectivity.'

Figure 17.2 (Photomontages) in Volume 3 of the EIAR show what the streetscape will look like once the Proposed Scheme is operational at a number of representative locations along the whole route. This includes a number of viewpoints along the Swords Road, and in particular View 21, see Figure

2.129, which shows the objectors property. Chapter 17 (Landscape (Townscape) & Visual) Section 17.5.2.1 describes the proposed changes to the streetscape at each photomontage location and states what the effect on visual amenity is at that location. In the case of View 21, the Chapter states that:

'There would be no appreciable change to the character but there would be a minor positive change to the visual amenity of the view due to removal of the overhead services and provision of new boundaries.'



Figure 2.129: 'View 21' Proposed New Layout at Swords Road

- x) The Proposed Scheme will result in increased traffic congestion and operational problems on the road networks, the impact has not been properly or adequately assessed.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR and its Appendix A6.1 (Transport Impact Assessment) in Volume 4 Part 2 of the EIAR provide the impact assessment for traffic and transport for both the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the assessments are described in Section 6.2 of Chapter 6 and Section 4 of Appendix A6.1.

The Construction Phase impact assessment is described in Section 6.4.5 of Chapter 6 and Section 6.5 of Appendix A6.1. As summarised in Chapter 6, Section 6.4.5.5 (Table 6.22) the predicted impact on general traffic during the Construction Phase as a result of *'Restrictions to general traffic along Proposed Scheme'* is Negative, Moderate and Temporary, while the predicted impact as a result of *'Additional construction traffic flows upon surrounding road network'* is Negative, Slight and Temporary. Section 6.5.1 describes the Construction Phase mitigation measures.

The Operational Phase impact assessment is described in Section 6.4.6 of Chapter 6 and Section 6.6 of Appendix A6.1. As summarised in Chapter 6, Section 6.4.6.3 (Table 6.81) the predicted impact on general traffic as a result of *'Reduction in general traffic flows along the Proposed Scheme'* is Positive, Moderate and Long-Term, while the predicted impact as a result of *'Redistributed general traffic along the surrounding road network in the indirect study area as a result of the reduction of reserve capacity along the Proposed Scheme'* is Negative, Slight and Long-Term.

2.7.11 31 – Kealy's of Cloghran

2.7.11.1 Summary of issue raised

The submission to the CPO raises seven potential issues:

- i) Creation of a Long-Term Traffic Hazard

The submission considers that the proposed works will result in the creation of a long-term traffic hazard due to the proximity of traffic lanes to the front of the property and the omission of the existing strip of planter boxes as is suggested in the General Arrangement drawing.

ii) Removal of Staff/Coach Parking Area

The submission considers that the proposed works will render the existing parking area to the front of the site unusable, and requests that an appropriate extent of parking space adjoining the footpath to the immediate front of the property is retained to ensure this parking area is not compromised.

iii) Carpark Accessibility

The submission is concerned that the scheme will result in traffic queuing on the Swords Road as it waits for cyclists to cross the access road into the rear carpark.

iv) Commercial Impact during Construction Process

The submission considers a lack of clarity in relation to the length of the construction process and impact on access.

It is noted within this submission that increased noise levels are considered to represent a direct impact arising as a result of the scheme. They are unclear whether internal and external noise levels at the property will remain compliant with the relevant standards set out in BS 8233:2014.

v) Development Plan Policy

It is noted within the submission that the site is zoned High Technology under the provisions of the Fingal Development Plan 2023-2029. The submission noted that this zoning provides the following objective which must be considered: 'Provide for residential development and protect and improve residential amenity'.

vi) Devaluation of Property

There is a concern that proposed works and associated accessibility and noise impacts will lead to a loss in value of numerous properties in the immediate area.

vii) Mitigation and Compensation

The submission states that it is considered reasonable that the NTA engage directly with their client in relation to identifying appropriate mitigation measures to ensure the adequate protection of residential amenity at this location. In the absence of comprehensive mitigation measures they would seek compensation to offset potential impacts.

There is a concern that proposed works and associated accessibility and noise impacts will lead to a loss in value of numerous properties in the immediate area.

2.7.11.2 *Response to issues raised*

i) Creation of a Long-Term Traffic Hazard

The NTA notes the comments raised in the submission. The Proposed Scheme provides additional safety measures such as continuous kerb segregated cycle tracks. Notwithstanding, the NTA recognises the benefits green buffers can bring and have introduced these elements at various sections in the Proposed Scheme where reasonably practicable to do so. There may be scope to relocate the existing planters during accommodation works negotiations, however careful consideration needs to be given when introducing grassed or planted buffers such that a consistent and legible layout can be understood by all road users.

It is noted that the Road Safety Audit undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided in the Supplementary Information, did not highlight any safety issues with the proposed arrangement at this location.

ii) Removal of Staff/Coach Parking Area

This parking space has not been identified as a formal parking space in the Parking and Loading assessment described in Section 6.4.6.1.3.4 of Chapter 6 Traffic and Transport of Volume 2 of the EIAR, due to the absence of appropriate signage and demarcation.

As there are significant parking facilities to the rear of Kealy's pub it is anticipated that any coaches or staff parking could be accommodated in these spaces. The exact details of any reconfiguration required during construction and in the permanent situation will be discussed with the landowner prior to the commencement of any works.

iii) Carpark Accessibility

The access to the car park of Kealy's pub is indicated on General Arrangement Drawings in the EIAR, Volume 3, Figures, Chapter 4 Proposed Scheme Description, 03. General Arrangement is shown in Figure 2.130.

The Design Manual for Urban Roads and Street (DMURS) advises that 'the design of vehicle crossovers clearly indicate that pedestrians and cyclists have priority over vehicles'. The design for each junction within the Proposed Scheme was developed to meet the underlying objectives of the project and to align with the geometric parameters set out in Section 4.1 of the Preliminary Design Report, included in the Supplementary Information, and in conjunction with the junction operation principles described in as BusConnects Preliminary Design Guidance Booklet (PDGB), which is Appendix A4.1 of the EIAR.

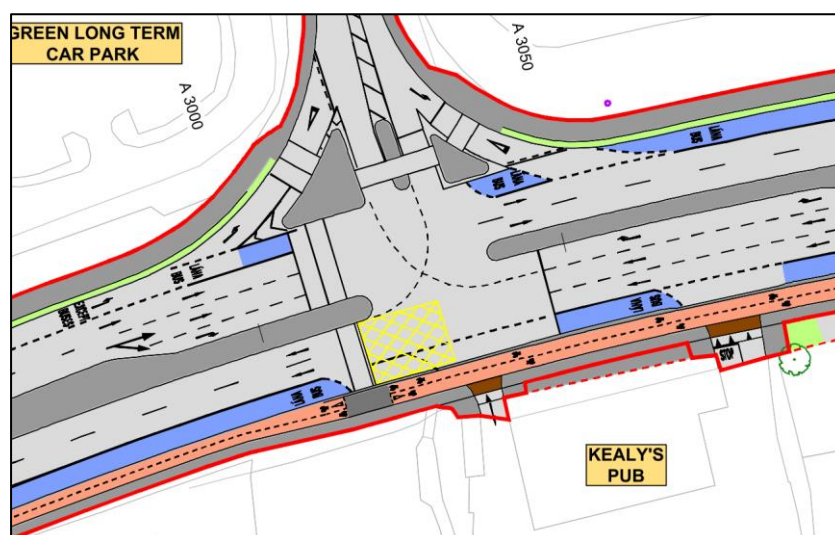


Figure 2.130: General Arrangement of Proposed Scheme at Kealy's Pub (Sheet 09)

The Road Safety Audit undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided in the Supplementary Information, did not highlight any safety issues with the proposed access and parking arrangement in this regard.

iv) Commercial Impact during Construction Process

With regards to construction duration, Section 5.3.2.2 of Chapter 5 of Volume 2 of the EIAR provides details of the construction activities along Swords Road, between Airside Junction and (Dublin) Airport Roundabout.

The expected construction duration for the section will be approximately 18 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented Section 5.3. The programme identifies the approximate duration of works at each section.

Regarding access and construction impact, when roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.1 of Chapter 5 of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction*

starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times'.

Vehicular access to the premises will not be blocked or restricted as a result of the construction of the Proposed Scheme. During the operational stage, there will be no restrictions to the access as indicated on General Arrangement Drawings in the EIAR, Volume 3, Figures, Chapter 4 Proposed Scheme Description, 03. General Arrangement is shown in Figure 2.130 above .

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage your its agent / valuer in preparing, negotiating and advising on compensation.

Regarding the noise impact of the Proposed Scheme, Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration provides details of the assessment undertaken for the Operational Phase of the Proposed Scheme in respect of the potential noise and vibration impacts associated with altered traffic flows, realigned traffic lanes and displaced traffic flows.

Section 9.4.4.1.1.5 states that *'Along the majority of roads of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to be Indirect, Positive, Imperceptible to Slight to Moderate, and Short to Medium Term to Negative, Moderate, and Short to Medium term once the Proposed Scheme becomes operational.'* It goes on to state that *'There are a small number of roads in the overall study area where there are potential initial significant impacts. These are defined as roads with a traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.'* Table 9.45 lists these roads and Swords Road is not included in Table 9.45.

Section 9.5.2.1 summarises the change in road traffic noise in the operation phase as follows: *'The impact assessment has determined that there are no calculated significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme. The range of noise level changes and overall noise levels calculated do not require any specific noise mitigation measures to be incorporated into the Proposed Scheme.'*

In respect of electric buses, as discussed in Section 9.4.4.1.1.4 of Chapter 9, during the proposed Opening Year (2028), the NTA forecast is for 94% of the city bus fleet to be EVs or HEVs. For the Design Year (2043), the city bus fleet is forecast to be 100% electric. The operation of electric and hybrid buses will eliminate ICE noise from buses accelerating, decelerating and idling at bus stops which is the dominant noise source.

In addition, the characteristic of noise from EVs is subjectively less intrusive compared to those with ICE's and is masked to a much greater extent by surrounding road traffic. It is noted the bus stops along the Proposed Scheme will be used by other bus operators which may not transition to EV and HEVs over the same period as the city bus fleet. The volume of these buses along the Proposed Scheme will, however, be significantly less than the city bus fleet and hence, noise levels associated with these areas will not generate significant noise levels over the prevailing noise environment.

With respect to construction noise impacts, as noted in Figure 9.3 in Volume 3 of the EIAR, a Not Significant-Slight noise impact is forecast along Swords Road at Kealy's Pub.

The EIAR contains a comprehensive set of mitigation measures to minimise construction phase impacts, including noise impacts. Construction noise mitigation measures are set out in Chapter 9 in Volume 2 of the EIAR (and are also summarised in Appendix 5.1 (Construction Environmental Management Plan) in Volume 4 of the EIAR).

Section 9.5.1.1 of EIAR Volume 2 Chapter 9 states that: *'The appointed contractor will be required to take specific noise abatement measures to the extent required and comply with the recommendations of BS 5228-1 (BSI 2014a) and S.I. No. 241/2006 - European Communities (Noise Emissions by Equipment for Use Outdoors) (Amendment) Regulations 2006.'* It also states that *'During the Construction Phase, the appointed contractor will be required to manage the works to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228-1 (BSI 2014a)'*

Section 9.5.1.1 also states that *'BS 5228-1 includes guidance on several aspects of construction site practices, which include, but are not limited to:*

- *Selection of quiet plant;*
- *Control of noise sources;*
- *Screening;*
- *Hours of work;*
- *Liaison with the public; and*
- *Monitoring.'*

Specifically, Section 9.5.1.1. states that *'The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas (i.e. based on the construction threshold values for noise and vibration set out in Table 9.8: and Table 9.11).'* [Note - Table 9.8 of Section 9.2.4.1 of EIAR Chapter 9 sets out the Construction Noise Threshold (CNT) Levels for the Proposed Scheme].

Section 9.5.1.1.4 of Chapter 9 sets out the proposed working hours and states: *'It is envisaged that generally construction working hours will be between 07:00hrs and 23:00hrs on weekdays, and between 08:00hrs and 16.30hrs on Saturdays. Night-time and Sunday working will be required during certain periods to facilitate street works that cannot be undertaken under daytime / evening time conditions.'*

However, the contractor will also have to take account of sensitive receptors (in particular any nearby residential areas). Section 9.5.1.1.4 goes on to state: *'The planning of such works will take consideration of sensitive receptors, in particular any nearby residential areas. Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant items will be considered with respect to their potential to exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g. road widening and utility diversions or activities with similar noise levels identified in Table 9.42), other construction activities will be scheduled to not result in significant cumulative noise levels'*.

In summary the noise abatement measures set out in the EIAR that the appointed contractor will be required to put in place to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228-1 will result in appropriate and adequate mitigation measures in respect of construction noise impact at this location during construction.

v) Development Plan Policy

It is considered that the Proposed Scheme remains compliant with the objectives of the Fingal Development Plan 2023-2029.

Within Appendix A2.1 Planning Report contained in the EIAR Volume 4 Appendices Part 1 of 4, Section 3.7.1 provides details of the Fingal Development Plan 2023-2029 and the key transport policies of particular relevance to the Proposed Scheme are set out in Table 3.11.

The zoning objectives of Fingal County Council are listed in Table 1.2 of Appendix A2.1 Planning Report. The Proposed Scheme objectives meet the residential planning objective to *'provide for residential development and protect and improve residential amenity'*.

vi) Devaluation of Property

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact include effects on property values The conclusion reached is that in overall terms *'the public realm improvements planned by the NTA may in fact lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.'*

Chapter 10 (Population) in Volume 2 of the EIAR includes an assessment of the impact on commercial properties as a result of land take during both the Construction Phase (Section 10.4.3.2.2.1) and the Operational Phase (Section 10.4.4.2.2.1). The commercial properties which were assessed are listed in the Chapter's Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 Part 3 of the EIAR, of which the Kealy's Pub is entry number 19. The property was not

assessed as being significantly impacted by either the construction or operation of the Proposed Scheme as summarised in the aforementioned sections. The impact of land take on commercial receptors across the Swords community area as a whole is considered Negative, Not Significant and Temporary/Short-Term during the Construction Phase. While the impact during the Operation Phase is assessed as Negative, Not Significant and Long-Term impact.

Based on the above text, it is considered that a combination of improved connectivity as a result of the dedicated public transport infrastructure being rolled out by the Proposed Scheme as well as public realm improvements, will not have a negative impact on values of commercial properties on Swords Road. If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

2.7.12 34 – Lesley Henderson

2.7.12.1 Summary of issue raised

The submission to the CPO challenges the following:

- i) Relevant statutory functions and powers of the NTA.
- ii) Questions the purposes for which the CPO has been made.
- iii) Assertions in relation to Constitutional Rights.
- iv) Effects on the environment of the proposed development.
- v) The potential impact of the presence and operation of the development in terms of health, security, general amenity and property values.
- vi) Disruption during the construction stage has not been addressed properly.
- vii) Potential impact of the disruption as a result of temporary acquisition of lands has not been addressed properly.
- viii) Potential impact of the proposed in terms of long-term impact to climate change has not been properly or adequately assessed.
- ix) The proposed development will result in a negative visual impact for residential property owners and road users.
- x) The Proposed Scheme will result in increased traffic congestion and operational problems on the road networks, the impact has not been properly or adequately assessed.

2.7.12.2 Response to issues raised

- i) Relevant statutory functions and powers of the NTA

This submission raises a number of queries in relation to the functions and powers of the NTA, and the statutory bases on which the NTA has made the CPO. It is clear from the CPO itself and indeed on the statutory notice served herein that the lands are being acquired for the purposes of the Swords to City Centre Core Bus Corridor Scheme to facilitate public transport and indeed such issues have been comprehensively addressed in Chapter 1 Introduction of Volume 2 of the EIAR, they are also explained below in response to this submission.

It is a function of the NTA under section 44(1)(a) of the Dublin Transport Authority Act 2008 (as amended) (the “**2008 Act**”) to “*secure the provision of, or to provide, public transport infrastructure*”, which includes the provision of the Swords to City Centre Core Bus Corridor Scheme.²

² “public transport infrastructure” is defined in section 2 of the 2008 Act as “infrastructure constructed or provided, or proposed to be constructed or provided, in connection with the provision of public passenger transport services, which includes but is not limited to railway infrastructure, metro railway infrastructure, light railway infrastructure, bus infrastructure, rolling stock, buses,

In that regard, and as set out in Section 1.4 of Chapter 1 of the EIAR, the NTA has decided in accordance with Section 44(2)(b) of the 2008 Act that the functions in relation to securing the provision of public transport infrastructure should be performed by the NTA.

Section 44(6) of the 2008 Act goes on to provide as follows in relation to the exercise of these functions by the NTA:-

“(6) Where—

(a) a decision is made by the Authority under subsection (2)(b) or (5)(a) for the performance of a particular function otherwise than through a public transport authority or statutory body, or

(b) the Authority is performing its function of securing the provision of public transport infrastructure in accordance with subsection (2)(e),

the following provisions have effect—

(i) the Authority shall be empowered (notwithstanding any other enactment) to perform the function, including the acquisition of land for that purpose, and to do any other thing which arises out of or is consequential on or is necessary for the purposes of or would facilitate the performance of the function,

(ii) for the purpose of paragraph (a) or (b), land may be acquired by agreement or by means of a compulsory purchase order made by the Authority in accordance with Part XIV of the Act of 2000,

(iii) the provisions of any enactment concerned (other than section 178 of the Act of 2000) apply in relation to the performance of the function subject to such modifications as may be necessary and as if the Authority was named in such enactment in each place where a public transport authority body entitled to exercise the function is named, ...”

Therefore, under section 44(6) of the 2008 Act, the NTA is empowered to acquire lands by agreement or by means of a compulsory purchase order in accordance with Part XIV of the Planning and Development Act 2000 (as amended) (the “**2000 Act**”), for the purposes of performing its function of providing public transport infrastructure (and in this instance providing the Swords to City Centre Core Bus Corridor Scheme), and such compulsory purchase order may, by virtue of section 10(4)(d) of the Local Government (No. 2) Act 1960 (as amended), authorise the NTA to extinguish a public right of way.

Section 44(7) of the 2008 Act goes on to provide that the 2000 Act applies to a compulsory acquisition of land under, for example, section 44(6) of the 2008 Act, as if it were an acquisition under Part XIV of the 2000 Act and for that purpose a reference to a local authority shall be read as a reference to the NTA.

Section 213 of the 2000 Act is contained in Part XIV of the 2000 Act and is referenced on the face of the CPO for the Proposed Scheme. Section 213(1) of the 2000 Act provides that “*the power conferred on a local authority [to be read as the NTA by virtue of section 44 of the 2008 Act] shall be construed in accordance with this section*”.

