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Ballymun to City Centre

Draft Preferred Route Options Report

November 2020

Project Ireland 2040
Building Ireland's Future

BUS CONNECTS

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

Contents

Glossary of Technical Terms

Signal Controlled Bus Priority - Signal Control Bus Priority uses traffic signals to enable buses to get priority ahead of other traffic on single lane road sections, but it is only effective for short distances. This typically arises where the bus lane cannot continue due to obstructions on the roadway. An example might be where a road has pinch-points where it narrows due to existing buildings or structures that cannot be demolished to widen the road to make space for a bus lane. It works through the use of traffic signal controls (typically at junctions) where the bus lane and general traffic lane must merge ahead and share the road space for a short distance until the bus lane recommences downstream. The general traffic will be stopped at the signal to allow the bus pass through the narrow section first and when the bus has passed, the general traffic will then be allowed through the lights

Bus Gate – A Bus Gate is a sign-posted short length of stand-alone bus lane. This short length of road is restricted exclusively to buses, taxis and cyclists plus emergency vehicles. It facilitates bus priority by removing general through traffic along the overall road where the bus gate is located. General traffic will be directed by signage to divert away to other roads before they arrive at the Bus Gate.

Cycle Lane – A cycle lane is a lane on the carriageway that is reserved either exclusively or primarily for cycling and is separated from general traffic or bus lanes by road markings.

Cycle Track – A cycle track is a separate section of the road dedicated for cycling only. This space will generally be isolated from other vehicular traffic by a physical kerb.

Virtual Bus Priority – This refers to cases where physical bus priority (i.e. bus lanes) is not provided, and instead, bus priority is provided within the general traffic lane through the use of signal controlled priority or bus gates to control the movements of general traffic.

Quiet Street Treatment – Where CBC roadway widths cannot facilitate cyclists without significant impact on bus priority, alternative cycle routes are explored for short distances away from the CBC bus route. Such offline options may include directing cyclists along streets with minimal general traffic other than car users who live on the street. They are called Quiet Streets due to the low amount of general traffic and 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.

Protected Junctions - Refers to junctions, which provide physical kerb buildouts to protect cyclists through the junction.

Due to the inherently complex nature of mixed mode movements at junctions, the provision for cyclists at junctions is a critical factor in managing conflict and providing safe junctions for all road users. As such, this is the preferred layout for signalised junctions as part of the CBC Infrastructure Works.

Greenway – A greenway is a recreational corridor for non-motorised journeys,

developed in an integrated manner which enhances both the environment and quality of life of the surrounding area. These routes should meet satisfactory standards of width, gradient and surface condition to ensure that they are both user-friendly and low-risk for users of all abilities.

Executive Summary

This report represents the Preferred Route Option assessment undertaken for the Ballymun to City Centre Core Bus Corridor. A draft Preferred Route Option is recommended, and an updated Scheme Concept Design is included.

The aim of the Core Bus Corridor 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 objectives 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.

Core Bus Corridor Extents

The Ballymun to City Centre Bus Corridor Study Area extends over a distance of 6.7 km from the St. Margaret's Road junction at the northern end (0.3 km south of M50 Junction 4) to the River Liffey at the southern end on the western edge of the City Centre at Arran Quay.

The study area included in the Feasibility Study & Options Assessment Report, was generally developed to include the main trip generators between the City Centre and Ballymun on either side of the central spine formed by the existing roads of Phibsborough Road, Botanic Road, St, Mobhi Road and Ballymun Road. The study area lies almost entirely within the administrative area of Dublin City Council, apart from a short section of 0.4 km at the northern end which is in the Fingal County Council area.

The route may be considered in 3 separate sections as follows:

Section 1 – St. Margaret's Road to Griffith Avenue: 3 km long.

Section 2 – Griffith Avenue to Phibsborough (Doyle's Corner): 2 km long.

Section 3 – Phibsborough (Doyle's Corner) to Arran Quay: 1.7 km long.

Review of the Route Options Assessment

The study area for the initial route selection process considered the main trip generators between Ballymun and the City Centre on either side of the central spine formed by the existing roads of Ballymun Road St, Mobhi Road, Botanic Road and Phibsborough Road. The study area is bounded to the east by Drumcondra Road and Swords Road, and to the west by the Finglas Road. It overlaps with the study areas for the adjoining Swords and Finglas Core Bus Corridors on each side.

In the Stage 1 Assessment a "spider's web" of potential routes was identified within the study area that consisted of a large set of separate road links that could be assembled in various configurations to form the core bus corridor. A sifting process concluded with a single potential coherent route through the Glasnevin and Phibsborough areas.

A number of localised route options were considered in the Glasnevin area between Griffith Avenue and Phibsborough. The Feasibility Study & Options Assessment Report, and a further Addendum report, concluded with two options in this section which were put forward for public consultation in 2019.

Conclusion of Review for the Emerging Preferred Route

This draft Preferred Route Option Report confirms that the most suitable of the two short-listed options in the Glasnevin area will consist of a northbound bus gate on St. Mobhi Road and diversion of through traffic onto other routes to the west.

Draft Preferred Route Option Refinement

A full review was undertaken of the previous design proposals as published for the Emerging Preferred Route. This review was informed by additional technical information and the feedback received from Public Consultations.

Conclusions and Draft Preferred Route Option for Section 1 – St. Margaret's Road to Griffith Avenue

The Emerging Preferred Route has been adjusted to adopt the following changes in the draft Preferred Route Option:

a) The CBC has been extended to include the northern section from St. Margaret's Road to Santry Cross.

b) Ballymun Main Street between Shangan Road at the northern end and Gateway Crescent at the southern end will be narrowed to a single traffic lane in each direction which will accommodate permanent on-street parking on both sides of the street with additional trees.

c) South of Collins Avenue Ballymun Road on the western side between St. Pappin Road and Our Lady of Victories Primary School will be narrowed to a single traffic lane in each direction which will accommodate permanent on-street parking near the school.

d) At the junction of Ballymun Road, St. Mobhi Road and Griffith Avenue, the one-way traffic system will be modified for two-way movements on the western and southern arms so that the southbound left-turn from St. Mobhi Road into Griffith Avenue eastbound can be redirected away from the eastern side of the gyratory system.

Conclusions and Draft Preferred Route Option for Section 2 – Griffith Avenue to Phibsborough

The Emerging Preferred Route has been adjusted to adopt the following changes in the draft Preferred Route Option:

a) Of the two options for bus priority considered in the Emerging Preferred Route Option A for a northbound bus gate at St. Mobhi Road has been selected for adoption in the draft Preferred Route Option. General traffic in the northbound direction will be diverted onto other routes to the west.

b) Additional modifications have been proposed in the Glasnevin area with enhanced cycling facilities on Glasnevin Hill, a southbound one-way traffic restriction on part of Ballymun Road south of Griffith Avenue, and an urban realm improvement at Glasnevin Village at the junction of Botanic Avenue and Botanic Road.

c) Along St. Mobhi Road the proposed road layout design has been adjusted to retain almost all existing street trees and a small amount of on-street parking.

d) On Botanic Road it is proposed to provide segregated cycle tracks in both directions instead of a bus lane in the northbound direction.

e) On Prospect Road there will be a two-way cycle track along the eastern side to replace one of the two existing traffic lanes, which will enable northbound cyclists to bypass the one-way traffic system at Hart's Corner.

Conclusions and Draft Preferred Route Option for Section 3 – Phibsborough to Arran Quay

The Emerging Preferred Route has been adjusted to adopt the following changes in the draft Preferred Route Option:

a) At Royal Canal Bank there will be a bridge provided for cyclists and pedestrians under North Circular Road instead of a traffic signal crossing.

b) An extended two-way cycle route will extend from Western Way along the eastern side of Constitution Hill to a quiet-streets route through the Markets Area to the River Liffey corridor.

Ballymun to City Centre Core Bus Corridor Draft Preferred Route Summary

The Ballymun to City Centre Core Bus Corridor is approximately 6.7 km long from end to end.

The proposed route will provide the following improvements for bus priority:

- In the southbound direction towards the city centre there is existing bus priority provision over 50% of the route length, and this will increase to 95% bus lanes along the most of the route apart from a short 240m section on Botanic Road where a bus priority signal at upstream junction at St. Mobhi Road will enable buses to proceed ahead of general traffic.

- In the northbound direction from the city centre there is existing bus priority provision over 42% of the route length, and this will increase to 78% through a combination of bus lanes along a large part of the route apart from a 1.2 km long section on Botanic Road and St. Mobhi Road where bus priority will be achieved through signals at the upstream junction plus a bus gate on St. Mobhi Road at the Griffith Avenue junction. Northbound through traffic will be diverted to other routes to the west, including Finglas Road.

The proposed route will provide segregated cycle tracks in both directions over the full 6.7 km length. In the Phibsborough area the cycle route will be off-line from Phibsborough Road and will follow Royal Canal Bank, 100m to the east.

1. Introduction and Background

1.1. Introduction

The BusConnects Dublin - Core Bus Corridors Infrastructure Works (herein after called the CBC Infrastructure Works) involves the development of continuous bus priority infrastructure and improved pedestrian & cycling facilities on sixteen radial core corridors in the Greater Dublin Area, across the local authority jurisdictions of Dublin City Council, South Dublin County Council, Dún Laoghaire-Rathdown County Council, Fingal County Council, and Wicklow County Council. Overall the CBC Infrastructure Works encompasses the delivery of approximately 230km of dedicated bus lanes and 200kms of cycle tracks along 16 of the busiest corridors in Dublin.

The Transport Strategy for the Greater Dublin Area 2016 – 2035 sets out a network of the bus corridors forming the "Core Bus Network" for the Dublin region. Sixteen indicative radial core bus corridors were initially identified for redevelopment. This is shown in **Figure 1.1** below (extract from Transport Strategy for the Greater Dublin Area 2016-2035):

Figure 5.5 – 2035 Core Bus Network – Radial Corridors

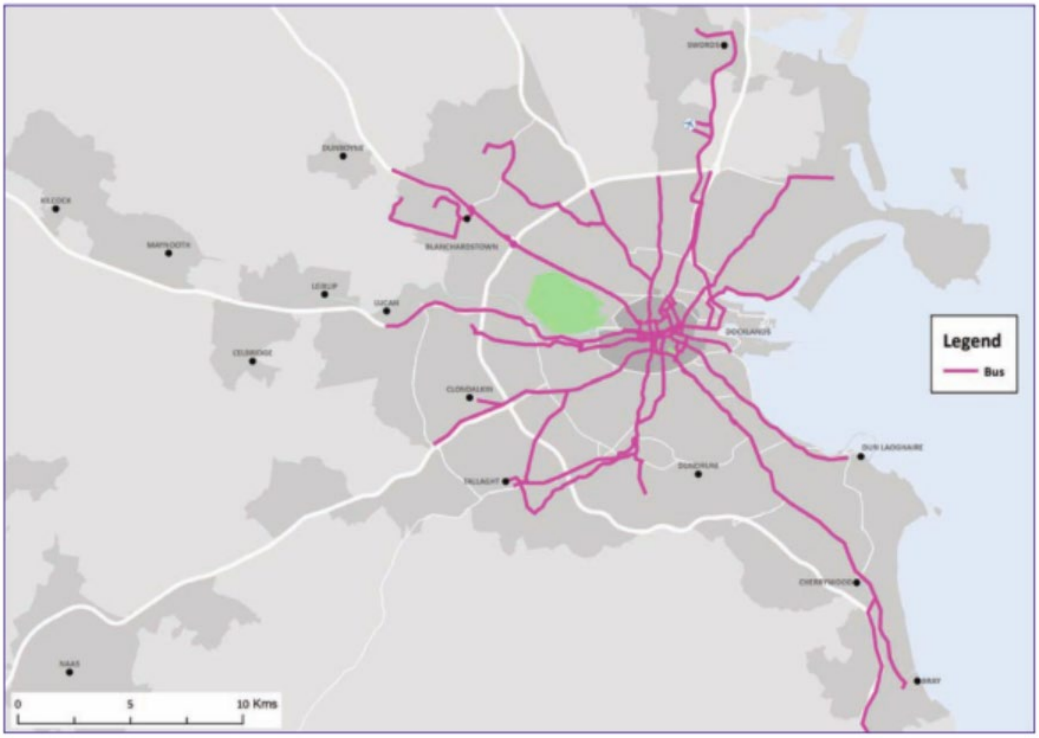


Figure 1.1: 2035 Core Bus Network – Radial Corridors

These corridors had dedicated bus lanes along only less than one third of their lengths which meant that for most of the journey, buses and cyclists were competing for space with general traffic and were negatively affected by the increasing levels of congestion. This resulted in delayed buses and unreliable journey times for passengers. Following the completion of feasibility and options studies, the sixteen radial corridors are being progressed, as the following 16 Core Bus Corridors:

1. Clongriffin to City Centre Core Bus Corridor.
2. Swords to City Centre Core Bus Corridor.
3. **Ballymun to City Centre Core Bus Corridor.**

4. Finglas to Phibsborough Core Bus Corridor.
5. Blanchardstown to City Centre Core Bus Corridor.
6. Lucan to City Centre Core Bus Corridor.
7. Liffey Valley to City Centre Core Bus Corridor.
8. Clondalkin to Drimnagh Core Bus Corridor.
9. Greenhills to City Centre Core Bus Corridor.
10. Tallaght to Terenure Core Bus Corridor.
11. Kimmage to City Centre Core Bus Corridor.
12. Rathfarnham to City Centre Core Bus Corridor.
13. Bray to City Centre Core Bus Corridor.
14. UCD Ballsbridge to City Centre Core Bus Corridor.
15. Blackrock to Merrion Core Bus Corridor; and
16. Ringsend to City Centre Core Bus Corridor

1.2. Background

The aim of the CBC Infrastructure Works is to provide enhanced walking, cycling and bus infrastructure on key access corridors in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along these corridors.

The objectives 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 June 2018, the National Transport Authority (NTA) published the Core Bus Corridors Project Report. The report was a discussion document outlining proposals for the delivery of a CBC network across Dublin. The 'Ballymun to City Centre CBC' is identified in this document as forming part of the radial Core Bus Network, as shown in red on **Figure 1.2**.

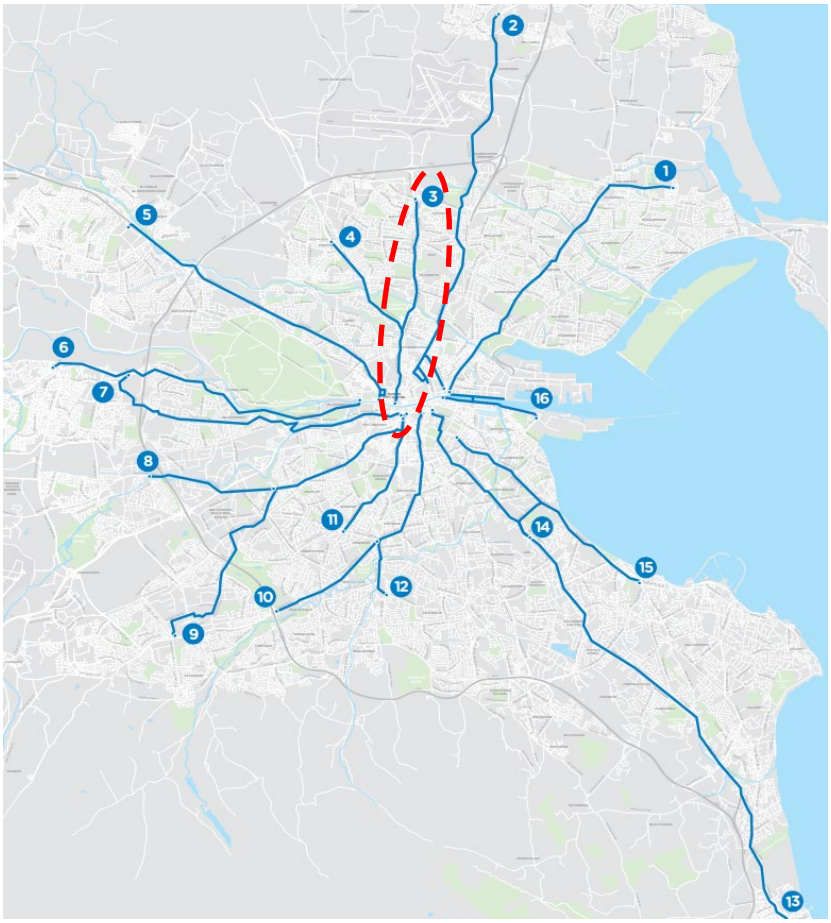


Figure 1.2 - Radial Core Bus Network in the GDA Transport Strategy

Following this, a public consultation for the sixteen radial CBCs took place on a phased basis from November 2018 until May 2019. As part of this process the 'Core Bus Corridor CBC Feasibility Study and Options Assessment Report' was published, which identified feasible options along the corridor, assessed these options and arrived at an Emerging Preferred Route (EPR) Option. Submissions were invited from the public to provide comment on the EPR Option proposals and to inform subsequent design stages. A second round of public consultation commenced on 4th March 2020 and ran until the 17th of April 2020 when submissions were once again invited from the public on the draft Preferred Route Option.

This Draft Preferred Route Option Report has been prepared for the Ballymun to City Centre ore Bus Corridor, which built on the previously published Feasibility Study and Options Assessment Report.

The Study Area Analysis and Multi Criteria Analysis for the previously proposed feasible route options are considered to still be valid unless otherwise detailed and updated in this Preferred Route Option Report. Any additional design work or optioneering has been assessed against the previously identified Emerging Preferred Route, or the full list of options in the previous Multi Criteria Analyses. Additional design development has been detailed in this Report and updated Draft Preferred Route Option Concept Design Drawings as being based on the following:

- Updated topographical survey information.
- Output from engagement and consultation activities on the Emerging Preferred Route Option and draft Preferred Route Option proposals.
- Clarifications of the previous assessment in the Feasibility Study and Options Assessment Report.
- Further design development and options assessment.

1.3. Report Structure

This report is structured as follows:

- **Chapter 2: Planning and Policy Context** – This chapter outlines the general background information to the proposed CBC network. It also outlines the policy context in which the CBC was developed and presents the concept of the CBC network as outlined in the Transport Strategy for the Greater Dublin Area 2016-2035 (NTA 2015) and the Bus Connects Core Bus Corridor Infrastructure Works.
- **Chapter 3**: **Background and Public Consultation** – This chapter outlines the summary of the first and second public consultation.
- **Chapter 4: Study Area and Route Options** – In this chapter, the study area for the CBC is detailed. Scheme specific constraints and opportunities are discussed. The integration of the scheme with existing and planned transport networks is considered, along with considerations of the scheme for other road users.
- **Chapter 5: Review of The Feasibility Study and Options Assessment Report** – This chapter is a summary of the options assessment that was previously carried out in each section of the previous Feasibility and Options Report. An assessment has been made on the previous options assessment and the emerging preferred route and outlines the issues and material changes in each section resulting from the design development as explained in section 1.2.
- **Chapter 6: Refined Route Options Assessment** – This chapter summarises the section of the previous option report that has been reviewed for material change. Other optioneering have been considered and Draft Preferred Route Option summarised.
- **Chapter 7: Draft Preferred Route Option** – This chapter gives the overall conclusions of the scheme options assessment process and identifies and describes the draft Preferred Route Option.
- **Chapter 8: Next Steps** – This chapter details the “next steps” in the delivery of this CBC.

2. Planning and Policy Context

This chapter summarises a review of transport and planning policy which is relevant to the route selection process for the CBC.

2.1 Transport Strategy for the Greater Dublin Area, 2016-2035

The CBC Infrastructure Works has evolved from and is a key component of the 'Transport Strategy for the Greater Dublin Area 2016-2035' (the 'GDA Transport Strategy'), the purpose of which is *"to contribute to the economic, social and cultural progress of the Greater Dublin Area by providing for the efficient, effective and sustainable movement of people and goods"*.

The strategy identifies a "Core Bus Network", representing the most important bus routes within the Greater Dublin Area, generally characterised by high passenger volumes, frequent services and significant trip attractors along the routes. The identified core network comprises sixteen radial bus corridors, three orbital bus corridors and six regional bus corridors.

The GDA Transport Strategy states that it is intended to provide continuous bus priority, as far as is practicable, along the core bus routes.

This will result in a more efficient and reliable bus service with lower journey times, increasing the attractiveness of public transport in these areas and facilitating a shift to more sustainable modes of transport.

The Ballymun to City Centre CBC (the CBC) is identified as an enabling element as part of the CBC Infrastructure Works.

2.2 Greater Dublin Area Cycle Network Plan

The Greater Dublin Area Cycle Network Plan was adopted by the NTA in early 2014 following a period of consultation with the public and various stakeholders. This plan forms the strategy for the implementation of a high quality, integrated cycle network for the Greater Dublin Area.

There are a number of primary and secondary cycle routes identified along the CBC. During the earlier assessment process which identified the CBC EPR Option, the provision of these cycle routes was considered at all stages. Therefore, as part of the options assessment process, any upgrading of infrastructure to provide bus priority also needs to consider and provide for the required cycling infrastructure, where practicable, to the appropriate level and quality of service (as defined by the NTA National Cycle Manual) required for primary and secondary cycle routes.

2.3 Development Plan, Local Area Plans and Strategic Development Zones

Dublin City Council Development Plan (2016 – 2022)

The current Development Plan for Dublin City Council (DCC) came into effect on 21st October 2016. The DCC Development Plan recognises the challenge that Transport has in making an important contribution to make towards achieving a sustainable city. These key challenges for the City are outlined as follows:

- *Effective integration of land-use and transportation, and the management of access and mobility.*
- *Pro-active engagement and collaboration with communities to bring about further modal shift and effective mobility management.*
- *The expansion of the strategic cycle network along all major water bodies including the River Liffey and the canals.*

- *Improving the city centre environment for pedestrians through public realm enhancements and through improvement of the strategic pedestrian network.*
- *Ensuring maximum benefits are achieved from public transport improvements including Luas cross-city and the anticipated Bus Rapid Transit network.*
- *Managing city centre road-space to best address the competing needs of public transport, pedestrians, cyclists, and the private car.*
- *Increasing significantly the existing mode share for active modes, i.e. walking and cycling, and supporting the forthcoming National Policy Framework for Alternative Fuels Infrastructure.*

Therefore, sustainable forms of transport such as public transport, walking, and cycling are strongly promoted in this plan, which takes a pro-active approach to influencing travel behaviour and effective traffic management.

Table 2.1: DCC Development Plan Policies for Modal Change and Active Travel aligned with the proposed development

Movement and Transport: Promoting Modal Change and Active Travel	
MT2	Whilst having regard to the necessity for private car usage and the economic benefit to the city centre retail core as well as the city and national economy, to continue to promote modal shift from private car use towards increased use of more sustainable forms of transport such as cycling, walking and public transport, and to co-operate with the NTA, Transport Infrastructure Ireland (TII) and other transport agencies in progressing an integrated set of transport objectives. Initiatives contained in the government's 'Smarter Travel' document and in the NTA's draft transport strategy are key elements of this approach.

Table 2.2: DCC Development Plan Policies for Public Transport aligned with the proposed development

Movement and Transport: Public Transport	
MT3	To support and facilitate the development of an integrated public transport network with efficient interchange between transport modes, serving the existing and future needs of the city in association with relevant transport providers, agencies and stakeholders.
MT4	To promote and facilitate the provision of Metro, all heavy elements of the DART Expansion Programme including DART Underground (rail interconnector), the electrification of existing lines, the expansion of Luas, and improvements to the bus network in order to achieve strategic transport objectives.
MT5	To work with the relevant transport providers, agencies and stakeholders to facilitate the integration of active travel (walking, cycling etc.) with public transport, thereby making it easier for people to access and use the public transport system.
MT6 (i)	To work with Iarnród Eireann, the NTA, Transport Infrastructure Ireland (TII) and other operators to progress a coordinated approach to improving the rail network, integrated with other public transport modes to ensure maximum public benefit and promoting sustainable transport and improved connectivity.

2.4 The Aim of the Bus Connects Core Bus Corridor Infrastructure Works

The aim of BusConnects is to transform Dublin's bus system, with the Core Bus Corridor (CBC) project aiming to provide 230 km of dedicated bus lanes and 200 km of cycle lanes on sixteen of the busiest bus corridors in and out of the city centre. This project is fundamental to addressing the congestion issues in the Dublin region with the population due to grow by 25% by 2040, bringing it to almost 1.55 million.

Across Dublin, 67% of public transport journeys each day are made by bus, carrying three and four times the number of passengers that travel on the Luas or Dart and commuter rail. The popularity of cycling to work has also increased in popularity, up by 43% since 203. Through the development of continuous bus priority and segregated cycle lanes we can meet the growing demand for fast, reliable, punctual, and convenient bus journeys in and out of the city centre, and safe cycling facilities for this growing numbers of cyclists.

2.5 The Core Bus Corridor Scheme Objectives

The aim of the Proposed Project is to transform the bus system to provide better services to more people. There are nine objectives underpinning this aim:

a) Reduce reliance on private car transport for all trips
b) Increase the number and variety of destinations served by the bus system
c) Maximise the people carrying capacity of existing transport corridors
d) Integrate technology to improve the public transport system and to enhance customer experiences
e) Enhance the safety and security of the bus system
f) Improve bus journey times and reliability
g) Reduce barriers to using the bus system
h) Simplify interchange between bus services and with other transport modes
i) Enable Project Ireland 2040 strategic outcomes and deliver on relevant Climate Action targets.

3. Background and Public Consultation

3.1 Ballymun to City Centre Core Bus Corridor Feasibility and Options Assessment Report and Emerging Preferred Route

In early 2016, the NTA initiated plans to develop the network of Core Bus Corridors identified in the GDA Transport Strategy. As part of this body of work, the 'Ballymun to City Centre Core Bus Corridor CBC Feasibility Study and Options Assessment Report' was prepared which identified feasible options along the corridor, assessed these options and arrived at an Emerging Preferred Route (EPR) Option. These proposals formed the basis for the first Non-Statutory Public Consultation on the Core Bus Corridor.

3.2 First Non-Statutory Public Consultation – Emerging Preferred Route

The first non-statutory public consultation on the BusConnects Core Bus Corridor Emerging Preferred Routes took place on a phased basis and ran until the 31st May 2019. The consultation for the Ballymun route was in Phase 3 from 26th February 2019 to 31st May 2019.

There were 475 submissions received in relation to the Ballymun corridor. These submissions ranged from individual submissions by residents, commuters, local representatives, various associations and private sector businesses.

A brief summary of the feedback received on the Ballymun to City Centre CBC during the public consultation is presented in this section of the report.

While a variety of matters were raised in the submissions, the key issues emerging from the consultation were as follows:

1) Options at St. Mobhi Road
2) Traffic and Access Impact
3) Impacts on Community
4) Metrolink
5) Safety
6) Car Parking
7) Impact for Properties
8) Cycling facilities
9) Bus facilities
10) Pedestrian facilities
11) Environmental Issues

Further detail on these issues can be found in the Ballymun to City Centre Core Bus Corridor Emerging Preferred Route First Non-Statutory Public Consultation Report (March 2020).

3.3 Development of the Draft Preferred Route Option

Following the first non-statutory public consultation, a review was undertaken of the scheme proposals along the route based on the following new information which was available for consideration:

- Detailed topographical survey along the route corridor.
- Submissions received during the first non-statutory public consultation; and
- Issues raised during meetings with community forum, resident groups, and one-on-one meetings with directly impacted property owners.

As part of this review, several new options were developed for consideration in specific areas where issues were identified. These new options were subject to further options assessment (as detailed in Section 6 of this report) to identify the draft Preferred Rout Option (PRO). The selected draft PRO identified formed the basis for the second non-statutory public consultation in March / April 2020.

The key changes adopted in the draft Preferred Route Option are as follows:

a) The corridor has been extended further north to St. Margaret's Road. This facilitates better public transport interchange between bus and the future MetroLink.

b) In the Glasnevin area Option A was selected with a northbound Bus Gate at the junction of St. Mobhi Road and Griffith Avenue. This significantly reduces the requirement for road widening on St. Mobhi Road, and allows for the retention of trees.

c) During the period of operation of the Bus Gate on St Mobhi Road, northbound traffic will be directed to Ballymun via Finglas Road, Old Finglas Road, Tolka Estate and Griffith Avenue. A more localised diversion will operate via Glasnevin Hill, Cremore Villas and Griffith Avenue.

d) Enhanced cycling and pedestrian facilities are proposed at Glasnevin Hill, with Urban Realm improvements planned for Glasnevin Village.

e) Signal Controlled Priority is proposed for Botanic Road in both directions to give priority to buses through a short section without bus lanes.

f) Significant Urban Realm enhancements are proposed for Phibsborough Village and in Glasnevin Village.

g) The proposed off-line cycle route at Royal Canal Bank at the eastern side of Phibsborough will be provided with new cycle/pedestrian bridge over the Royal Canal to the east of Cross Guns Bridge and a new underpass is proposed under North Circular Road.

h) A two-way cycle track is proposed on Constitution Hill with a quiet street cycle route through the Markets area to the Liffey Cycle Route at Ormond Quay.