Section 213(2) of the 2000 Act states:-

“A local authority [to be read as the NTA by virtue of section 44 of the 2008 Act] may, for the purposes of performing any of its functions (whether conferred by or under this Act, or any other enactment passed before or after the passing of this Act), ... do all or any of the following:-

(i) acquire land, permanently or temporarily, by agreement or compulsorily,

(ii) acquire, permanently or temporarily, by agreement or compulsorily, any easement, way-leave, water-right or other right over or in respect of any land or water or any substratum of land,

busways, bus lanes, bus garages, cycleways, cycle and pedestrian facilities, interchange facilities or such other class of infrastructure, facility, building or vehicle, whether of the same kind as the aforementioned or not, which the Authority has prescribed to be public transport infrastructure under section 44(13)”

- (iii) *restrict or otherwise interfere with, permanently or temporarily, by agreement or compulsorily, any easement, way-leave, water-right or other right over or in respect of any land or water or any substratum of land, and the performance of all or any of the functions referred to in subparagraphs (i), (ii) and (iii) are referred to in this Act as an “acquisition of land”.*

Section 213(4) of the 2000 Act states:-

“a local authority may be authorised by compulsory purchase order to acquire land for any of the purposes referred to in subsection (2) of this section and section 10 (as amended by section 86 of the Housing Act, 1966) of the Local Government (No. 2) Act, 1960, shall be construed so as to apply accordingly and the references to “purposes” in section 10 (1)(a) of that Act shall be construed as including purposes referred to in subsection (2) of this section”.

Having regard to the provisions of section 213 of the 2000 Act, reference is therefore correctly made on the face of the CPO for the Proposed Scheme to “*Section 10 of the Local Government (No. 2) Act, 1960 as substituted by Section 86 of the Housing Act, 1966 as amended by Section 6 and the Second Schedule of the Roads Act, 1993*”.

Further, section 10 of the Local Government (No. 2) Act, 1960 (the “**1960 Act**”) operates, for example, to apply the provisions of section 76 of the Housing Act 1966 (the “**1966 Act**”), and the Third Schedule thereto. Therefore, reference is correctly made on the face of the CPO for the Proposed Scheme to section 76 of the 1966 Act and the Third Schedule thereto, and the processes and procedures set out in section 76 of the 1966 Act and the Third Schedule to the 1966 Act have, accordingly, been followed by the NTA in submitting the CPO for the Proposed Scheme to An Bord Pleanála (the “**Board**”) for confirmation. Indeed, the statutory notice which was served on the objector is that required by Article 4(b) of the Third Schedule to the 1966 Act.

Finally, reference is also correctly made on the face of the CPO for the Proposed Scheme to section 184 of the Local Government Act 2001 (as amended) (the “**2001 Act**”), given that section 184 of the 2001 Act clarifies the rights referenced in section 213(2)(a) of the 2000 Act (referenced above), as including any easement, way-leave, water right or other right to which section 213(2)(a) applies granted by or held from the local authority acquiring the land [the reference to local authority here should, by virtue of section 44 of the 2008 Act, be read as a reference to the NTA].

Therefore, there is no question but that the NTA has relied on the correct statutory bases in making the CPO for the Proposed Scheme, and has followed the correct processes and procedures as set out in the appropriate legislative framework in submitting the CPO for the Proposed Scheme to the Board for confirmation.

ii) Purposes for which the CPO has been made

This submission also raises queries in relation to the purposes for which the NTA has made the CPO. As set out in paragraph 2 of the statutory notice which was served upon the objector, the CPO is ‘*for the purposes of the construction of the Swords to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*’. Further, the face of the CPO itself also indicates that it is ‘*for the purposes of facilitating public transport*’.

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Swords to City Centre Core Bus Corridor Scheme was available for inspection physically and on the NTA’s dedicated website for this Proposed Scheme, and that EIAR contains all of the ‘*precise details of the proposed construction works*’ and all of the ‘*proposed ancillary and consequential works for the Swords to City Centre Core Bus Corridor Scheme*’ as requested in paragraphs 9 and 10 of this submission (CPO-16).

The lands at plot numbers 1133(1).1d and 1133(2).2d are proposed to be compulsorily acquired for the specific purposes of widening of the existing road corridor to facilitate a bus lane in each direction. As a result, the existing boundary wall of 298 Swords Road will be set back from its original position. The temporary land take is to facilitate the construction of this wall and to tie the driveway to any level differences with the Proposed Scheme as depicted in General Arrangement Drawing Sheet 20 of 37 of the EIAR Volume 3 Figures Chapter 4 Proposed Scheme Description, General Arrangement drawings and as detailed in Section 4.5.3.1 in Chapter 4 of Volume 2 of the EIAR.

Indeed, as the Board is aware, the NTA has also made an application to the Board under section 51 of the Roads Act 1993 (as amended) for approval of the proposed road development, the Swords to City Centre Core Bus Corridor Scheme, which is currently pending before the Board (ABP-Ref No. HA06D.317121).

iii) Assertions in relation to Constitutional Rights

This submission makes a number of assertions that the NTA has acted in breach of the objectors constitutional rights, has acted *ultra vires*, and has '*failed to act in accordance with the principles of basic fairness of procedures and natural/constitutional justice*' in making this CPO and in serving this statutory notice on the objector.

In addition to the lawfulness of the proposed compulsory acquisitions (as coming within the powers of the NTA as outlined above), the acquisitions are proportionate. In this latter regard, the courts have established that the power conferred to compulsorily acquire land must be exercised in accordance with the requirements of the constitution, including respecting the property rights of the affected landowner. The confirming authority (being the Board) must be satisfied that the acquisition of the property is clearly justified by the exigencies of the common good.

Accordingly, in applying the proportionality test, the NTA did (in making the Swords to City Centre Core Bus Corridor Compulsory Purchase Order 2023) and the Board should (in confirming the CPO) ensure that:

- (i) there is a need that advances the common good which is to be met by the acquisition of the lands in question;
- (ii) the particular property is suitable to meet that need;
- (iii) any alternative methods of meeting the need have been considered; and
- (iv) that the landowner is entitled to be compensated.

Chapter 2 of Volume 2 of the EIAR sets out how there is significant evidence to satisfy the requirement that there is a need that advances the common good. It is axiomatic that the acquisition of land and rights over land will result in interference with the use of those lands by owners/leases/occupiers. However, such interference is proportionate to the legitimate aim being pursued in the interests of the common good.

As detailed in Chapter 3 of Volume 2 of the EIAR, the NTA considered the reasonable alternatives to meet the need with the requirements of the EIA Directive which requires '*a description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of environmental effects*'

In terms of alternative solutions, Chapter 3 of the EIAR sets out the reasonable alternative studies and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route.

'For urban transport systems, bus-based transport is the appropriate public transport mode for passenger demand levels of up to 4,000 passengers per hour per direction. (UITP 2009). Light rail provision would generally be appropriate to cater for passenger demand of between 3,500 and about 7,000 passengers per hour per direction. Passenger demand levels above 7,000 passengers per hour per direction would generally be catered for by heavy rail or metro modes, which would usually be expected to serve a number of major origins or destinations along a Particular corridor. In the case of both the bus and light rail modes, higher levels of passenger demand than the above stated figures can be accommodated under specific conditions.

The development of the prior GDA Transport Strategy considered the likely public transport passenger demand levels across the region using the NTA's transport model and took into account

the other studies referenced above, in addition to studies that had been carried out to investigate a potential light rail scheme within the area of this corridor. Likely passenger flows were identified to be within the capacity of bus transport, without reaching the quantum of passenger demand which would support the provision of a higher capacity rail solutions in addition to a Metrolink. Section 3.2.1 set out various studies undertaken for the prior GDA Transport Strategy. Arising from these studies and the specific assessment and transport modelling work undertaken for the prior Strategy, it was concluded that a bus-based transport system would be the proposed public transport solution in the corridor of the Proposed Scheme. The proposed transport solution would be supplemented by Metro, to provide more passenger capacity and enhanced interchange between the Luas Red and Green Line Services, proposed Metrolink Station at Fosterstown, Sligo/Maynooth Line Heavy Rail Services at Drumcondra Station and the Suburban Interchange between the Orbital and Radial Routes at Coolock Lane. It was considered that there would be insufficient demand to justify the provision of an additional light rail alternative beyond what is proposed above, particularly given the low to medium density nature of development in this corridor.

Similar to BRT, the light rail option would be worse for the environment in terms of construction impacts, including flora and fauna, heritage, air and noise, compared to the CBC proposal. Light rail requires continuous unbroken physical lane infrastructure to achieve high-priority. This would involve significantly more land take and potentially involve demolition of buildings at pinch-points. In the case of the CBC proposals, bus-priority can be achieved through short lengths at pinch-points by the use of signal controlled priority.

Given the consideration of light rail provision, and the level of likely public passenger use along this overall corridor assessed in the transport modelling work, the development of the prior GDA Transport Strategy identified that a Metro solution would be economically justified within the area covered by this corridor. Therefore, it is intended to develop the light rail Metro system along this corridor through the implementation of MetroLink.

Arising from the various studies and analysis that had been carried out, and the specific assessment and transport modelling work undertaken for the prior GDA Transport Strategy, it was concluded that a high quality bus-based transport system, supplemented by the implementation of MetroLink, would be part of the proposed public transport solution in the corridor of the Proposed Scheme. This is because the development of an underground Metro would not remove the need for additional infrastructure to serve the residual bus needs of the area covered by the Proposed Scheme, nor would it obviate the need to develop the cycling infrastructure required along the route of the Proposed Scheme'.

With respect to congestion charging, Section 3.2.8 of the EIAR states that a key success factor of demand management is greater use of alternative travel modes, in particular public transport. In the case of Dublin, the existing public transport system does not currently have sufficient capacity to cater for larger volumes of additional users.

'In advance of a significant uplift in overall public transport capacity in the Dublin metropolitan area, the implementation of major demand management measures across that area would be unsuccessful. Effectively constraining people from making journeys by car and requiring them to use other modes, without those modes having the necessary capacity to cater for such transfer, would not deliver an effective overall transport system. Instead, the capacity of the public transport system needs to be built up in advance of, or in conjunction with, the introduction of major demand management measures in the Dublin metropolitan area. This is especially true in the case of the bus system where a major increase in bus capacity through measures such as the Proposed Scheme would be required for the successful implementation of large scale demand management initiatives.

While the foregoing addresses the dependency of demand management measures on public transport capacity, it is equally correct that the provision of greatly enhanced cycling facilities will also be required to cater for the anticipated increase in cycling numbers, both in the absence of demand management measures and, even more so, with the implementation of such measures. Demand management initiatives by themselves will not deliver the level of segregated cycling infrastructure required to support the growth in that mode. Consequently, the progression of demand management proposals will not secure the enhanced safe cycling infrastructure envisaged under the Proposed Scheme.

Finally it is noted that park and ride and cashless fares both form part of the broader BusConnects programme and may be implemented to complement improvements to the overall bus system, including the Proposed Scheme infrastructure’.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

In light of all of the above, the NTA is satisfied that it has not acted *ultra vires* or in abuse of its powers, and that the making of the CPO is reasonable and justified and does not represent a disproportionate interference with the objector’s constitutionally protected property rights.

- iv) Effects on the environment of the proposed development such as noise, traffic volumes, increase in private transport causing harmful emissions and health hazards with living in close proximity to the proposed development.

With respect to construction activities leading to ‘considerable increased traffic volumes and noise’, these potential impacts have been assessed within the EIAR.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR and its Appendix A6.1 (Transport Impact Assessment) in Volume 4 Part 2 of the EIAR provide the impact assessment for traffic and transport for both the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the assessments are described in Section 6.2 of Chapter 6 and Section 4 of Appendix A6.1.

The Construction Phase impact assessment is described in Section 6.4.5 of Chapter 6 and Section 6.5 of Appendix A6.1. As summarised in Chapter 6, Section 6.4.5.5 (Table 6.22) the predicted impact on general traffic during the Construction Phase as a result of ‘Restrictions to general traffic along Proposed Scheme’ is Negative, Moderate and Temporary, while the predicted impact as a result of ‘Additional construction traffic flows upon surrounding road network’ is Negative, Slight and Temporary. Mitigation measures to manage traffic impacts as a result of construction as described in Section 6.4.5.4.6.1 and 6.4.5.4.6.2 of Chapter 6 respectively will include:

- *‘The appointed contractor will develop a CTMP that gives due consideration to provision of local access requirements and designates appropriate diversion routes in the case where localised temporary closures are required’; and*
- *‘The appointed contractor will prepare a Construction Stage Mobility Management Plan (CSMMP) which will be developed prior to construction, as described in Appendix A5.1 CEMP in Volume 4 of this EIAR, to actively discourage personnel from using private vehicles to travel to site. The CSMMP will promote the use of public transport, cycling and walking by personnel. Private parking at the Construction Compound will be limited. Vehicle sharing will be encouraged, subject to public health guidelines, where travel by private vehicle is a necessity, e.g. for transporting heavy equipment’.*

Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR provides an assessment of the potential noise impacts as a result of the Construction and Operational Phases of the Proposed Scheme. Section 9.4.3 provides the impact assessment for the Construction Phase, with Section 9.4.3.4.1 and Table 9.44 providing the summary of the potential construction noise impacts. The potential impact significance of construction traffic noise along the Proposed Scheme is illustrated in Figure 9.2 in Volume 3 of the EIAR, with the impact significance for the Swords Road in the vicinity of the 298 Swords Road categorised as Slight – Moderate (Sheet 3-4 of 5). Chapter 9 lays out the mitigation measures for the management of noise during the Construction Phase in Section 9.5.1, with all mitigation measures also recorded in Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4 Part 1 of the EIAR. Construction Phase mitigation measures as listed in Table 5.2 of the CEMP will include:

- NV2: *‘The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas i.e., based on the construction threshold values for noise and vibration set out*

in Tables 9.7 and 9.10 in Chapter 9 (Noise & Vibration) of this EIAR. Reference to Table 9.37 in Chapter 9 (Noise & Vibration) of this EIAR indicates that intrusive works occurring within 25m to 45m of Noise Sensitive Locations (NSLs) will need specific noise control measures to reduce impacts depending on the time period over which they will occur, i.e., daytime or evening’;

- NV8: *‘Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant or equipment items will be considered with respect to their potential to exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g., road widening and utility diversions or activities with similar noise levels identified in Table 9.22 in Chapter 9 (Noise & Vibration) of this EIAR). Other construction activities associated with the Proposed Scheme will be scheduled to avoid significant cumulative noise levels’;*
- NV9: *‘The NTA will establish clear forms of communication that will involve the appointed contractor and NSLs in proximity to the works so that residents or building occupants are aware of the likely duration of activities likely to generate noise or vibration that are potentially significant as set out in Table 9.7 and Table 9.10 in Chapter 9 of this EIAR’;* and
- NV10: *‘During the Construction Phase the appointed contractor will carry out noise monitoring at representative NSLs to evaluate and inform the requirement and / or implementation of noise management measures. Noise monitoring will be conducted in accordance with International Organization for Standardization (ISO) 1996–1 (ISO 2016) and ISO 1996–2 (ISO 2017). The selection of monitoring locations will be based on the nearest representative NSLs to the working area which will progress along the length of the Proposed Scheme’.*

With respect to the observations that ‘Private transport in the area will increase and take significantly longer to pass through the area causing extra harmful emissions and hazard’, this has been assessed within the EIAR.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR provides an assessment of the impact the Proposed Scheme will have on traffic volumes once operational, both directly along the route of the Proposed Scheme, and on the surrounding road network. As described in Section 6.4.6.2.8 of Chapter 6, traffic modelling was carried out to assess the predicted traffic volumes in 2028 once the Proposed Scheme is fully operational, in both the AM and PM peak hours compared to the predicted traffic in the absence of the Proposed Scheme (the Do Minimum scenario). With respect to the Swords Road in the vicinity of this property, the results of the modelling showed a decrease in general traffic during both the AM peak of 807 Passenger Car Units (Table 6.67 in Chapter 6), and the PM peak of 548 Passenger Car Units (Table 6.71 in Chapter 6).

With respect to harmful emissions, Chapter 7 (Air Quality) in Volume 2 of the EIAR describes the assessment of the potential impacts of the Proposed Scheme on air quality during the Construction and Operational Phases. Figures 7.3 to 7.5 show the modelled annual mean impacts to NO₂, PM₁₀ and PM_{2.5} respectively at receptors along the Proposed Scheme once the Proposed Scheme is operational, with the area in which 298 Swords Road is located shown on Sheet 2 of each of those figures. Along that stretch of the Swords Road, Figure 7.3 shows a Negligible to Moderate Beneficial change to NO₂, Figure 7.4 shows a Negligible change to PM₁₀, and Figure 7.5 shows a Negligible change to PM_{2.5}.

With respect to the observations that ‘The health effects associated with living in close proximity to the proposed development have not been adequately or properly assessed’, this has been assessed within the EIAR.

Chapter 11 (Human Health) of Volume 2 of the EIAR provides an assessment of the potential human health impact of the Proposed Scheme during both the Construction Phase (Section 11.4.3) and the Operational Phase (Section 11.4.4). Section 11.1 (Introduction) states that *‘This assessment has been carried out according to best practice and guidelines relating to human health, and in the*

context of similar large-scale transport infrastructural projects', with the Chapter going on to state in Section 11.2.4.2 that:

'The characteristics of the Proposed Scheme have been considered and the potential pathways between aspects of the construction and operation of the Proposed Scheme and health outcomes (beneficial and adverse) have been mapped out... Due to the nature of impacts on human health, many of these are indirect. The assessment of the Operational Phase of the Proposed Scheme has focused on those potential impacts most likely to be influenced by the Proposed Scheme, namely air quality, noise, community severance, social use of outdoor space, physical activity levels, access and risk of injuries. For the identification of construction impacts, reference has been made to the other environmental topic assessments to identify the aspects of the environment likely to be affected, and then a further consideration has been made as to whether there is a likely pathway between those impacts and human health outcomes.'

The Construction Phase health impacts are summarised in Section 11.4.3.7 (Table 11.6), while the Operational Phase health impacts are summarised in Section 11.4.4.9 (Table 11.7). A description of the mitigation and monitoring measures proposed during both the Construction and Operational Phases are described in Section 11.5 of the Chapter.

Section 11.6 describes the predicted residual impacts after mitigation measures have been incorporated. With respect to Construction Phase residual impacts the Chapter states:

'No significant residual impacts on health are predicted.'

With respect to Operational Phase residual impacts the Chapter states:

'Three issues were assessed as likely to be associated with significant residual impacts on human health, all of which were considered positive.'

Lack of regular physical activity is a leading cause of chronic disease and premature deaths. The Proposed Scheme will improve opportunities and convenience for walking and cycling, which will support many people in the study area in achieving recommended levels of weekly physical activity, for example as part of an active travel commute to work or education. It will also increase safety and the perception of safety for pedestrians and cyclists, who are more vulnerable to injury and mortality from traffic collisions. Furthermore, by redressing the balance between private car use and other forms of transport, the Proposed Scheme will improve public transport journey times and reliability, as well as introducing greatly improved active travel infrastructure. This will provide for a more equitable transport experience, including for those without access to a car.'

The Proposed Scheme is expected to have a significantly positive contribution on health outcomes related to increased physical activity, equitable access to services and improved safety for vulnerable road users.'

The significant positive impacts which are expected to arise in the Operational Phase fully align with the relevant objectives of the Proposed Scheme'.

- v) The potential impact of the presence and operation of the development in terms of health, security, general amenity and property values.

With respect to potential health impact, Chapter 11 (Human Health) of Volume 2 of the EIAR provides an assessment of the potential impact of the Proposed Scheme during both the Construction Phase and the Operational Phase. In particular, Section 11.4.4 of the Chapter covers the potential health impacts of the Proposed Scheme once in place and fully operational. The Operational Phase health impacts are summarised in Section 11.4.4.9 (Table 11.7)

With respect to security, Appendix A10.2 (Economic Impact of Core Bus Corridors) in Volume 4 Part 3 of the EIAR assesses the potential economic impact of the Core Bus Corridors, which includes consideration of the impact on crime and anti-social activity. In Section 5 of the report, and specifically the section on *'The impact of transport infrastructure on crime'*, the conclusion states that:

'The new infrastructure improvements should have a direct and immediate impact on crime along the corridors. It will provide better, safer and more visible bus stops whilst also improving the wider public realm infrastructure through investments such as improved street lighting. This will act as a

direct deterrent to criminal activity and result in a reduction in crime. This in turn has been shown to encourage people onto the streets into the evening which will also support the night time economy in community centres.'

With respect to general amenity, Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the potential impacts during both the Construction and Operational Phases, including an assessment of the residual impacts at one year and 15 years post-construction. The assessment includes potential impacts on visual amenity and amenity designations along the Proposed Scheme. Chapter 10 (Population) in Volume 2 of the EIAR includes assessments of the potential impacts on both community amenity and commercial amenity, during both Construction and Operational Phases. With respect to the potential Operational Phase impacts, these are assessed in Section 10.4.3.1.1 for community amenity and in Section 10.4.3.2.1 for commercial amenity.

With respect to property values, Chapter 10 (Population) Appendix A10.2 (Economic Impact of Core Bus Corridors) in Volume 4 Part 3 of the EIAR assesses the potential economic impact of the Core Bus Corridors, which includes consideration of the impact on property value. In Section 3 of the report, and specifically the section on 'The impact on property values', the conclusion states that:

'The public realm improvements planned by the NTA may lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors. Evidence shows that investing in public realm creates nicer places that are more desirable for people and business to locate in, thereby increasing the value of properties in the area. The evidence suggests that all public realm improvements generate value, regardless of the size of the investment or the neighbourhood. Residents along the corridors will also see a measurable increase in their quality of life, with evidence showing that residents are willing to pay more for an improved public realm.'

vi) Disruption during the construction stage has not been addressed properly.

The potential Construction Phase impacts have been assessed throughout the EIAR, with mitigation measures proposed where required. A description of the Construction Phase is described in Chapter 5 (Construction) in Volume 2 of the EIAR. This includes description of construction duration, working hours, construction compounds and management of construction. The appendix to the Chapter, Appendix A5.1 (Construction Environmental Management Plan) in Volume 4 Part 1 of the EIAR, provides a description of the measures to be taken and commitments to be made by the appointed contractor during construction to ensure disruption and impact is minimised as far as reasonably practicable, including Table 5.2 which collates all Construction Phase mitigation measures as identified within the EIAR.

In addition to Chapter 5 (Construction), potential Construction Phase impacts are assessed for each topic within Volume 2 of the EIAR, and mitigation measures proposed where required. Specifically with respect to disruption, the most relevant chapter sections would be:

- Chapter 6 (Traffic & Transport), Section 6.4.5 (Construction Phase impact assessment) and Section 6.5.1 (Construction Phase mitigation);
- Chapter 7 (Air Quality), Section 7.4.2 (Construction Phase impact assessment) and Section 7.5.1 (Construction Phase mitigation);
- Chapter 9 (Noise & Vibration), Section 9.4.3 (Construction Phase impact assessment) and Section 9.5.1 (Construction Phase mitigation);
- Chapter 10 (Population), Section 10.4.3 (Construction Phase impact assessment) and Section 10.5 (Mitigation and Monitoring Measures);
- Chapter 11 (Human Health), Section 11.4.3 (Construction Phase impact assessment) and Section 11.5.1 (Construction Phase mitigation);
- Chapter 17 (Landscape (Townscape) & Visual), Section 17.4.3 (Construction Phase impact assessment) and Section 17.5.1 (Construction Phase mitigation);
- Chapter 18 (Waste & Resources), Section 18.5.3 (Construction Phase impact assessment) and Section 18.6.1 (Construction Phase mitigation); and

- Chapter 19 (Material Assets), Section 19.4.3 (Construction Phase impact assessment) and Section 19.5.1 (Construction Phase mitigation).

In addition to the individual Mitigation and Monitoring Measures section of each chapter, Chapter 22 (Summary of Mitigation and Monitoring Measures) in Volume 2 of the EIA collates all of those mitigation measures included throughout the EIA into one chapter.

- vii) Potential impact of the disruption as a result of temporary acquisition of lands has not been addressed properly.

Chapter 5 (Construction) in Volume 2 of the EIA gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.'

'Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

It goes on to state in Section 5.5.3.2 that:

'The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

Chapter 10 (Population) in Volume 2 of the EIA assesses the Construction Phase impacts associated with temporary land acquisition on both community (including residential) and commercial property in Sections 10.4.3.1.2.1 and 10.4.3.2.2.1 respectively. Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIA assesses the Construction Phase impacts associated with temporary land acquisition for all impacted properties in Section 17.4.3.2.8.

- viii) Potential impact of the proposed in terms of long-term impact to climate change has not been properly or adequately assessed.

Chapter 8 (Climate) in Volume 2 of the EIA assesses the climate impact of the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the climate assessment is described in Section 8.3, with the assessment looking at both the impact of the project on the climate and the vulnerability of the project to climate change as per the guidance from Highways England's (2021) Design Manual for Roads and Bridges (DMRB) LA 114 Climate.

The assessment included both the direct Operational Phase carbon emissions from the Proposed Scheme (Section 8.5.2.4), as well as the indirect Operational Phase carbon emissions (Section 8.5.2.5). The assessment concludes that:

'The Proposed Scheme has the potential to reduce CO_{2e} emissions equivalent to the removal of approximately 21,130 and 22,150 car trips per weekday from the road network in 2028 and 2043 respectively.'

In addition to the climate assessment, Chapter 13 (Water) Appendix A13.2 (Flood Risk Assessment) in Volume 4 Part 3 of the EIA describes the Flood Risk Assessment (FRA) undertaken for the Proposed Scheme. This FRA includes an assessment of the flood risk due to climate change (Section 5.6) which considers mean sea level rise, river flows, and extreme rainfall depths.

In addition to the FRA undertaken, Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIA describes the drainage design for the Proposed Scheme (Section 4.6.15), while the Proposed Surface Water Drainage Works figure in Volume 3 of the EIA shows the design in more detail. In order to ensure that the increase in impermeable area from the Proposed Scheme does not increase the potential for flooding into the future as a result of climate change, Sustainable Drainage Systems (SuDS) have been included in the Drainage Design and:

'All drainage structures for newly paved areas are designed with a minimum return period of no flooding in 1:30 years with a 20% climate change allowance.'

- ix) The proposed development will result in a negative visual impact for residential property owners and road users.

Chapter 17 (Landscape (Streetscape) & Visual) in Volume 2 of the EIAR describes the results of the assessment undertaken with respect to visual impact as a result of the Proposed Scheme. The Chapter assesses streetscape characteristics and visual impacts under a number of headings (i.e. Architectural Conservation Areas, Conservation Areas, Residential Conservation Areas, Protected Structures, Amenity Designations, Tree Preservation Orders / Tree Protection Objectives, Preserved Views / Scenic Views, Properties, and Trees and Vegetation) for the Construction Phase (Section 17.4.3.2, with the potential impacts summarised in Table 17.7) and Operational Phase one year post-construction (Section 17.4.4.2 with the potential impacts summarised in Table 17.8), while Section 17.5.2 assesses the Operational Phase visual impacts at 15 years post-construction.

The Chapter conclusion (Section 17.7) states that:

'the Proposed Scheme will give rise to some degree of townscape and visual effect, most notably during the Construction Phase. These impacts arise especially where there is temporary and/or permanent acquisition of lands associated with residential or other properties including amenities, and where tree removal is required. The Proposed Scheme includes for replacement of disturbed boundaries, reinstatement of the Construction Compound, return of temporary acquisition areas, and for additional tree and other planting where possible along the Proposed Scheme.'

In the Operational Phase, localised negative residual effects will remain for properties experiencing permanent land acquisition, including the Thatch Cottage at Collinstown (a protected structure). There will be a negative residual effect remaining for the River Tolka Conservation Area resulting from the introduction of a new bridge structure within the designation. There will be overall positive effects for sections of the Proposed Scheme between Northwood Avenue and Granby Row, including Residential Conservation Areas, as the Proposed Scheme provides for improvements in the urban realm, which will provide positive long-term effects for the townscape and visual character. The Proposed Scheme will also provide for a significantly enhanced level of service for public transport and for pedestrian/cycle connectivity.'

Figure 17.2 (Photomontages) in Volume 3 of the EIAR show what the streetscape will look like once the Proposed Scheme is operational at a number of representative locations along the whole route. This includes a number of viewpoints along the Swords Road, and in particular View 21, see Figure 2.131, which shows the objectors property. Chapter 17 (Landscape (Townscape) & Visual) Section 17.5.2.1 describes the proposed changes to the streetscape at each photomontage location and states what the effect on visual amenity is at that location. In the case of View 21, the Chapter states that:

'There would be no appreciable change to the character but there would be a minor positive change to the visual amenity of the view due to removal of the overhead services and provision of new boundaries.'



Figure 2.131: 'View 21' Proposed New Layout at Swords Road

- x) The Proposed Scheme will result in increased traffic congestion and operational problems on the road networks, the impact has not been properly or adequately assessed.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR and its Appendix A6.1 (Transport Impact Assessment) in Volume 4 Part 2 of the EIAR provide the impact assessment for traffic and transport for both the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the assessments are described in Section 6.2 of Chapter 6 and Section 4 of Appendix A6.1.

The Construction Phase impact assessment is described in Section 6.4.5 of Chapter 6 and Section 6.5 of Appendix A6.1. As summarised in Chapter 6, Section 6.4.5.5 (Table 6.22) the predicted impact on general traffic during the Construction Phase as a result of 'Restrictions to general traffic along Proposed Scheme' is Negative, Moderate and Temporary, while the predicted impact as a result of 'Additional construction traffic flows upon surrounding road network' is Negative, Slight and Temporary. Section 6.5.1 describes the Construction Phase mitigation measures.

The Operational Phase impact assessment is described in Section 6.4.6 of Chapter 6 and Section 6.6 of Appendix A6.1. As summarised in Chapter 6, Section 6.4.6.3 (Table 6.81) the predicted impact on general traffic as a result of '*Reduction in general traffic flows along the Proposed Scheme*' is Positive, Moderate and Long-Term, while the predicted impact as a result of '*Redistributed general traffic along the surrounding road network in the indirect study area as a result of the reduction of reserve capacity along the Proposed Scheme*' is Negative, Slight and Long-Term.

2.7.13 35 – Maxol

2.7.13.1 Summary of issue raised

This submission raised the following queries/issues:

1. The proposed bus corridor scheme proposes two bus lanes where currently one exists. It is unclear how this can be achieved without any land take from the existing petrol filling station or houses on the opposite side of the road. The respondent is concerned for the implication that the bus connects proposal would have on their clients facility.
2. In the case of proposed either permanent or temporary land acquisition along the frontage of the petrol filling station, the submission points out that a minimum distance of 4.25m between the fuel dispensers to the back of the footpath must be maintained to comply with safety regulations

- The submission refers to a layout of the ground services at the subject station and it is requested that locations of tanking and services are considered when finalising the subject plan.

2.7.13.2 Response to issues raised

- As indicated on the deposit map relevant to this premises, there is permanent and temporary land take proposed at this location, see Figure 2.132. There is also permanent and temporary land take proposed at the houses on the opposite side of the road.

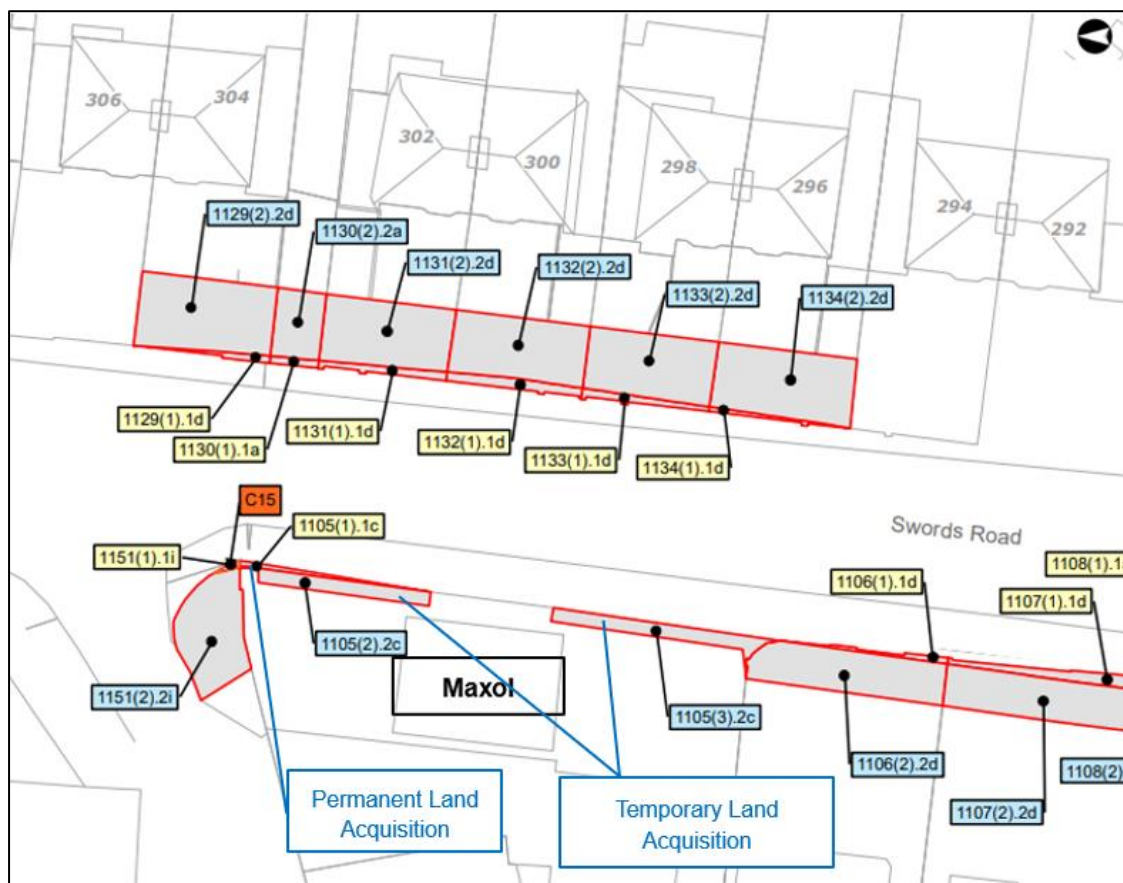


Figure 2.132 Extract from CPO Deposit Map at Maxol (Sheet 21)

Section 4.5.3 of Chapter 4 of the Proposed Scheme Description of Volume 2 of the EIAR provides a general overview of the Proposed Scheme through Santry,

‘Between Coolock Lane and the entrance to Omni Park Shopping Centre, it is proposed to extend continuous bus lanes and cycle tracks in both directions. This will require some limited land take from adjacent properties on both sides of the existing road and the removal of existing on-street car parking.

Between the Omni Park Shopping Centre entrance and the Shantalla Road junction it is proposed to maintain the two-way general traffic lanes and introduce continuous bus lanes in both directions. A segregated footpath will be maintained on either side. This will require some land take from adjacent properties on both sides of the existing road in Santry Village and the removal of existing on-street car parking. Off street parking is proposed at residential properties between the shopping centre and Shanowen Road to offset the loss of on-street parking.

It is proposed to redirect cyclists through Lorcan Road and Shanrath Road as a Quiet Street. This cycle route commences at the junction with Omni Park Shopping Centre and connects with the Swords Road at the junction with Shantalla Road. A two-way cycle track is proposed to connect the Quiet Street from Shanrath Road through the Shanrath junction, connecting to the existing Quiet Street west of the off-slip.

A dedicated bus lane is proposed inbound along the Shantalla Road Bridge and a general traffic lane is maintained in both directions. The Shantalla Road junction will be upgraded to accommodate the bus lane and cycle and pedestrian movements.'

Chapter 10 (Population) in Volume 2 of the EIAR assessed community and economic impacts of the Proposed Scheme, including an assessment of the impacts due to land take at commercial properties along the route of the Proposed Scheme. Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of the EIAR provides a list of all commercial properties lining the Proposed Scheme which have been included within the assessment, with the Maxol premises being included as entry 68 in the schedule. The population assessment did not identify any significant impact on the Maxol premises either during the Construction Phase (Section 10.4.3.2.2.1 of Chapter 10) or during the Operational Phase (Section 10.4.4.2.2.1 of Chapter 10).

- At the northern boundary of the Maxol garage there is a short section of permanent land take that will move the back of the footpath 0.45m closer to the premises however the proposed back of the footpath remains at least 12m away from the canopy of the Maxon garage, see Figure 2.133. The remainder of the footpath position adjacent to the Maxol garage is not changing as part of the Proposed Scheme.