3.4 Second Non-Statutory Public Consultation – Draft Preferred Route Option

The draft Preferred Route option was published in March 2020 and a second round of public consultation took place from 4th March 2020 to the 17th of April 2020.

Due to Covid-19 restrictions being imposed by Government in mid-March the planned Public Information Events were impacted. Consequently there were 22 submissions received relating to the CBC (compared to 475 submissions following the First Public Consultation).

A brief summary of the feedback received on the Ballymun to City Centre CBC during the public consultation is presented in this section of the report.

While a variety of matters were raised in the submissions, the key issues emerging from the consultation were as follows:

1) Many submissions **welcomed the changes** of the proposals since the EPR.
2) Dublin Airport Authority has requested the CBC be extended to the airport campus.
3) Concern about security at the proposed bridge under North Circular Road.

4) Removal of trees (misunderstood in some cases). Alternative proposal for St. Mobhi Road south of River Tolka bridge suggested to drop bus lane for a short section and retain the trees on the western side.
5) Narrow footpaths & island bus stops for people with disabilities.
6) Preference for Metrolink instead of BusConnects.
7) Alternative cycle route via Walsh Road instead of St. Mobhi Road.
8) Local traffic access concerns in the St. Mobhi Road area.
9) Through traffic concern in area at Iona Road and Lindsay Road, Phibsborough/Drumcondra.
10) Traffic impacts at Glasnevin Hill due to the diversion from the proposed bus gate at St. Mobhi Road.
11) 30 km/h speed limit requested along the CBC, and at Glasnevin Hill with speed ramps.
12) Ballymun Road to be reduced from 2 traffic lanes to 1 with green verges instead.
13) Cycling facilities:
    a) Further improvements to specific details for cycle tracks at junctions and bus stops.
    b) Separated rather than toucan crossings preferred at Prospect Way.
    c) Cycle priority at Dominick Street.
    d) Markets route via Greek Street to O'Donovan Rossa Bridge instead.
    e) Cycle link towards Stoneybatter.
    f) Cycle tracks requested on Phibsborough Road and Church Street, with one-way traffic to suit.
14) Various queries about specific local issues.
15) Flood risk at Botanic Avenue / Botanic Road junction.
16) Query about left turn southbound at North King Street.
17) Impact for Phibsborough Shopping Centre.
18) Access for a development site at North Mill, Cross Guns Bridge.
19) Complaints about the **public consultation process** due to the disruption caused by the public

The issues raised during the 2nd public consultation have been considered as part of the further development of the Preferred Route Option.

Subsequently it was determined by NTA that a third non-statutory public consultation would be conducted prior to finalising the Preferred Route Option.

4. The Study Area

4.1 Introduction

The Ballymun to City Centre Bus Corridor Study Area runs from the M50 at the northern end southward to the River Liffey at the western edge of the city centre. It is centered on the axis of Ballymun Road and Phibsborough Road and extends for a width of about 3 km in the east-west direction as shown in Figure 4.1.

The study area included in the Feasibility Study & Options Assessment Report, as shown below, was generally developed to include the main trip generators between Ballymun and the City Centre. Most of the entire study area lies within the administrative area of Dublin City Council, with the most northerly 0.5 km located at the southern fringe of the Fingal County Council area.

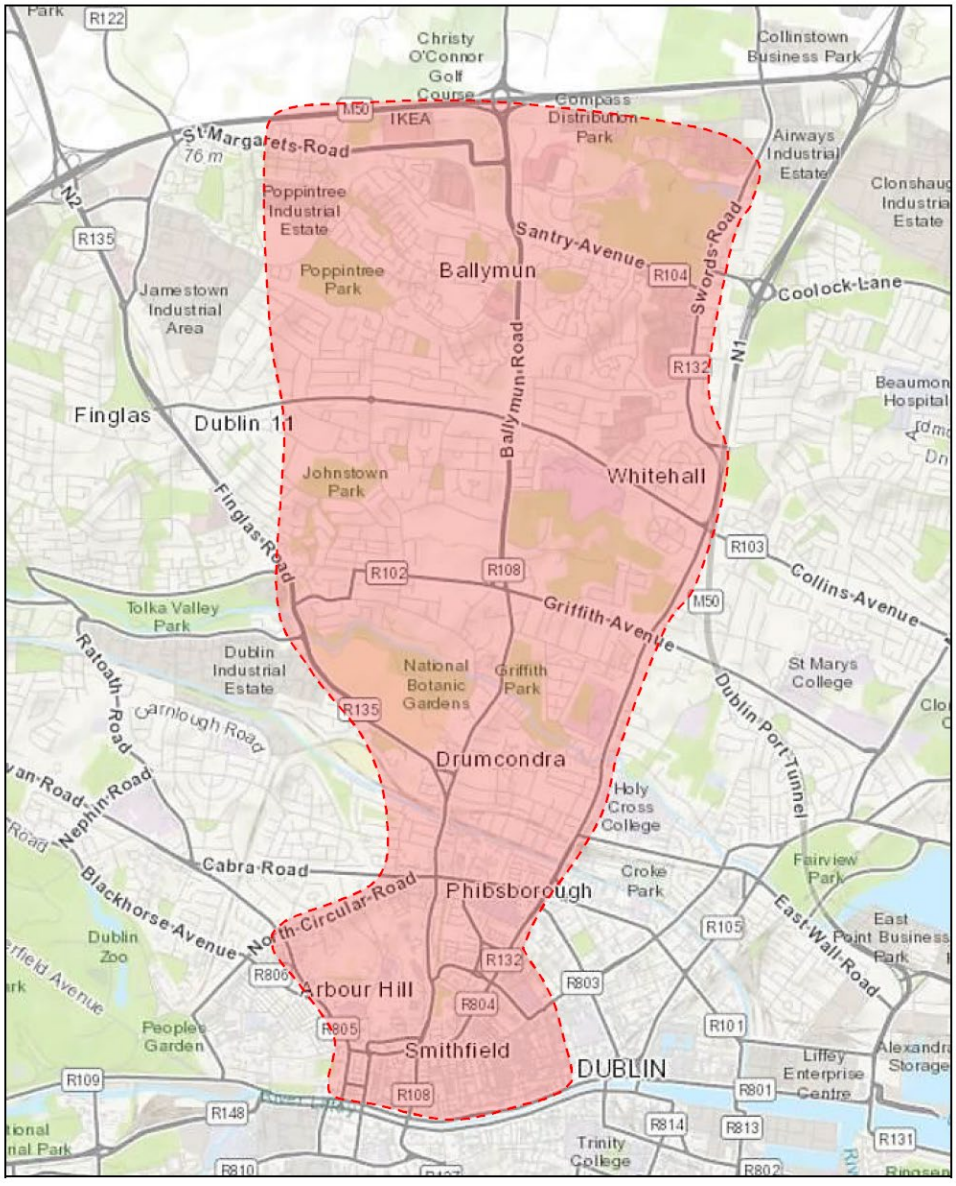


Figure 4.1 – Study Area as defined in the Feasibility Study & Options Assessment Report

4.2 Route Sections

The route may be considered in 3 separate sections as follows:

Section 1 – St. Margaret's Road to Griffith Avenue: 3 km long (in green on Figure 4.2).

Section 2 – Griffith Avenue to Phibsborough (Doyle's Corner): 2 km long (in blue on Figure 4.2).

Section 3 – Phibsborough (Doyle's Corner) to Arran Quay: 1.7 km long (in red on Figure 4.2).

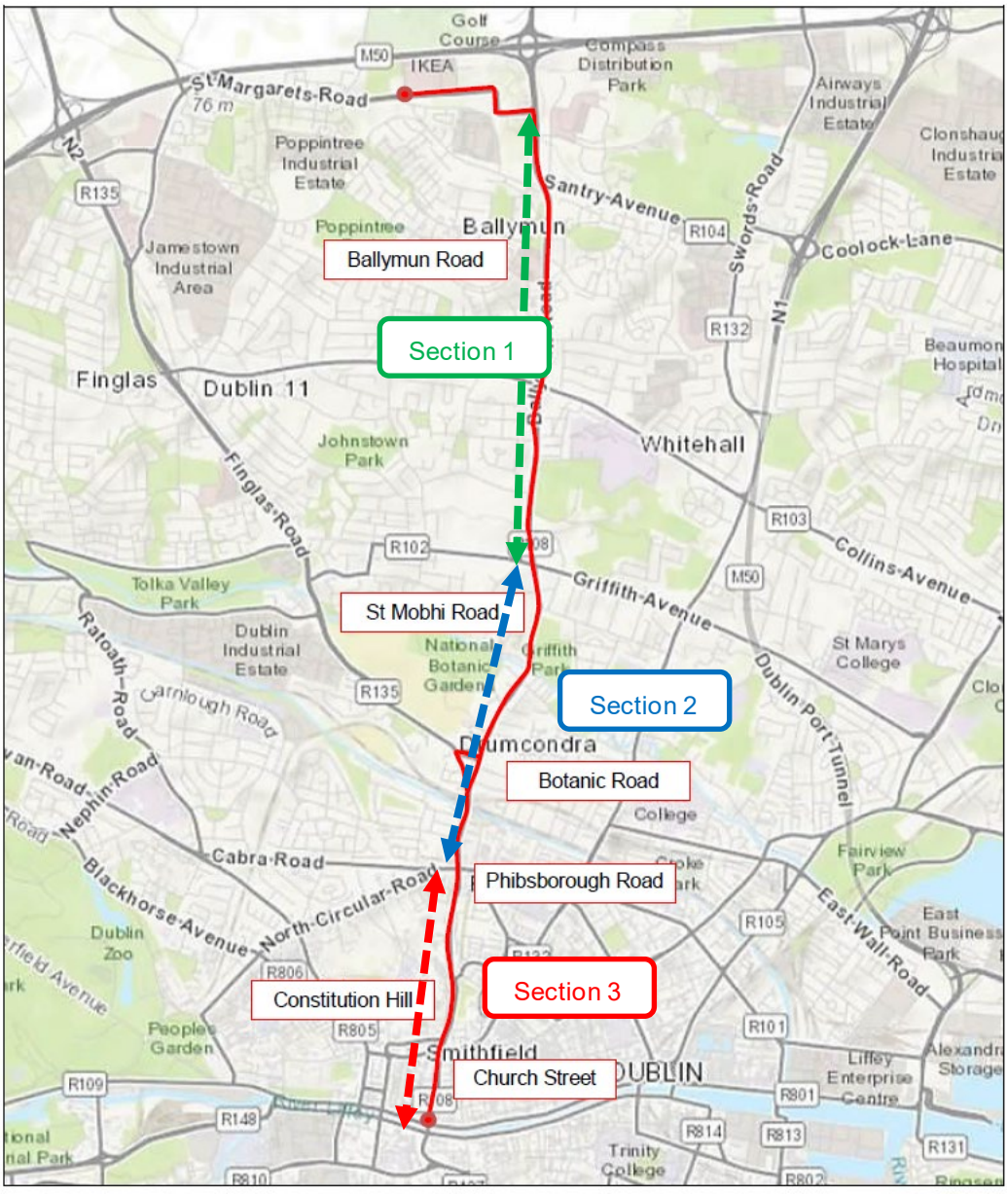


Figure 4.2: Route Sections

4.3 Physical Constraints and Opportunities

There are constraints and opportunities, both natural (i.e. existing natural environment) and physical (the built environment), which affect the potential route options for the proposed scheme within the defined study area including:

- In Section 1 in the northern half of the corridor, the Ballymun Road is a wide dual carriageway with existing bus lanes along all of Ballymun Road south of Santry Cross and hard shoulders north of there. There is sufficient space available within the existing road for the necessary improvements for the extension of the bus lanes in Section 1 and provision of cycle tracks segregated from the bus lanes over the full length.

- In Section 2 south of Griffith Avenue the existing streets are much narrower single carriageways, and this is a very significant constraint for the provision of appropriate bus priority and segregated cycle tracks.

- The River Tolka is a major constraint through the Glasnevin area in Section 2, with just two existing bridges at St. Mobhi Road and Glasnevin Hill within a 2.3km length of the river between Drumcondra to the east and the Finglas Road to the west.

- On the western side of the corridor in the Glasnevin area the National Botanic Gardens and Glasnevin Cemetery occupy a large block of land that extends 1.3 km in the east-west direction.

- The Hart's Corner traffic gyratory at the southern end of Glasnevin and the northern end of Phibsborough is a considerable constraint for the provision of segregated cycle tracks within the existing street widths.

- The crossing of the 2 railways and the Royal Canal at Phibsborough are physical constraints where the street layout is quite narrow, and widening is required to accommodate suitable and segregated facilities for all road users including public transport, pedestrians, cyclists and general traffic.

- Royal Canal Bank is a disused canal that has been infilled along the eastern edge of Phibsborough over a length of 1 km that provides an opportunity for an off-line cycle route away from traffic, and that circumvents the width constraints along Phibsborough Road where it is not feasible to provide cycle tracks segregated from the bus lanes.

- A quiet streets network is available in the Markets area at the southern end of the corridor to accommodate a cycle route that is separate from busy Church Street over a length of 0.7 km.

4.4 Integration with Existing and Proposed Public Transport Network

One of the key objectives of the proposed CBC scheme is to enhance interchange between the various modes of public transport operating in the city and wider metropolitan area, both now and in the future. Route options within the study area have therefore been developed in so far as possible to seek to provide for improved existing or new interchange opportunities with other transport services including from north to south:

- Future Orbital Bus Corridor N8 at Santry Cross near the northern end.
- Future Orbital Bus Corridor N4 at Collins Avenue.
- Future interconnection with Orbital Bus Corridor N2 at Griffith Avenue.
- The Finglas Core Bus Corridor at Phibsborough.
- Future City Centre Orbital Bus Route O at North Circular Road (Doyle's Corner) in Phibsborough.
- LUAS Green Line tram service at Broadstone.
- City Centre East-West Spine Bus Corridor along the River Liffey at the southern end.

4.5 Compatibility with Other Road Users

A key objective of the proposed scheme is to improve pedestrian and cyclist facilities along the route. In general, segregated facilities should be proposed for these modes.

Pedestrian Facilities

For pedestrians it is proposed to simplify and shorten the road crossings at major junctions, which can be a barrier to mobility. The design development has also undertaken an audit of the public realm for pedestrians so that necessary improvements can be undertaken through application of *Universal Design* principles to ensure that barriers to mobility are removed for people with mobility and visual impairments.

Cycle Routes

The *Greater Dublin Area Cycle Network Plan* was adopted by the NTA in early 2014 and there are several of the proposed cycle routes identified along the *Ballymun* Corridor as follows and as shown in Figures 4.3a and 4.3b for the northern part of Dublin city, there are a number of proposed cycle routes along the proposed bus corridor (shown as a yellow dashed line) and intersecting with it.

- Primary Radial Route 3 along the corridor with branches 3A & 3B from Phibsborough northward to Ballymun and Finglas respectively.
- Primary Route 5 along the River Liffey at the southern end.
- Primary Radial Route 4 from the Navan Road at Broadstone.
- Secondary Orbital Route NO1 / Cross-City Route C8 at the North Circular Road.
- National Cycle Route N2 *Royal Canal Greenway* from Galway to Dublin (and part of International *Euro-Velo* cycle route EV2) at Phibsborough.
- NO2 *River Tolka Greenway* at Glasnevin (St. Mobhi Road).
- Secondary Orbital Route NO3 at Griffith Avenue.
- Primary Orbital Routes NO4 along Collins Avenue.
- Secondary Orbital Route NO5 at Santry Avenue.
- *River Santry Greenway* at Northwood.

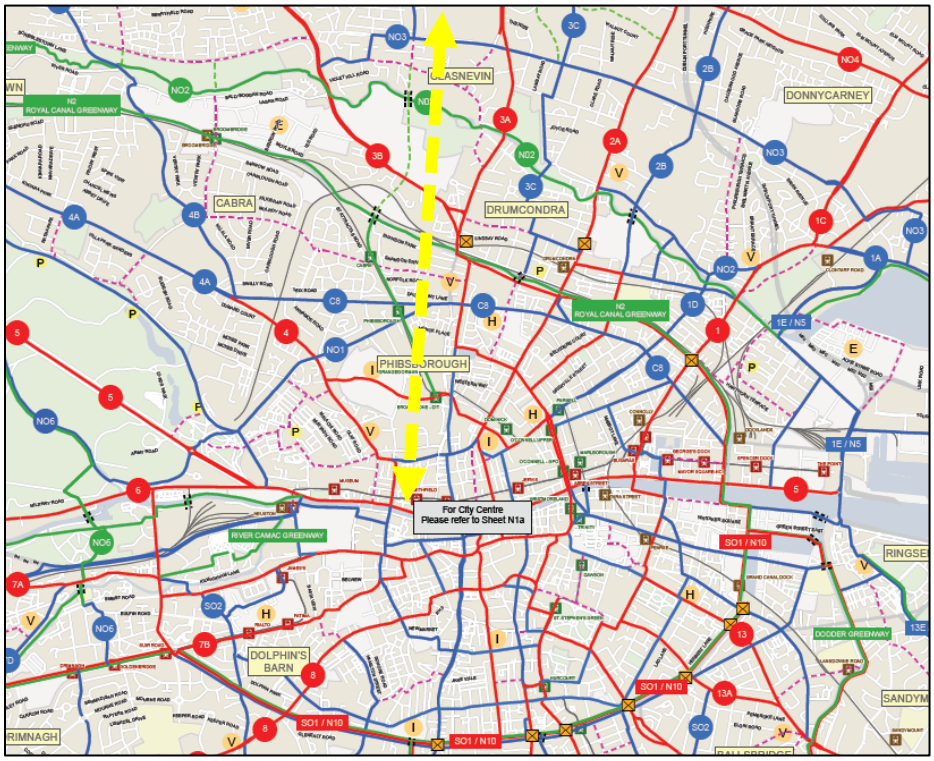


Figure 4.3a – GDA Cycle Network Plan for Central & North Dublin

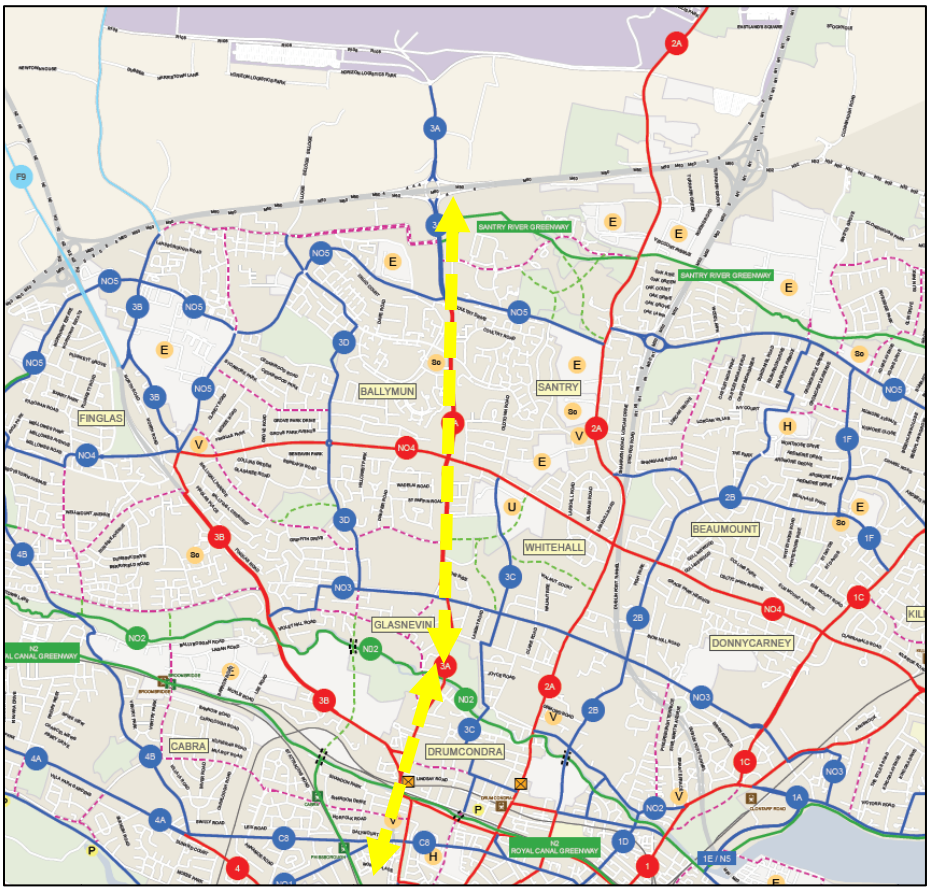


Figure 4.3b – GDA Cycle Network Plan for North Dublin

In the analysis carried out to identify the preferred core bus corridor, the provision of the associated cycle routes was considered at all stages. This includes provisions for intersections with orbital cycle routes.

Traffic Routes

Provision of bus priority may result in some impact for general traffic flow and capacity along the CBC corridor necessitated by the reallocation of road space to CBC priority and cycle tracks, and the introduction of necessary bus priority signals in places. Improved facilities for pedestrians will also reduce junction capacity for traffic to an extent. Any necessary reductions in traffic carrying capacity of the road network will be compensated for by the overall planned significant increase in quality and level of service of other modes (including increased capacity provision) on the CBC route once implemented.

Bus priority measures will be required on narrow streets such as St. Mobhi Road south of Griffith Avenue where removal of a large number of street trees is to be avoided, and at Botanic Road north of Hart's Corner in Glasnevin where it would not be feasible to widen the road into very small front gardens sufficiently for the addition of bus lanes. In such a scenario local access will generally be maintained along the CBC corridor although there could be some impacts on local traffic where it is required to follow diversion routes. At some locations it may be necessary to adopt turning movement restrictions or local road closures for appropriate traffic management.

5. Review of the Emerging Preferred Route

5.1 Introduction

From a review of submissions received as part of the public consultation process, as well as a review of the topographical survey carried out since the EPR's publication, a number of issues were identified which had the potential to be overcome through the implementation of alternative design solutions. These issues are described in the following sections.

5.2 Route Options Assessment Methodology

The first step in the assessment process was to review the previous Feasibility Study and Options Assessment Report which concluded with the "Emerging Preferred Route" (EPR). Options for the Emerging Preferred Route were previously evaluated through a Multi-Criteria Assessment (MCA in accordance with the guidance outlined in the Government publication "Common Appraisal Framework for Transport Projects and Programmes" (March 2016). There were 5 criteria applied in the appraisal as follows:

Options for the Emerging Preferred Route were previously assessed in accordance with the guidance outlined in the Government publication "Common Appraisal Framework for Transport Projects and Programmes" (March 2016). There were 6 headline criteria applied in the appraisal as follows:

1. Economy
2. Safety
3. Integration
4. Accessibility & Social Inclusion
5. Physical Activity
6. Environment

Under each headline criterion, a set of sub-criteria were assessed as listed in Table 5.1.

Table 5.1: Assessment Criteria & Sub-Criteria

Assessment Criteria	Assessment Sub-Criteria
a) Economy	1.a. Capital Cost
	1.b. Transport Reliability and Quality (Bus Journey Time)
b) Integration	2.a. Land Use Integration
	2.b. Residential Population and Employment Catchments
	2.c. Transport Network Integration
	2.d. Cycle Network Integration
	2.e. Traffic Network Integration
c) Accessibility & Social Inclusion	3.a. Key Trip Attractors (Education/Health/Commercial/Employment)
	3.b. Deprived Geographic Areas
d) Safety	Road Safety, especially for Pedestrians & Cyclists
e) Physical Activity	Encouragement for people to walk and cycle
f) Environment	5.a. Archaeology and Cultural Heritage
	5.b. Architectural Heritage
	5.c. Flora & Fauna
	5.d. Soils and Geology

Assessment Criteria	Assessment Sub-Criteria
	5.e. Hydrology
	5.f. Landscape and Visual
	5.g Air Quality
	5.h. Noise & Vibration
	5.i. Land Use & the Built Environment

The criteria and sub-criteria proposed in this supplementary Multi-Criteria Assessment have been standardised for use across the 16 BusConnects corridors.

For each individual assessment sub-criterion considered, routes have been relatively compared against each other based on a five-point scale, ranging from having significant advantages to having significant disadvantages over other route options. For illustrative purposes, this five-point scale is colour coded as presented below with advantageous routes graded to 'dark green' and disadvantaged routes graded to 'dark red'.

Colour	Description
	Significant advantages over the other options
	Some advantages over other options
	Neutral compared to other options
	Some disadvantages over other options
	Significant disadvantages compared to other options

Options are compared under each sub-criterion before those sub-criteria are aggregated to give a summary score per criterion. These CAF criterion scores are then compared to establish the relative ranking of the options. The Multi-Criteria Assessment (MCA) methodology was applied to compare the refined route options and to select the Preferred Route Option in each case as described in the remainder of this chapter.

Review of Options Assessment & Potential Refinements

A number of locations along the EPR were identified where there was potential to revisit scheme proposals to address issues raised in the public consultation or identified through a review of additional information. For each area identified, additional options were developed and if considered feasible, were subject to a Multi-Criteria Assessment (MCA) in a similar manner to the previous EPR assessment process.

In addition to the new options considered, any alternative options previously considered within the Ballymun to City Centre Core Bus Corridor (CBC) Feasibility Study & Options Assessment Report which could potentially address the issues being encountered now, have been reconsidered once again. In addition, all new options were assessed against the EPR option.

This additional assessment does not supersede work undertaken during earlier stages but complements it and responds to issues raised by the public during the public consultation process or issues identified by additional information available to the Design Team.

5.3 Review of Core Bus Corridor Route Options Assessment

5.3.1 CBC Route Options in Section 1

The study area included in the Feasibility Study & Options Assessment Report, was generally developed to include the main trip generators between the City Centre and Ballymun either side of the central spine formed

by the existing roads of Phibsborough Road, Botanic Road, St, Mobhi Road and Ballymun Road. The study area is bounded to the east by Drumcondra Road and Swords Road, and to the west by the Finglas Road. It overlaps with the study areas for the adjoining Swords CBC2 and Finglas CBC4 on each side.

In the Stage 1 Assessment a "spider's web" of potential routes was identified within the study area that consisted of various road links that could be possibly be assembled in various configurations to form the core bus corridor. As is shown in Figure 5.1 below there are few coherent alternative radial routes to either side of the Ballymun Road in Section 1. The few available alternative routes to the west would be considerably less direct than the Ballymun Road. There is only one suitable coherent route in Section 1, which is along Ballymun Road.

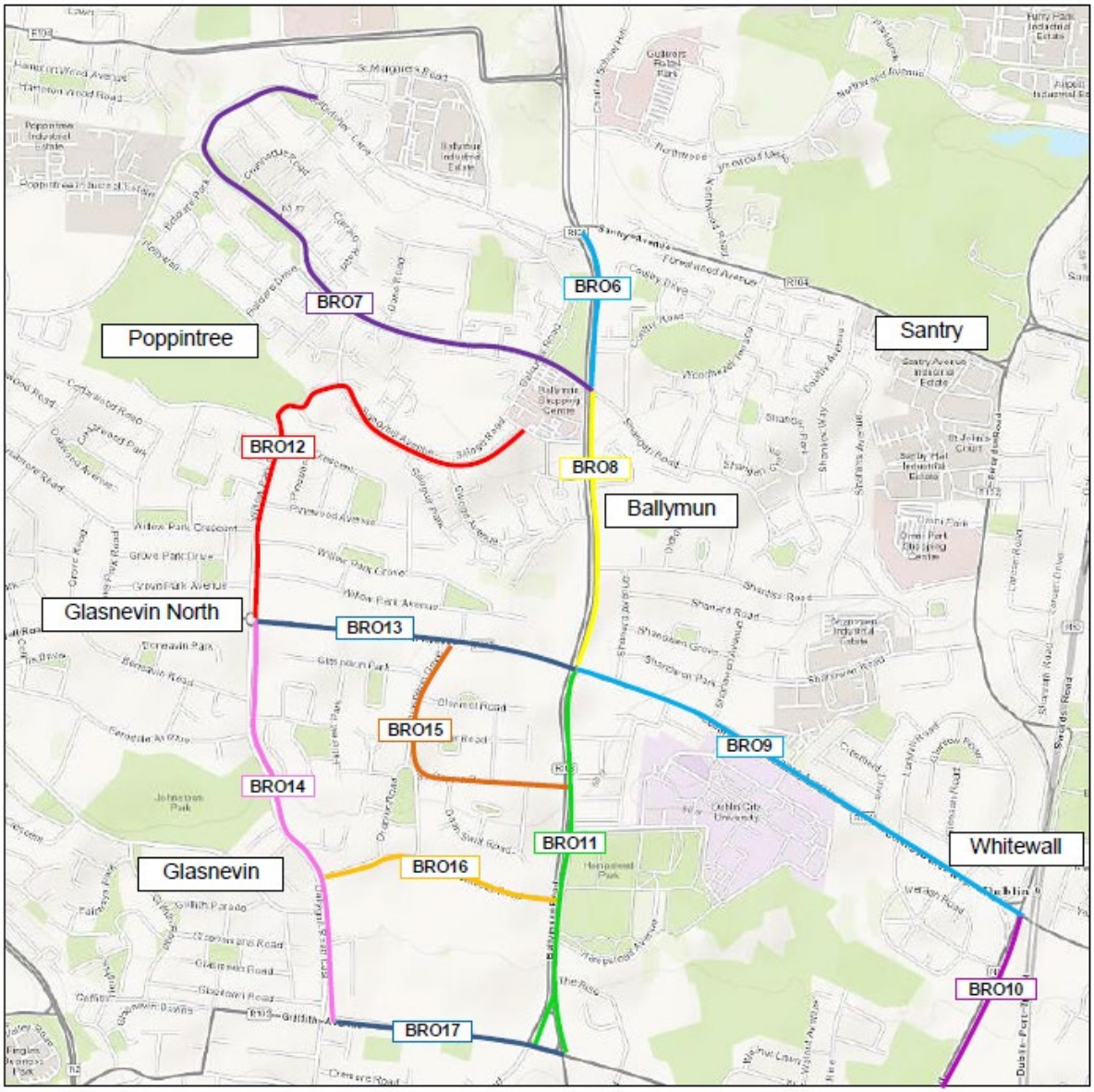


Figure 5.1: Potential CBC Links in Section 1

5.3.2 CBC Route Options in Section 2

In Section 2 though the Glasnevin area as shown in Figure 5.2 there are two existing routes that extend reasonably directly in a north-south direction: St. Mobhi Road and Ballymun Road (southern end) / Glasnevin Hill / Botanic Road, which then converge. To the west there is a large block of land occupied by the National Botanic Gardens and Glasnevin Cemetery south of the River Tolka which precludes any alternative routes on that side. Similarly, on the eastern side there is a network of narrow residential streets that extends to

Drumcondra, but there is no link southwards across the River Tolka. The river forms a major barrier for any alternative routes other than the two existing roads noted above. Similarly, at the crossings of the two railway lines and the Royal Canal in the northern part of Phibsborough, where there is only one route available along Prospect Road through Hart's Corner.