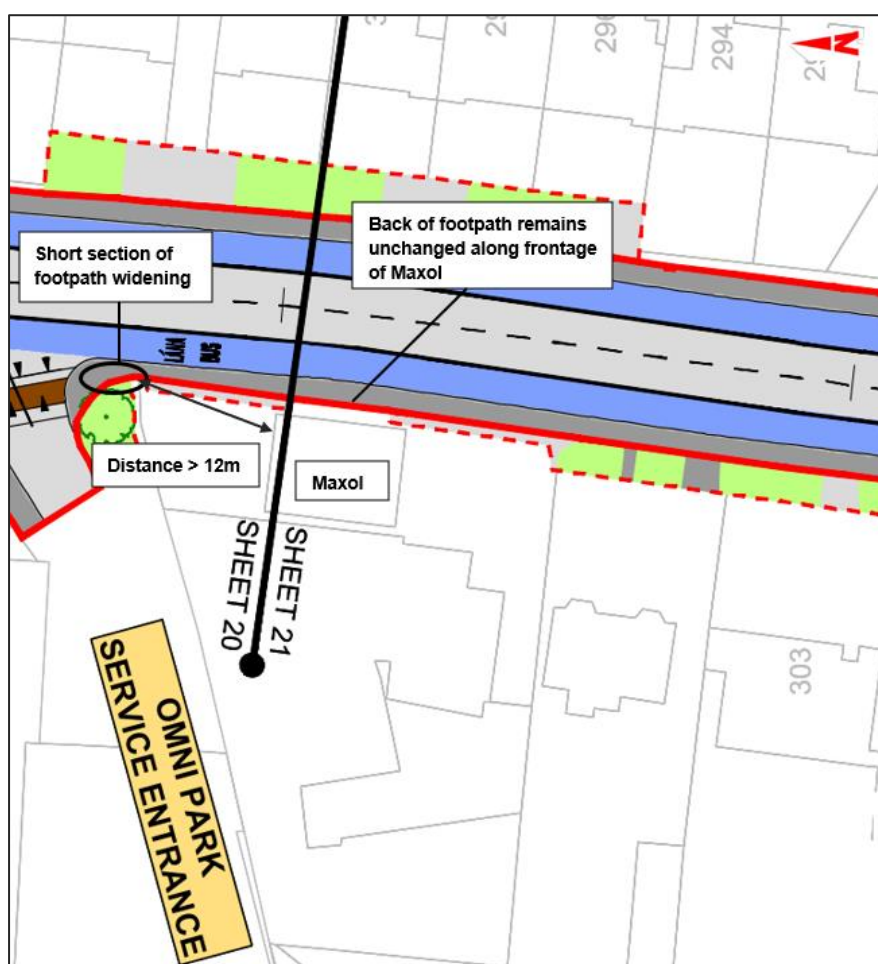


Figure 2.133 Extract from General Arrangement Drawing at Maxol (Sheet 21)

- The NTA acknowledges the layout of the ground services provided as part of the submission. As mentioned in the responses above, the Proposed Scheme will not have any impact upon this plant and equipment.

2.7.14 40 – Nesta Limited

2.7.14.1 Summary of issue raised

The submission to the CPO raises three potential issues:

i) Access

Nesta cannot be accessed from any other road and given the nature of the business (warehousing and office), any impediment to the existing vehicular access point, whether it be on a permanent or temporary basis, would be devastating to the business and would also adversely impact customers whose goods are stored on site. The nature of the business means that its operation is reliant on good quality continuous vehicular access.

ii) Planning Context

Nesta is zoned 'GE- General Employment'. The use of Nesta for warehousing and office use is fully consistent with the zoning objective. Blocking or restricting vehicular access to the premises would not be consistent with the zonings vision.

iii) Impact to Business

In addition to providing vehicular access, those lands also enable vehicles and user of Nesta Santry to safely pull in from the Swords Road and to alight from their vehicles to open the gate, if necessary. Nesta is highly concerned that the acquisition of these lands for the purpose, inter alia, of storage of materials for construction works for an unknown duration will adversely affect their business.

For reasons set out above it is considered that the Order, if confirmed, would have a disproportionate impact on Nesta's property rights, would diminish the value of its property and its business, and would be contrary to proper planning and sustainable development of the area. Nesta therefore requests that the Board refuse to confirm the Order. Alternatively, the Board might consider amending the Order such that it will not require the acquisition of Nesta's lands.

2.7.14.2 Response to issues raised

ii) Access

When roads and streets are being upgraded, there will be some temporary disruption / alterations to on-street and off-street parking provision, and access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.2 of Chapter 5 Construction of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times*'.

Detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the CPO.

iii) Planning Context

As outlined in point i) above, vehicular access to the premises will not be blocked or restricted as a result of the Proposed Scheme at the Construction Phase. During the Operational Phase, there will be no restrictions to the access, as indicated on Sheet 14, General Arrangement Drawings in the EIAR, Volume 3 Figures, Chapter 4 Proposed Scheme Description, 03. The extract of the General Arrangement drawing is shown in Figure 2.134.

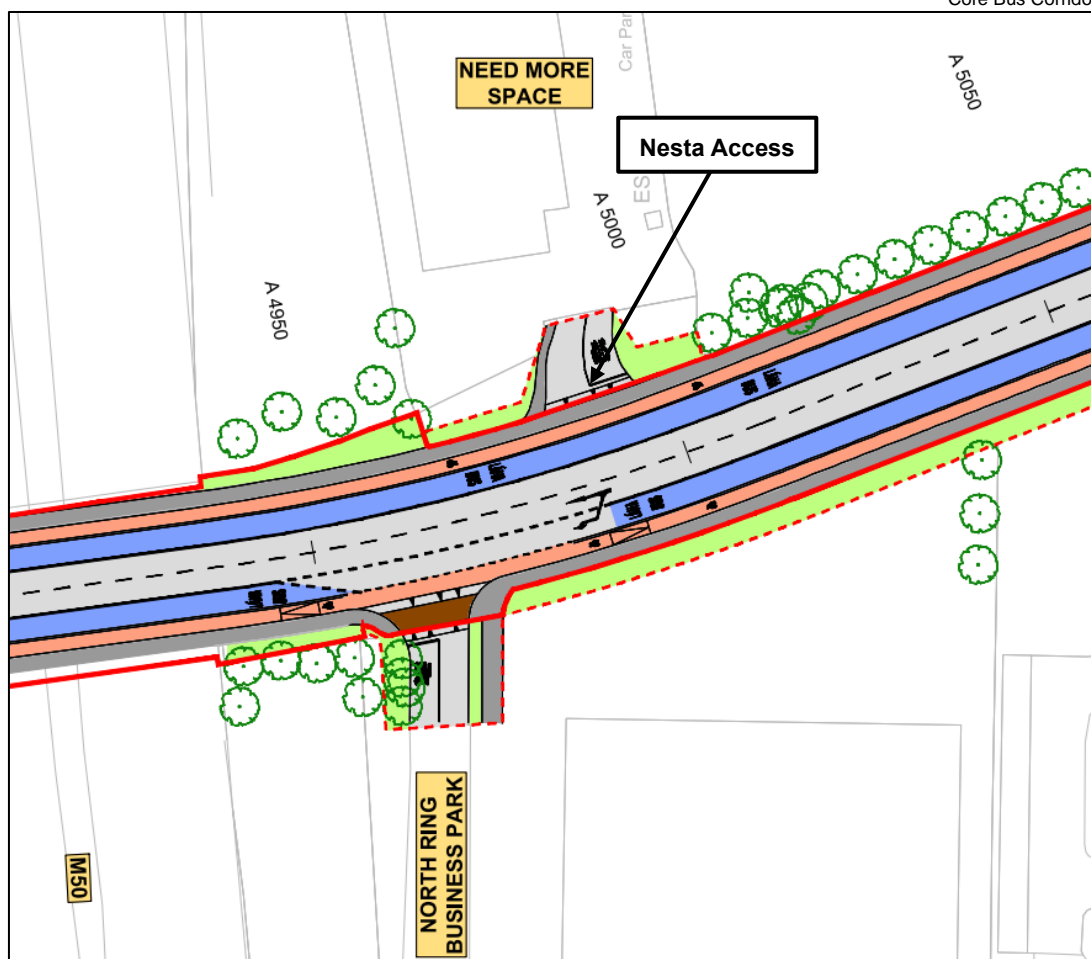


Figure 2.134: General Arrangement of Proposed Scheme at Nesta Storage (Sheet 14)

iv) Impact to Business

The Proposed Scheme has been designed to deliver upon the scheme objectives set out in Chapter 1 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the scheme objectives and to construct the scheme with permanent and temporary acquisitions respectively.

Chapter 10 (Population) in Volume 2 of the EIAR includes an assessment of the impact on commercial properties as a result of land take during both the Construction Phase (Section 10.4.3.2.2.1) and the Operational Phase (Section 10.4.4.2.2.1). The commercial properties which were assessed are listed in the Chapter's Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 Part 3 of the EIAR, of which the Nesta facility in Santry is entry number 41. The facility was not assessed as being significantly impacted by either the construction or operation phases of the Proposed Scheme as summarised in the aforementioned Sections.

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Figures, Chapter 4 Proposed Scheme Description, General Arrangement drawings.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

2.7.15 42 – O'Scanail Veterinary Hospital

2.7.15.1 Summary of issue raised

The submission to the CPO raises two potential issues:

i) Revised Access

The submission states that the scheme proposes to change the current access arrangements for the site by removing the 2 no. existing access points and replacing them with 1 no. new access point and considers that any alteration to access points could have severe implications for the facility's ability to maintain its parking operations effectively. The submission requested that access to the practice be maintained from the R132 at the western end of the site.

ii) Loss of Vehicular Parking

The submission considers that the existing facility has only 23 no. vehicular parking spaces with these spaces routinely occupied at full capacity. It is viewed that the works illustrated on the general arrangement drawings will result in the loss of 6 no vehicular parking spaces and will require all vehicles to perform excessive reverse manoeuvres creating traffic hazard. This is apparently based on a perception that Heavy Goods Vehicles (HGVs) can only enter and exit the premises vis the proposed roundabout to the north of the premises.

iii) Construction Stage Impacts

The submission considers that construction works described in the available documentation are projected to last for a duration of several years. These works are expected to generate significant noise, dust and further restrictions on access.

iv) Mitigation and Compensation

It is considered reasonable that the NTA engage directly with our client in relation to identifying appropriate mitigation measures to ensure the adequate protection of residential amenity at this location. In the absence of comprehensive mitigation measures their client would seek compensation to offset potential impacts to the monetary value of their property. The respondent confirms their client's willingness to engage with the NTA.

2.7.15.2 Response of issue raised

i) Revised Access

The NTA has actively engaged with the landowner since 2018 in respect to the Emerging Preferred route at Pinnock Hill and will continue to do so with respect to specific details. This engagement has included Teams meetings, phone calls and on-site meetings with the engineering design team relating to access provisions with revisions made to the Proposed Scheme to take account of concerns.

As part of the Proposed Scheme, it is proposed to upgrade the existing roundabout at Pinnock Hill Roundabout to a signalised junction to provide improved bus priority, and pedestrian and cyclist facilities.

Vehicles will not be required to reverse to exit the premises. Access to the practice will continue to be maintained from the R132 as requested in the submission. This will also ensure that the access to the paddocks will be maintained.

The existing access/egress to the Swords Veterinary Hospital at the Pinnock Hill roundabout is to be extinguished under the Proposed Scheme. Alternative access and egress will be provided by means of upgrading the existing R132 access, which will serve both the business and residential properties, and the creation of a new exit onto the R125, as indicated in Figure 2.135.

Under the Proposed Scheme all clients, including cars, SUVs, LGVs and HGVs, will enter the business by means of the upgraded R132 access. HGVs, and clients travelling west to Swords or northbound on the R132, will leave the practice via the R125 exit. Clients travelling southbound will use the R132 access/exit.

HGVs can continue to enter the practice via the existing R132 access under the Proposed Scheme, but instead of exiting via the proposed mini roundabout as described in the submission, they will leave through the proposed R125 exit.



Figure 2.135: Proposed Access/Egress Arrangement for Ó'Scanail Veterinary Hospital

When roads and streets are being upgraded, there will be some temporary disruption / alterations to on-street and off-street parking provision, and access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.2 of Chapter 5 Construction of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times*'.

ii) Loss of Vehicular Parking

Under the Proposed Scheme, a mini roundabout will tie in with the existing access road between the Pinnock Hill roundabout and the car park to the veterinary practice. All vehicles will thus be able to continue to execute the manoeuvres described in the Impact Report presented with the submission.

HGVs will not be required to turn within the carpark. Instead as described above, HGVs will be able to enter via the R132 access and then continue on to exit via the R125. Therefore there is no anticipated impact on the existing vehicular parking for the practice.

iii) Construction Stage Impacts

Regarding the concern raised about access restrictions, when roads and streets are being upgraded there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.1 of Chapter 5 Construction of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business*

owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times'.

With regards to construction duration at this location, Section 5.3.1 of Chapter 5 Construction of Volume 2 of the EIAR describes the construction works in Section 1 of the Proposed Scheme between Pinnock Hill and Airside Junction. It is anticipated that the construction duration will be approximately 12 months.

Regarding the concerns raised about noise and dust, EIAR Volume 2 Chapter 9 Noise and Vibration Sections 9.4 to 9.6 discuss the potential impacts, mitigation measures and residual impacts of the construction and operational phases of the Scheme. EIAR Volume 2 Chapter 5 Construction Section 5.3.2.2 lays out the construction that will take place in Section 1, commenting that construction near this plot will last approximately 12 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented Section 5.3.

Section 9.5.1 of Chapter 9 describes the noise and vibration mitigation measures during the Construction Phase. All of these measures are also recorded in Chapter 22 (Summary of Mitigation and Monitoring Measures) in Volume 2 of the EIAR, and are listed in Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4 Part 1 of the EIAR.

Section 9.4.3.2 of Chapter 9 sets out the calculated construction noise levels associated with various phases of work. For each element of work, noise levels are calculated for varying distances from an activity in the absence of noise mitigation. Under each activity it is noted that the identified NSLs is not an exhaustive list of properties at varying distances. For a long linear project of this nature, it is not possible to list each building in the vicinity of a working area, however it is intended that the reader can interpret impacts at their properties based on NSLs at similar distances. The impacts are further described in full in Table 9.44 for each collection of properties depending on their distance from the works.

A noise survey was undertaken within the ground of the veterinary hospital, adjacent to the residential property and hence both the residential property and the veterinary hospital form part of the assessment and have been considered as part of the overall impact assessment based on the approach discussed above.

Section 9.5.1.1 of Chapter 9 describes a number of measures including selection of quiet plant, noise control at source, screening, managing work hours, liaison with the public and monitoring of noise levels. It states that *'The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas (i.e. based on the construction threshold values for noise and vibration set out in Table 9.10 and Table 9.13). Reference to Table 9.44 indicates that intrusive works occurring within 75m of NSLs with a direct line of sight to work will need specific noise control measures to reduce impacts depending on time period over which they will occur (i.e. daytime or evening).'*

It is noted the existing hedgerows which bound the property and R132 are not relied upon for noise screening. From a noise point of view, due to the porous nature of vegetation, they provide a minimal level of noise screening. During the construction phase, the use of screening via site hoarding or localised demountable screens will be used to control noise emissions which are significantly more effective compared to vegetation. The landscaping plan for the proposed project includes replanting of trees to and hedgerows along the site boundary.

Highest residual construction noise levels at the veterinary hospital buildings will occur during road widening and utility diversion works. There is potential for a negative, slight to moderate and temporary impact within 20m from the proposed works during daytime periods and negative, moderate to significant and temporary within 20m during evening or Saturday periods. During other activities, impacts will be lower and hence over the full 12 month construction duration, the majority of works will result in a not significant to moderate and temporary noise impact. The paddock area extends between approximately 40m to 150m from the works boundary. Residual construction noise levels for all phases at these distances are below the construction noise thresholds or the baseline noise environment and hence the impact is negative, not significant and temporary.

With regards to dust, Chapter 7 (Air Quality) in Volume 2 of the EIAR has assessed the potential impacts related to dust during the Construction Phase of the Proposed Scheme. Section 7.2.4.4 of

Chapter 7 describes the approach to the Construction Phase assessment undertaken and specifically describes dust as follows: *'The greatest potential impact on air quality during the Construction Phase is from construction dust emissions, PM₁₀/PM_{2.5} emissions and the potential for nuisance dust. Dust is characterised as encompassing PM with a particle size of between 1 micron and 75 microns (1µm to 75µm). Deposition of dust typically occurs in close proximity to the source and with IAQM Guidance (IAQM 2014) defining a maximum impact area of 350m from the dust-generating activity. Sensitivity to dust depends on the duration of the dust deposition, the dust-generating activity, and the nature of the deposit. Therefore, a higher tolerance of dust deposition is likely to be shown if only short periods of dust deposition are expected and the dust-generating activity is either expected to stop or move on'*. The assessment considered the sensitivity to dust soiling with respect to people and property, human health, and ecology; and assessed four major dust-generating activities, namely demolition, earthworks, construction, and trackout.

Section 7.4.2.1 describes the impact assessment and conclusions with respect to construction dust. The summary of the assessment states *'In accordance with the EPA Guidelines (EPA 2022) the impacts associated with the Construction Phase dust emissions pre-mitigation are overall negative, not significant and short-term'*, and provides a summary table (Table 7.24, shown below) of the risk of dust impacts in order to inform the need for mitigation.

Table 7.24: Summary of Dust Impact Risk Used to Define Site-Specific Mitigation

Potential Impact	Dust Emission Magnitude			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Low Risk	High Risk	Low Risk	Medium Risk
Human Health	Low Risk	Medium Risk	Low Risk	Medium Risk
Ecological	Low Risk	Medium Risk	Low Risk	Medium Risk

Section 7.5.1 describes the required Construction Phase mitigation measures, with specific dust mitigation listed as follows:

'In order to minimise dust nuisance impacts, a series of mitigation measures that are applicable to the Construction Phase of the Proposed Scheme will be implemented by the appointed contractor. In summary, the mitigation measures will include:

- *Public roads affected by the Proposed Scheme will be regularly inspected for soiling associated with construction activities and cleaned as necessary;*
- *Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays (or similar dust suppression methods) will be used as required if particularly dusty activities associated with the construction contract are necessary during dry or windy periods;*
- *During movement of dust-generating materials both on and off site, trucks will be covered with tarpaulin and before entrance onto public roads, trucks will be checked to ensure the tarpaulins are properly in place; and*
- *The appointed contractor will provide a site hoarding of 2.4m height along noise-sensitive boundaries, at a minimum, at the Construction Compounds which will assist in minimising the potential for dust impacts off site.*

The appointed contractor will keep the effectiveness of the mitigation measures under review and revise them as necessary. In the event of dust nuisance occurring outside the works boundary associated with the Proposed Scheme, movements of materials likely to raise dust will be curtailed and satisfactory procedures implemented to rectify the problem.'

Section 7.6.1 describes the predicted residual impacts following the implementation of the proposed mitigation measures. Specifically with respect to dust it states, *'When the dust minimisation measures detailed in the mitigation section of this Chapter are implemented, fugitive emissions of dust from the site will be insignificant and pose no nuisance at nearby receptors. Thus, there will be no significant residual Construction Phase dust impacts'*.

iv) Mitigation and Compensation

Based on the above assessment, the proposed noise levels do not merit mitigation measures at this location. The impact on business operation will be reviewed as part of the landowners claim for compensation.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation, which can include perceived loss in property, and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent / valuer in preparing, negotiating and advising on compensation.