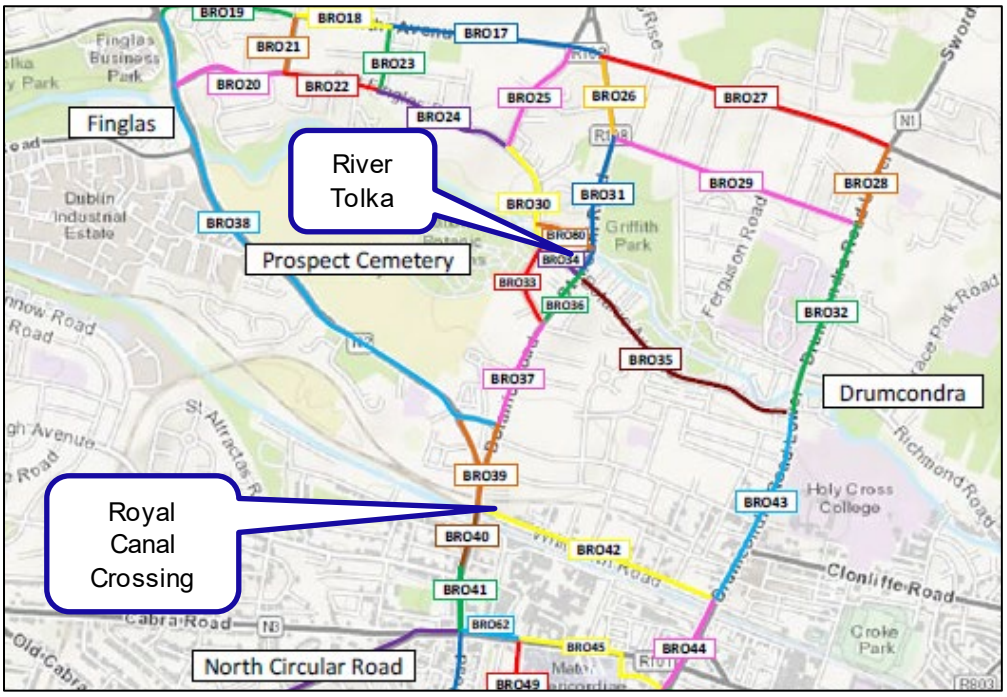


Figure 5.2: Potential CBC Links in Section 2

5.3.3 CBC Route Options in Section 3

In Section 3, approaching the city centre from Phibsborough, there are many available route options as may be seen in Figure 5.3, with 29 separate links.

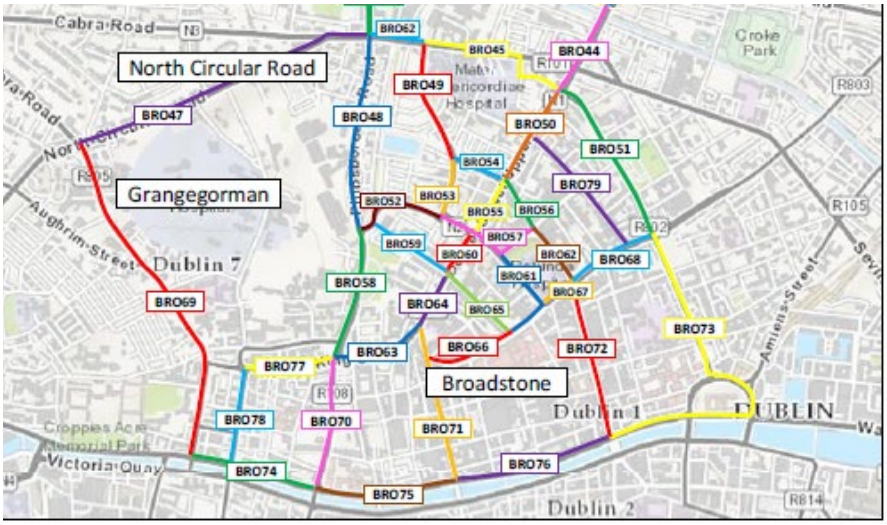


Figure 5.3: Potential CBC Links in Section 3

5.3.4 Combined CBC Route Options in Sections 2 & 3

A sifting process concluded by identifying 2 potential coherent routes in Sections 2 and 3 as shown in the Figure 5.4 below at the end of the Stage 1 assessment, which were then brought forward into the Stage 2 assessment as follows:

CC1 through Phibsborough, or

CC2 through Drumcondra, which would overlap with the Swords CBC.

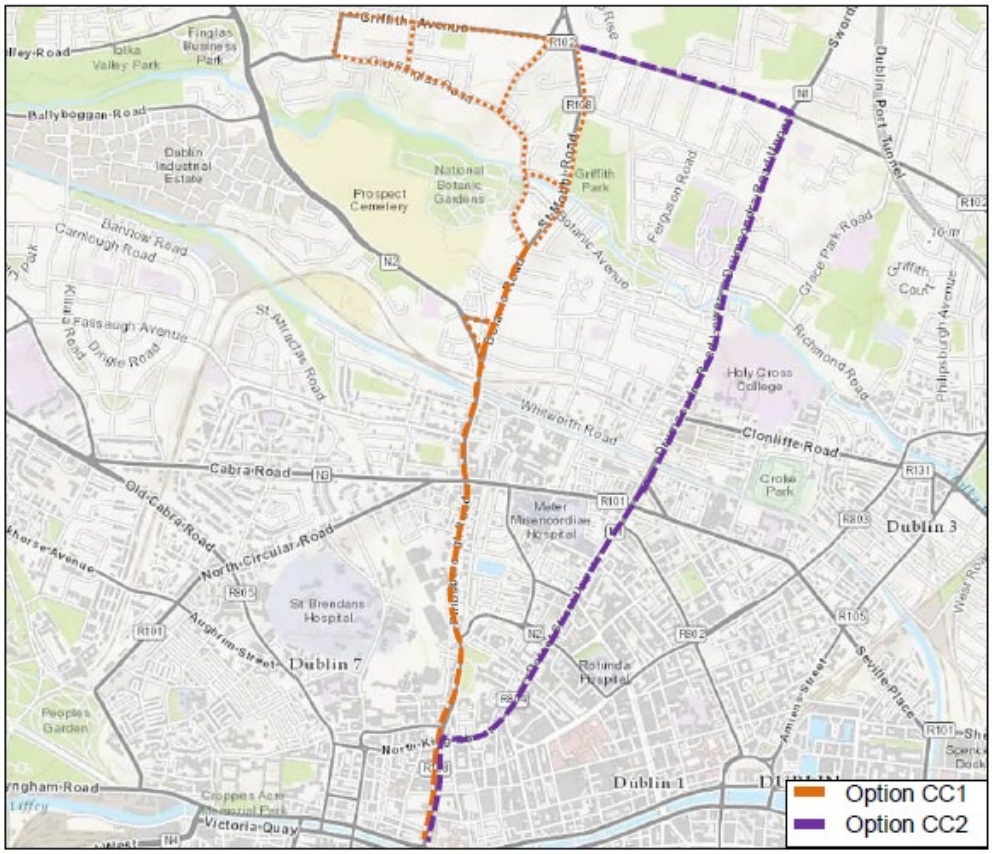


Figure 5.4 – Combined Route Options for Ballymun CBC in Sections 2 & 3

CC1 through Phibsborough was selected as the most appropriate corridor from Ballymun to the City Centre as it would provide a service to several communities along that route and could be combined with the Finglas to Phibsborough CBC.

5.3.5 Refined CBC Route Options in Section 2

For Option CC1, 3 sub-sections were identified for particular analysis at Glasnevin, Phibsborough and Church Street as shown in Figure 5.5.

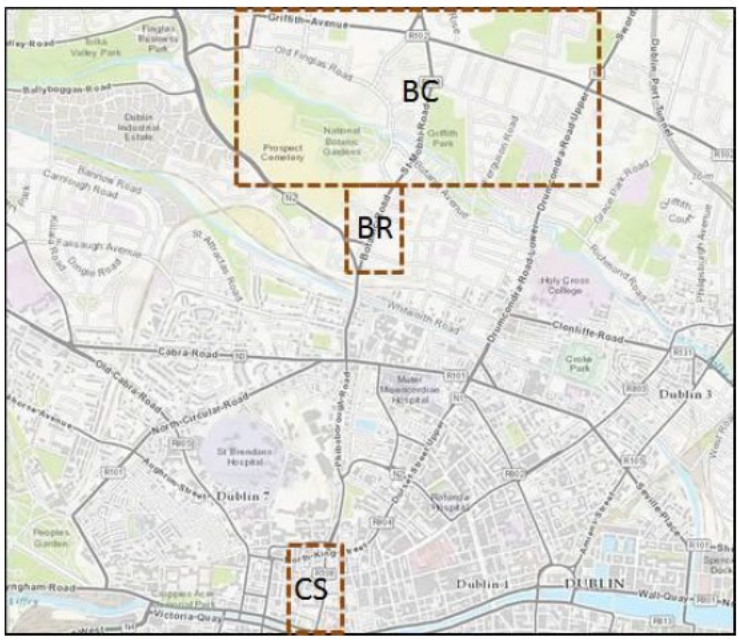


Figure 5.5 – Sub-Sections within Option CC1

5.3.6 Refined CBC Route Options in Sub-Section BC (Glasnevin)

For Sub-Section BC at Glasnevin a range of possibilities were assessed for the provision of bus lanes and cycle tracks along several roads as shown in Figure 5.6. These possibilities included divided routes by direction on parallel roads as well as potential widening for the provision of bus lanes.

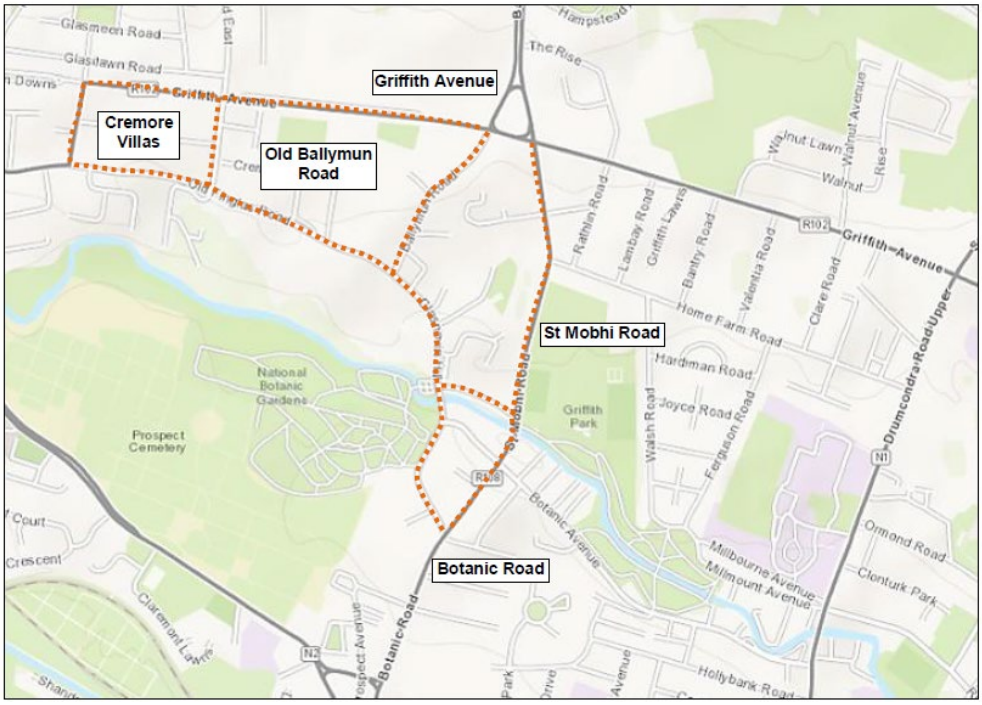


Figure 5.6 – Options in Sub-Section BC at Glasnevin

A total of 9 options were identified in Sub-Section BC. A selection of two options is shown below:

Option BC1 shown in Figure 5.7a and 5.7b considered a conventional arrangement along St. Mobhi Road with bus lanes and cycle tracks in both directions. This would entail removal of all of the existing mature trees along the road.

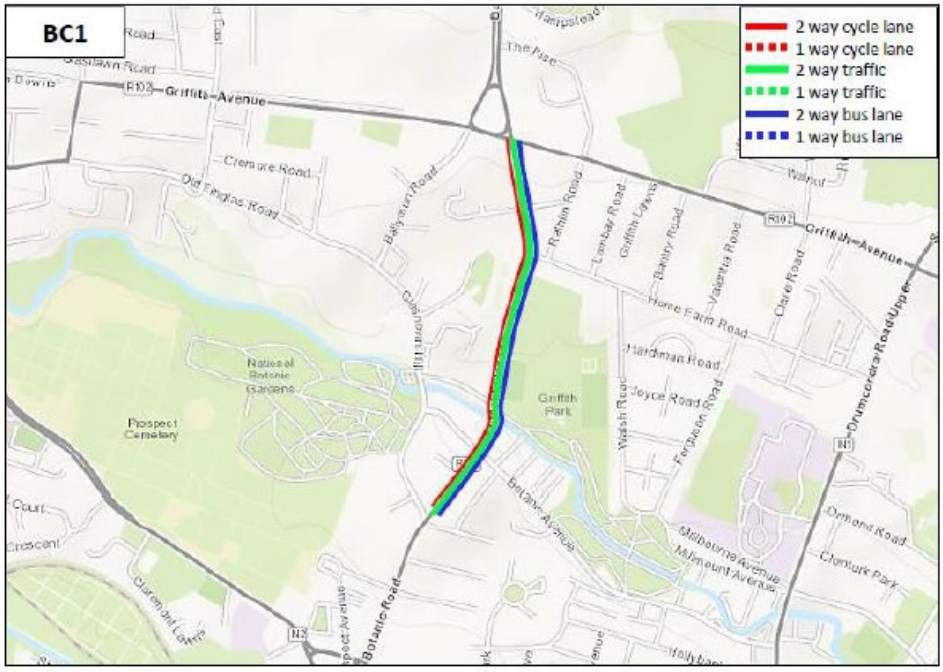


Figure 5.7a – Option BC1 in Sub-Section BC at Glasnevin

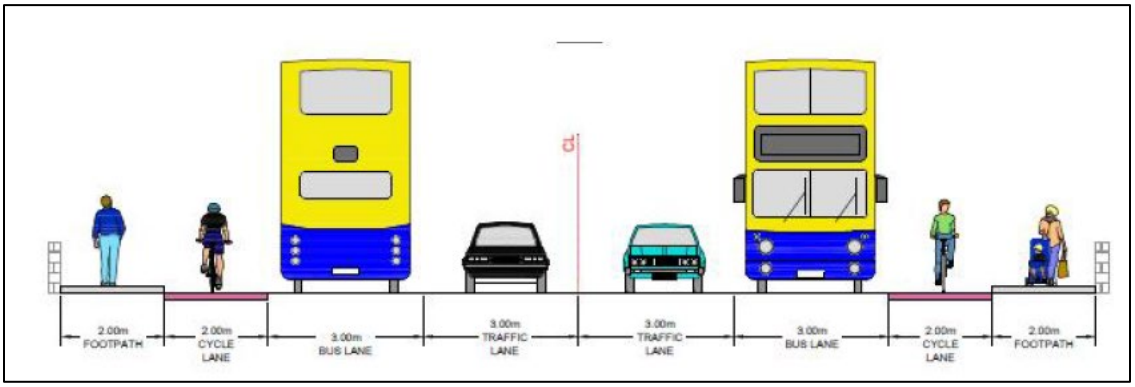


Figure 5.7b – Option BC1 in Sub-Section BC at Glasnevin

Option BC9 shown in Figure 5.8 considered a split arrangement with a northbound Bus Gate at the northern end of St. Mobhi Road and northbound traffic diverted to Glasnevin Hill / Ballymun Road. This would retain the existing 3-lane road layout and all of the existing mature trees along the road.

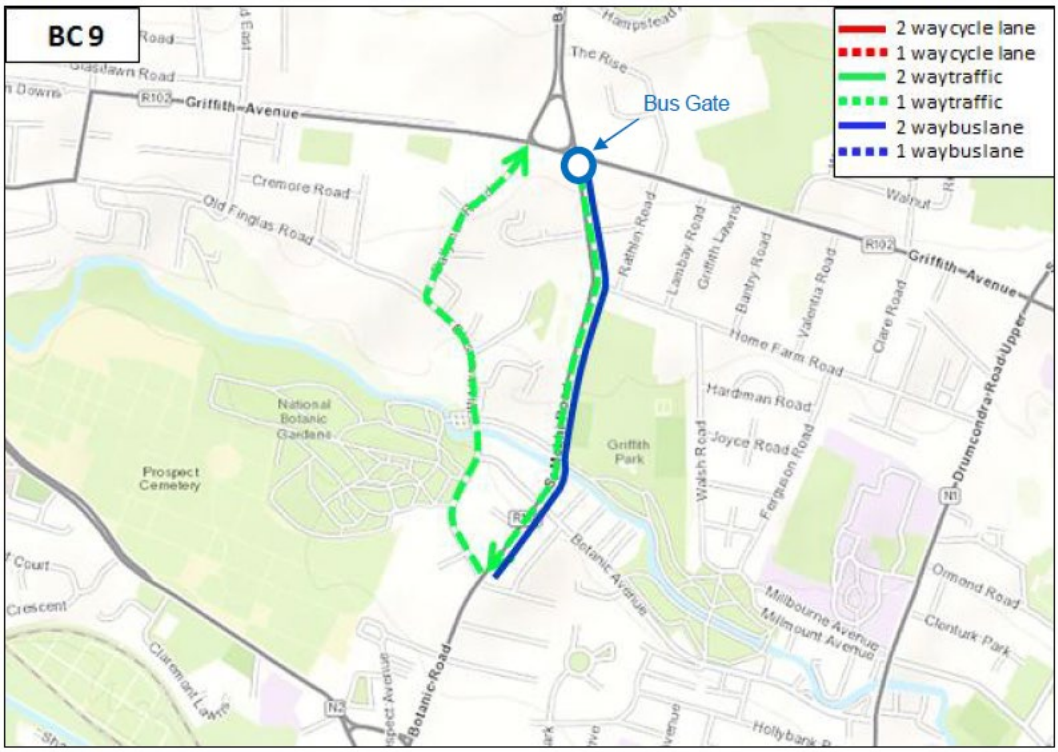


Figure 5.8 – Option BC9 in Sub-Section BC at Glasnevin

The other 7 options involve various permutations of arrangements and these can be seen in the Feasibility Study & Options Assessment Report in Appendix B.

The 9 options in Sub-Section BC were assessed using a Multi-Criteria Assessment (MCA) methodology to compare them and to select the emerging preferred route in the Feasibility Study & Options Assessment Report. That assessment ranked Options BC1 and BC9 as the two best options, with a slight preference for Option BC1 on the basis that it is a legible and conventional arrangement that retains movement in both directions by all modes of transport.

The Feasibility Study & Options Assessment Report concluded with the selection of Option BC1 which would widen St. Mobhi Road to provide bus lanes in both directions over a length of 1.1km. All of the existing mature street trees would be removed in this scenario, with a significant landscape and visual impact.

In July 2018 an additional report was completed titled "Feasibility Study and Options Assessment Report Addendum – Option St Mobhi Road" and this is available on the BusConnects.ie website as background information. This report introduced a further option BC10 that is a variant on the previous Option BC9 with cycling facilities along the CBC on St. Mobhi Road.

When the proposed CBC was published for Public Consultation No.1 in early 2019, it was decided to enable people to comment on the relative merits of the two highest ranked options BC1 and BC10, renamed as Options B and A respectively, and both were included.

5.3.7 Refined Route Options in Sub-Section BR (Botanic Road)

Botanic Road is particularly narrow and would require significant widening into small front gardens to accommodate the full cross-section required for BusConnects to provide bus lanes and cycle tracks in both directions. Five options were considered in this section as follows:

BR1: Bus lanes and cycle tracks in both directions with widening by 7m.

BR2: Bus lanes only and no cycle tracks in both directions with widening by 3m.

BR3: Southbound bus lane only and no widening.

BR4: Northbound bus lane only and no widening.

BR5: Retention of the existing road layout with cycle lanes and no bus lanes.

Option BR4 was selected for the Emerging Preferred Route following a multi-criteria assessment on the basis of providing reasonable and reliable bus priority within the constraints of this narrow street.

5.3.8 Refined Route Options in Sub-Section CS (Church Street)

For the Church Street section, road widening to accommodate the full cross-section required for BusConnects to provide bus lanes and cycle tracks in both directions would require extensive demolition of buildings including many houses which is not feasible. A range of 7 sub-options were considered for this section which included some diversion of traffic to other routes or omission of some elements such as cycle tracks. Following assessment, it was concluded that Option CS4 was preferred, which provides for bus lanes shared by cyclists in both directions over most of the length of Church Street and with short sections of cycle lane where there are gaps in the bus lanes.

5.3.9 The Emerging Preferred Route in Sections 2 & 3

The Feasibility Study & Options Assessment Report concluded with the Emerging Preferred Route Option in Sections 2 & 3 as shown in Figure 5.9 below.

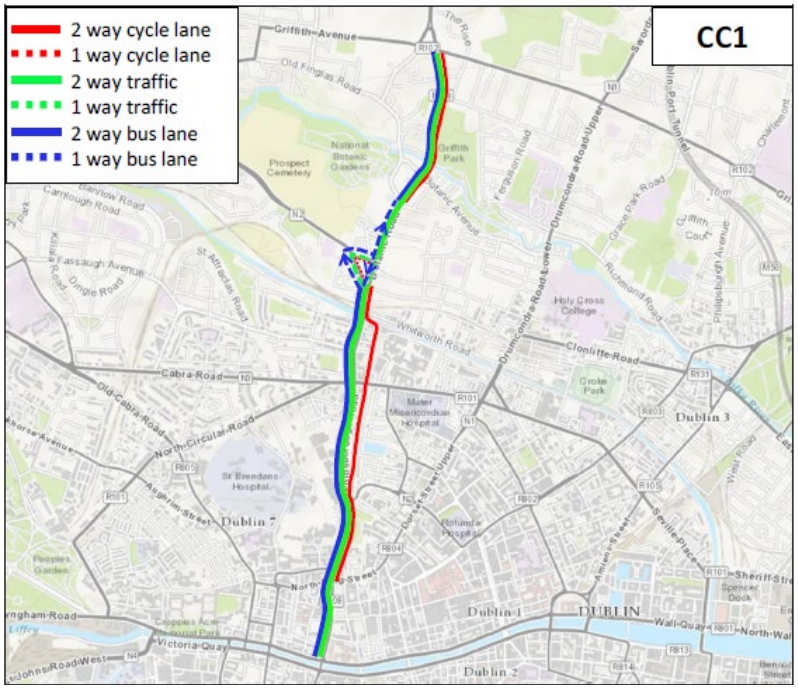


Figure 5.9 – Emerging Preferred Route in Sections 2 & 3

5.3.10 The Emerging Preferred Route

The full Emerging Preferred Route along Sections 1, 2 and 3 is shown in Figure 5.10 below.

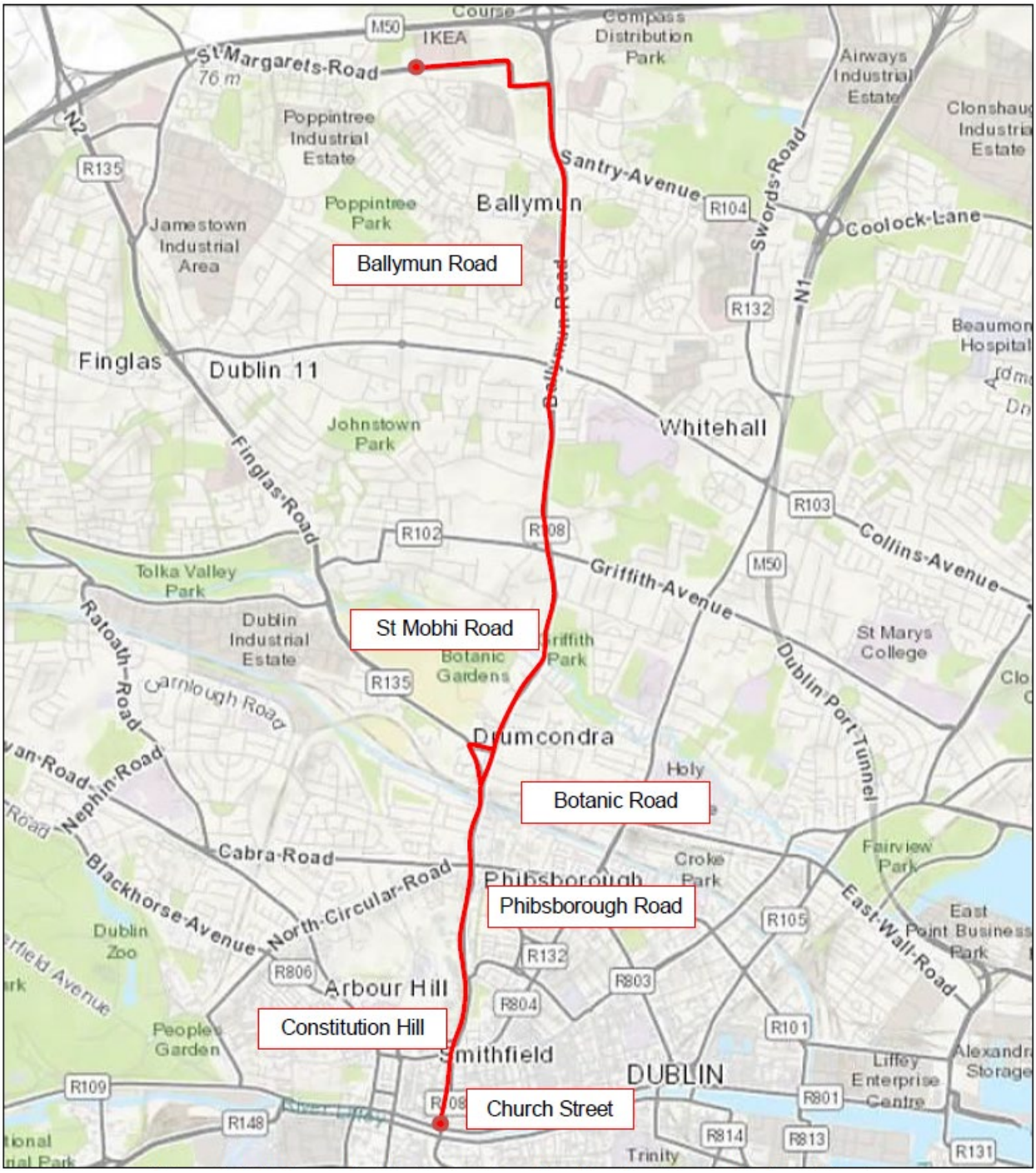


Figure 5.10 – Ballymun to City Centre CBC Emerging Preferred Route

5.4 Public Consultation No.1 for the Emerging Preferred Route

As described in Section 3 of this report, the Emerging Preferred Route Option was published for Public Consultation No.1 in early 2019 with an information booklet that provided detailed maps of the proposals, as shown in a selection of Figures below.

Public Consultation No.1 Information booklet

Two options were included for the Glasnevin section of the route between Griffith Avenue and Botanic Road as follows:

Option A: Traffic Management System with a Bus Gate at the northern end of St. Mobhi Road at the Griffith Avenue junction.

Option B: Bus Lanes in both directions on St. Mobhi Road.

The following map in Figure 5.11 was included to explain the way that local traffic access would operate in Option A, with sections of one-way traffic shown in red and limited local access in pink.

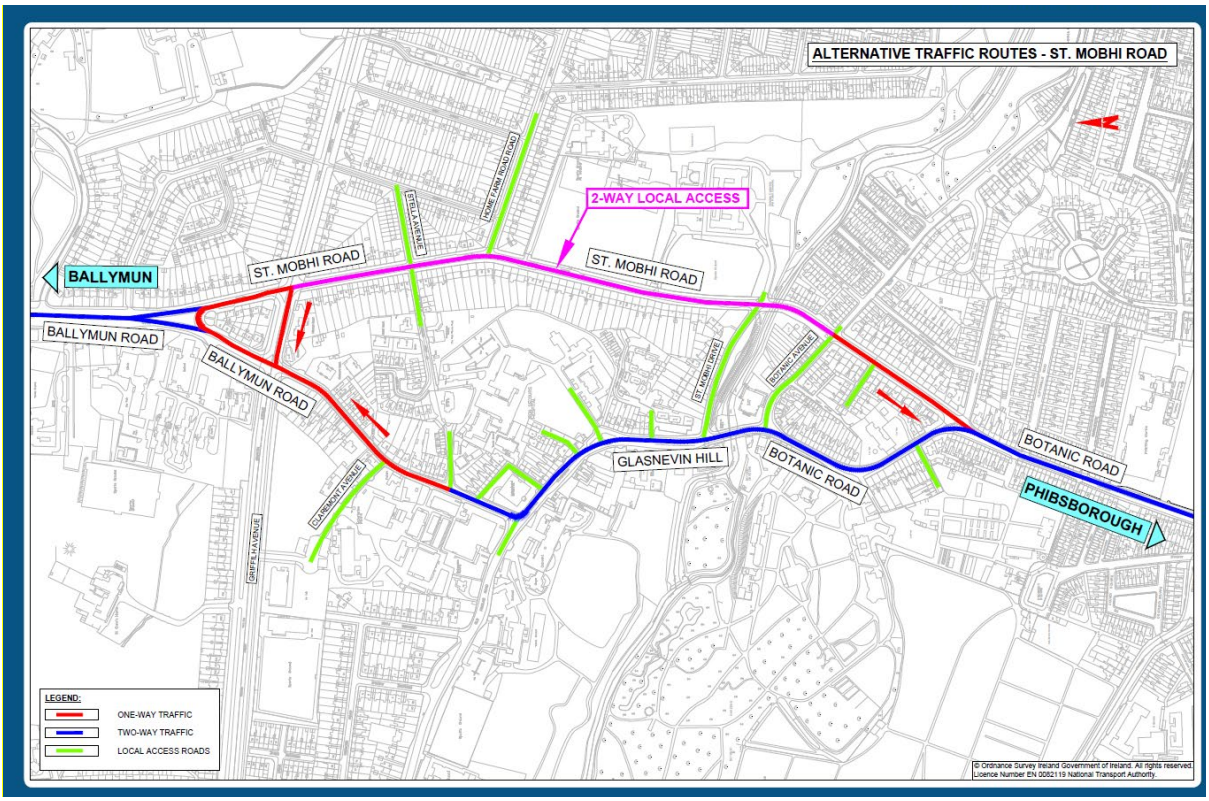


Figure 5.11 – Option A Traffic System at Glasnevin

The scale of response to Public Consultation No.1 was significant with 475 submissions received.

The previously prepared Feasibility Study and Options Assessment Report was available as background information in the public consultation.

Most submissions addressed specific aspects of the design proposals as published for the Emerging Preferred Route.

The issues that attracted the most numerous submissions were the following:

1) Concerns about the potential removal of mature trees, particularly on St. Mobhi Road.

2) A preference of most people for Option A at St. Mobhi Road which would retain most trees with a bus gate at the northern end.

3) Traffic access and diversions, including concerns about impacts at Ballymun Road between Glasnevin Hill and Griffith Avenue.

4) Desire for more continuous cycling facilities.

5) Requests for public realm enhancements in "village centres".

6) Loss of on-street car parking in certain places.

7) Integration with the proposed Metro.

5.5 Conclusion of Review for the Emerging Preferred Route

This Preferred Route Option Report confirms that Option A is the most suitable of the two short-listed options for the Emerging Preferred Route for the CBC No.3 from Ballymun to the City Centre.

From the extensive feedback received in Public Consultation No.1 it is evident that some aspects of the design proposals merit reconsideration and possible adaptation to address the concerns raised. Proposed refinements to the design proposals are outlined in the next Section 6 of this report.

5.6 Route Sections Identified for Review

Based on the public consultation submissions received and assessment of topographical survey subsequently undertaken, a number of areas were identified as requiring further review. These are summarised in the following sections.

5.6.1 Review of Section 1 – St. Margaret's Road to Griffith Avenue

The Emerging Preferred Route that was issued for public consultation in early 2019 did not include the 0.4 km long northern Sub-Section 1A from St. Margaret's Road to Santry Cross, although that section had been included in the Feasibility Study and Options Assessment Report. In the Preferred Route Option, the CBC has been extended to include the full length as originally assessed and now includes the northern section from St. Margaret's Road to Santry Cross.

There were no issues that required to be reassessed in this section of the CBC on foot of the public consultation feedback.

Opportunities were identified for improvements or modifications to the design proposals for the following sub-sections:

a) Sub-Section 1B: Ballymun Main Street between Shangan Road and Gateway Crescent.

b) Sub-Section 1C: Ballymun Road between Collins Avenue and St. Pappin Road.

c) Sub-Section 1D: The Griffith Avenue traffic gyratory system.

5.6.2 Review of Section 2 – Griffith Avenue to Phibsborough

The key issues that were reassessed for this section based on the concerns raised in Public Consultation No.1:

a) Most suitable Bus Priority provisions and the impact for street trees.

b) Traffic diversion route at Glasnevin.

c) Cycling facilities on Botanic Road.

5.6.3 Review of Section 3 – Phibsborough to Arran Quay

There was no need for a review of this section of the CBC on foot of the public consultation feedback.

An opportunity was identified for improvements or modifications to the design proposals for:

d) A quiet streets cycle route in the Markets Area from Constitution Hill to Ormond Quay.

6. Preferred Route Option Refinement

During 2019 and 2020 a full review was undertaken of the previous design proposals as published for the Emerging Preferred Route. This review was informed by additional technical information and the feedback received from Public Consultation No.1.

This section of the Preferred Route Option Report deals with the corridor in the central and southern sections as defined in Section 4.2 earlier:

Section 1 – St. Margaret's Road to Griffith Avenue: 3 km long (in pink on Figure 6.1).

Section 2 – Griffith Avenue to Phibsborough (Doyle's Corner): 2 km long (in blue on Figure 6.1).

Section 3 – Phibsborough (Doyle's Corner) to Arran Quay: 1.7 km long (in green on Figure 6.1).

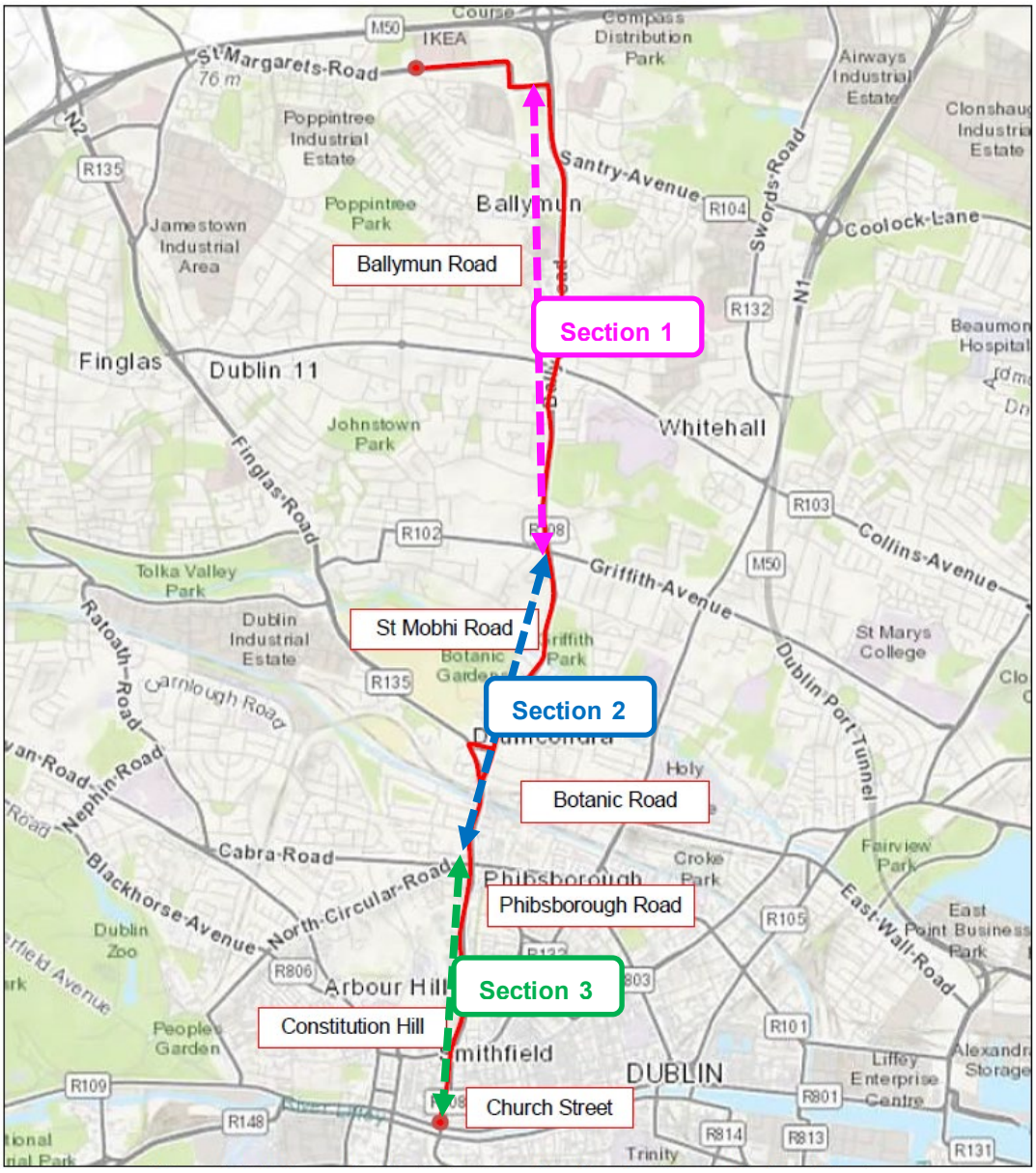


Figure 6.1: Route Sections for Review

6.1 Review of Section 1 – St. Margaret's Road to Griffith Avenue

Opportunities were identified for improvements or modifications to the design proposals for the following sub-sections:

a) Sub-Section 1B: Ballymun Main Street between Shangan Road and Gateway Crescent.

b) Sub-Section 1C: Ballymun Road between Collins Avenue and St. Pappin Road.

c) Sub-Section 1D: The Griffith Avenue traffic gyratory system.

6.1.1 Options in Sub-Section 1B - Ballymun Main Street between Shangan Road and Gateway Crescent

Along Ballymun Main Street there is a cluster of frontage activity that generate requirements for parking and loading. Part-time pay and display parking is permitted on the western side, with 17 spaces (including 2 wheelchair spaces at the northern end). The accommodation of the parking is at the expense of limitations for the public transport and cycling facilities on this section. Since it is a key objective of BusConnects to provide continuous full-time bus lanes and cycle tracks along the corridors, this is not compatible with the retention of part-time parking arrangements. In addition, current unregulated parking activity on the western side of the street causes blockage to the bus lane and cycle track.

Figure 6.2 - Frontage and Parking on Ballymun Main Street East

Figure 6.3 - Ballymun Main Street West

A key objective of the Ballymun Regeneration project over the past 3 decades has been to develop a "vibrant" main street at the heart of the town centre. There is a good range of commercial and civic activity focused along the main street.

The current BusConnects proposals to provide full-time bus lanes and cycle tracks through Ballymun Main Street would entail removal of the existing 17 pay and display parking spaces on the eastern side of the street, and restriction of informal parking at other times on the western side of the street

A limited supply of alternative public on-street car parking in Ballymun town centre is available within 100m of Main Street with 65 spaces in total. Removal of the parking on Main Street would reduce the available supply by 26%. It would be desirable to retain the existing on-street parking along Ballymun Main Street, and to increase the number of spaces and the hours of operation to support, and possibly enhance, the continued vibrancy of the town centre.

Potential for Retention and Increase of Parking in Ballymun Town Centre

The existing 2-lane dual carriageway road provides more traffic capacity than is necessary to meet the existing traffic demand. It would be feasible to reduce the layout of Ballymun Road from 2 traffic lanes to 1 lane per direction over the 250m length in the town centre between the Shangan Road and Gateway Crescent junctions.

If Ballymun Road were narrowed to a single lane per direction, this could enable full-time parking bays to be provided on both sides of the street where appropriate, without disrupting the bus lane and cycle track as shown in the cross-section below (taken from the BusConnects Preliminary Design Guidance Booklet). Thus, there can be additional on-street car parking provided along Ballymun Main Street to enhance the commercial and civic strength of the street in conjunction with the significant improvements that BusConnects will provide for public transport and cycling. Additional street trees can also be provided along the edges of the street between pairs of parking spaces to provide a significant visual enhancement to the urban landscape.

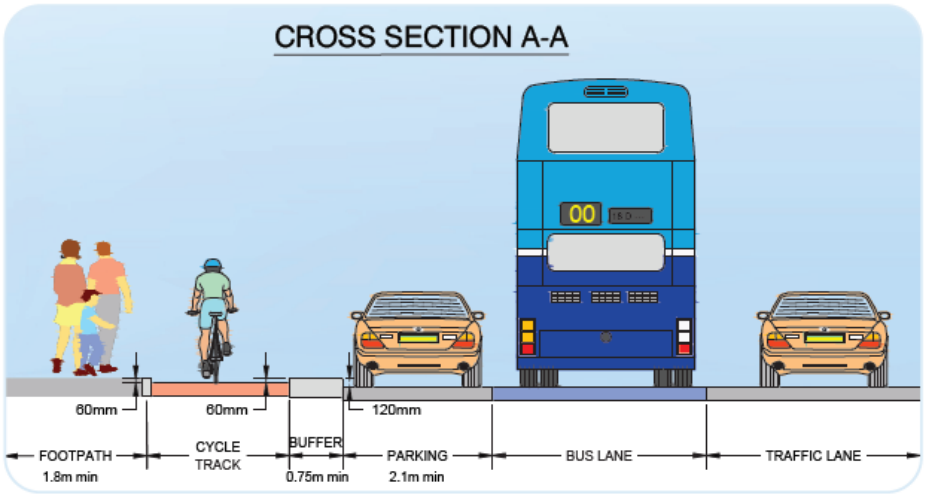


Figure 6.4 – Street Cross-Section with Parking between Bus Lane and Cycle Track

In Table 6.1.1 following, the alternative option for Ballymun Main Street with the road narrowed to facilitate parking and improved public realm is assessed.

Table 6.1.1 – Evaluation of Options for Sub-Section 1B

Ballymun Main Street between Shangan Road and Gateway Crescent

Option	Option A 2 Traffic Lanes	Option B 1 Traffic Lane + Parking
Economy		
Capital Cost	Lower cost	Higher Cost
Journey Time Reliability (Bus)	Part-time Bus Lane or risk of illegal parking	Better Bus Priority
Integration		
Integration with Land-Use policy	Less support for commercial activity	More support for commercial activity
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Equal	Equal
Cycle Network	Risk of blockage	Clear segregation
Other Vehicular Traffic Network	More capacity	Less capacity
Accessibility & Social Inclusion		
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas	Equal	Equal
Safety	Equal	Equal
Physical Activity	Equal	Equal
Environment		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	No change	More street trees
Air & Noise	Equal	Equal
Land Use and the Built Environment	No change	Improved public realm
Preference		**Preferred**

6.1.2 Options in Sub-Section 1C - Ballymun Road from Collins Avenue to St. Pappin Road

South of Collins Avenue junction there is parking and stopping activity at various times on the western side of the road associated with Our Lady of Victories National School on the western side, across the road from the church of the same name. There is no vehicular drop-off zone at the school which gives rise to disorganised on-street parking at school collection times, shown as a dashed yellow line on the aerial photograph below. This blocks the northbound cycle lane over a length of 200m or so, as well as partially encroaching into the bus lane as shown in the following photographs.

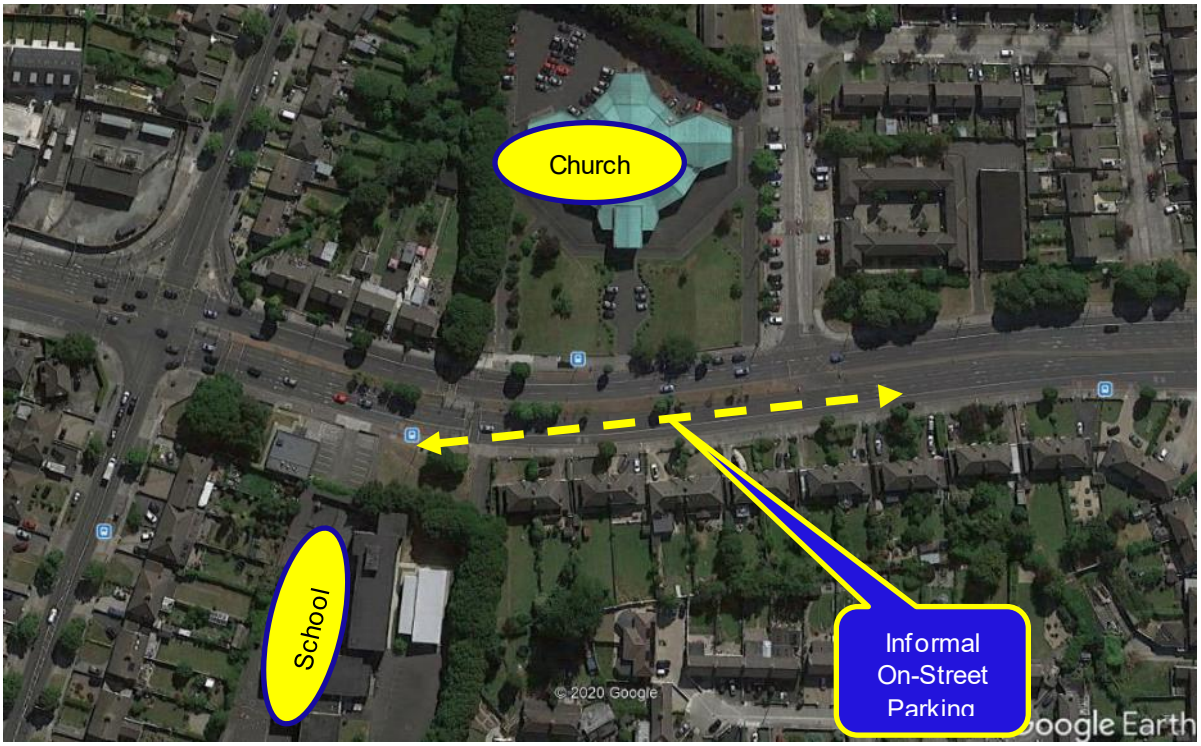


Figure 6.5 - Ballymun Road South of Collins Avenue

There is potential to provide formalised on-street car parking along this section of Ballymun Road if the number of traffic lanes were reduced from 2 to 1 in the northbound direction. This would protect the proposed cycle track and the bus lane from being impeded by parking, and it would resolve current difficulties at the primary school during collection times.

The traffic context in this section is very similar to the previous Section 1B further north and the removal of one of the two northbound traffic lanes on Ballymun Road over a length of 200m north of Saint Pappin Road should not give rise to congestion. The second traffic lane would be retained north of the primary school for the final 100m approach to the junction at Collins Avenue.

The advantages of this refined road layout option are similar to those assessed for the similar proposal in Section 1B further north and a further multi-criteria assessment is therefore not repeated here for this section.

Conclusion: The Draft Preferred Route Option will provide for on-street parking over a length of 200m on the western side of Ballymun Road between Saint Pappin Road and Our Lady of Victories National School. The road layout will be reduced from two northbound traffic lanes to one lane in this section.

Figure 6.6 – Ballymun Road at Our Lady of Victories National School

Figure 6.7 - On-Street Parking on Ballymun Road associated with Our Lady of Victories National School

6.1.3 Options in Sub-Section 1D - Griffith Avenue Traffic Gyratory System

The Draft Preferred Route Option design published in March 2020 proposed on the St. Mobhi Road southbound approach to the junction with Griffith Avenue a 3-lane one-way road layout with a bus lane, a separate left-turn lane and a shared straight and right-turn lane as shown in Figure 6.8.

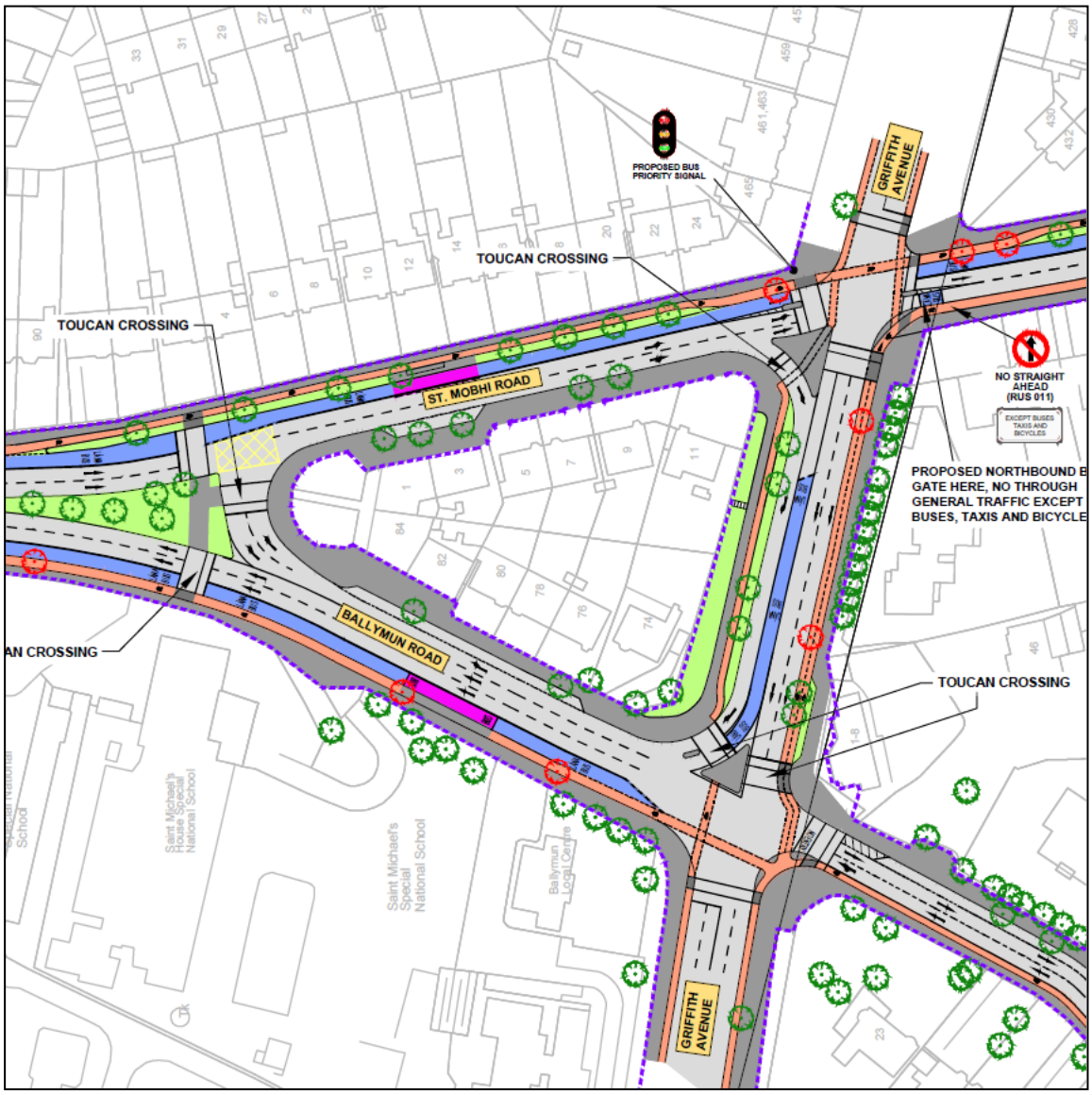


Figure 6.8 – Draft PRO Road Layout at St. Mobhi Road / Griffith Avenue Junction

The left-turn flow is quite high at this location because of the gyratory system that directs eastbound traffic from Griffith Avenue West around the one-way system to share with traffic from Ballymun Road along the 100m length of St. Mobhi Road. An evaluation of the traffic demands at this location indicated that the removal of one of the three existing traffic lanes would be problematic and would overload the remaining two traffic lanes. It is clear therefore that allocation of one of the 3 existing traffic lanes on this link to become a bus lane will require a reduction in the general traffic flows to match the reduced capacity of the two remaining traffic lanes. This can be achieved by removing the left-turn lane entirely and reversing the one-way system partially to divert the southbound to east traffic from the Ballymun Road around the western and southern sides of the triangle to be joined by traffic from the west enabled to continue directly eastward along the southern arm. Thus, the left-turn conflict at Griffith Avenue would be removed entirely for the benefit of buses, cyclists and pedestrians. The proposed revised traffic layout is shown in Figure 6.9 below.

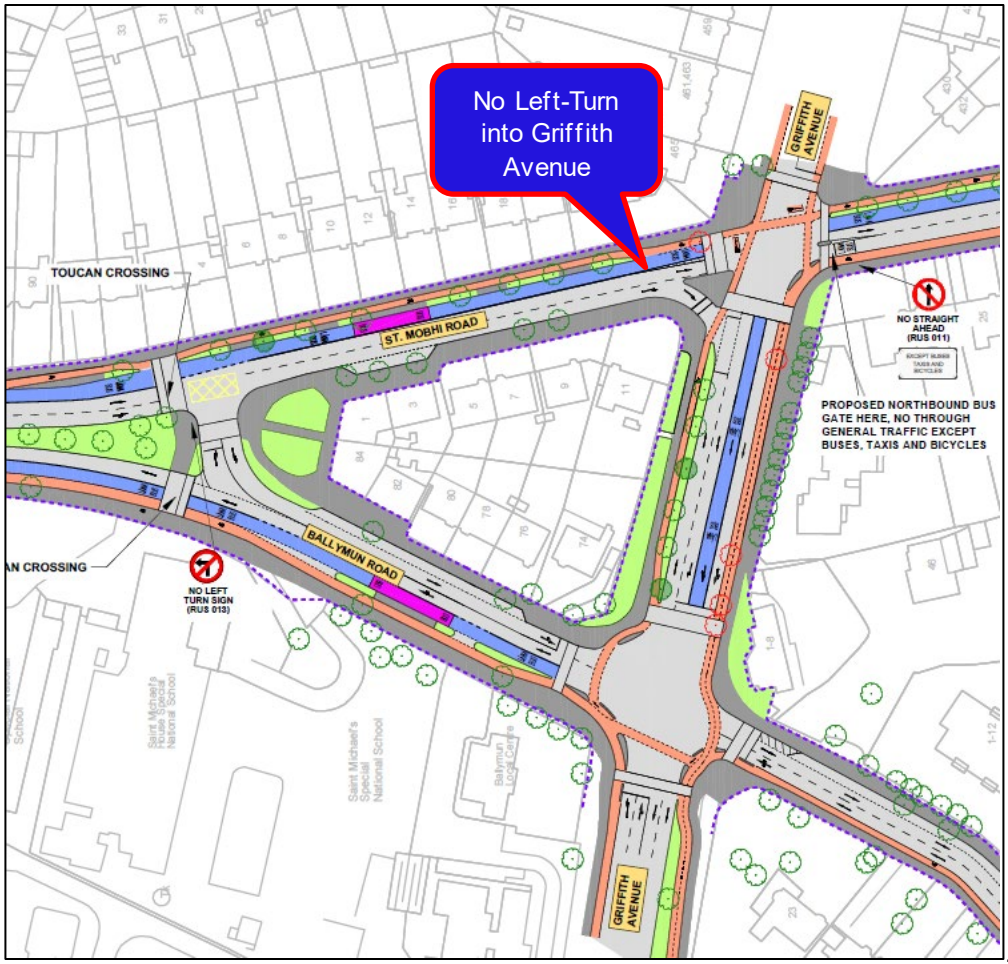


Figure 6.9 – Revised PRO Road Layout at St. Mobhi Road / Griffith Avenue Junction

A multi-criteria assessment for the two options at the junctions of Ballymun Road and St. Mobhi Road with Griffith Avenue is presented in Table 6.1.2 following.