2.7.16 43 – Patrick Fitzsimons and Parfit

2.7.16.1 Summary of issue raised

The submission to the CPO raises nine potential issues, and requests an oral hearing:

i) Surplus Land Acquisition

The property owner objects to the acquisition of lands which appear to be surplus for the scheme requirements. The submission considers that the acquisition of the areas in the CPO is excessive and appears unnecessary.

ii) Drainage

The property owner is concerned in relation to drainage implications associated with the works on the public road, particularly that they may negatively impact their retained property and parking areas.

iii) Noise

The submission alleges that inadequate information has been provided regarding the mitigation measures that are being proposed to control increased noise pollution from the intensive bus corridor.

iv) Access

The property owner has serious concerns in relation to the access to the retained property during and post construction. Insufficient detail is considered to have been provided in this regard. The submission considers that there would be a significant negative consequence if there is any negative impact on access arrangements during and post construction.

v) Traffic Management

The submission alleges that there is a lack of detail in relation to how traffic will be managed during the construction phase.

vi) Boundary Treatment

The submission considers that there is a lack of clarity in relation to the new boundary along the permanent acquisition area, and that there is a lack of clarity with regard to hoarding or proper temporary boundary treatments which will be essential in relation to health and safety.

vii) Environmental Impacts

There is concern within the submission that there is a lack of clarity around what the total environmental impact will be of the BusConnects scheme including the environmental impact and upfront carbon footprint for the construction phase. The owners have a concern in relation to the design of the scheme and the route that has been chosen.

viii) Footpaths/Cycle Paths

Concern there is a lack of clarity in relation to the impact of the scheme on footpaths and cycle paths.

ix) Other matters and proper planning and sustainable development

The submission considers that other relevant matters may arise when more detailed design information is made available, and the owner reserves the right to raise and deal with these matters at an Oral Hearing. In particular the submission considers that there are significant issues and concerns around proper planning and sustainable development of the area arising from the Proposed Scheme.

2.7.16.2 Response to issues raised

i) Surplus Land Acquisition

The Proposed Scheme has been designed to deliver upon the scheme objectives set out in Chapter 1 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets the scheme objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the scheme objectives and to construct the scheme with permanent and temporary acquisitions respectively.

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, General Arrangement drawings.

Typically along the Proposed Scheme a 2.0-3.0m working room offset for temporary land take is required to ensure there is sufficient space available to construct the Proposed Scheme and boundary treatments. Any land that is temporarily acquired will be returned to the owner. It is intended that boundaries and accesses will be replaced on a like for like basis.

ii) Drainage

A Flood Risk Assessment was undertaken for the Proposed Scheme and is included as Appendix A13.2 (Flood Risk Assessment) in Volume 4 Part 3 in the EIAR. The Proposed Surface Water Drainage Works drawing series in Volume 3 (Figures) of the EIAR provides information in relation to drainage and the proposed drainage design.

Section 4.6.15 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the approach taken to drainage design for newly paved areas. In particular, the principal objectives of the drainage design are described in Section 4.6.15.5 as follows:

- *'All drainage structures for newly paved areas are designed with a minimum return period of no flooding in 1:30 years with a 20% climate change allowance;*
- *A SuDS drainage strategy has been developed for all newly paved areas in accordance with the SuDS hierarchy. SuDS are provided to ensure no increase on existing runoff rates from new paved areas will also provide a level of treatment before discharging into the existing network system; and*
- *Infiltration rates were assumed to be zero for calculating the required attenuation volumes for SuDS measures. This is a conservative approach and ensures SuDS measures are not knowingly undersized at this stage of the design. Where necessary, permeability tests will be completed so that infiltration rates can be considered in further design.'*

Supplementary information is also provided in Appendix K Drainage Design Basis Document of the Preliminary Design Report.

At the location of Parfit, road widening as part of the Proposed Scheme will result in slight additional catchment area on the inbound carriageway. Oversized pipes and storm water pipes are proposed as part of the surface water drainage works to drain any additional surface water from the newly paved areas. The details of the proposed drainage are indicated on the Surface Water Drainage Works drawings in the EIAR, Volume 3, Figures, Chapter 4 Proposed Scheme Description, 11. Proposed Surface Water Drainage Works, shown in Figure 2.136.

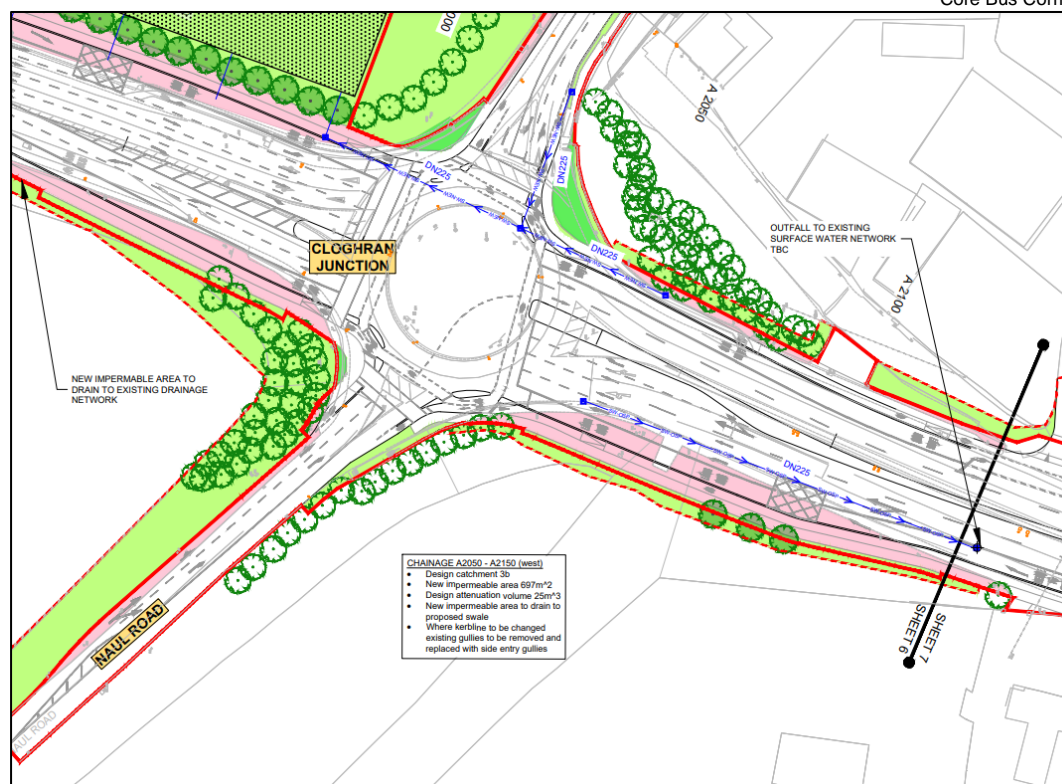


Figure 2.136: Proposed Surface Water Drainage Works at Parfit (Sheet 06)

iii) Noise

Regarding the noise impact of the Proposed Scheme, Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration provides details of the assessment undertaken for the Operational Phase of the Proposed Scheme in respect of the potential noise and vibration impacts associated with altered traffic flows, realigned traffic lanes and displaced traffic flows.

Section 9.4.4.1.1.5 states that '*Along the majority of roads of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to be Indirect, Positive, Imperceptible to Slight to Moderate, and Short to Medium Term to Negative, Moderate, and Short to Medium term once the Proposed Scheme becomes operational.*' It goes on to state that '*There are a small number of roads in the overall study area where there are potential initial significant impacts. These are defined as roads with a traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.*' Table 9.45 lists these roads and the section of Swords Road at the location of Parfit is not included in Table 9.45.

Section 9.5.2.1 summarises the change in road traffic noise in the operation phase as follows: '*The impact assessment has determined that there are no calculated significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme. The range of noise level changes and overall noise levels calculated do not require any specific noise mitigation measures to be incorporated into the Proposed Scheme.*'

In respect of electric buses, as discussed in Section 9.4.4.1.1.4 of Chapter 9, during the proposed Opening Year (2028), the NTA forecast is for 94% of the city bus fleet to be EVs or HEVs. For the Design Year (2043), the city bus fleet is forecast to be 100% electric. The operation of electric and hybrid buses will eliminate ICE noise from buses accelerating, decelerating and idling at bus stops which is the dominant noise source.

In addition, the characteristic of noise from EVs is subjectively less intrusive compared to those with ICE's and is masked to a much greater extent by surrounding road traffic. It is noted the bus stops along the Proposed Scheme will be used by other bus operators which may not transition to EV and HEVs over the same period as the city bus fleet. The volume of these buses along the Proposed Scheme will, however, be significantly less than the city bus fleet and hence, noise levels associated with these areas will not generate significant noise levels over the prevailing noise environment.

With respect to construction noise impacts, as noted in Figure 9.3 in Volume 3 of the EIAR, a noise impact of Imperceptible/Positive is forecast along Swords Road in the vicinity of Parfit.

The EIAR contains a comprehensive set of mitigation measures to minimise construction phase impacts, including noise impacts. Construction noise mitigation measures are set out in Chapter 9 in Volume 2 of the EIAR (and are also summarised in Appendix 5.1 (Construction Environmental Management Plan) in Volume 4 of the EIAR).

Section 9.5.1.1 of EIAR Volume 2 Chapter 9 states that: *'The appointed contractor will be required to take specific noise abatement measures to the extent required and comply with the recommendations of BS 5228–1 (BSI 2014a) and S.I. No. 241/2006 - European Communities (Noise Emissions by Equipment for Use Outdoors) (Amendment) Regulations 2006.'* It also states that *'During the Construction Phase, the appointed contractor will be required to manage the works to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228–1 (BSI 2014a)'*

Section 9.5.1.1 also states that *'BS 5228–1 includes guidance on several aspects of construction site practices, which include, but are not limited to:*

- *Selection of quiet plant;*
- *Control of noise sources;*
- *Screening;*
- *Hours of work;*
- *Liaison with the public; and*
- *Monitoring.'*

Specifically, Section 9.5.1.1. states that *'The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas (i.e. based on the construction threshold values for noise and vibration set out in Table 9.8: and Table 9.11).'* [Note - Table 9.8 of Section 9.2.4.1 of EIAR Chapter 9 sets out the Construction Noise Threshold (CNT) Levels for the Proposed Scheme].

Section 9.5.1.1.4 of Chapter 9 sets out the proposed working hours and states: *'It is envisaged that generally construction working hours will be between 07:00hrs and 23:00hrs on weekdays, and between 08:00hrs and 16.30hrs on Saturdays. Night-time and Sunday working will be required during certain periods to facilitate street works that cannot be undertaken under daytime / evening time conditions.'*

However, the contractor will also have to take account of sensitive receptors (in particular any nearby residential areas). Section 9.5.1.1.4 goes on to state: *'The planning of such works will take consideration of sensitive receptors, in particular any nearby residential areas. Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant items will be considered with respect to their potential to exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g. road widening and utility diversions or activities with similar noise levels identified in Table 9.42), other construction activities will be scheduled to not result in significant cumulative noise levels.'*

In summary the noise abatement measures set out in the EIAR that the appointed contractor will be required to put in place to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228–1 will result in appropriate and adequate mitigation measures in respect of construction noise impact at this location during construction.

iv) Access

When roads and streets are being upgraded, there will be some temporary disruption / alterations to on-street and off-street parking provision, and access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.2 of Chapter 5 Construction of Volume 2 of the EIAR, *'details regarding temporary access provisions will be discussed with residents and business owners prior*

to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times'.

Additionally EIA Appendix A5.1 Section 5.2.1.2 states that an objective of the Construction Traffic Management Plan is to ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.

During the operational stage, there will be no restrictions to the access as indicated on General Arrangement Drawings in the EIA, Volume 3, Figures, Chapter 4 Proposed Scheme Description, 03. General Arrangement is shown in Figure 2.137.

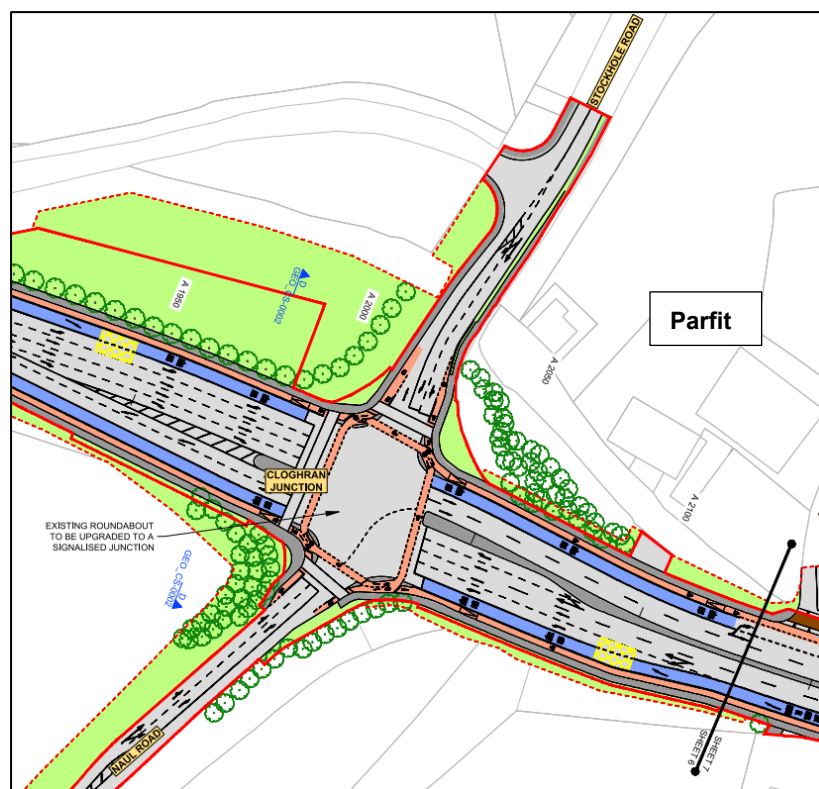


Figure 2.137: General Arrangement of Proposed Scheme at Parfit (Sheet 06)

v) Traffic Management

The Parfit business is located within Section 2a of the Proposed Scheme, as described in Section 5.3.2.1 of Chapter 5 Construction of Volume 2 of the EIA, 'Section 2a encompasses a length of approximately 1,920m along Swords Road, between Airside Junction and (Dublin) Airport Roundabout. The construction activities at Section 2a will comprise conversion of the Cloghran roundabout to a signalised junction, pavement reconstruction and resurfacing of the roads, footpaths, and cycle tracks, and new kerbs. Construction activities will also consist of additional signage, new road markings, new and amended traffic signal infrastructure, new street furniture and landscaping works. A principal retaining wall (RW022) will be constructed north of the Cloghran Junction, approximately 50m in length and maximum 2m in retained height. A minor retaining wall (RW026) will be constructed opposite Metro Point Business Park, approximately 30m in length. A minor retaining wall (RW027) will be constructed along Swords Road, south of Cloghran Junction, approximately 85m in length. Boundary walls will be constructed, and gates will be relocated along Swords Road, north and south of the Airside Junction. Fencing will also be constructed along Swords Road, between Kettles Lane and Stockhole Road, south of Cloghran Junction, and along Castlemoate House. The Construction Compound (SW1) will be located at the Cloghran Junction. Utility (telecommunications infrastructure) diversions and/or protections will be required. The expected construction duration will be approximately 18 months.' It should be noted however, that construction activities at individual plots will have shorter durations than outlined in overview of construction works presented Section 5.3.

Section 5.5.2.3 of Chapter 5 Construction notes that prior to commencing the construction works described above within a sub-section of the Proposed Scheme, temporary traffic management

measures will be installed. *'The temporary traffic management measures, including measures for pedestrians, cyclists, public transport users, general traffic, proposed lane closures, road closures and diversions are discussed in detail in Section 5.8. Temporary traffic management signage will be put in place in accordance with the requirements of the Department of Transport's Traffic Signs Manual, Chapter 8, Temporary Traffic Measures and Signs for Roadworks (hereafter referred to as the Traffic Signs Manual) (Department of Transport, Tourism and Sport 2019). Further information is also provided in the Construction Traffic Management Plan (CTMP) in Appendix A5.1 CEMP in Volume 4 of this EIAR.'*

As set out in Section 5.8.3 of Chapter 5 Construction, road closures and diversions will need to be carried out during the Construction Phase of the Proposed Scheme, however these measures will be minimised wherever possible. As set out in Section 8 of Appendix A6.1 Traffic Impact Assessment, general traffic redistribution is not anticipated to be a significant issue during the construction phase, however there will be a requirement for some localised temporary road closures for short durations of the daytime and / or night-time. Therefore, the impact on general traffic redistribution is anticipated to be a Medium Negative impact.

vi) Boundary Treatment

The NTA notes the comment raised in relation to Boundary Treatment. Additional information has been provided below.

In regard to Boundary Treatments the NTA recognises the importance of maintaining the character of the streetscape where boundary adjustments are required. In the Supplementary Information section of the planning application documentation, Section 13.5 of the Preliminary Design Report outlines the approach to maintaining boundary treatment character. This is also reflected in Chapter 5 (Construction) in Volume 2 of the EIAR, where Section 5.5.2.1 states:

'Boundary works will be commenced where both permanent and temporary land acquisition is required to ensure that sufficient space is available to construct the Proposed Scheme. Boundary treatments will be carried out on a section-by-section basis (with sections/sub-sections defined in Section 5.2, and in line with the traffic management stages set out in Section 5.8.3.

This will be a mixture of boundary walls/fencing along industrial/commercial land, railings along parks and temporary boundaries, as required. Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

Chapter 17 (Landscape (Townscape) & Visual) in Volume 4 of the EIAR also addresses boundary treatments, stating in Section 17.4.1 that:

'New boundaries will be established on the setback line to match the existing boundary. The construction and provision of the new boundaries will take account of the location of existing trees, other plantings, gradients, drainage, property features and access arrangements so as to minimise additional indirect effects. Where practicable, existing railings, gates, cut stone walls and/or piers (or where appropriate, elements of same) to be removed will be reinstated on the new setback boundary line subject to discussion between the landowner and the NTA'.