Table 6.1.2 – Evaluation of Options for Sub-Section 1D

Griffith Avenue Traffic Gyratory System

Option	Option A Existing Traffic System + Bus Lane	Option B Southbound Left-Turn Diverted
Economy		
Capital Cost	Equal	Equal
Journey Time Reliability (Bus)	Less signal time	More signal time
Integration		
Integration with Land-Use policy	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Left-turn traffic conflict	No Left-turn traffic conflict
Cycle Network	Left-turn traffic conflict	No Left-turn traffic conflict
Other Vehicular Traffic Network	More delay and congestion	Less delay and congestion
Accessibility & Social Inclusion	Equal	Equal
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas		
Safety	Left-turn traffic conflict	No Left-turn traffic conflict
Physical Activity	Equal	Equal
Environment		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	Equal	Equal
Air & Noise	Equal	Equal
Land Use and the Built Environment	Equal	Equal
Preference		**Preferred**

Conclusion: The revised Draft Preferred Route Option will provide a reorganised traffic system at the Griffith Avenue gyratory as follows:

1) Ballymun Road southbound at St. Mobhi Road junction:
    - Left lane for straight ahead traffic
    - Right lane for traffic towards Griffith Avenue eastbound to continue in contra-flow direction along western side of the gyratory traffic system.

2) St. Mobhi Road southbound to Griffith Avenue junction:
    - Bus lane on left (eastern side)
    - No left-turn traffic to Griffith Avenue eastbound.
    - Centre lane for straight ahead traffic
    - Right lane for right-turn traffic towards Griffith Avenue westbound.

3) Ballymun Road North to Griffith Avenue junction:
    - One traffic lane reversed to southbound on eastern side, for left-turn only at junction.
    - 1 northbound traffic lane instead of 2.
    - Short northbound right-turn lane towards St. Mobhi Road for local access.
    - Northbound bus lane.
    - Northbound cycle track.

4) Griffith Avenue Link between Ballymun Road and St. Mobhi Road:
    - 4 existing westbound traffic lanes.
    - Reduce to 2 westbound traffic lanes – one for straight ahead and one for right-turn with bus lane in the middle.
    - New eastbound traffic lane.

6.2 Review of Section 2 - Griffith Avenue to Phibsborough

Two key issues were reassessed for this section based on the concerns raised in Public Consultation No.1:

a) Most suitable Bus Priority provisions and the impact for street trees.

b) Traffic diversion route at Glasnevin.

c) Cycling facilities on Botanic Road.

6.2.1 Bus Priority Options in Section 2 from Griffith Avenue to Phibsborough

In the Emerging Preferred Route there were 2 potential options for bus priority and associated traffic management provided for public comment:

Option A: Bus Priority along St. Mobhi Road and northbound through traffic diverted to Ballymun Road parallel to the west.

Option B: Widening along St. Mobhi Road to provide additional bus lanes.

Figure 6.1 – Bus Facility Options in Section 2

The submissions received in the public consultation process were almost all in favour of Option A where any preference was expressed. There were no objections to the proposal to route through traffic along Ballymun Road instead of St. Mobhi Road. Some submissions sought clarity about the extent and timing of bus priority restrictions on St. Mobhi Road to minimise local access limitations. This issue can be considered in further

assessment of the traffic system adjustments that are necessary to ensure appropriate bus priority at peak times. For example, the bus priority measures at each end of St. Mobhi Road could apply only at the evening peak period (16:00 to 19:00) from Monday to Friday. It would generally assist bus operations if northbound through traffic were directed along the Ballymun Road route rather than the St. Mobhi route through the configuration of the Botanic Road / St. Mobhi Road junction to make the through route follow Botanic Road, and require a right-turn to enter St. Mobhi Road.

Table 6.2.1 – Evaluation of Options for Bus Facilities in Section 2 Griffith Avenue to Phibsborough

Option	Option A Bus Gate at Northern end of St. Mobhi Road	Option B Widen St. Mobhi Road for 2 Bus Lanes
Economy		
Capital Cost	Lower Cost	Higher cost
Journey Time Reliability (Bus)	Equal	Equal
Integration		
Integration with Land-Use policy	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Equal	Equal
Cycle Network	Equal	Equal
Other Vehicular Traffic Network	Local Access Diversions. Through Traffic Diversion	No traffic diversions
Accessibility & Social Inclusion		
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas	Equal	Equal
Safety	Equal	Equal
Physical Activity	Equal	Equal
Environment		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	Most street trees retained	All street trees removed
Air & Noise	Equal	Equal
Land Use and the Built Environment	Equal	Equal
Preference	**Preferred**	**Not Preferred**

Conclusions and Preferred Route Option in Section 2 from Griffith Avenue to Phibsborough

Following this review of the Emerging Preferred Route proposals, the Preferred Route Option is Option A as illustrated in Figure 6.2 below. No road widening is required at St. Mobhi Road with a northbound bus gate and through traffic will be diverted to other roads.

Figure 6.2 – Preferred Route Option at St. Mobhi Road in Section 2

A complementary Traffic Management Plan is illustrated in Figure 6.3 below.

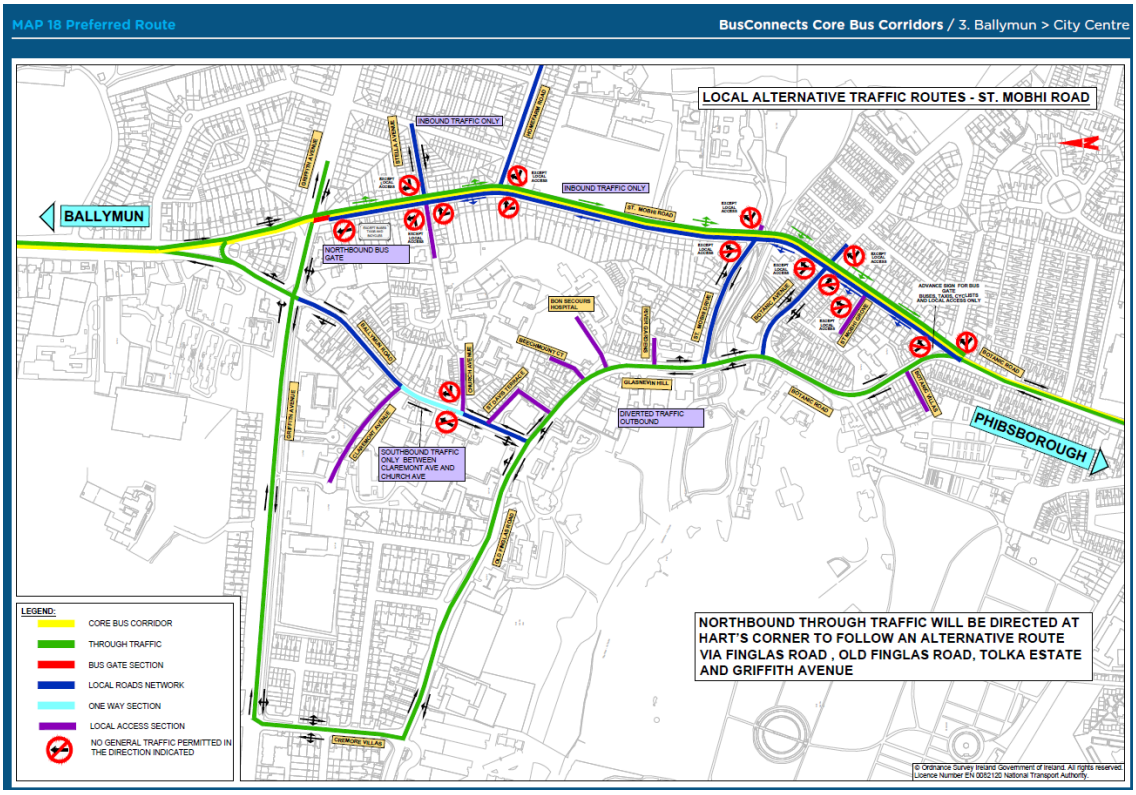


Figure 6.3 – Traffic Management Plan for Preferred Route Option in Section 2

In summary the traffic management proposals are as follows:

a) The proposed bus gate at the northern end of St. Mobhi Road will restrict northbound traffic along St. Mobhi Road to local access only.
b) Northbound through traffic will be diverted to parallel routes to the west at two locations as follows:
    - Southern diversion point for regional traffic at Hart's Corner onto Finglas Road as shown in Figure 6.4.
    - Northern diversion point for local traffic at the Botanic Road junction with St. Mobhi Road as shown in Figure 6.5.

For traffic diverted along Botanic Road the most direct alternative route would follow Glasnevin Hill and then turn right at the Met Éireann office onto Ballymun Road linking to Griffith Avenue. There is a very narrow section of Ballymun Road between Church Avenue and Claremont Avenue over a length of 80m. The houses on the eastern side of this street do not have driveways, and residents park on the street, which restricts the road width and impedes two-way traffic movements. As the existing traffic volumes on this section of Ballymun Road are quite low, the impedance to two-way movements does not give rise to significant problems. For northbound through traffic that will be diverted from St. Mobhi Road, it would be preferable to direct this traffic to a wider and more suitable alternative route and not along Ballymun Road between Glasnevin Hill and Griffith Avenue. As shown in Figure 6.5 Cremore Villas, 500m further west, is a more suitable alternative route for diverted traffic, and the proposed diversion will use that road instead of Ballymun Road. To complement the diversion route it is proposed that Ballymun Road would be restricted to one-way southbound between Claremont Avenue and Church Avenue.

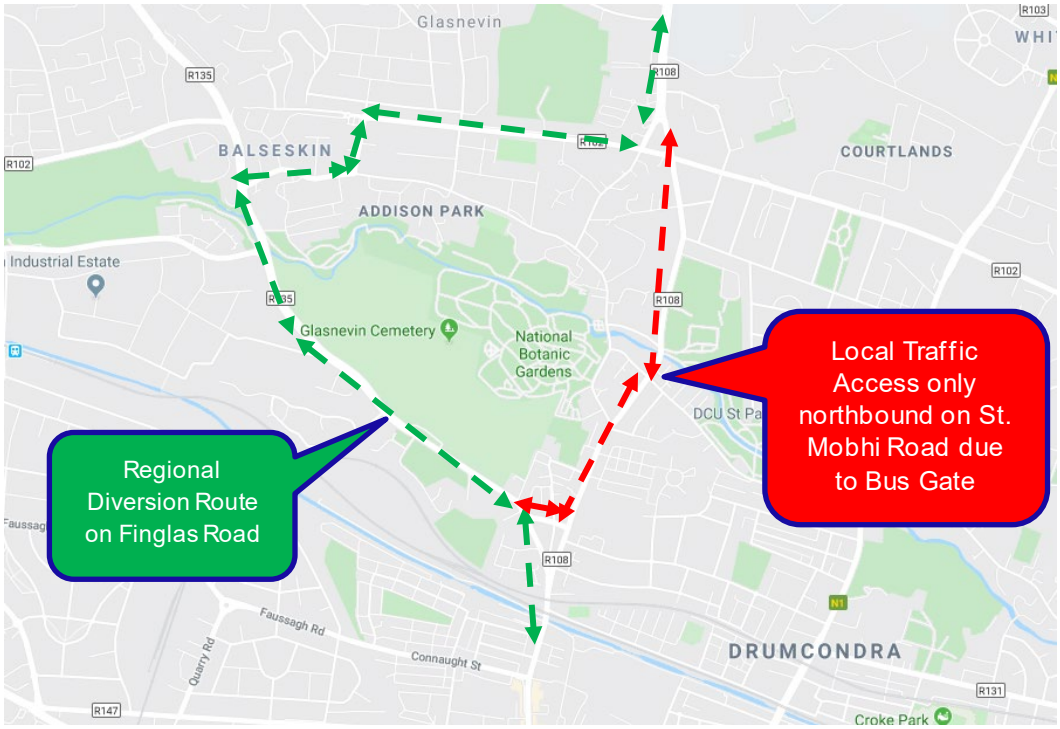


Figure 6.4 – Traffic Diversion to Regional Roads at Ballymun & Finglas Corridors
Alternative Regional Route when St. Mobhi Road is restricted to Bus Only northbound

The traffic route lengths from Hart's Corner to the junction of Griffith Avenue & Ballymun Road are as follows:

- Direct route length via St. Mobhi Road 1.8 km
- Regional Diversion via Finglas Road: 3.3 km (+1.5 km)
- Local diversion via Glasnevin Hill / Cremore Villas: 2.8 km (+1.0 km)

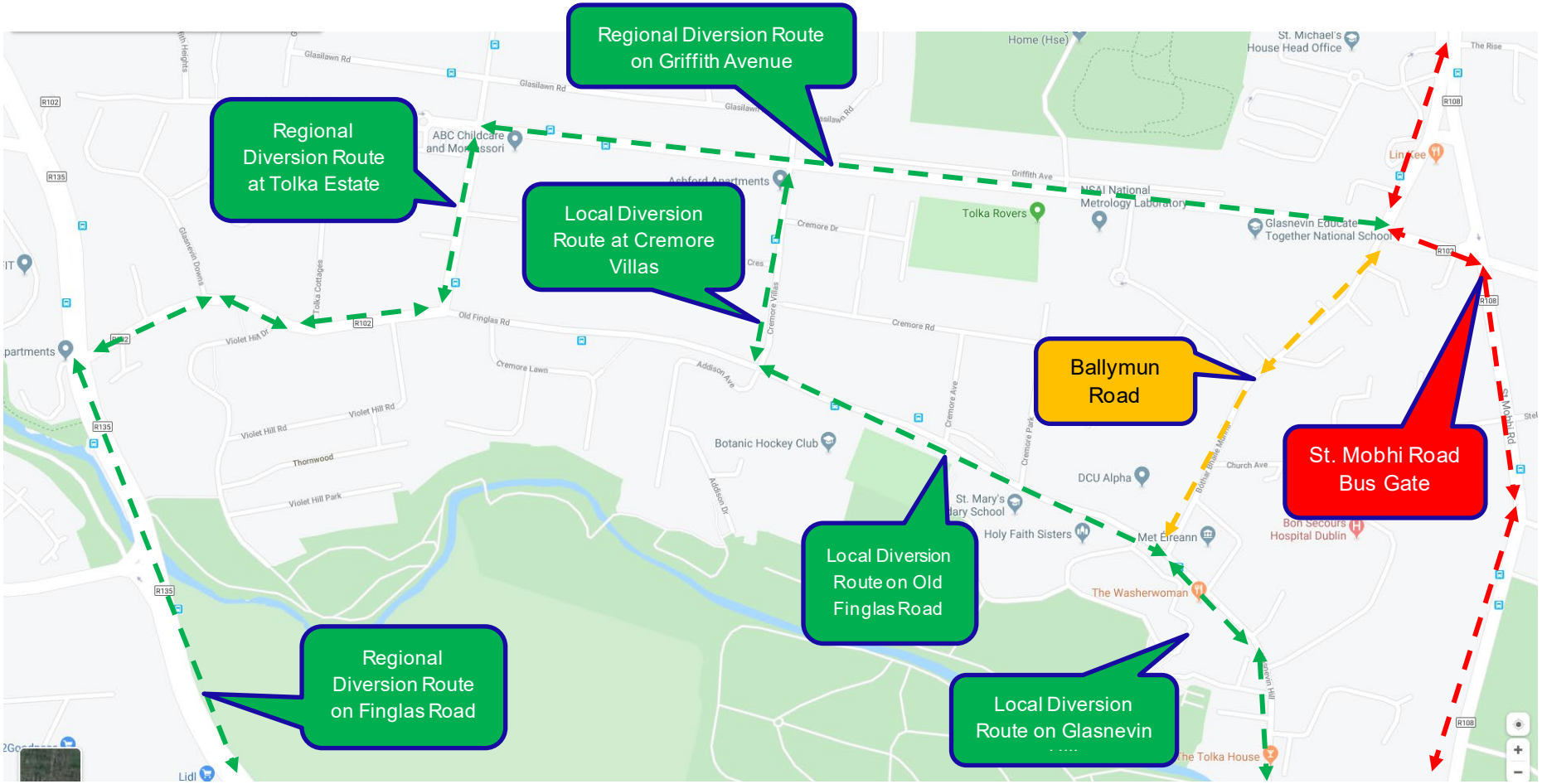


Figure 6.5 - Regional & Local Traffic Diversion Routes towards Ballymun at Glasnevin

6.2.2 Road Layout Options in Sub-Sections of Section 2 from Griffith Avenue to Botanic Road

This 2.1 km long section is quite complex with variations in the existing road width and layout and different constraints along 7 discrete sub-sections as shown in Figure 6.7 and as follows:

2A. St. Mobhi Road from Griffith Avenue to the River Tolka Bridge (700m)
2B. St. Mobhi Road from River Tolka Bridge to Botanic Avenue (100m)
2C. St. Mobhi Road from Botanic Avenue to Botanic Road (200m)
2D. Botanic Road from St. Mobhi Road to Prospect Way (400m)
2E. Prospect Road from Prospect Way to Whitworth Road (300m)
2F. Phibsborough Road from Whitworth Road to North Circular Road at Doyle's Corner (400m)

Each subsection is considered separately in the following review and discussion of potential options for consideration.

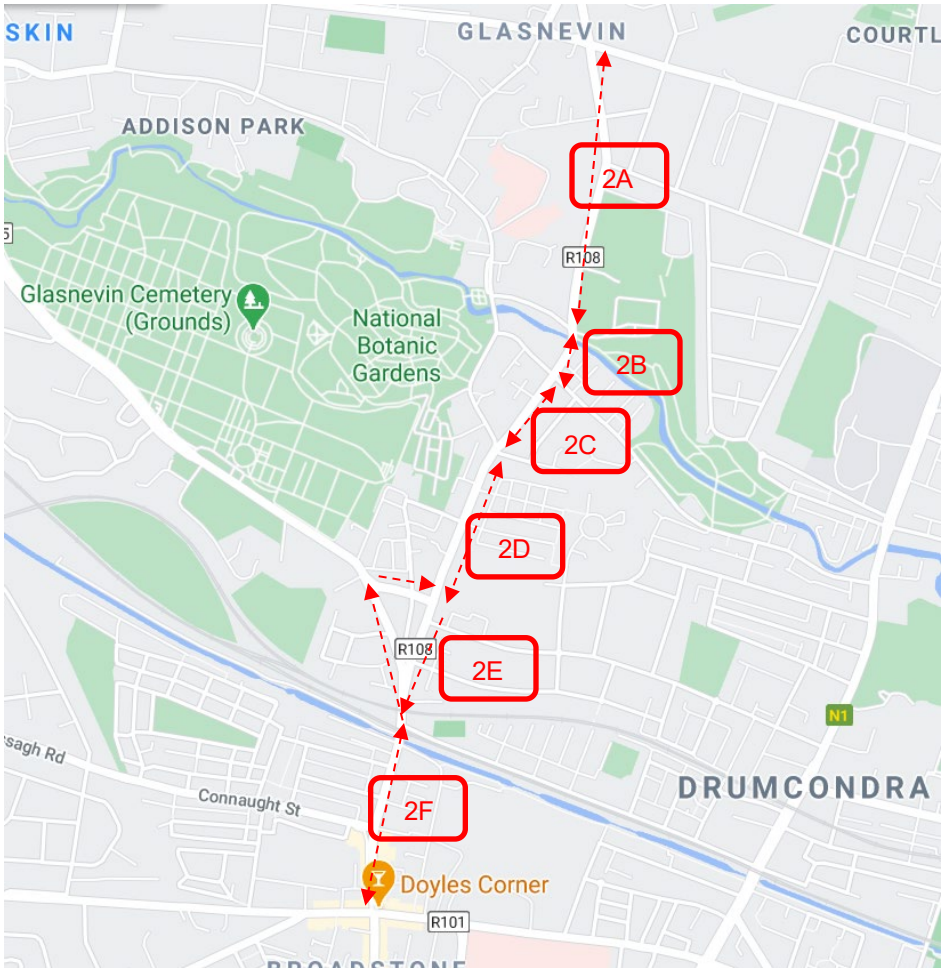


Figure 6.7 – Sub-Sections in Section 2

There may be some scope to further refine the design in each of the 4 sub-sections to address specific issues raised in the public consultations as described next. This review has also examined the previous design proposals in detail based on a topographical survey and technical assessment which has also suggested some potential further improvements to the design in certain places.

6.2.3 Sub-Section 2A Griffith Avenue to the River Tolka Bridge (700m)

No further layout options were identified for assessment in this Preferred Route Option Report.

6.2.4 Sub-Section 2B St. Mobhi Road - River Tolka Bridge to Botanic Avenue (100m)

Both options for the Emerging Preferred Route proposals involved the removal of the existing parking on the eastern side of the street south of the River Tolka Bridge as shown in Figure 6.8 below. There is no off-street parking at the row of 8 houses on the eastern side of street at No.66 to 80 St. Mobhi Road, and submissions from these residents objected to the removal of the existing parking.

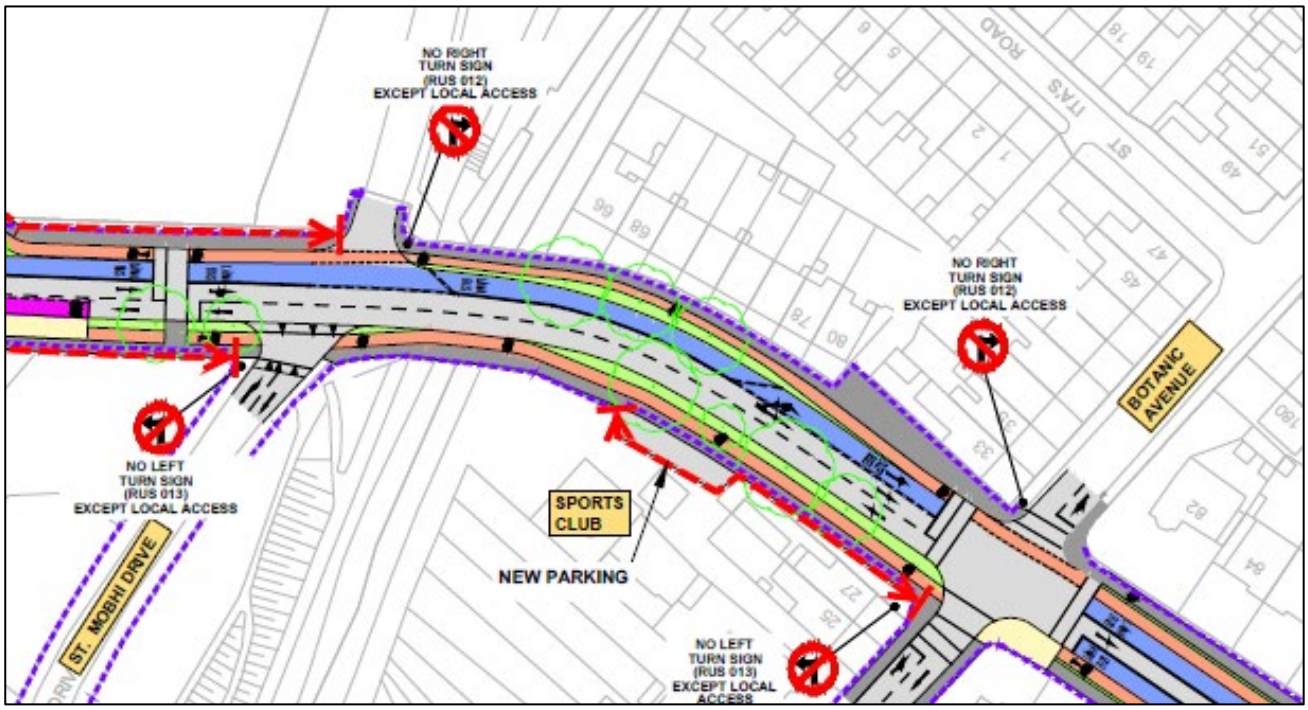


Figure 6.8 – EPR Option A in Sub-Section 2B

Potential Cross-Section Options in Section 2B:

Three options were assessed for this sub-section:

Option 1: Emerging Preferred Route

Option 2: Widen on western side to retain existing parking on eastern side

Option 3: Widen into Gardens

Options Evaluation

A multi-criteria assessment (MCA) presents a comparison between the options as shown in Table 6.2.2.

Table 6.2.2 – Evaluation of Options in Sub-Section 2B

St. Mobhi Road from Tolka Bridge to Botanic Avenue

Criterion	Option 1 Emerging Preferred Route	Option 2 Widen on Western Side	Option 3 Widen on Eastern Side
Economy			
Capital Cost	Lower cost	Greater cost	Greater cost
Journey Time Reliability (Bus)	Equal	Equal	Equal
Integration			
Integration with Land-Use policy	Equal	Equal	Equal
Residential Population and Employment Catchments	Parking on other side of the road	Parking Retained	Parking Retained
Public Transport Network	Equal	Equal	Equal
Cycle Network	Equal	Equal	Equal
Other Vehicular Traffic Network	Equal	Equal	Equal
Accessibility & Social Inclusion			
Key Trip Attractors within Catchment	Equal	Equal	Equal
Deprived Geographic Areas	Equal	Equal	Equal
Safety	Equal	Equal	Equal
Physical Activity	Equal	Equal	Equal
Environment			
Archaeology & Cultural Heritage	Equal	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal	Equal
Soils & Geology	Equal	Equal	Equal
Hydrology	Equal	Equal	Equal
Landscape & Visual	Trees removed on eastern side	Trees removed on western side	All trees retained
Air & Noise	No change	No change	Traffic closer
Land Use and the Built Environment	No impact on gardens	No impact on gardens	Loss of Gardens
Preference Rank	**2**	**1**	**3**

6.2.5 Sub-Section 2C St. Mobhi Road - Botanic Avenue to Botanic Road: (200m)

In this sub-section the Emerging Preferred Route for Option A proposed widening the road from the existing 2 general traffic lanes to accommodate a new southbound bus lane. The existing northbound traffic lane would become a bus lane and local access traffic would be diverted around the block via Botanic Road and Botanic Avenue. Segregated cycle tracks would be provided in both directions. All the existing 26 street trees along this section would be removed in this scenario with proposed replacement trees to be planted between the cycle tracks and footpaths.

Figure 6.9 – St. Mobhi Road in Section 2C – looking south from the Botanic Avenue junction

Figure 6.10 – St. Mobhi Road in Section 2C – looking north at the footpath on the western side

Cross-Section Options in Sub-Section 2C

Option A (EPR)

Bus lanes in both directions.
2.0m wide cycle tracks in both directions.
All existing street trees removed.
Existing 2.5m wide footpaths retained.

Option B

Bus lanes in southbound direction only.
Shared traffic lane northbound, with Bus Gate at junction of St. Mobhi Road and Griffith Avenue.
1.5m wide Cycle tracks in both directions behind the existing trees.
Footpaths narrowed to 1.8m.
All existing street trees retained.

Table 6.2.3 – Evaluation of Options in Sub-Section 2C

St. Mobhi Road from Botanic Avenue to Botanic Road

Option	Option 1 2 Bus Lanes	Option 2 1 Bus Lane
Economy		
Capital Cost	Higher cost	Lower Cost
Journey Time Reliability (Bus)	Equal	Equal with Bus Gate
Integration		
Integration with Land-Use policy	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Equal	Equal
Cycle Network	2m cycle tracks	1.5m cycle tracks
Other Vehicular Traffic Network	No traffic diversions	Through Traffic Diversion
Accessibility & Social Inclusion		
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas	Equal	Equal
Safety	Equal	Equal
Physical Activity	Equal	Equal
Environment		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	All street trees removed	Street trees retained
Air & Noise	Equal	Equal
Land Use and the Built Environment	Equal	Equal
Preference	**Not Preferred**	**Preferred**

6.2.6 Sub-Section 2D - Botanic Road to Prospect Way (400m)

In this sub-section the Emerging Preferred (EPR) proposed reorganisation of the road layout from the existing 2 general traffic lanes with advisory cycle lanes to accommodate a new northbound bus lane. All modes, bus, traffic, and cyclists would share a single southbound lane uphill for 250m from the northern end until the start of a bus lane for the 150m length approaching the Prospect Way junction. Northbound cyclists would share the bus lane in the downhill direction.