The NTA will prepare detailed accommodation works plans in consultation with impacted landowners upon confirmation of the CPO by An Bord Pleanála. Section 4.6.18.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the approach for boundary treatment:

'To maintain the character and setting of the Proposed Scheme, the approach to undertaking the new boundary treatment works along the corridor is replacement on a 'like for like' basis in terms of material selection and general aesthetics, unless a section of street can benefit from urban improvement appropriate to the area'.

vii) Environmental Impacts

With regard to environmental impacts for the Proposed Scheme, the Environmental Impact Assessment Report (EIAR) has assessed these impacts in each of the assessment chapters and summarised in Table 23.1: Summary of Significant Residual Impacts from the Construction and Operational Phases of the Proposed Scheme of the EIAR Volume 2 of 4 Main Report for the operational phase. It is noted that for;

- **Fauna and Flora** – this is assessed in Chapter 12 Biodiversity of the EIAR. As stated in Section 12.6.2 following the implementation of the mitigation measures the Proposed Scheme will not result in any significant residual effects during the Operational Phase.
- **Soil** – this is assessed in Chapter 14 Land Soils Geology & Hydrogeology of the EIAR. As stated in Section 14.6.2 no significant residual impacts on land, soils, geology and hydrogeology as a result of the operation of the Proposed Scheme
- **Water** – this is assessed in Chapter 13 Water of the EIAR. As stated in Section 13.6.2 no significant residual impacts have been identified in the Operational Phase of the Proposed Scheme.
- **Air** – this is assessed in Chapter 7 Air Quality of the EIAR. As stated in Section 7.6.2 overall it is considered that the residual impacts of the Proposed Scheme's Operational Phase will be Neutral and Long-Term.
- **Climate** – this is assessed in Chapter 8 Climate of the EIAR. As stated in Section 8.8.2 the Proposed Scheme will make a significant contribution to reduction in carbon emissions.
- **Landscape** – this is assessed in Chapter 17 Landscape (Townscape) & Visual of the EIAR. As noted in Section 17.6.2 the impact on non-residential properties included in permanent acquisition (e.g. business, commercial, hotel etc.) is deemed to be negative moderate/significant and short-term.
- **Population** – this is assessed in Chapter 10 Population and in Appendix A10.2 of the EIAR. As noted in Section 10.6.2 the Proposed Scheme will deliver positive impacts in terms of accessibility to commercial businesses for pedestrians, cyclists and bus users during the operational phase.

Specifically in relation to the carbon footprint of the construction phase, Section 8.5.1.1 of Chapter 8 Climate of volume 2 of the EIAR states:

'The Proposed Scheme is estimated to result in total Construction Phase CO₂e emissions of 8,396 tonnes embodied CO₂eq for materials over a 36-month period. The IEMA Guidance (IEMA 2022) states that 'Carbon budgets allow for continuing economic activity, including projects in the built environment, in a controlled manner'. Thus, projects which have a carbon footprint are not necessarily significant provided that the projects are compatible with net zero by 2050, and the full range of mitigation measures are employed to minimise the carbon footprint. Given that the construction of the Proposed Scheme itself will lead to operational GHG emission reductions overall, then the Construction Phase should be viewed as compatible with net zero emission targets. Thus, the assessment of significance for the Construction Phase of the Proposed Scheme is deemed to have a minor adverse impact, given that the Construction Phase emissions are equivalent to an annualised total of 0.007% of Ireland's non-ETS 2020 target and 0.047% of the 2030 Transport Emission Ceiling. The potential impact to climate due to embodied carbon emissions during the Construction Phase, prior to mitigation, will be Negative, Minor and Short-Term.'

viii) Footpaths/Cycle Paths

As referenced in the EIAR Section 3.2.3 of the Traffic Impact Assessment Report (Volume 4 Appendices Part 1 of 2, A6.1 Transport Impact Assessment Report), the recently published National Investment Framework for Transport in Ireland (NIFTI) sets out a hierarchy of travel modes to be accommodated and encouraged when investments and other interventions are made. Sustainable modes, starting with active travel (walking, wheeling and cycling) and then public transport, will be

encouraged over less sustainable modes such as the private car. This aligns with the core objectives of the Proposed Scheme.

Chapter 4 Proposed Scheme Description of the EIAR outlines the design principles associated with the Core Bus Corridor. It has been designed following guidance relating to the design principles for urban streets, bus facilities, cycle facilities and public realm. Figure 2.138 shows the typical road layout proposed for the Core Bus Corridor.

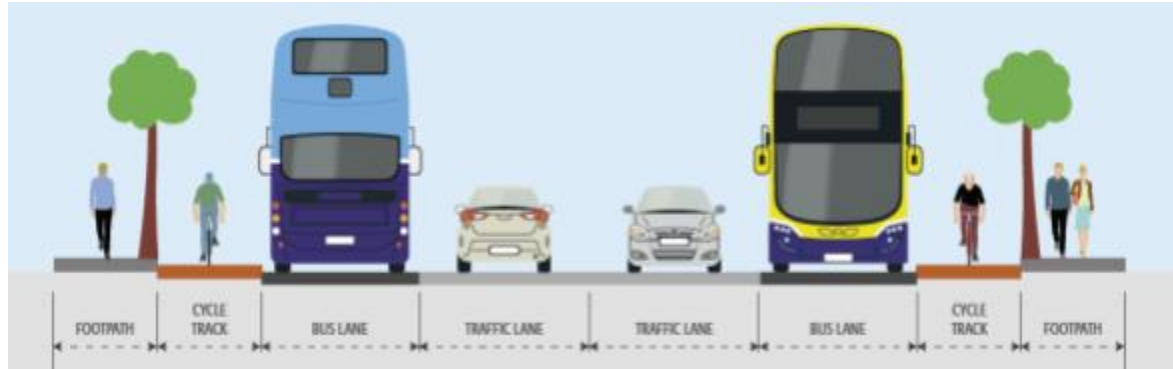


Figure 2.138: Typical Road Layout

Cycling Provision

Section 5.3.3.2 of the Traffic Impact Assessment describes the cycling infrastructure proposals between Airside Junction and Northwood Avenue.

Section 4.6.3 of Chapter 4 of Volume 2 of the EIAR describes the preferred provision of dedicated cycle facilities along the route:

'The 'preferred cross-section template' developed for the Proposed Scheme includes protected cycle tracks, providing vertical segregation from the carriageway to the cycle track and vertical segregation from the cycle track to the footpath.'

The desirable minimum width for a single-direction cycle track is two metres. Figure 2.139 shows the typical arrangements of a fully segregated cycle track provided alongside the adjacent bus lane and footpath.

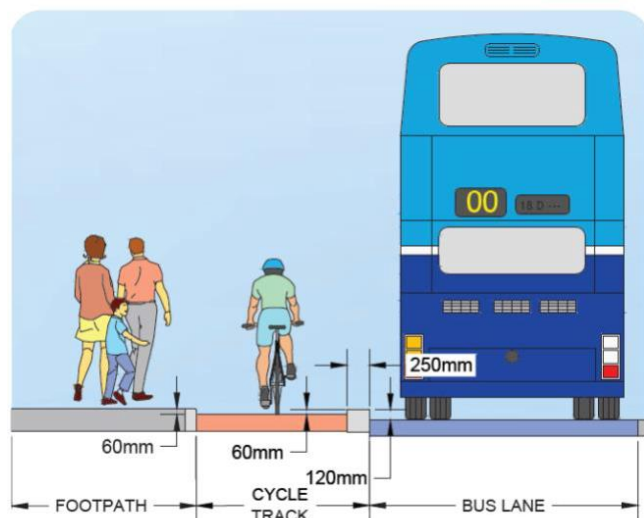


Figure 2.139: Typical arrangements of fully segregated cycle track

Pedestrian provision

Section 5.3.3.1 of the Traffic Impact Assessment describes the pedestrian infrastructure proposals between Airside Junction and Northwood Avenue.

Enhancements for pedestrians are made through the provision of upgraded footpath facilities located adjacent to fully segregated cycle track. The footpath is vertically segregated from the cycle track by a kerb with an upstand height of 60mm. As stated in Section 4.6.2 of the EIAR:

'The desirable minimum width for a footpath is 2.0m. This width should be increased in areas catering for significant pedestrian volumes where space permits. DMURS defines the absolute minimum footpath width for road sections as 1.8m based on the width required for two wheelchairs to pass each other. Building for Everyone: A Universal Design Approach (NDA 2020), defines acceptable minimum footpath widths at specific pinch points as being 1.2m wide over a two-metre length of path.'

Junctions have been designed to facilitate a high level of safety, comfort, and priority for sustainable modes of travel (i.e. walking and cycling) and for public transport by prioritising the space and time allocated to these modes within the operation of a junction.

ix) Other matters and proper planning and sustainable development

Regarding the objectors concerns around proper planning and sustainable development of the Proposed Scheme, the Transport Strategy for the Greater Dublin Area 2022-2042 (hereafter described as the GDATS) was published for consultation on the 9 November 2021 and has been prepared in accordance with Section 12 of the Dublin Transport Authority Act 2008 (as amended). It was adopted in January 2023 and replaces the previous Transport Strategy for the Greater Dublin Area 2016 – 2035. Under the Dublin Transport Authority Act 2008, the NTA must review its Transport Strategy every six years. The GDATS is considered to be an essential component for the orderly development of the GDA for the next 20 years. The overall aim of the strategy is *'To provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports the regional economy'*. A key focus of the strategy is to enable increased use of other transport modes to meet environmental, economic and social objectives related to emissions, congestion and car dependency. It sets a clear direction towards a 50% reduction in CO2 emissions within the GDA area by 2030. The Transport Strategy report and background documents can be downloaded from the following website:

<https://www.nationaltransport.ie/planning-and-investment/strategic-planning/greater-dublin-area-transport-strategy/> .

The GDATS sets out a range of measures and those of relevance to the Proposed Scheme are outlined in Table 2.19. The GDA Transport Strategy 2022 - 2042 (NTA 2022) puts the delivery of Dublin BusConnects, of which the Proposed Scheme is part, at the heart of its objectives. There is added emphasis on the delivery of public transport, active travel and enhanced accessibility to sustainable modes of transport, all of which the Proposed Scheme will help to deliver.

Table 2.19: GDA Transport Strategy 2022 – 2042 Measures

Measure Number	Measure	How the Proposed Scheme meets the Measure
PLAN2 – The Road User Hierarchy	<i>The NTA, in the decision-making process around the design, planning and funding of transport schemes in the GDA, will be guided by the priority afforded to each mode in the Road User Hierarchy as set out in the Transport Strategy.'</i>	The Proposed Scheme aligns with the measure as it will promote modal shift from private car to a more sustainable forms of transport. It enhances active travel networks and thus encourages the use of these modes reducing reliance on the private car.
PLAN14 - Urban Design in Major Infrastructure Projects	<i>'The NTA will incorporate a high standard of urban design and placemaking, taking into account architectural heritage, into the planning and design of all major public transport infrastructure schemes and will consider how greater biodiversity can be fostered.'</i>	The overall landscape and public realm design strategy for the Proposed Scheme aims to create attractive, consistent, functional and accessible places for people alongside the core bus and cycle facilities. In addition, opportunities have been sought to enhance the public realm and landscape. As part of the Proposed Scheme public realm improvements are proposed at several locations. For example, the Drumcondra Road Upper shopping parade is identified as a local enhancement opportunity to improve the image of the public realm, this includes footway enhancements and upgrades to the parking bays. Similarly, the area in front of The Comet in Santry is proposed to have surface treatment enhancements and de-cluttering and reorganising of the street furniture.

Measure Number	Measure	How the Proposed Scheme meets the Measure
		<p>All the plants and trees selected will be native species, appropriate to the location. The enhancement opportunities include key nodal locations which focus on locally upgrading the quality of the paving materials, extending planting, decluttering of streetscape and general placemaking along the route.</p>
<p><i>Measure PLAN15 – Urban Design in Walking and Cycling Projects</i></p>	<p><i>'In the design, planning and prioritisation of walking and cycling schemes, the NTA and the local authorities will ensure the incorporation of urban design and placemaking considerations, taking into account architectural heritage, and will consider how greater biodiversity could be fostered.'</i></p>	<p>The overall landscape and public realm design strategy for the Proposed Scheme aims to create attractive, consistent, functional, and accessible places for people alongside the core bus and cycle facilities.</p> <p>Along the route of the Proposed Scheme, improvements and enhancements will be made to footpaths, walkways, and pedestrian crossings. Additional landscaping and outdoor amenities will be provided to improve the local urban realm.</p>
<p><i>Measure PLAN16 – Reallocation of Road Space</i></p>	<p><i>'The NTA, in conjunction with the local authorities, will seek the reallocation of road space in appropriate locations in Dublin City Centre, Metropolitan towns and villages, and towns and villages across the GDA in accordance with the road user hierarchy, in order to prioritise walking, cycling and public transport use and prioritise the placemaking functions of the urban street network.'</i></p>	<p>The Proposed Scheme will support integrated sustainable transport usage through road space reallocation in support of infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor. The Proposed Scheme reallocates road space along the route to facilitate full and continuous bus lanes along the north and south quays.</p>
<p><i>Measure INT3 – Integration of all Modes in Transport Schemes</i></p>	<p><i>'It is the intention of the NTA, in the design and planning of transport schemes, to ensure that the needs of all transport modes are considered, as appropriate, based on the objectives of the scheme and on the road user hierarchy.'</i></p>	<p>The Proposed Scheme aligns with the measure as it will service the current and future transport needs of Dublin. It enhances active travel networks and thus encourages the use of these modes reducing reliance on the private car.</p>
<p><i>Measure INT6 - Interchange</i></p>	<p><i>'It is the intention of the NTA, in conjunction with local authorities and transport operators, to ensure that passengers wishing to change between services on the transport network are provided with a safe, convenient and seamless interchange experience.'</i></p>	<p>The Proposed Scheme aligns with the measure as it will enhance the interchange between the various modes of public transport operating in the city and wider metropolitan area, both now and in the future. The design has been developed with this in mind and, in so far as possible, is seeking to provide for improved existing or new interchange opportunities with other transport services. These include:</p> <ul style="list-style-type: none"> • Existing and future Dublin Bus services at numerous locations along the route; • Future bus service proposals including Spine A associated with the New Dublin Area Bus Network; • MetroLink high-frequency rail line running from Swords to Charlemont linking Dublin Airport, Irish Rail, DART and Luas services; • Greater Dublin Area Cycle Network Plan (GDACNP); • Future public transport proposals such as DART Plus scheme at Drumcondra; • Interface with New Dublin Area Bus Network; • Griffith Avenue Protected Cycle Lane Scheme; • Santry River Greenway; and • Royal Canal Greenway.
<p><i>Measure INT19 – Travelling at Night</i></p>	<p><i>'The NTA will work with transport operators, local authorities and An Garda Síochána to improve security and perceptions of security for people using public transport, and walking and cycling at night by improving lighting at public transport stops and stations and along access points to and from stops, assisting local authorities to design in passive surveillance and high quality lighting along pedestrian routes, and to reduce anti-social behavior around stops and stations.'</i></p>	<p>The Proposed Scheme has considered security and safety in its design, and it provides lighting as appropriate to the end use. The Proposed Scheme will include upgrades to existing public lighting. In addition to public lighting, it is proposed to install traffic monitoring cameras at key locations to enable the monitoring of traffic flows along the Proposed Scheme and provide rapid identification of any events that are causing, or are likely to cause, disruption to bus services on the route and to road users in general.</p>
<p><i>Measure INT20 – Accessible Infrastructure</i></p>	<p><i>'During the period of the Transport Strategy, the NTA will ensure that public transport infrastructure,</i></p>	<p>The Proposed Scheme has been designed to include:</p>

Measure Number	Measure	How the Proposed Scheme meets the Measure
	<p><i>and facilities in the GDA are made accessible for all users, and that additional resources for the maintenance and repair of lifts are made available.'</i></p>	<ul style="list-style-type: none"> • More bus shelters, seating, accessible footways and bus infrastructure to make the bus transit experience more accessible for users of all abilities and ages; and • Provision and enhancement of cycling facilities along the Proposed Scheme, creating routes that are safe, accessible and attractive for people of all abilities and ages.
<p><i>Measure INT25 – Construction Management</i></p>	<p><i>The NTA, in conjunction with the local authorities, TII, Irish Rail, and other agencies will ensure that the level of disruption to the transport system and to wider activity throughout the region will be minimized, and that up-to-date travel information is provided during the construction of transport infrastructure projects.</i></p>	<p>The Construction Travel Management Plan (CTMP) of the Proposed Scheme will help to ensure that disruption is minimised, with access to houses and businesses maintained.</p>
<p><i>Measure WALK2 – Improved Footpaths</i></p>	<p><i>The NTA, in conjunction with local authorities, will implement footpath improvement schemes across the GDA where required throughout the period of the Transport Strategy in order to ensure that they are of sufficient width, adequately lit, serve both sides of the road in urban areas (in most cases), are of good quality surfacing, provide for seating at appropriate locations, and are free of unnecessary clutter. Footpaths will also be maintained and improved in a manner which contributes positively to the public realm.</i></p>	<p>Along the Proposed Scheme improvements and enhancements will be made to footpaths, walkways, and pedestrian crossings. Additional landscaping and outdoor amenities will be provided to improve the local urban realm. Several urban realm upgrades, including widened footpaths, high quality hard and soft landscaping and street furniture will be provided in areas of high activity to contribute towards a safer, more attractive environment for pedestrians.</p>
<p><i>Measure WALK4 – Improved Junctions</i></p>	<p><i>'The NTA, in conjunction with local authorities, will implement junction improvements across the GDA as follows:</i></p> <ul style="list-style-type: none"> <i>• To enhance safety at junctions, a programme of "narrowing" junctions by reducing kerb-line radii will be undertaken as a means of managing vehicular speeds; and</i> <i>• To enhance movement by pedestrians and cyclists, a programme of removal of slip lanes will be undertaken at appropriate locations, together with consideration of junction signaling changes to better balance the use of the junction between motorised and vulnerable modes, and in urban areas, junctions will be designed so as footpaths on side roads will be carried through at-grade, where practicable and safe to do so.'</i> 	<p>The Proposed Scheme provides infrastructure that will support sustainable transport and will improve the safety of road users through junction improvement and the segregation of road vehicles and active travel modes, where possible.</p> <p>The design of each junction has given priority to pedestrian, cycle and bus movements. Junctions have been designed to ensure a high level of comfort and priority for sustainable modes of travel e.g. walking, cycling and public transport by prioritising the space and time allocated to these modes within the operation of a junction.</p>
<p><i>Measure WALK9 – Disabled People</i></p>	<p><i>'Local authorities in the GDA and the NTA will take full account of disabled people and pedestrians with mobility impairments when delivering transport schemes which affect the pedestrian environment; and will implement improvements to existing facilities where appropriate and encourage the enforcement of the Road Traffic Laws in this regard.'</i></p>	<p>A Disability Audit of the existing environment and proposed draft preliminary design for the corridor was undertaken. The Audit provided a description of the key accessibility features and potential barriers to disabled people based on the Universal Design standards of good practice. The Audit was undertaken in the early design stages with the view to implementing any key measures identified as part of the design development process. This audit has informed the design of the Proposed Scheme. The audit assessed footpaths, crossings / junctions, bus stops, parking and access for users with disabilities. Traffic signal layout design included accessibility considerations for the mobility impaired. Potential areas of conflict with other non-motorised users were considered to provide suitable separation where possible.</p> <p>It has been designed to include:</p> <ul style="list-style-type: none"> • The interaction between pedestrians, cyclists, and buses at bus stops. The Proposed Scheme has prioritised the use of island bus stops, including signal call button for crossing of cycle tracks, to manage the interaction between the various modes with the view to providing a balanced safe solution for all modes; and • Clear segregation of modes at key interaction points along the Proposed Scheme which was highlighted as a potential mobility constraint in the Audit.