Two other alternative options were assessed:

Option 1: Northbound Bus Lane (EPR)

Option 2: Southbound Bus Lane

Option 3: Cycle Tracks

Table 6.2.4 – Evaluation of Options in Sub-Section 2D - Botanic Road

Criterion	Option 1 Northbound Bus Lane	Option 2 Southbound Bus Lane	Option 3 Cycle Tracks
Economy			
Capital Cost	Equal	Equal	Equal
Journey Time Reliability (Bus)	Equal	Equal	Equal
Integration			
Integration with Land-Use policy	Equal	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal	Equal
Public Transport Network	1 Bus Lane	1 Bus Lane	No Bus Lanes
Cycle Network	Slow cyclists uphill in shared lane	Slow cyclists uphill in bus lane	Segregated in both directions
Other Vehicular Traffic Network	Equal	Equal	Equal
Accessibility & Social Inclusion			
Key Trip Attractors within Catchment	Equal	Equal	Equal
Deprived Geographic Areas	Equal	Equal	Equal
Safety	Equal	Equal	Equal
Physical Activity	Gap in Cycle Network	Gap in Cycle Network	No Gap in Cycle Network
Environment			
Archaeology & Cultural Heritage	Equal	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal	Equal
Soils & Geology	Equal	Equal	Equal
Hydrology	Equal	Equal	Equal
Landscape & Visual	Equal	Equal	Equal
Air & Noise	Equal	Equal	Equal
Land Use and the Built Environment	Equal	Equal	Equal
Preference Rank	**3**	**2**	**1**

6.2.7 Sub-Section 2E - Prospect Road from Prospect Way to Whitworth Road (300m)

Prospect Road forms the eastern arm of a triangular one-way traffic gyratory system at Hart's Corner just north of the Grand Canal at Phibsborough. The Finglas to City Centre Core Bus Corridor joins the Ballymun to City Centre Core Bus Corridor at this location, and they share the Hart's Corner traffic gyratory.

In the Emerging Preferred Route, as shown below in Figure 6.11, the cycle route followed the same circulation system as general traffic with one-way cycle lanes around most of the traffic gyratory along both the Prospect Road and Prospect Way arms in full, but only partially along Finglas Road on the western side north of Dalcassian Downs. . Northbound cyclists were not provided with a segregated cycle track over a length of 260m northward from the Royal Canal to Dalcassian Downs, and they would have been required to share the bus lane over this section. On the Ballymun CBC cyclists intending to continue north along Botanic Road were required to follow the traffic gyratory around two sides of the triangle at Hart's Corner.

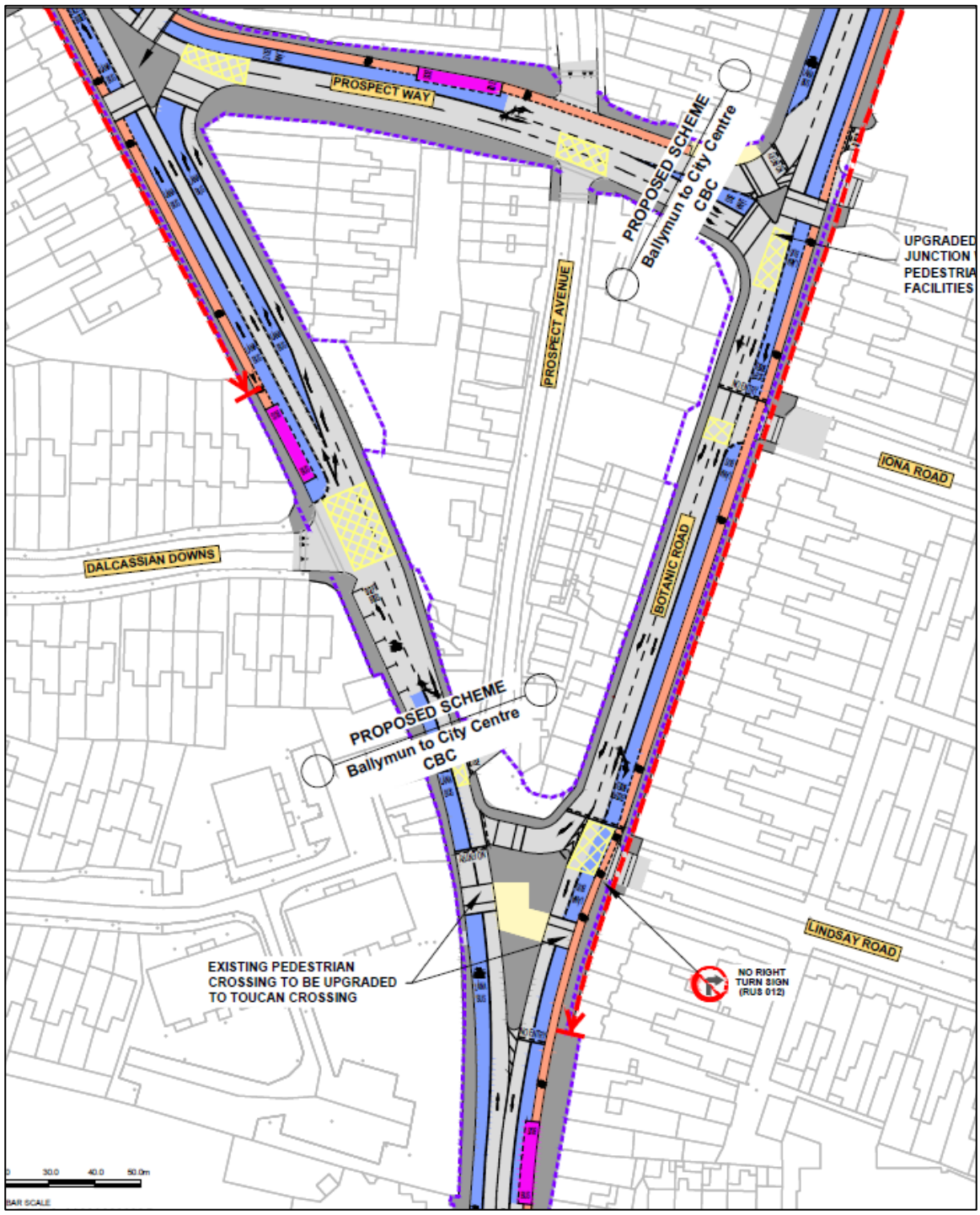


Figure 6.11 – Emerging Preferred Route at Hart's Corner

A review of the cycling facilities at Hart's Corner identified an opportunity for two-way cycle tracks on the eastern and northern sides of the traffic gyratory as shown below in Figure 6.12. This would complement the proposed cycle route along Royal Canal Bank on the eastern side of Phibsborough with a continuation northward along the eastern side of Prospect Road on the most direct link to Botanic Road. A two-way link along Prospect Way then connects to the Finglas Road.

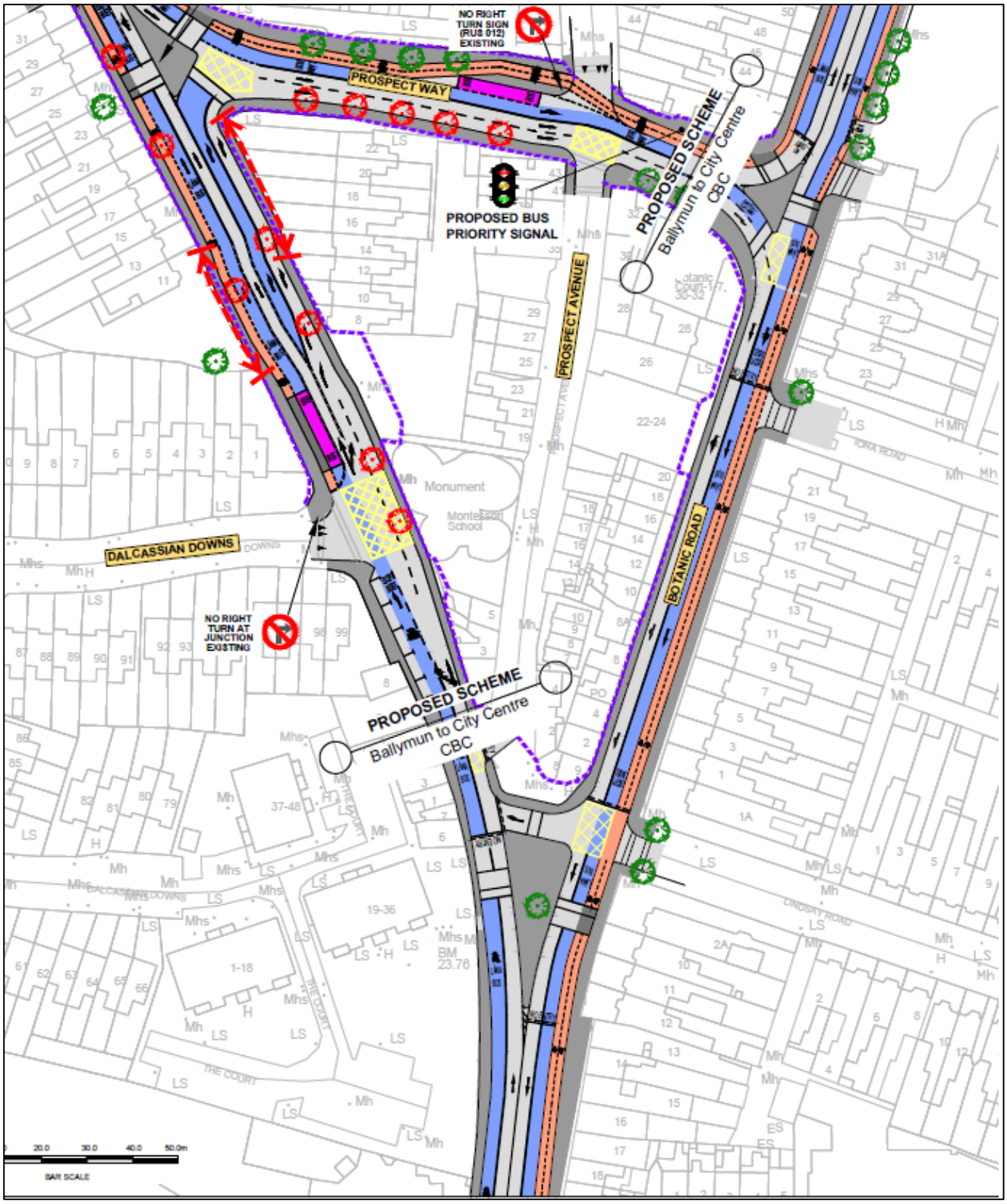


Figure 6.12 - Two-Way Cycle Tracks at Hart's Corner in Draft Preferred Route Option (March 2020)

The alternative options for cycling facilities at Hart's Corner have been reappraised through a multi-criteria assessment as shown in Table 6.2.5.

Table 6.2.5 – Evaluation of Options for Cyclists at Hart's Corner

Option	Option 1 One-Way Cycle Lanes & Shared Bus Lane	Option 2 Two-Way around Gyratory
Economy		
Capital Cost	Lower cost	Marginally higher Cost
Integration		
Cycle Network Integration	Not fully segregated	Continuously segregated
Accessibility & Social Inclusion		L
Safety	Increased interactions with buses and general traffic	Full segregation of cyclists
Environment		
Ecology		
Heritage (Architectural and Archaeological)		
Geology, Hydrology Hydrogeology		
Landscape		
Air & Noise		
Human Beings and Material Assets		
Rank	**2**	**1**

The options assessment concluded that Option 2, to provide two-way cycle tracks at Hart's Corner, is preferred.

6.2.8 Sub-Section 2F - Phibsborough Road from Whitworth Road to North Circular Road (400m) & Royal Canal Bank Cycle Route

This section commences at Cross Guns Bridge which carries Phibsborough Road over the Royal Canal at the southern side of the junction with Whitworth Road. From this point southwards over a distance of 1.1km, Phibsborough Road varies in width, and is typically 18m wide in the narrowest section through the junction of Doyle's Corner at North Circular Road. The street s too narrow for the provision of cycle tracks segregated from the bus lanes, for which an overall width of 22m would be necessary. For this reason in the Emerging Preferred Route it was proposed to direct cyclists along a separate cycle route via Royal Canal Bank which runs parallel to Phibsborough Road 100m to the east. Where the Royal Canal Bank cycle route crosses North Circular Road it was proposed to provide an at-grade toucan signal crossing as shown below in Figure 6.13.

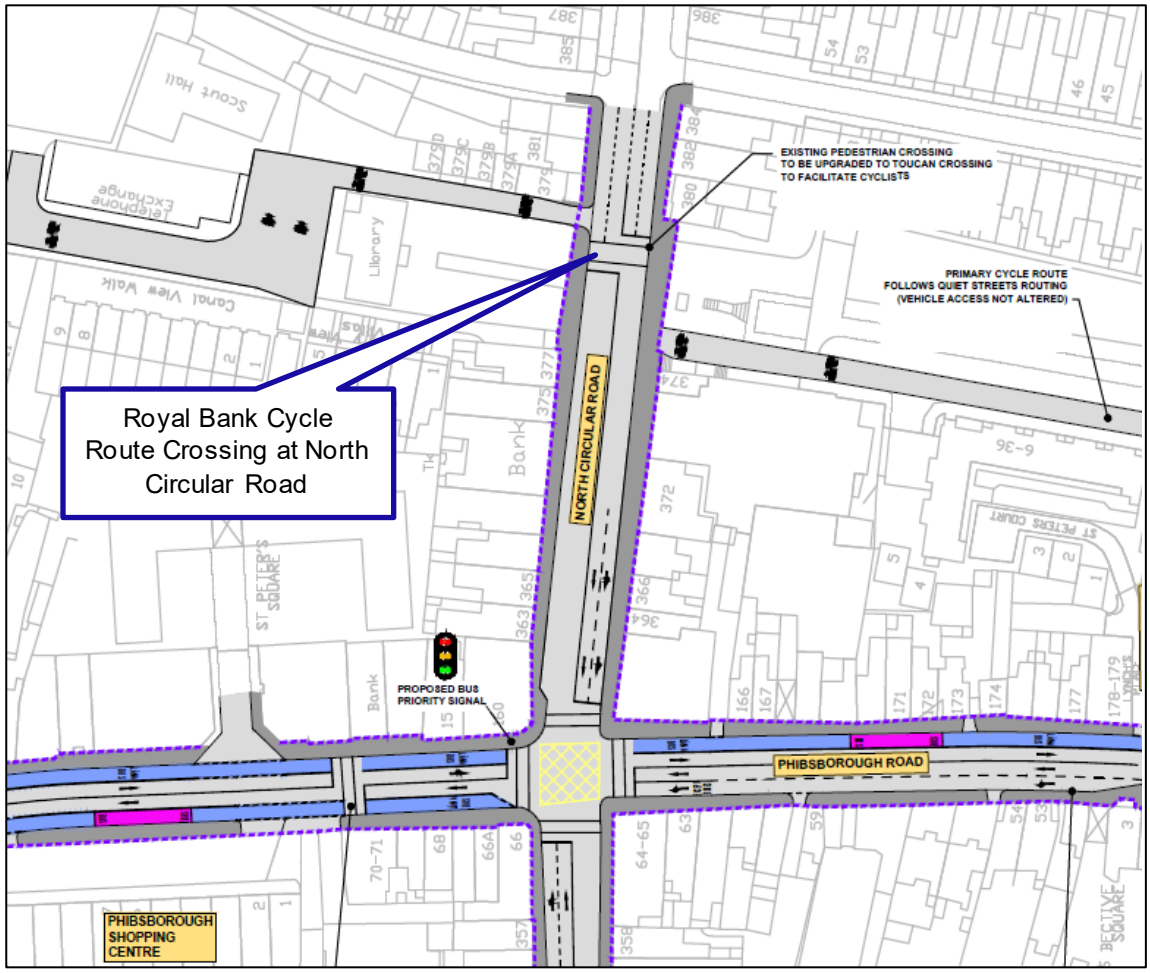


Figure 6.13 –Royal Canal Bank Cycle Route Crossing at North Circular Road in the Emerging Preferred Route

In the draft Preferred Route Option review, the potential for an improved and grade-separated crossing at North Circular Road was identified. Historically there was a stone arch bridge, Blacquiere's Bridge, on North Circular Road where it crossed the former Royal Canal Broadstone Branch Line. The bridge was removed after the canal became disused and was filled in to form what is now the linear park of Royal Canal Bank. At present there is a level difference of approximately 3m between the north-south Royal Canal Bank and the east-west North Circular Road. On the southern side there is no ramp to connect the two streets, with a set of steps on the western side. In the Emerging Preferred Route, cyclists and pedestrians would have been required to climb the 3m level change and then wait for a traffic signal to cross the busy North Circular Road. An alternative option, as shown in Figure 6.14 below, would be to reinstate a bridge under North Circular Road to enable the north-south cycle route to pass through without the climb and delay of a traffic signal crossing. This option would involve considerably greater cost but would provide a far superior facility for cyclists and pedestrians. It would also reinstate the integrity and continuity of the former canal route and link the southern part of the linear park through to the Phibsborough Library on the northern side. An artist's impression view through the proposed bridge is shown in Figure 6.15., looking northward which shows the library building in the background

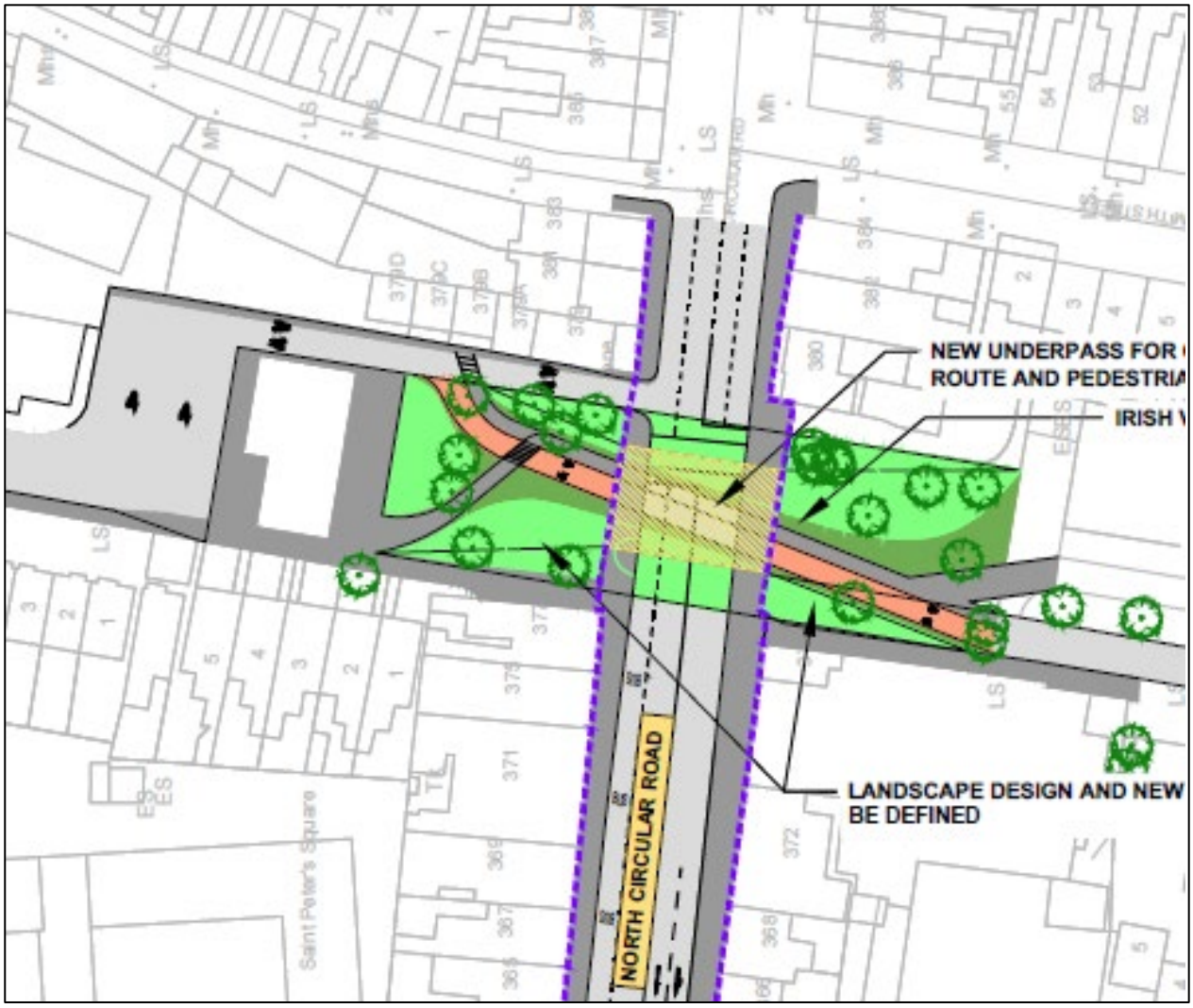


Figure 6.14 – Royal Canal Bank Cycle Route Crossing at North Circular Road: Alternative Option for a Bridge

Figure 6.15 – A view of the potential bridge at Royal Canal Bank Crossing of North Circular Road

The alternative options for the cycle route crossing at North Circular Road on the Royal Canal Bank have been appraised through a multi-criteria assessment as shown in Table 6.2.6.

Table 6.2.6 – Evaluation of Options for the crossing of Royal Canal Bank at North Circular Road

Option	Option A Traffic Signal	Option B Bridge
Economy		
Capital Cost	Lower cost	Significantly higher Cost
Integration		
Cycle Network Integration	Major traffic route crossing	Segregated Crossing
Accessibility & Social Inclusion		L
Safety	Traffic Crossing	Segregated Crossing
Environment		
Ecology		
Heritage (Architectural and Archaeological)	No change	Reinstatement of a bridge on Royal Canal Bank
Geology, Hydrology Hydrogeology		
Landscape	Severance	Connection along Royal Canal Bank
Air & Noise		
Human Beings and Material Assets	Severance of Community	Connectivity of Community
Rank	**2**	**1**

The options assessment concluded that Option B, to provide a bridge for Royal Canal Bank under North Circular Road, is preferred.

6.3 Review of Section 3 – Phibsborough to Arran Quay (1.7km)

6.3.1 Sub-Section 3A - Phibsborough to Western Way (700m)

The review of the Emerging Preferred Route did not identify any further options in this section for inclusion in the draft Preferred Route Option.

6.3.2 Sub-Section 3B – Western Way to Arran Quay (1,000m)

One adjustment is proposed to the Emerging Preferred Route in this section. A two-way cycle track will be provided over a length of 200m along the eastern side of Constitution Hill from the Western Way junction alongside the King's Inns Park to connect to Coleraine Street. Careful works will be required in the vicinity of the row of mature trees along the western side of Constitution Hill where a new footpath would be provided as part of the minor road widening to accommodate the proposed cycle tracks.

From the southern corner of the King's Inns Park a quiet-streets cycle route can be directed through the Markets Area along Coleraine Street, Lisburn Street, Linenhall Street, Anne Street North, George's Hill, St. Michan's Street, Ormond Square and Charles Street West. In combination with the proposed Royal Canal Bank cycleway. this would complete a 2.4km long separate cycle route all the way from the Royal Canal to the River Liffey that avoids the main traffic route as proposed in the *Greater Dublin Area Cycle Network Plan*.

The option for an additional cycle route in Sub-Section 3B was appraised through a multi-criteria assessment as shown in Table 6.2.7.

Table 6.2.7 – Evaluation of Options for Cyclists from Western Way to Arran Quay

Option	Option 1 Cycle Route along Church Street	Option 2 Additional Two-Way Cycle Route through Markets Area
Economy		
Capital Cost	Lower cost	Higher Cost
Integration		
Cycle Network Integration	Single Route	Additional route
Accessibility & Social Inclusion		
Safety		
Environment		
Ecology		
Heritage (Architectural and Archaeological)		
Geology, Hydrology Hydrogeology		
Landscape	No impact for trees	Minor risk for trees
Air & Noise		
Human Beings and Material Assets		Enhancement for Markets Area
Rank	**Equal**	**Equal**

The options assessment concluded that both were equal, and both are included in the draft Preferred Route.

7. Preferred Route Option

7.1 Introduction

Chapter 6 of this report presented an appraisal of all route options considered for *Ballymun to City Centre Core Bus Corridor*. Following this appraisal, the Preferred Route Option has been confirmed as summarised in this chapter of the report. The updated preferred route option scheme design drawings are included in *Appendix A* of this report.

7.2 Draft Preferred Route Option in Section 1 - St. Margaret's Road to Griffith Avenue

The Emerging Preferred Route has been adjusted to adopt the following changes in the draft Preferred Route Option:

e) The CBC has been extended to include the northern section from St. Margaret's Road to Santry Cross.

f) Ballymun Main Street between Shangan Road at the northern end and Gateway Crescent at the southern end will be narrowed to a single traffic lane in each direction which will accommodate permanent on-street parking on both sides of the street with additional trees.

g) South of Collins Avenue Ballymun Road on the western side between St. Pappin Road and Our Lady of Victories Primary School will be narrowed to a single traffic lane in each direction which will accommodate permanent on-street parking near the school.

h) At the junction of Ballymun Road, St. Mobhi Road and Griffith Avenue, the one-way traffic system will be modified for two-way movements on the western and southern arms so that the southbound left-turn from St. Mobhi Road into Griffith Avenue eastbound can be redirected away from the eastern side of the gyratory system.

The proposed road layout in Section 1 will be as follows:

1) Continuous bus lanes will be provided in both directions along this 3 km long route section.
2) Segregated cycle tracks will be provided in both directions along the full length.
3) Existing part-time on-street parking on the eastern side of Ballymun Main Street will be upgraded to permanent on-street parking and will be extended over a longer length on both sides of the street. One of the two existing traffic lanes will be removed in each direction on this section of street.
4) Additional street trees will be provided on both sides of Ballymun Main Street.
5) On-street parking will be provided on the western side of Ballymun Road south of Collins Avenue at Our Lady of Victories Primary School, with one of the two existing traffic lanes removed over the section north of the St. Pappin Road junction.
6) The one-way traffic system at Griffith Avenue will be modified for eastbound traffic to remove left-turn conflicts with buses and cyclists on St. Mobhi Road.

7.3 Draft Preferred Route Option in Section 2 - Griffith Avenue to Phibsborough

The Emerging Preferred Route has been adjusted to adopt the following changes in the draft Preferred Route Option:

f) Of the two options for bus priority considered in the Emerging Preferred Route Option A for a northbound bus gate at St. Mobhi Road has been selected for adoption in the draft Preferred Route Option. General traffic in the northbound direction will be diverted onto other routes to the west.

g) Additional modifications have been proposed in the Glasnevin area with enhanced cycling facilities on Glasnevin Hill, a southbound one-way traffic restriction on part of Ballymun Road south of Griffith Avenue, and an urban realm improvement at Glasnevin Village at the junction of Botanic Avenue and Botanic Road.

h) Along St. Mobhi Road the proposed road layout design has been adjusted to retain almost all existing street trees and a small amount of on-street parking.

i) On Botanic Road it is proposed to provide segregated cycle tracks in both directions instead of a bus lane in the northbound direction.

j) On Prospect Road there will be a two-way cycle track along the eastern side to replace one of the two existing traffic lanes, which will enable northbound cyclists to bypass the one-way traffic system at Hart's Corner.

The proposed road layout in Section 2 will be as follows:

1) In the southbound direction there will be a continuous bus lane over 1.7km of the 2km length of this section. A bus priority signal will enable buses to travel along a 300m long section of Botanic Road without delay where a bus lane will not be provided.
2) In the northbound direction there will be no bus lane over the 2km length of this section. A bus gate at the junction of St. Mobhi Road with Griffith Avenue will divert through traffic off this corridor and enable buses to travel along this section without delay.
3) Segregated cycle tracks will be provided in both directions along the full length of this section.

7.4 Draft Preferred Route Option in Section 3 – Phibsborough to Arran Quay

The Emerging Preferred Route has been adjusted to adopt the following changes in the draft Preferred Route Option:

c) At Royal Canal Bank there will be a bridge provided for cyclists and pedestrians under North Circular Road instead of a traffic signal crossing.

d) An extended two-way cycle route will extend from Western Way along the eastern side of Constitution Hill to a quiet-streets route through the Markets Area to the River Liffey corridor.

The proposed road layout in Section 3 will be as follows:

1) Continuous bus lanes will be provided in both directions along this 1.7 km long route section on Phibsborough Road, Constitution Hill and Church Street.
2) A segregated cycle route will be provided along Royal Canal Bank parallel to Phibsborough Road, and then extending along the eastern side of Constitution Hill to a quiet streets route through the Markets Area in addition to cycle tracks along Church Street.

7.5 Ballymun to City Centre Core Bus Corridor Draft Preferred Route Summary

The Ballymun to City Centre Core Bus Corridor is approximately 6.7 km long from end to end.