Measure Number	Measure	How the Proposed Scheme meets the Measure
Measure CYC1 – GDA Cycle Network	<i>'It is the intention of the NTA and the local authorities to deliver a safe, comprehensive, attractive and legible cycle network in accordance with the updated Greater Dublin Area Cycle Network.'</i>	The Proposed Scheme aligns with the policy objective as it provides of segregated cycling facilities along the Proposed Scheme in both directions. These high-quality cycle track will generally be 2m in width offering a high level of service and help to reduce dependency on private car use for short journeys.
Measure CYC5 – Cycle Parking	<i>'It is the intention of the NTA to deliver, through the statutory planning process and liaison with relevant stakeholders, high quality cycle parking at origins and destinations, serving the full spectrum of cyclists including users of non-standard cycles.'</i>	Cycle parking is provided in a number of locations throughout the Proposed Scheme such as at some bus stop locations, where space is available.
Measure CYC14 – Supporting Measures for Cycling	<i>'The NTA will monitor new developments related to supporting measures for cycling including emerging technologies, infrastructure, policies and programmes, with a view to their implementation in the GDA.'</i>	The Proposed Scheme has been designed in line with guidance documents and design standards relating to the design of urban streets, cycling facilities and urban realm.
Measure PT2 – Climate Proofing New Public Transport Infrastructure	<i>'The NTA will ensure that all new public transport infrastructure is proofed for resilience against the potential impacts arising from climate change.'</i>	The Proposed Scheme aligns with the measure as it comprises transport infrastructure that supports the delivery of an efficient, low carbon and climate resilient public transport service. Design principles included exploring opportunities for sustainable urban realm and landscape design responses such as SuDS, species rich planting and reusing materials, where possible. SuDS measures were designed to attenuate runoff for any newly paved areas. SuDS measures were designed to provide sufficient storage to ensure no increase in existing runoff rates.
Measure BUS1 – Core Bus Corridor Programme	<i>'Subject to receipt of statutory consents, it is the intention of the NTA to implement the 12 Core Bus Corridors as set out in the BusConnects Dublin programme.'</i>	The Proposed Scheme is part of the BusConnects programme to enhance bus services and active travel options in the Greater Dublin Area.
Measure BUS12 – New Bus Stops and Shelters	<i>'It is the intention of the NTA to continue to roll-out the programme of bus stop and shelter provision, and to monitor potential for further expansion and upgrade during the lifetime of the strategy.'</i>	The Proposed Scheme includes additional bus shelters, seating, accessible footways and bus infrastructure to make the bus transit experience more accessible for users.
Measure ROAD13 – Roadspace Reallocation	<i>'The local authorities and the NTA will implement a programme of road space reallocation from use by general traffic or as parking to exclusive use by sustainable modes as appropriate, as a means of achieving the following:</i> <ul style="list-style-type: none"> • <i>Providing sufficient capacity for sustainable modes;</i> • <i>Improving safety for pedestrians and cyclists; and</i> • <i>Encouraging mode shift from the private car and reducing emissions'.</i> 	The Proposed Scheme reallocates road space for bus priority and cycling infrastructure. It will provide the infrastructure to deliver a modal shift from private car usage to sustainable transport.
Measure TM2 – Management of Urban Centres	<i>'The NTA and relevant local authorities, in collaboration, will deliver the public transport, cycling and walking networks, and public realm that are required to serve local centres, and to facilitate a post-Covid recovery based on sustainable transport.'</i>	The Proposed Scheme aligns with the measure as it will support sustainable transport modes through infrastructure improvements for active travel (both walking and cycling). The Proposed Scheme will bring greater accessibility to the city centre and other strategic areas for people to avail of housing, jobs, amenities and services. It aims to mitigate any adverse effects that the proposals may have on the streets, spaces, local areas and landscape through the use of appropriate design responses. In addition, opportunities have been sought to enhance the public realm and landscape design where possible.
MEASURE CLIMATE3	<i>Through the implementation of the full measures set out in this strategy, in combination with the plans and programmes of Government, the NTA will contribute to a reduction in CO2 emissions from transport in the GDA to below 1 MtCO2eq by 2042.</i>	The Proposed Scheme aligns with the objective through the development of transport infrastructure that supports the delivery of an efficient, low carbon and climate resilient public transport service. A greater increase in sustainable mode share will in turn lead to further reductions in GHG emissions, beyond those reported in the assessment. The Proposed Scheme has the

Measure Number	Measure	How the Proposed Scheme meets the Measure
		potential to reduce GHG emissions equivalent to the removal of approximately 21,130 and 22,150 car trips per weekday from the road network in 2028 and 2043 respectively. This represents a significant contribution towards the national target of 500,000 additional trips by walking, cycling and public transport per day by 2030 as outlined as a target in the Government's 2021 Climate Action Plan.

2.7.17 49 – Tesco Ireland

2.7.17.1 Summary of issue raised

i) Duration of Works

The respondent's client expresses concern regarding the timing and duration of the temporary acquisition of the lands.

ii) Parking (Loading)

During Preferred Route Option stage, the submission considers that a portion of the parking proposed outside the store situated on Drumcondra Road was requested to be designated as a loading bay, and the submission considers that it appears this space has been extended without any designated loading bay facilities.

The submission notes that their preference is for no raised kerbs between space designated as 'loading bay' and cycle track as this can act as an impediment and where possible the provision of a buffer zone between the loading bay and cycle track that could accommodate delivery cages that are 846mm wide. Additionally, the submission would like to suggest that bollards/warning signs are erected.

Additional comments were also raised at two other locations where no CPO is proposed. These are summarised below:

Omni Shopping Centre

The submission notes that changes are proposed at the service yard entrance to Omni Shopping Centre. It is requested that any proposed alterations are carefully considered by the NTA at detailed design stage so that the junction can continue to facilitate HGV access to the service yard in a safe manner.

Additionally, the impact of any change on levels/raised crossings and driver visibility to oncoming traffic and vulnerable road users will need to be carefully considered at further design stages.

Dorset Street

The inclusion of a designated loading bay would be welcomed by Tesco on Dorset Street Lower. It is also requested that consideration is given at detailed design stage for the materials/treatments between the loading bay and cycle track to facilitate the movement of stock and goods to the premises.

2.7.17.2 Response to issues raised

Tesco's support for the scheme is noted and welcomed by the NTA.

i) Duration of Works

Section 5.3.4.2 of Chapter 5 of Volume 2 of the EIAR provides details of the construction activities along Drumcondra Road Upper and Drumcondra Road Lower, between Griffith Avenue and Botanic Avenue.

The expected construction duration for the section will be approximately 18 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented Section 5.3. As described in Section 5.5.3.1 of Chapter 5 of Volume

2 of the EIAR, details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.

ii) Parking (Loading)

In developing the design of the Proposed Scheme, the NTA has balanced the need to provide parking and loading with the objectives of the Proposed Scheme to provide high quality public transport, cycling and walking facilities through this area. Section 6.4.5.4.5 of Chapter 6 Traffic and Transport of Volume 2 of the EIAR identifies that *'Parking and loading locations may be temporarily impacted by construction activities along the Proposed Scheme corridor. There may be temporary restrictions to on-street parking and loading facilities. The appointed contractor will discuss temporary traffic management measures with the road authority and directly affected residents/business with the aim of minimising disruption. Therefore, the anticipated impact on parking and loading during the Construction Phase will be Negative, Slight and Temporary.'*

Section 4.5.4.7 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR summarises that there will be no changes to the parking and loading provisions along Drumcondra Road Upper. Table 4.1 in the Preliminary Design Report provided in the Supplementary Information identifies that for parallel parking bays a buffer zone of 0.75m wide is provided between the parking bays and the cycle track. This buffer is to protect cyclists from opening doors.

The NTA does not appear to have a record of submission described in the submission.

Detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application.

This submission raises comments at three locations along the scheme where there are Tesco stores. It is noted that CPO is only required at one of these locations, Drumcondra Metro. The other two are general comments/observations in relation to proposals in the vicinity of Tesco stores at Omni Shopping Centre and Dorset Street. Whilst there is no CPO at these locations these comments have also been responded to below.

Omni Shopping Centre

The NTA notes the comments regarding the treatment of the service yard entrance to Omni Shopping Centre. As stated in Section 4.8 of the Preliminary Design Report, included in the Supplementary Information,

'In line with the Proposed Scheme objectives of improving facilities for walking and cycling, corner radii along the route have been reduced where appropriate in order to lower the speed at which vehicles can turn corners, and to increase inter-visibility between users.'

Junctions are where the actual and perceived risk to both cyclists and pedestrians are highest and usually represent the most uncomfortable parts of any journey. In order to provide a design whereby vehicles navigate through turns at a reduced speed, thereby reducing the risk of serious collisions, kerb and footway buildouts have been included on the majority of the designed junctions along the route, thus adhering to design guidance given within the DMURS document, where it is stated:

'Build-outs should be used on approaches to junctions and pedestrian crossings in order to tighten corner radii, reinforce visibility splays and reduce crossing distances.'

The corner radius is often determined by swept path analysis. While swept path analysis should be considered, the analysis may overestimate the amount of space needed and / or the speed at which the corner is taken. The design balanced the size of the corner radii with user needs, pedestrian safety and cyclist safety and the promotion of lower operating speeds. In general, on junctions between Arterial and/or Link streets a maximum corner radius of 6m was applied. Which will generally allow larger vehicles, such as buses and rigid body trucks, to turn corners without crossing the centre line of the intersecting road.'

Swept path analysis was carried out considering a suite of vehicles which included articulated vehicles, as described in Section 4.8 of the Preliminary Design Report, no issues with swept path analysis were identified on the Proposed Scheme.

It is further noted that the Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided in the Supplementary Information, did not highlight any safety issues with the proposed arrangement at this location.

Dorset Street

As part of the Proposed Scheme, a loading bay is proposed near Tesco Metro on Dorset Street as indicated as indicated on Sheet 34 of 37 of the General Arrangement Drawings in the EIAR, Volume 3, Figures, Chapter 4 Proposed Scheme Description, 03. General Arrangement, see Figure 2.140. Table 4.1 in the Preliminary Design Report provided in the Supplementary Information identifies that for parallel parking bays a buffer zone of 0.75m wide is provided between the parking bays and the cycle track. This buffer is to protect cyclists from opening doors.

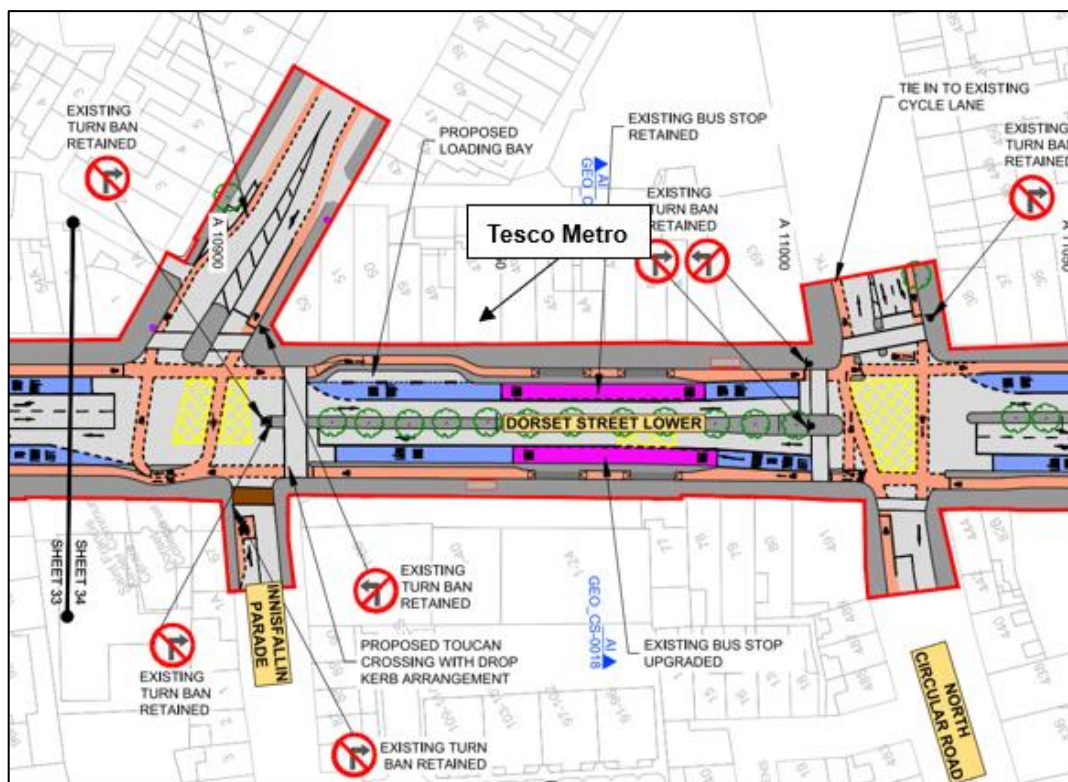


Figure 2.140: General Arrangement of Proposed Scheme at Tesco Metro, Dorset Street Lower (Sheet 34)

3. Responses to Individual Submissions on the Proposed Scheme

3.1 01 – Alan and Fiona Fitzpatrick

3.1.1 Submission – Seven Oaks/Griffith Downs

The submission raised the following issues:

1. Request for green area to be protected and conserved.
2. Inadequate information has been provided regarding noise mitigation measures
3. Proximity of scheme to houses
4. Inadequate details have been provided regarding speed bumps/traffic calming measures
5. Privacy and property safety
6. Objection to road closures and disruption this would cause
7. Clarification has not been made as to whether the existing pedestrian entrance will be affected to Seven Oaks
8. Insufficient detail has been provided to address health and safety
9. Inadequate screening and planting proposed
10. Inadequate detail provided regarding type of boundary to be provided along CPO lines
11. Insufficient detail has been provided regarding lighting proposals along the scheme
12. Setback distances for buildings have not been clarified
13. Insufficient detail has been provided to deal with impact on services
14. Proposed development will have significant adverse effects on environment
15. Clarification has not been given regarding the demolition of trees
16. No communication from parties to inform us of the plan
17. Temporary Accommodation
18. Impact on viability and obtrusion to home
19. Route selection could be more suitable located elsewhere

3.1.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.1.3 and 2.1.4 of this report.

3.2 02 – All Hallows Area Association

3.2.1 Submission – Seven Oaks/Griffith Downs

The submission raised the following issues:

1. Request for green area to be protected and conserved.

3.2.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.1.3 of this report.

3.3 03 – Bob Laird

3.3.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Sections 2.6.2 and 2.7.2 of this report .

3.3.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.6.2 of this report.

3.4 04 – Brendan Collins

3.4.1 Submission – Collinstown Business Park

Description of issues raised in this submission is included in Section 2.7.2 of this report .

3.4.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.2 of this report.

3.5 05 – Brendan Heneghan

3.5.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.3 of this report .

3.5.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.6.3 of this report.

3.6 06 – Brian O'Rourke

3.6.1 Submission – Drumcondra

The submission raised the following issues:

1. Cycle infrastructure
2. Pedestrian infrastructure
3. Public realm

3.6.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.3.3 and 2.3.4 of this report.

3.7 07 – Brittney Bennett

3.7.1 Submission – Drumcondra

The submission raised the following issues:

1. Support for the Proposed Scheme
2. Impact on Richmond Road
3. Discouraging heavy vehicles
4. Enforcement
5. Noise, air pollution, and vibrations
6. 30kph zones and signage

3.7.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.3.3 and 2.3.4 of this report.

3.8 08 – Carmel Sherry and Celine Byrne

3.8.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.4 of this report .

3.8.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.6.4 of this report.

3.9 09 – Clondev Properties Limited

3.9.1 Submission – Hollytree House

Description of issues raised in this submission is included in Section 2.7.3 of this report .

3.9.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.3 of this report.

3.10 10 – Collinstown Caravans Limited

3.10.1 Submission – Collinstown Business Park

Description of issues raised in this submission is included in Section 2.7.4 of this report .

3.10.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.4 of this report.

3.11 11 – Conor O’Scaill, O’Scaill Veterinary Surgeons

3.11.1 Submission – Pinnock Hill

Description of issues raised in this submission is included in Section 2.7.5 of this report .

3.11.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.5 of this report.

3.12 12 – Deirdre and Aidan O’Callaghan

3.12.1 Submission – Santry

The submission raised the following issues:

1. Clarification regarding removal of trees and existing boundary at Santry Bypass junction (Swords Road (R132)/Larkhill Road/Shanrath Road junction)
2. Removal of trees and existing barriers/guardrails at Whitehall Junction and request for further trees to be planted in various locations through Santry
3. Request for footpath to be upgraded along the Swords Road Slip Road
4. Light sequence at the Swords Road (R132)/Larkhill Road/Shanrath Road junction
5. Request for paving area and wall at the Comet to be upgraded
6. Request for upgrade and removal of existing barriers/guardrails at Santry Bypass Junction
7. Request for footpath at left hand side of the corner of Shanowen Road and Swords Road to be widened
8. Request for existing walls to be upgraded
9. Request for new signage on Collins Avenue West

3.12.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.2.3 and 2.2.4 of this report.

3.13 13 – Deirdre and Pamela Scully

3.13.1 Submission – Santry

Description of issues raised in this submission is included in Section 2.7.6 of this report .

3.13.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.6 of this report.

3.14 14 – Development Applications Unit

3.14.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.5 of this report .

3.14.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.6.5 of this report.

3.15 15 – District 7 Community Alliance

3.15.1 Submission – Dorset Street

The submission raised the following issues:

1. Removal of the central reserve (median)
2. Lack of consultation

3. Unique community / sense of place
4. Drawing inconsistencies
5. Impacts of turn bans
6. Relocation of bus stops
7. Absence of cycle facilities

3.15.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.4.3 and 2.4.4 of this report.

3.16 16 – Donal O’Brolchain

3.16.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.6 of this report .

3.16.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.6.6 of this report.

3.17 17 – Dublin Airport Authority

3.17.1 Submission – Dublin Airport

Description of issues raised in this submission is included in Section 2.7.7 of this report .

3.17.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.7 of this report.

3.18 18 – Dublin Commuter Coalition

3.18.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.7 of this report .

3.18.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.6.7 of this report.

3.19 19 – Dublin Cycling Campaign

3.19.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.8 of this report .

3.19.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided Section 2.6.8 of this report.

3.2020 – Fingal County Council

3.20.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.9 of this report .

3.20.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided Section 2.6.9 of this report.

3.21 21 – Greater Dorset Street Together

3.21.1 Submission – Dorset Street

The submission raised the following issues:

1. Removal of the central reserve (median)
2. Lack of consultation
3. Unique community / sense of place
4. Absence of cycle facilities
5. Pedestrian crossing design
6. Impacts on heritage kerbs
7. Increased emissions

3.21.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.4.3 and 2.4.4 of this report.

3.22 22 – Ian Croft

3.22.1 Submission – Santry

The submission raised the following issues:

1. Objection to development of a bus terminus on the green space at Coolock Lane

3.22.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.2.3 of this report.

3.23 23 – Iona and District Residents Association (IDRA) C/O Carol Lynch

3.23.1 Submission – Drumcondra

The submission raised the following issues:

1. Impact to Our Lady's Park, Drumcondra
2. Cycle infrastructure
3. Pedestrian infrastructure

4. Bus lanes and bus stops
5. Parking

3.23.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.3.3 and 2.3.4 of this report.

3.24 24 – Iona and District Residents Association C/O Rory Flynn

3.24.1 Submission – Drumcondra

The submission raised the following issues:

1. Concern of rat runs through the Drumcondra area
2. Enforcement
3. Discouraging heavy vehicles
4. Parking
5. Cycle infrastructure
6. Pedestrian infrastructure
7. Noise, air pollution, and vibrations
8. Impact to traffic flow
10. 30kph zones and signage
11. Use of NTA Eastern Regional Model
12. Request for the fundamental reworking of the street design

3.24.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.3.3 and 2.3.4 of this report.

3.25 25 – J. Murphy Developments Limited

3.25.1 Submission – Fosterstown / Pinnock Hill

The submission raised the following issues:

1. Support for the Proposed Scheme.
2. SHD planning application.
3. Temporary access to land
4. Inclusion of pedestrian crossing

3.25.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.5.3 and 2.5.4 of this report.

3.26 26 – Jerry and Lorraine Crowley

3.26.1 Submission – Santry

The submission raised the following issues:

1. Opposition to the removal of trees at Swords Road (R132)/Larkhill Road/Shanrath Road junction
2. Opposition to the 'quiet street' cycle lane along Swords Road.

3.26.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.2.3 and 2.2.4 of this report.

3.27 27 – JJ Breen

3.27.1 Submission – Santry

Description of issues raised in this submission is included in Section 2.7.8 of this report .

3.27.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.8 of this report.

3.28 28 – Juliana Boland and Others

3.28.1 Submission – Nevinstown

Description of issues raised in this submission is included in Section 2.7.9 of this report .

3.28.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.9 of this report.

3.29 29 – Karen Wade

3.29.1 Submission – Santry

The submission raised the following issues:

1. Environmental impact of the scheme on Santry
2. Impact on local community of the widening of the R132
3. Public consultation process
4. Demolition

3.29.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.2.4 of this report.

3.30 30 – Kathleen McKee

3.30.1 Submission – Santry

Description of issues raised in this submission is included in Section 2.7.10 of this report .

3.30.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.10 of this report.

3.31 31 – Kealy’s of Cloghran

3.31.1 Submission – Cloghran

Description of issues raised in this submission is included in Section 2.7.11 of this report .

3.31.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.11 of this report.

3.32 32 – Leo McNamee

3.32.1 Submission – Drumcondra

The submission raised the following issues:

1. Support for the Proposed Scheme
2. Concern of rat runs through the Drumcondra area
3. Request for closure of Saint Anne’s Road

3.32.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.3.3 and 2.3.4 of this report .

3.33 33 – Leo Street and District Residents Association and Lower Dorset Street Community Group

3.33.1 Submission – Dorset Street

The submission raised the following issues:

1. Removal of the central reserve (median)
2. Increased emissions
3. Impacts of turn bans
4. Relocations of bus stops

3.33.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.4.3 and 2.4.4 of this report.

3.34 34 – Lesley Henderson

3.34.1 Submission – Santry

Description of issues raised in this submission is included in Section 2.7.12 of this report .

3.34.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.12 of this report.

3.35 35 – Maxol Limited

3.35.1 Submission – Santry

Description of issues raised in this submission is included in Section 2.7.13 of this report .

3.35.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.13 of this report.

3.36 36 – Michelle Bannon and Ranjith Techell

3.36.1 Submission – Santry

The submission raised the following issues:

1. Objection to development of a bus terminus on the green space at Coolock Lane
2. Environmental impact of the scheme on Santry

3.36.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.2.3 and 2.2.4 of this report.

3.37 37 – MKN Properties Limited

3.37.1 Submission – Fosterstown / Pinnock Hill

The submission raised the following issues:

1. Support for the Proposed Scheme.
2. Pinnock Hill roundabout design and MetroLink integration

3.37.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.5.3 and 2.5.4 of this report.

3.38 38 – MPM Residents Association

3.38.1 Submission – Dorset Street

The submission raised the following issues:

1. Impacts of turn bans
2. Pedestrian crossing design

3. Infrastructure on adjacent streets
4. Bike bunkers or parking requested as cycling become safer.
5. Unique community / sense of place

3.38.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.4.3 and 2.4.4 of this report.

3.39 39 – Neasa Hourigan TD

3.39.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.10 of this report .

3.39.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided Section 2.6.10 of this report.

3.40 40 – Nesta Limited

3.40.1 Submission – Old Airport Road

Description of issues raised in this submission is included in Section 2.7.14 of this report .

3.40.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.14 of this report.

3.41 41 – Oak View Residents Association

3.41.1 Submission – Santry

The submission raised the following issues:

1. Objection to development of a bus terminus on the green space at Coolock Lane

3.41.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.2.3 of this report.

3.42 42 – O’Scanail Veterinary Surgeons

3.42.1 Submission – Pinnock Hill

Description of issues raised in this submission is included in Section 2.7.15 of this report .

3.42.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.15 of this report.

3.43 43 – Patrick Fitzsimons and Parfit

3.43.1 Submission – Cloghran

Description of issues raised in this submission is included in Section 2.7.16 of this report .

3.43.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.16 of this report.

3.44 44 – Residents of Griffith Downs

3.44.1 Submission – Seven Oaks / Griffith Downs

The submission raised the following issues:

1. Request for green area to be protected and conserved
2. No communication from parties to inform us of the plan

3.44.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.1.3 and 2.1.4 of this report.

3.45 45 – Residents of Seven Oaks

3.45.1 Submission – Seven Oaks / Griffith Downs

The submission raised the following issues:

1. Request for green area to be protected and conserved.

3.45.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.1.3 of this report.

3.46 46 – Róisín Shorthall

3.46.1 Submission – Santry

The submission raised the following issues:

1. Support for the Proposed Scheme
2. The scheme proposals do little in the way of public realm improvements
3. Connectivity with the Santry River Restoration and Greenway project
4. Opposition to the 'quiet street' cycle lane along Swords Road
5. Objection to development of a bus terminus on the green space at Coolock Lane
6. Integration with Omni Park Shopping Centre
7. Clarification on plans for the junction of Santry Avenue and Swords Road
8. Congestion at Griffith Avenue
9. Inadequate consideration of the needs of older people and those with a disability

3.46.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.2.3 and 2.2.4 of this report.

3.47 47 – Santry Forum

3.47.1 Submission – Santry

The submission raised the following issues:

1. Bus stop locations
2. Suggestion to remove bank of earth adjacent to footpath in front of Magenta Hall
3. Suggestion to remove on street parking
4. Suggestion to widen footpath

3.47.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Sections 2.2.3 and 2.2.4 of this report.

3.48 48 – Stephen Hall

3.48.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.11 of this report .

3.48.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided Section 2.6.11 of this report.

3.49 49 – Tesco Ireland

3.49.1 Submission – Various

Description of issues raised in this submission is included in Section 2.7.17 of this report .

3.49.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided in Section 2.7.17 of this report.

3.50 50 – TII

3.50.1 Submission – Whole Scheme

Description of issues raised in this submission is included in Section 2.6.12 of this report .

3.50.2 Response to issues raised

Detailed responses to the issues raised by this submission have been provided Section 2.6.12 of this report.

3.51 51 – MKN Investments Limited

3.51.1 Submission – Santry

The submission raised the following issues:

1. Integration with Omni Park Shopping Centre
2. Integration with development lands at Omni Living SHD

3.51.2 Response to issues raised


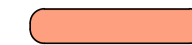











Detailed responses to the issues raised by this submission have been provided in Sections 2.2.3 and 2.2.4 of this report.

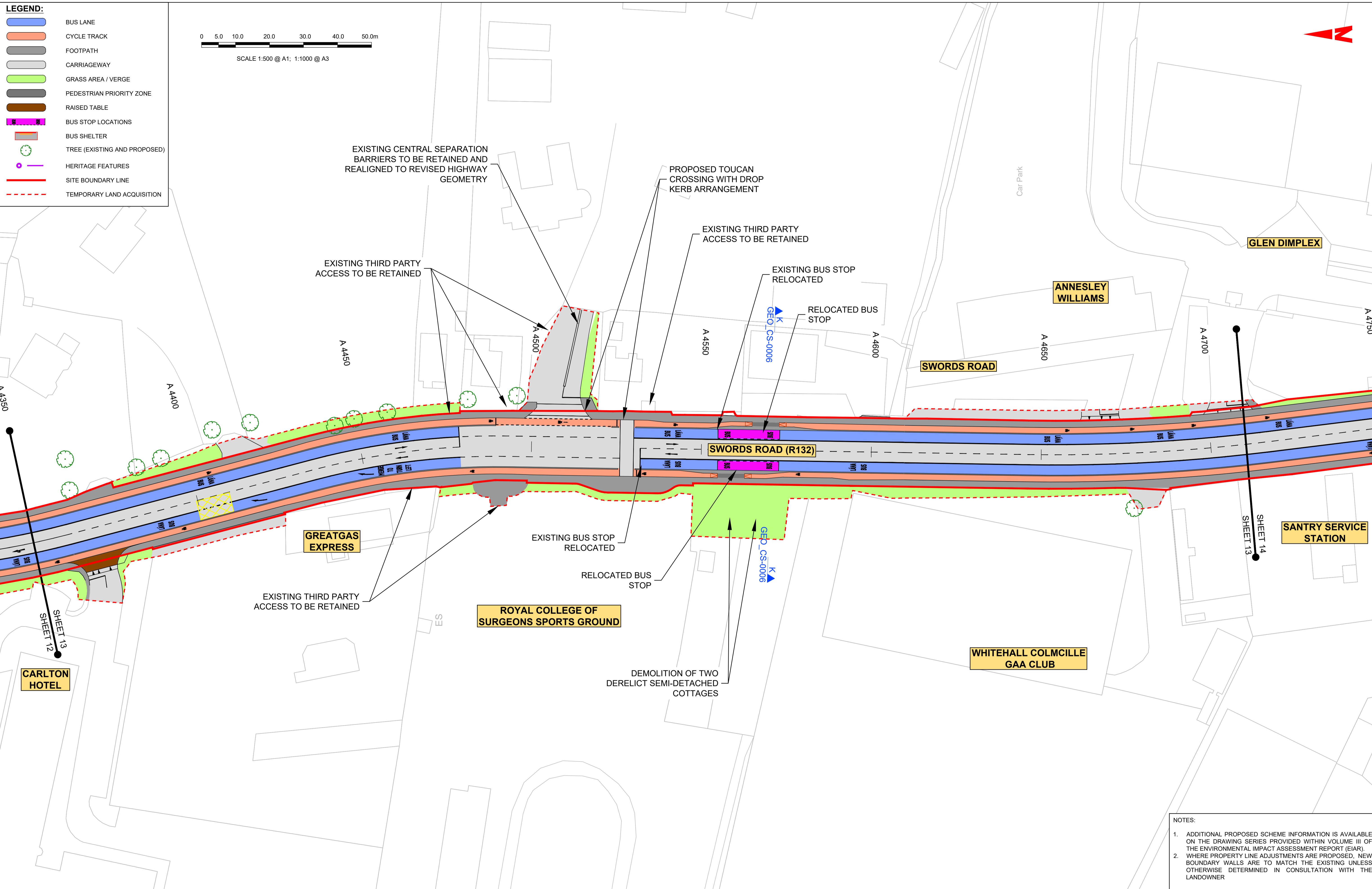
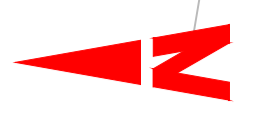
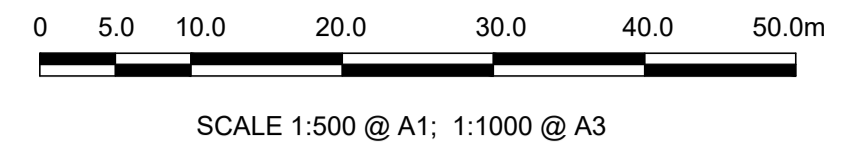
Appendix A

BCIDB-JAC-GEO_GA-0002_XX_00-DR-CR-0013 – General Arrangement Drawing

BCIDB-JAC -TSM_SJ-0002_XX_00-DR-TR-0012 – Junction System Design Drawing

LEGEND:

-  BUS LANE
-  CYCLE TRACK
-  FOOTPATH
-  CARRIAGEWAY
-  GRASS AREA / VERGE
-  PEDESTRIAN PRIORITY ZONE
-  RAISED TABLE
-  BUS STOP LOCATIONS
-  BUS SHELTER
-  TREE (EXISTING AND PROPOSED)
-  HERITAGE FEATURES
-  SITE BOUNDARY LINE
-  TEMPORARY LAND ACQUISITION



NOTES:

1. ADDITIONAL PROPOSED SCHEME INFORMATION IS AVAILABLE ON THE DRAWING SERIES PROVIDED WITHIN VOLUME III OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR).
2. WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE TO MATCH THE EXISTING UNLESS OTHERWISE DETERMINED IN CONSULTATION WITH THE LANDOWNER

\nbsfpp01\Proj\Consulting\Users\SeekA\Ireland\Swords\BCIDB-JAC-GEO_GA-0002_XX_00-DR-CR-0011 Rev.2.dwg
 \nbsfpp01\Proj\Consulting\Users\SeekA\Ireland\Swords\BCIDB-JAC-GEO_GA-0002_XX_00-DR-CR-0011 Rev.2.dwg
 \nbsfpp01\Proj\Consulting\Users\SeekA\Ireland\Swords\BCIDB-JAC-GEO_GA-0002_XX_00-DR-CR-0011 Rev.2.dwg

Disclaimer

a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.



b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

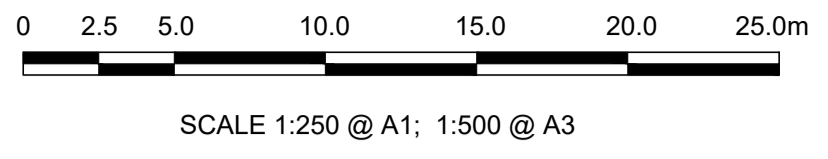
Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING
M02	23/11/2023	OHP	HOS	SN	DESIGN UPDATE TO COLLINSTOWN BUSINESS PARK JUNCTION

 Údarás Náisiúnta Iompair National Transport Authority		 Engineering Designer		
Date	Scale	Drawn	Checked	Approved
06/04/2023	1:250 @ A1 1:5000 @ A3	FM	IL	HOS
Project Code	Originator Code	QMS Code		
BCIDB	JAC			

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME GENERAL ARRANGEMENT			
Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-GEO_GA-0002_XX_00-DR-CR-0013	13 of 37	A	M02



DO NOT SCALE USE FIGURED DIMENSIONS ONLY



LEGEND:

TRAFFIC SIGNAL HEADS:

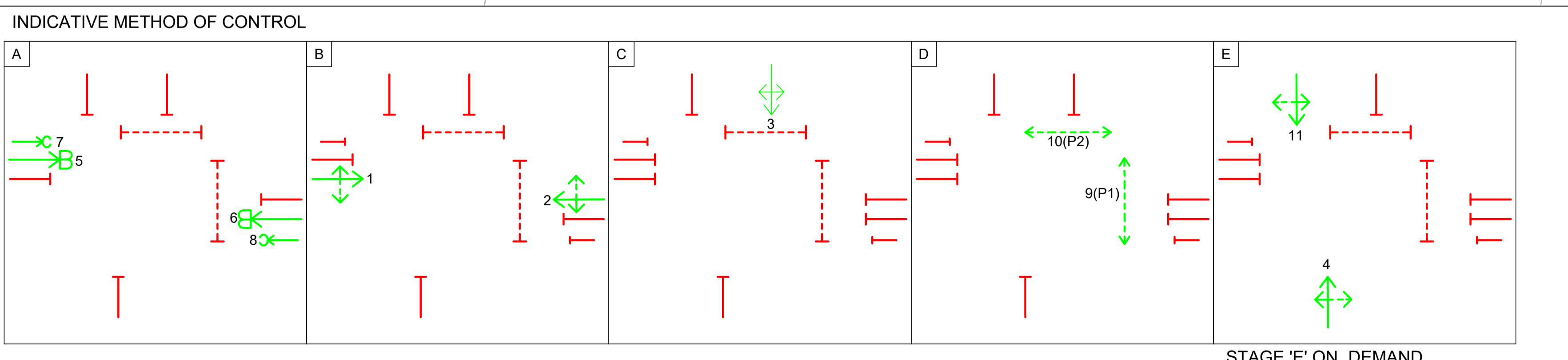
- RTS 001: [Symbol]
- RTS 002: [Symbol]
- RTS 003: [Symbol]
- RTS 007: [Symbol]
- RPC 004: [Symbol]

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION



STAGE 'E' ON DEMAND

Disclaimer

a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titleblock. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Rev	Date	Drm	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING
M02	23/11/2023	OHP	HOS	SN	DESIGN UPDATE TO COLLINSTOWN BUSINESS PARK JUNCTION

Client: **NTA**
Údarás Náisiúnta Iompair
National Transport Authority

Engineering Designer: **Jacobs**

Date: 06/04/2023 | Scale: 1:250 @ A1, 1:500 @ A3 | Drawn: FM | Checked: IL | Approved: HOS

Project Code: BCIDB | Originator Code: JAC | QMS Code:

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: **SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEM DESIGN SWORDS ROAD / COLLINSTOWN BUSINESS PARK JUNCTION**

Drawing File Name: BCIDB-JAC-TSM_SJ-0002_XX_00-DR-TR-0012	Sheet Number: 12 of 44	Status: A	Rev: M02
-----------------------------------------------------------	------------------------	-----------	----------