The proposed route will provide the following improvements for bus priority:

Bus Priority – Southbound to City Centre	Road Length (m)	Existing Length	%	Proposed Length	%
Ballymun Road	2,950	2,160	73%	2,950	100%
St. Mobhi Road	1,000	760	76%	1,000	100%
Botanic Road	530	190	36%	290	55%
Prospect Road	140	70	50%	140	100%
Phibsborough Road	1,070	140	13%	1,070	100%
Constitution Hill	300	0	0%	300	100%
Church Street	670	0	0%	440	66%
Total	**6,660**	**3,320**	**50%**	**6,330**	**95%**
Bus Priority – Northbound from City Centre					
Church Street	670	0	0%	590	88%
Constitution Hill	300	0	0%	300	100%
Phibsborough Road	1,070	625	58%	925	86%
Prospect Road / Finglas Road	340	135	40%	340	100%
Prospect Way	130	75	58%	105	81%
Botanic Road	380	0	0%	120	32%
St. Mobhi Road	1,000	0	0%	0	0%
Griffith Avenue (westbound)	90	0	0%	60	67%
Ballymun Road	2,950	2,090	71%	2,950	100%
Total	**6,930**	**2,925**	**42%**	**5,390**	**78%**

The proposed route will provide the following improvements for cyclists:

Cycling Facilities – Southbound	Road Length (m)	Existing Length	%	Proposed Length	%
Ballymun Road	2,950	1,250	42%	2,950	100%
St. Mobhi Road	1,000	0	0%	1,000	100%
Botanic Road	530	220	0%	530	100%
Prospect Road	140	0	0%	140	100%
Phibsborough Road / Royal Canal Bank	1,070 / 1,200	700	65%	1,200	100%
Constitution Hill	300	300	100%	300	100%
Church Street	670	520	78%	670	100%
Total	**6,790**	**2,990**	**45%**	**6,790**	**100%**
Cycling Facilities – Northbound					
Church Street	670	670	100%	670	100%
Constitution Hill	300	300	100%	300	100%
Phibsborough Road / Royal Canal Bank	1,070 / 1,200	0	0%	1,200	100%
Prospect Road	140	0		140	100%
Botanic Road	530	380	72%	530	100%
St. Mobhi Road	1,000	470	47%	1,000	100%
Griffith Avenue (westbound)	90	0	0%	90	100%
Ballymun Road	2,950	700	24%	2,950	100%
Total	**6,790**	**2,520**	**38%**	**6,790**	**100%**

8. Next Steps

This report has identified a Draft Preferred Route Option for the bus infrastructure along this Core Bus Corridor for which an updated concept design has been developed.

The next stage (the development of a Preliminary Design) will further refine and update the concept design along the route. Further account will be taken of likely public transport service levels, particularly the bus service patterns and any changes to the overall bus network which may arise from the separate bus network review process. The proposals will be amended, if and as required, to integrate any resultant changes. The Preliminary Design will define the final practically achievable scheme for the CBC, considering more detailed studies of constraints, impacts and environmental assessment required at a local level.

This Preliminary Design will form the basis of the planning consent process for the scheme, which will require a development consent application to be made directly to An Bord Pleanála, due to the nature and extent of the proposed works.

Appendices

Appendix A. Multi-Criteria Options Assessments

Table 6.1.1 – Evaluation of Options for Sub-Section 1B

Ballymun Main Street between Shangan Road and Gateway Crescent

Option	Option A 2 Traffic Lanes	Option B 1 Traffic Lane + Parking
Economy		
Capital Cost	Lower cost	Higher Cost
Journey Time Reliability (Bus)	Part-time Bus Lane or risk of illegal parking	Better Bus Priority
Integration		
Integration with Land-Use policy	Less support for commercial activity	More support for commercial activity
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Equal	Equal
Cycle Network	Risk of blockage	Clear segregation
Other Vehicular Traffic Network	More capacity	Less capacity
Accessibility & Social Inclusion		
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas	Equal	Equal
Safety	Equal	Equal
Physical Activity	Equal	Equal
Environment		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	No change	More street trees
Air & Noise	Equal	Equal
Land Use and the Built Environment	No change	Improved public realm
Preference		**Preferred**

Table 6.1.2 – Evaluation of Options for Sub-Section 1D
Griffith Avenue Traffic Gyratory System

Option	Option A Existing Traffic System + Bus Lane	Option B Southbound Left-Turn Diverted
Economy		
Capital Cost	Equal	Equal
Journey Time Reliability (Bus)	Less signal time	More signal time
Integration		
Integration with Land-Use policy	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Left-turn traffic conflict	No Left-turn traffic conflict
Cycle Network	Left-turn traffic conflict	No Left-turn traffic conflict
Other Vehicular Traffic Network	More delay and congestion	Less delay and congestion
Accessibility & Social Inclusion	Equal	Equal
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas		
Safety	Left-turn traffic conflict	No Left-turn traffic conflict
Physical Activity	Equal	Equal
Environment		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	Equal	Equal
Air & Noise	Equal	Equal
Land Use and the Built Environment	Equal	Equal
Preference		**Preferred**

Table 6.2.1 – Evaluation of Options for Bus Facilities in Section 2 Griffith Avenue to Phibsborough

Option	Option A Bus Gate at Northern end of St. Mobhi Road	Option B Widen St. Mobhi Road for 2 Bus Lanes
Economy		
Capital Cost	Lower Cost	Higher cost
Journey Time Reliability (Bus)	Equal	Equal
Integration		
Integration with Land-Use policy	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Equal	Equal
Cycle Network	Equal	Equal
Other Vehicular Traffic Network	Local Access Diversions. Through Traffic Diversion	No traffic diversions
Accessibility & Social Inclusion		
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas	Equal	Equal
Safety	Equal	Equal
Physical Activity	Equal	Equal
Environment		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	Most street trees retained	All street trees removed
Air & Noise	Equal	Equal
Land Use and the Built Environment	Equal	Equal
Preference	**Preferred**	**Not Preferred**

Table 6.2.2 – Evaluation of Options in Sub-Section 2B

St. Mobhi Road from Tolka Bridge to Botanic Avenue

Criterion	Option 1 Emerging Preferred Route	Option 2 Widen on Western Side	Option 3 Widen on Eastern Side
Economy			
Capital Cost	Lower cost	Greater cost	Greater cost
Journey Time Reliability (Bus)	Equal	Equal	Equal
Integration			
Integration with Land-Use policy	Equal	Equal	Equal
Residential Population and Employment Catchments	Parking on other side of the road	Parking Retained	Parking Retained
Public Transport Network	Equal	Equal	Equal
Cycle Network	Equal	Equal	Equal
Other Vehicular Traffic Network	Equal	Equal	Equal
Accessibility & Social Inclusion			
Key Trip Attractors within Catchment	Equal	Equal	Equal
Deprived Geographic Areas	Equal	Equal	Equal
Safety	Equal	Equal	Equal
Physical Activity	Equal	Equal	Equal
Environment			
Archaeology & Cultural Heritage	Equal	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal	Equal
Soils & Geology	Equal	Equal	Equal
Hydrology	Equal	Equal	Equal
Landscape & Visual	Trees removed on eastern side	Trees removed on western side	All trees retained
Air & Noise	No change	No change	Traffic closer
Land Use and the Built Environment	No impact on gardens	No impact on gardens	Loss of Gardens
Preference Rank	**2**	**1**	**3**

Table 6.2.3 – Evaluation of Options in Sub-Section 2C

St. Mobhi Road from Botanic Avenue to Botanic Road

Option	Option 1 2 Bus Lanes	Option 2 1 Bus Lane
Economy		
Capital Cost	Higher cost	Lower Cost
Journey Time Reliability (Bus)	Equal	Equal with Bus Gate
Integration		
Integration with Land-Use policy	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Equal	Equal
Cycle Network	2m cycle tracks	1.5m cycle tracks
Other Vehicular Traffic Network	No traffic diversions	Through Traffic Diversion
Accessibility & Social Inclusion		
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas	Equal	Equal
Safety	Equal	Equal
Physical Activity	Equal	Equal
Environment		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	All street trees removed	Street trees retained
Air & Noise	Equal	Equal
Land Use and the Built Environment	Equal	Equal
Preference	**Not Preferred**	**Preferred**

Table 6.2.4 – Evaluation of Options in Sub-Section 2D - Botanic Road

Criterion	Option 1 Northbound Bus Lane	Option 2 Southbound Bus Lane	Option 3 Cycle Tracks
Economy			
Capital Cost	Equal	Equal	Equal
Journey Time Reliability (Bus)	Equal	Equal	Equal
Integration			
Integration with Land-Use policy	Equal	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal	Equal
Public Transport Network	1 Bus Lane	1 Bus Lane	No Bus Lanes
Cycle Network	Slow cyclists uphill in shared lane	Slow cyclists uphill in bus lane	Segregated in both directions
Other Vehicular Traffic Network	Equal	Equal	Equal
Accessibility & Social Inclusion			
Key Trip Attractors within Catchment	Equal	Equal	Equal
Deprived Geographic Areas	Equal	Equal	Equal
Safety	Equal	Equal	Equal
Physical Activity	Gap in Cycle Network	Gap in Cycle Network	No Gap in Cycle Network
Environment			
Archaeology & Cultural Heritage	Equal	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal	Equal
Soils & Geology	Equal	Equal	Equal
Hydrology	Equal	Equal	Equal
Landscape & Visual	Equal	Equal	Equal
Air & Noise	Equal	Equal	Equal
Land Use and the Built Environment	Equal	Equal	Equal
Preference Rank	**3**	**2**	**1**

Table 6.2.5 – Evaluation of Options for Cyclists at Hart's Corner

Option	Option 1 One-Way Cycle Lanes & Shared Bus Lane	Option 2 Two-Way around Gyratory
Economy		
Capital Cost	Lower cost	Marginally higher Cost
Integration		
Cycle Network Integration	Not fully segregated	Continuously segregated
Accessibility & Social Inclusion		L
Safety	Increased interactions with buses and general traffic	Full segregation of cyclists
Environment		
Ecology		
Heritage (Architectural and Archaeological)		
Geology, Hydrology Hydrogeology		
Landscape		
Air & Noise		
Human Beings and Material Assets		
Rank	**2**	**1**

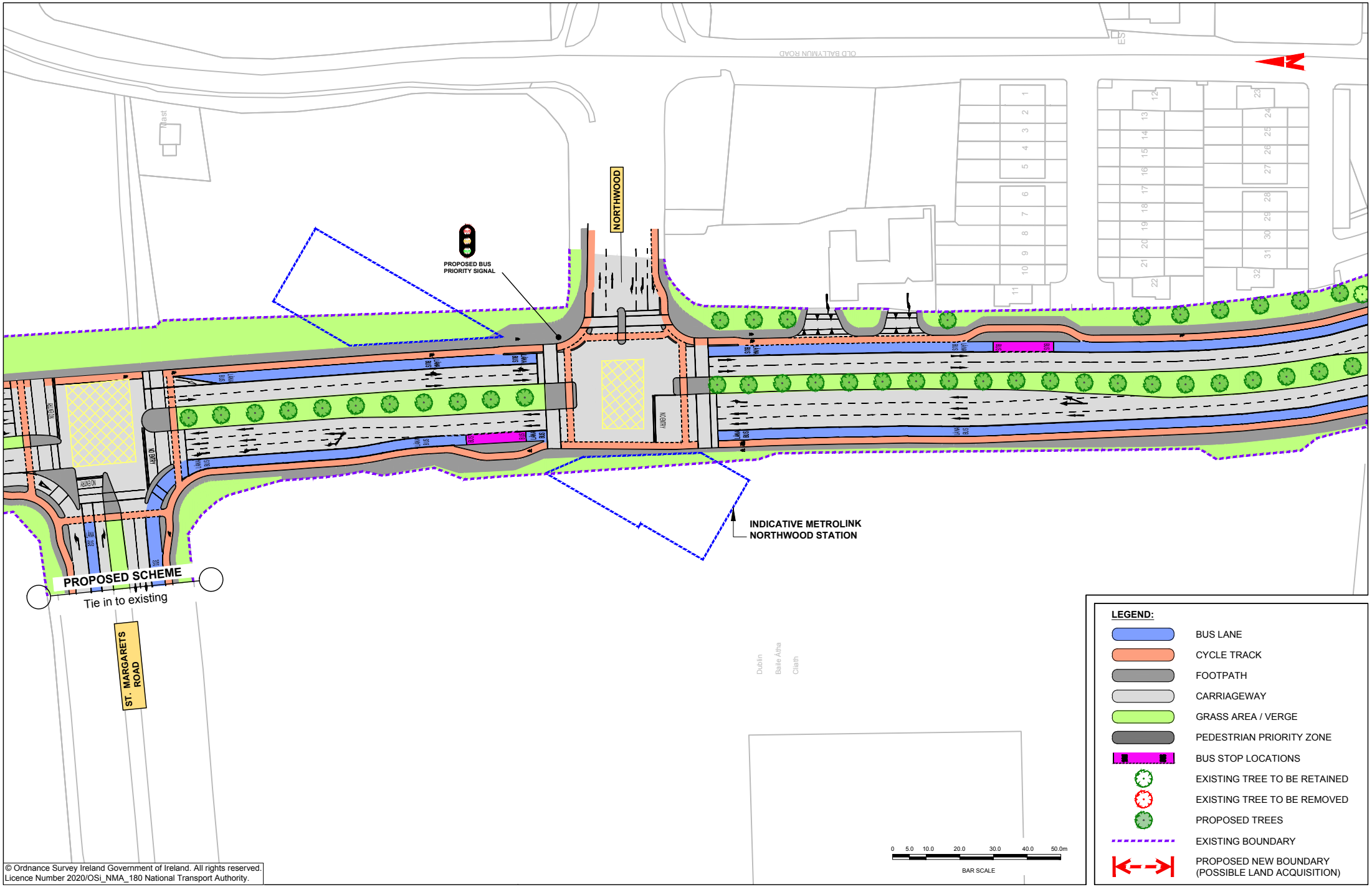
Table 6.2.6 – Evaluation of Options for the crossing of Royal Canal Bank at North Circular Road

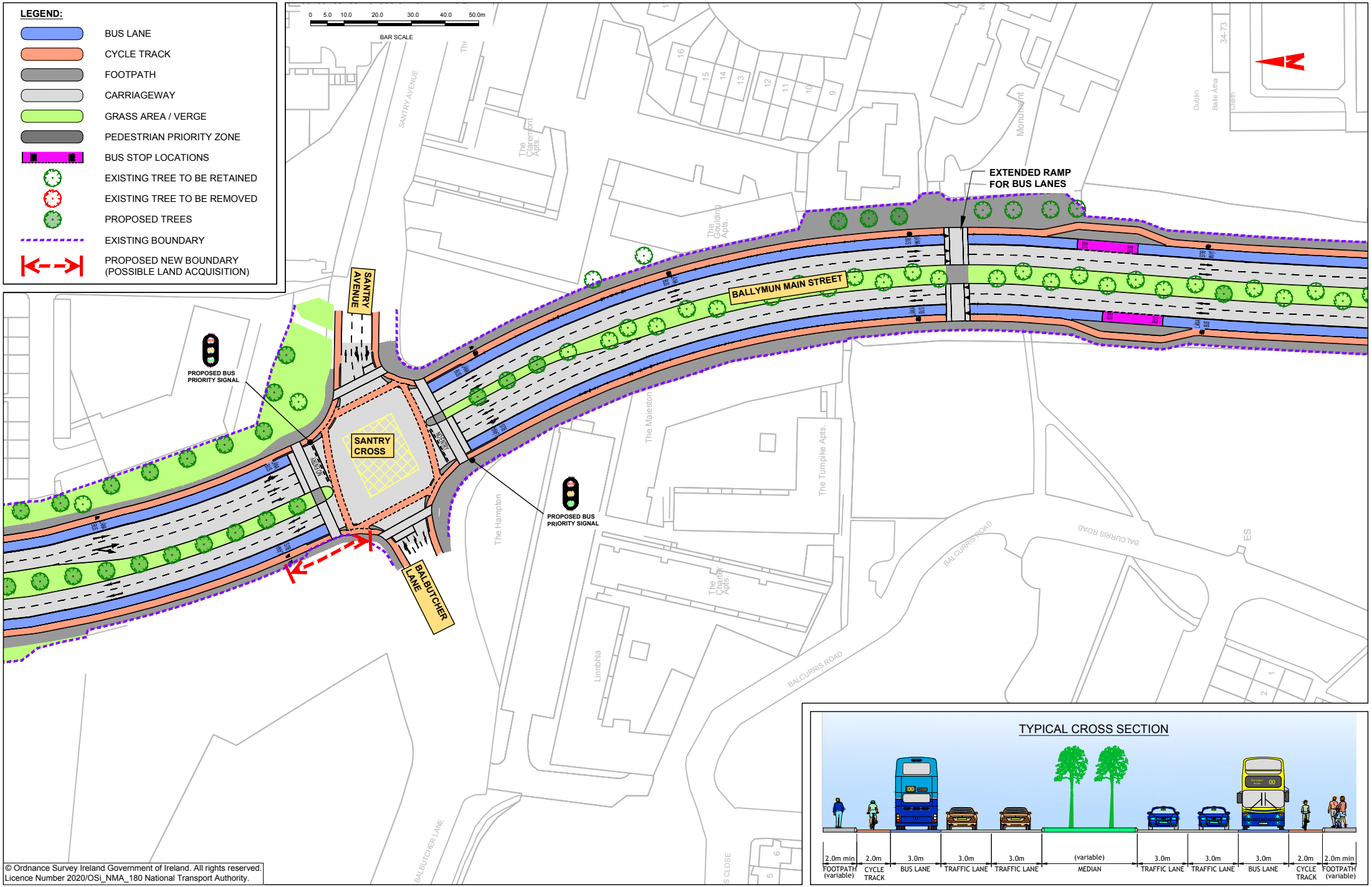
Option	Option A Traffic Signal	Option B Bridge
Economy		
Capital Cost	Lower cost	Significantly higher Cost
Integration		
Cycle Network Integration	Major traffic route crossing	Segregated Crossing
Accessibility & Social Inclusion		L
Safety	Traffic Crossing	Segregated Crossing
Environment		
Ecology		
Heritage (Architectural and Archaeological)	No change	Reinstatement of a bridge on Royal Canal Bank
Geology, Hydrology Hydrogeology		
Landscape	Severance	Connection along Royal Canal Bank
Air & Noise		
Human Beings and Material Assets	Severance of Community	Connectivity of Community
Rank	**2**	**1**

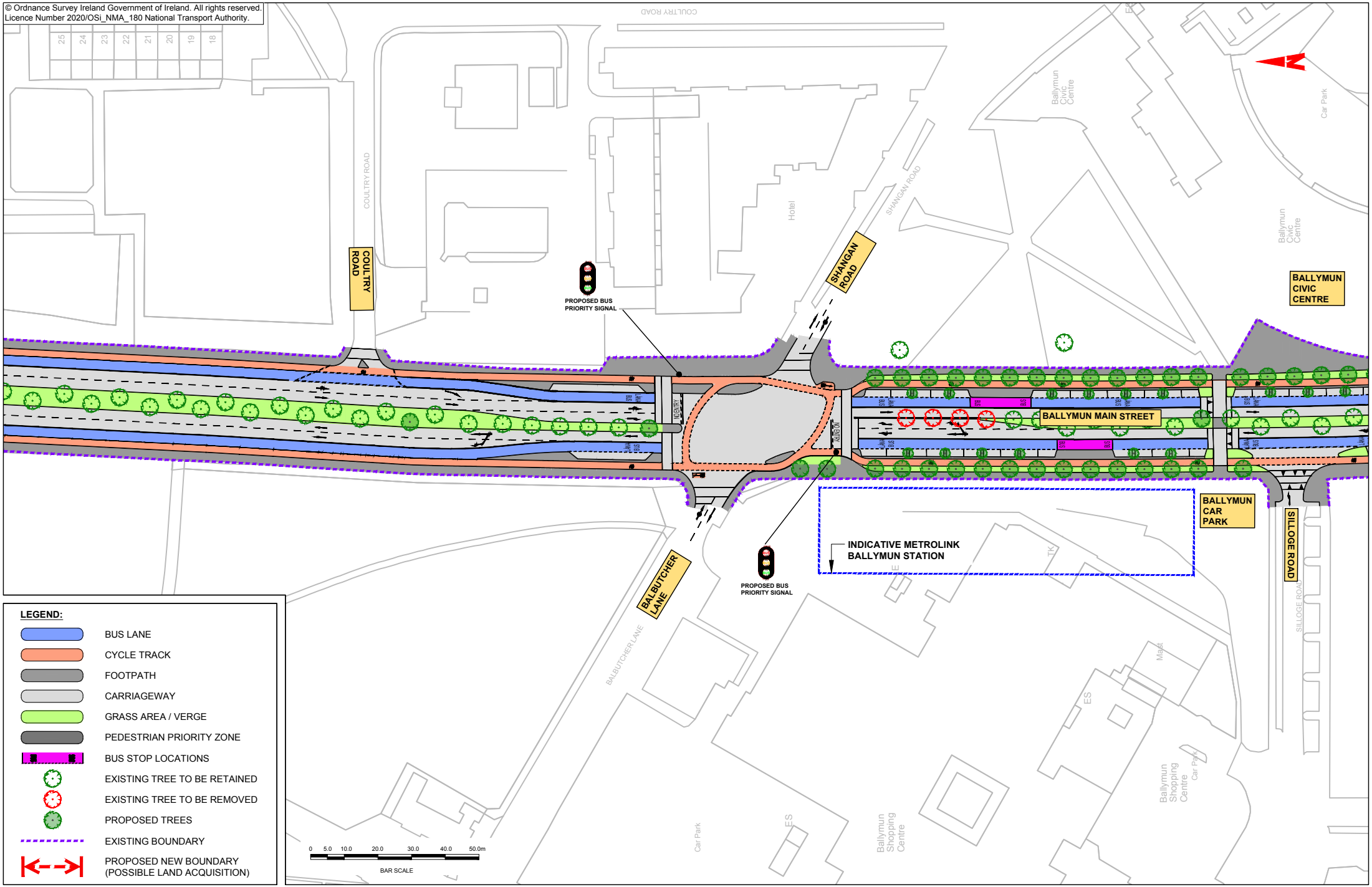
Table 6.2.7 – Evaluation of Options for Cyclists from Western Way to Arran Quay

Option	Option 1 Cycle Route along Church Street	Option 2 Additional Two-Way Cycle Route through Markets Area
Economy		
Capital Cost	Lower cost	Higher Cost
Integration		
Cycle Network Integration	Single Route	Additional route
Accessibility & Social Inclusion		
Safety		
Environment		
Ecology		
Heritage (Architectural and Archaeological)		
Geology, Hydrology Hydrogeology		
Landscape	No impact for trees	Minor risk for trees
Air & Noise		
Human Beings and Material Assets		Enhancement for Markets Area
Rank	**Equal**	**Equal**

Appendix B. Draft Preferred Route Option Maps

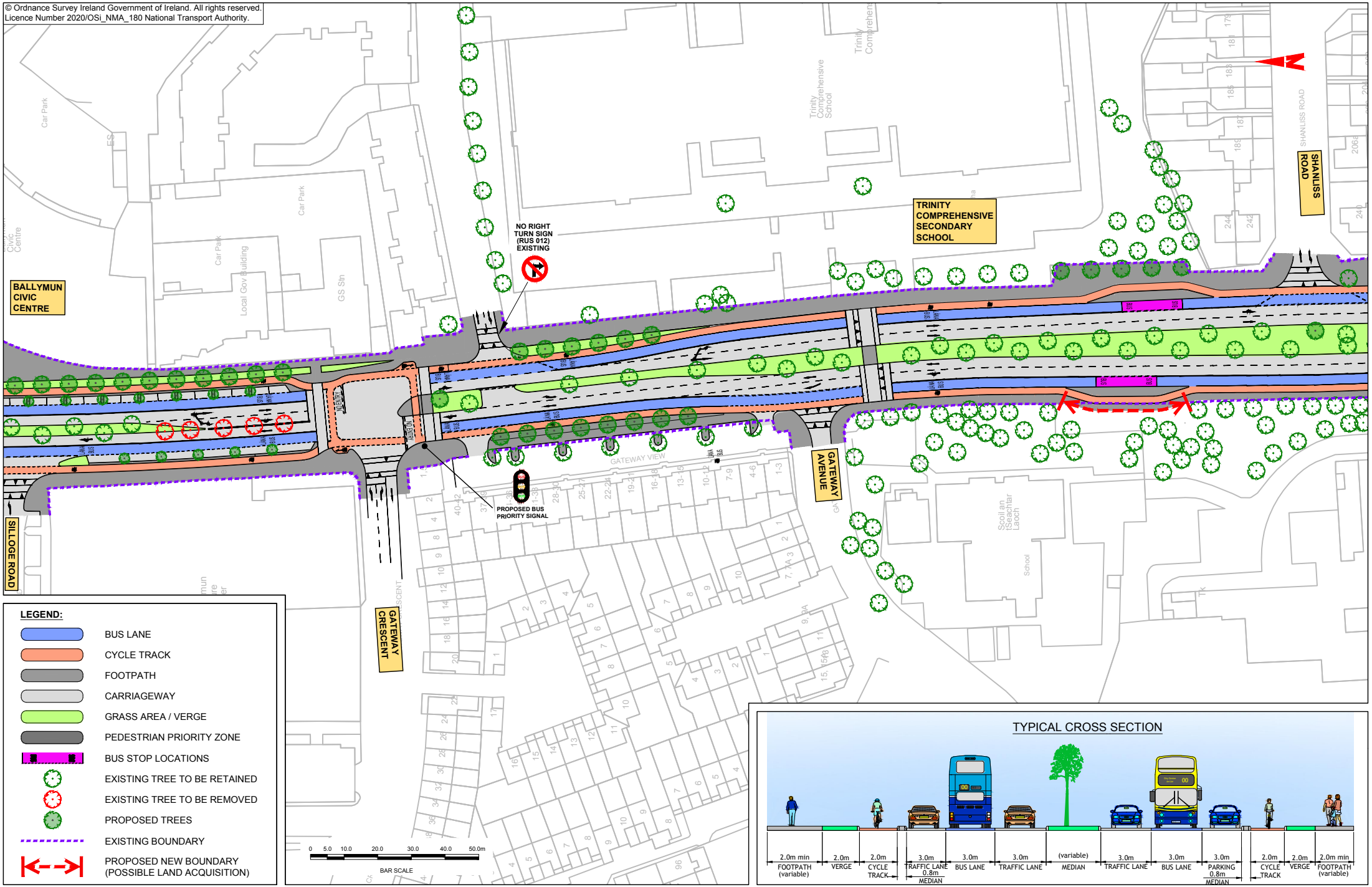






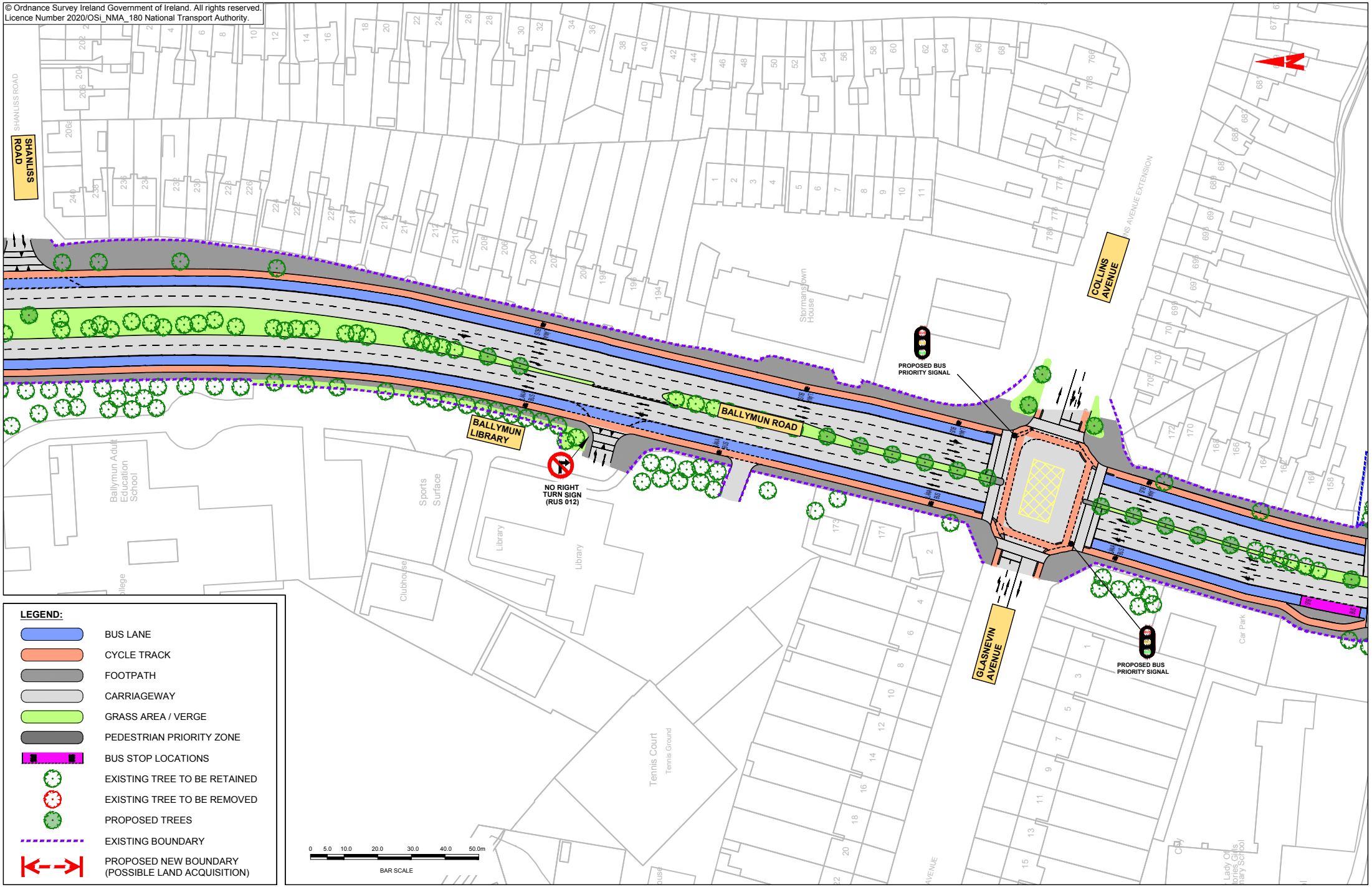
LEGEND:

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- BUS STOP LOCATIONS
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREES
- EXISTING BOUNDARY
- PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)



LEGEND:

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- BUS STOP LOCATIONS
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREES
- EXISTING BOUNDARY
- PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)



CHURCH OF OUR LADY OF VICTORIES

INDICATIVE METROLINK COLLINS AVENUE STATION

ALBERT COLLEGE DRIVE

NO RIGHT TURN SIGN (RUS 012) EXISTING

BALLYMUN ROAD

ST PAPPIN ROAD

PROPOSED BUS PRIORITY SIGNAL

LEGEND:

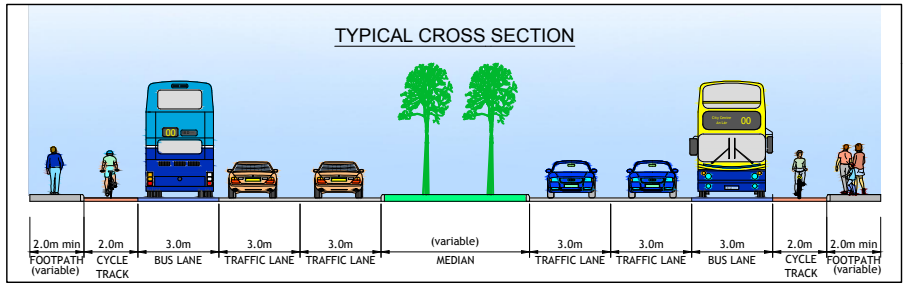
- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- BUS STOP LOCATIONS
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREES
- EXISTING BOUNDARY
- PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)

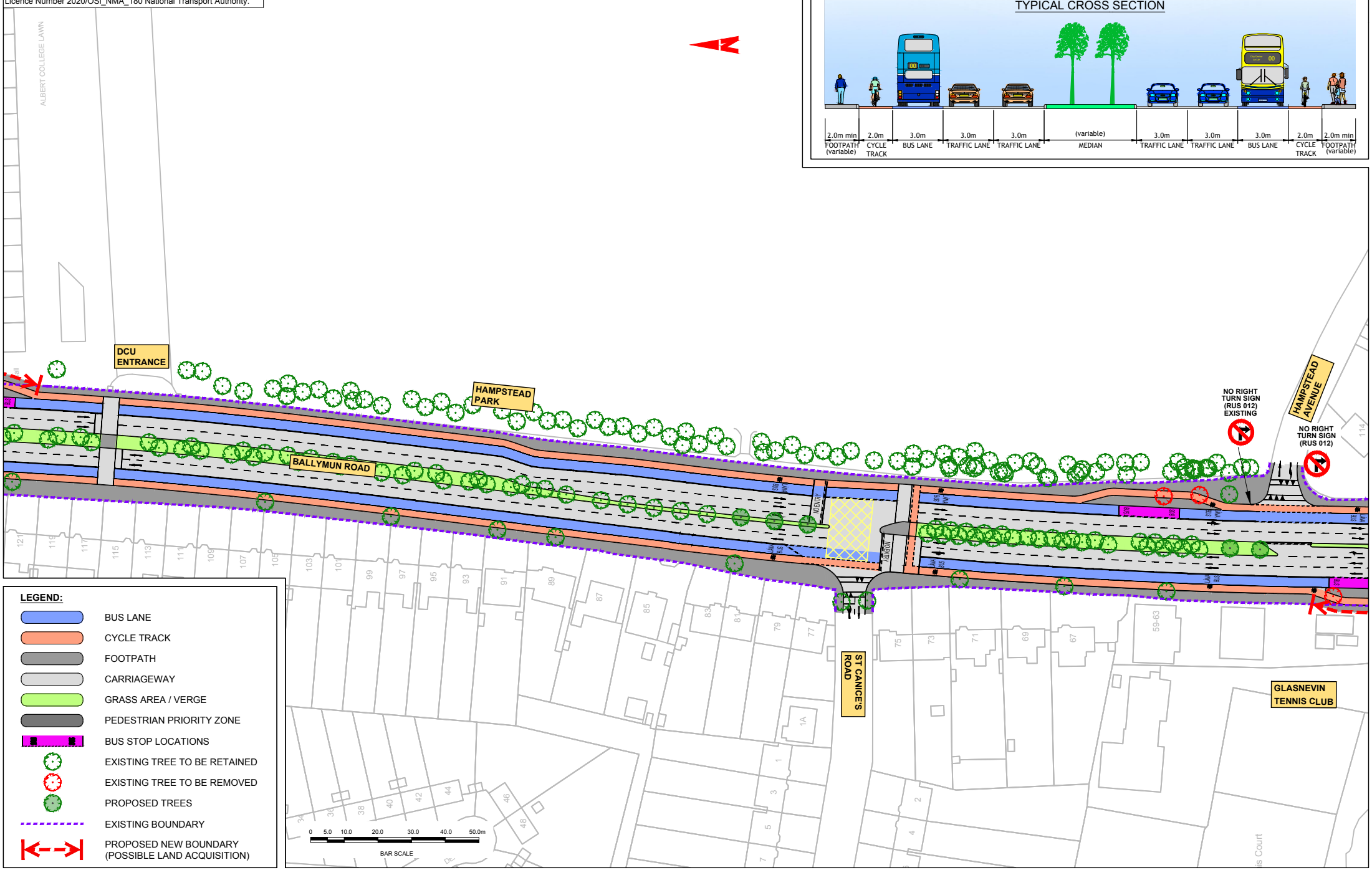
0 5.0 10.0 20.0 30.0 40.0 50.0m

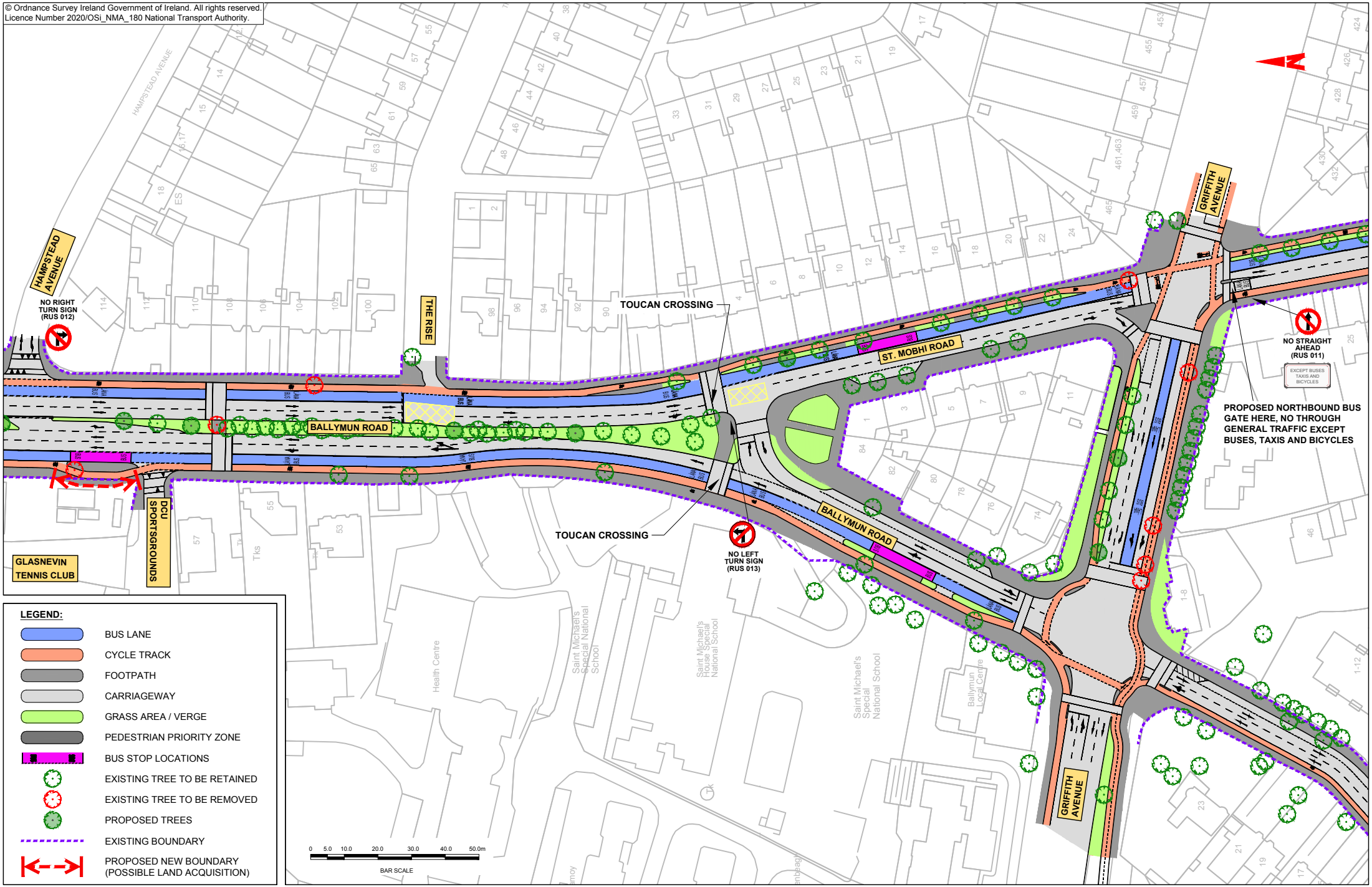
BAR SCALE

TYPICAL CROSS SECTION

2.0m min	2.0m	3.0m	3.0m	3.0m	4.0m	3.0m	3.0m	2.2m	2.0m	2.0m min
FOOTPATH (variable)	CYCLE TRACK	BUS LANE	TRAFFIC LANE	TRAFFIC LANE	MEDIAN	TRAFFIC LANE	TRAFFIC LANE	CAR PARKING	CYCLE TRACK	FOOTPATH (variable)

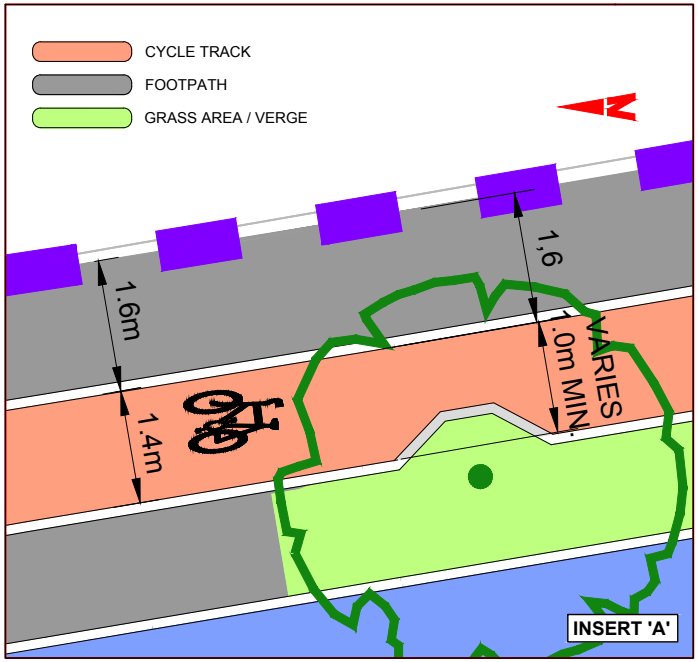


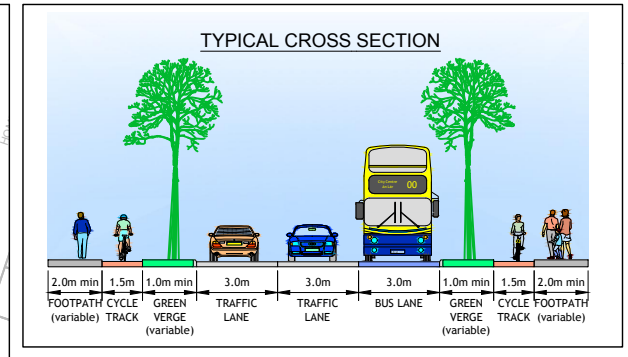




LEGEND:

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- BUS STOP LOCATIONS
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREES
- EXISTING BOUNDARY
- PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)





REFER TO INSERT 'A' FOR PEDESTRIAN / CYCLIST LAYOUT AT EXISTING TREE LOCATION

STELLA AVENUE

NO RIGHT TURN SIGN (RUS 012)

HOME FARM ROAD

NO RIGHT TURN SIGN (RUS 012)
EXCEPT LOCAL ACCESS

ENTRANCE TO SCOIL CHAITRIONA SECONDARY SCHOOL

CLG NA FIANNA

ST MOBHI ROAD

ST. MOBHI ROAD

NO RIGHT TURN SIGN (RUS 012)

ADVANCE SIGN FOR BUS GATE

NO RIGHT TURN SIGN (RUS 012)

NO LEFT TURN SIGN (RUS 013)
EXCEPT LOCAL ACCESS

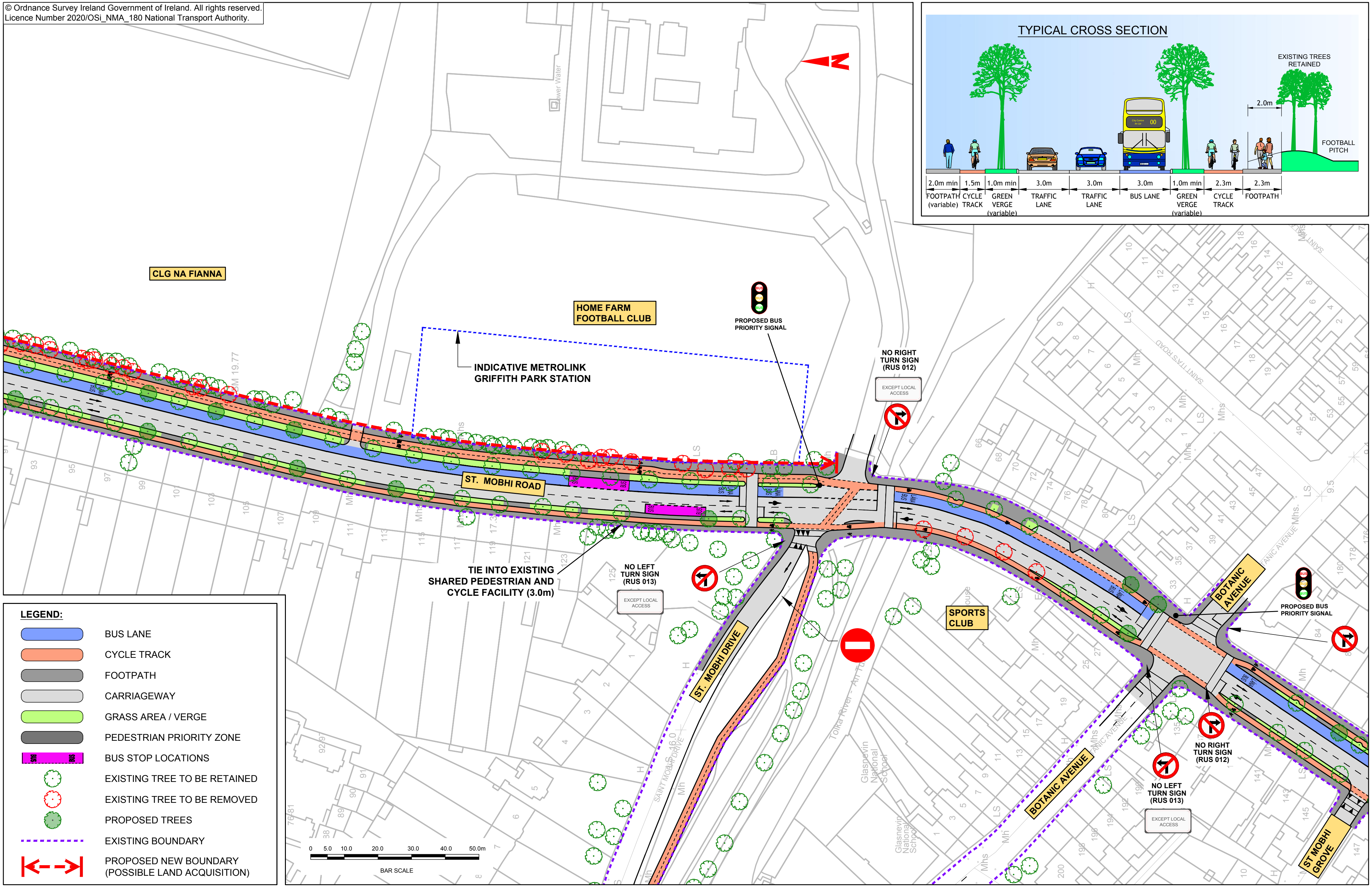
ST. MOBHI BOITHRIN

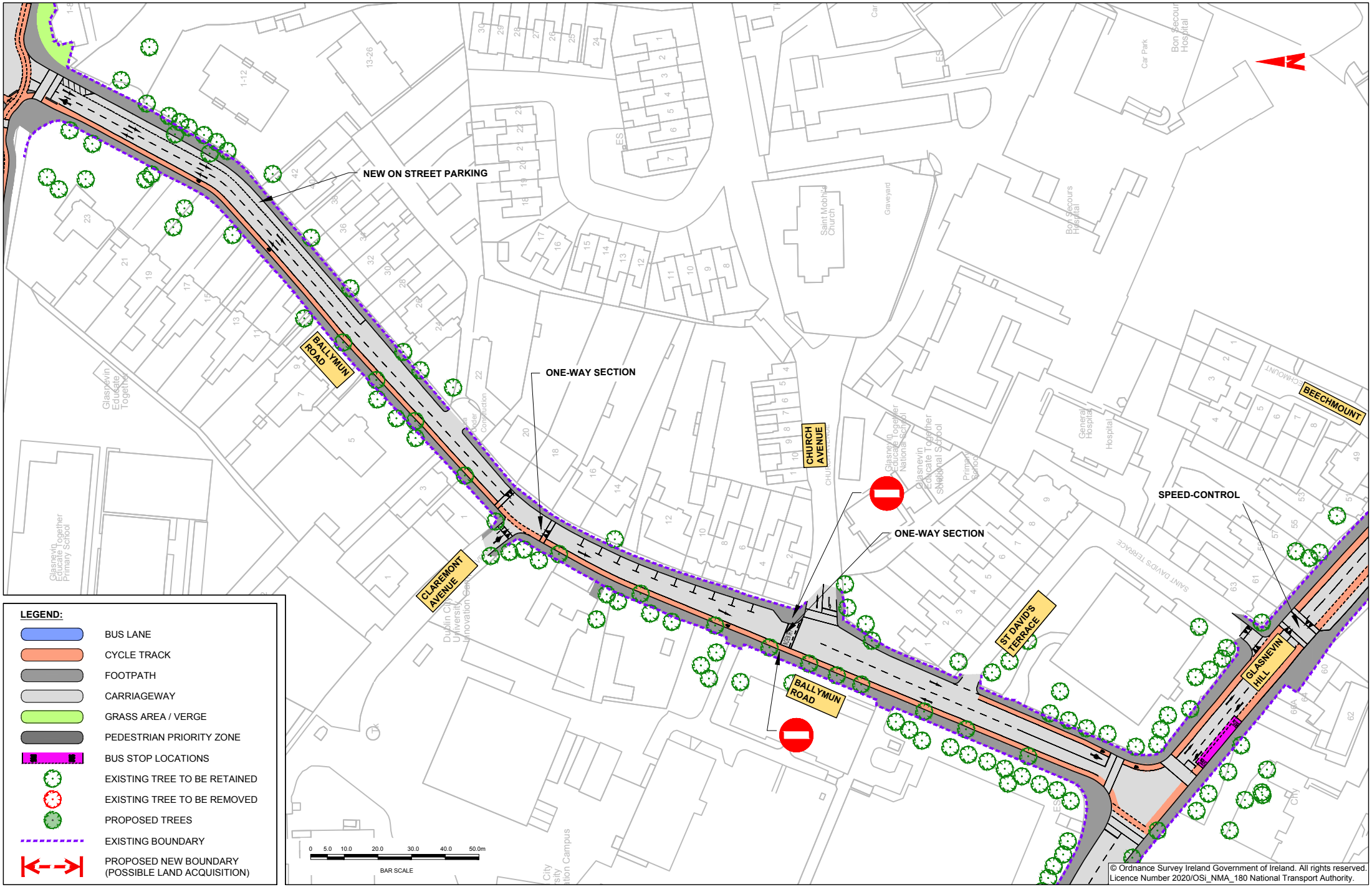
REFER TO MAP 18 FOR ALTERNATIVE TRAFFIC ROUTES - ST. MOBHI ROAD

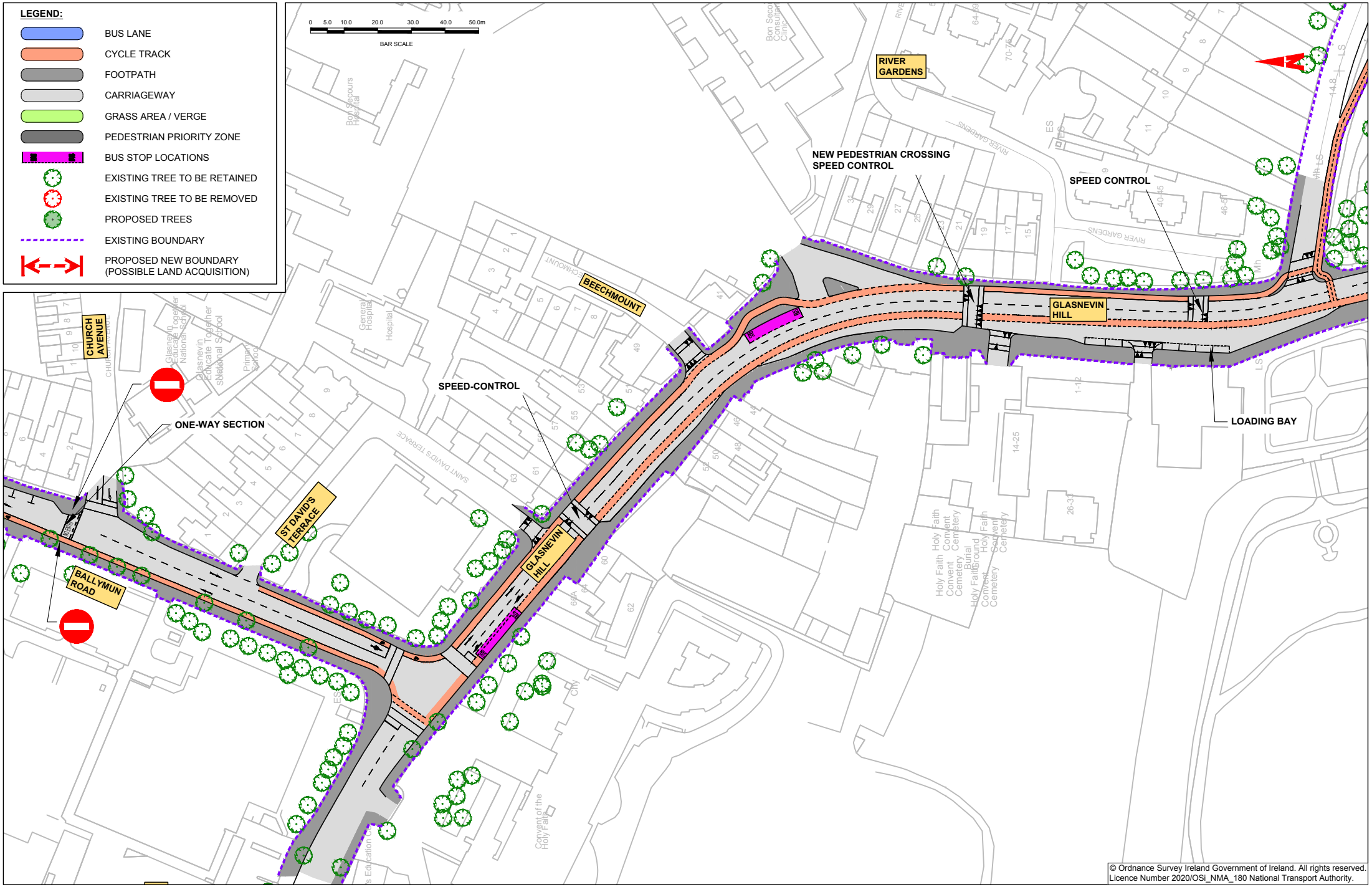
LEGEND:

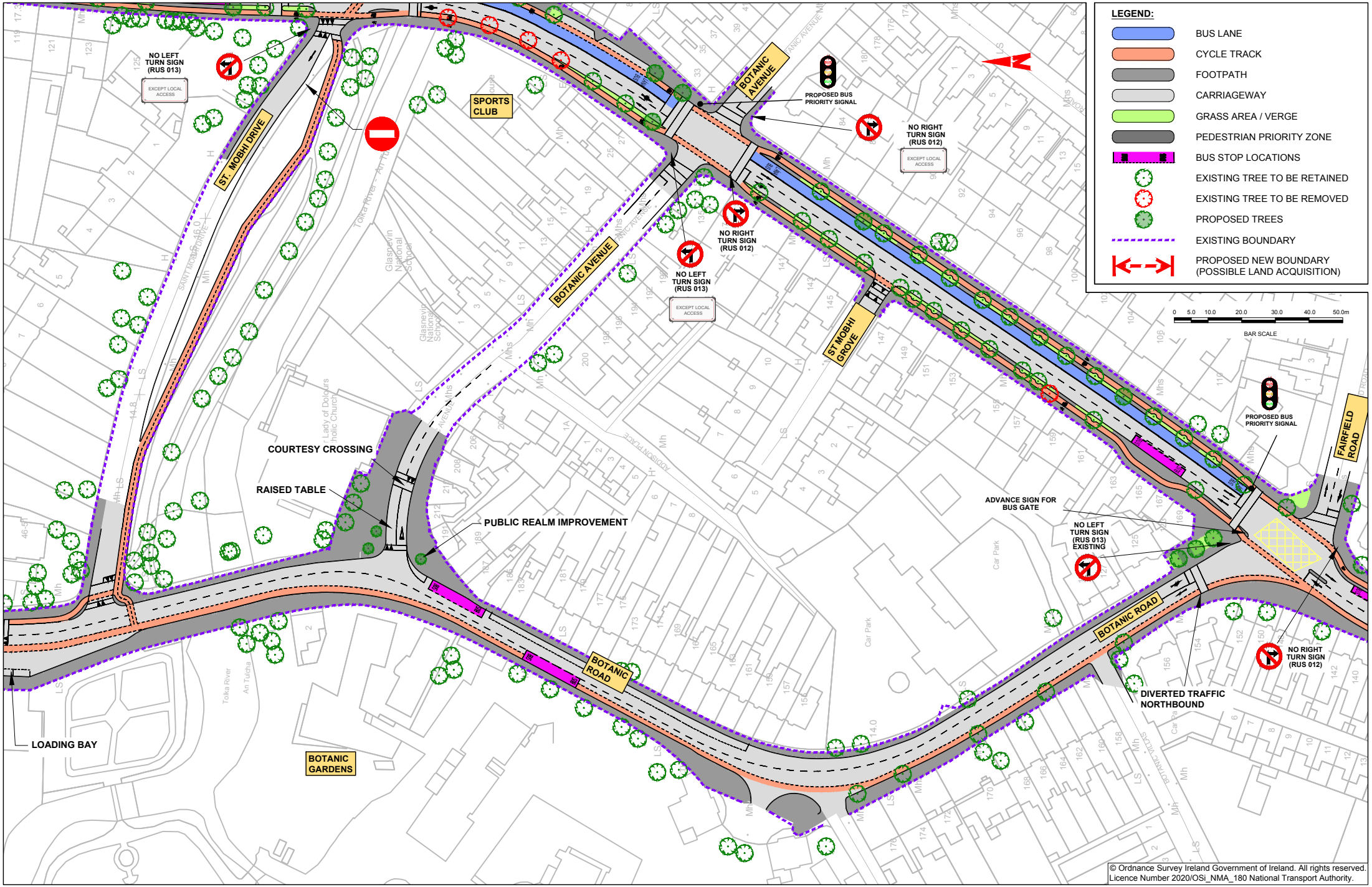
- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- BUS STOP LOCATIONS
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREES
- EXISTING BOUNDARY
- PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)

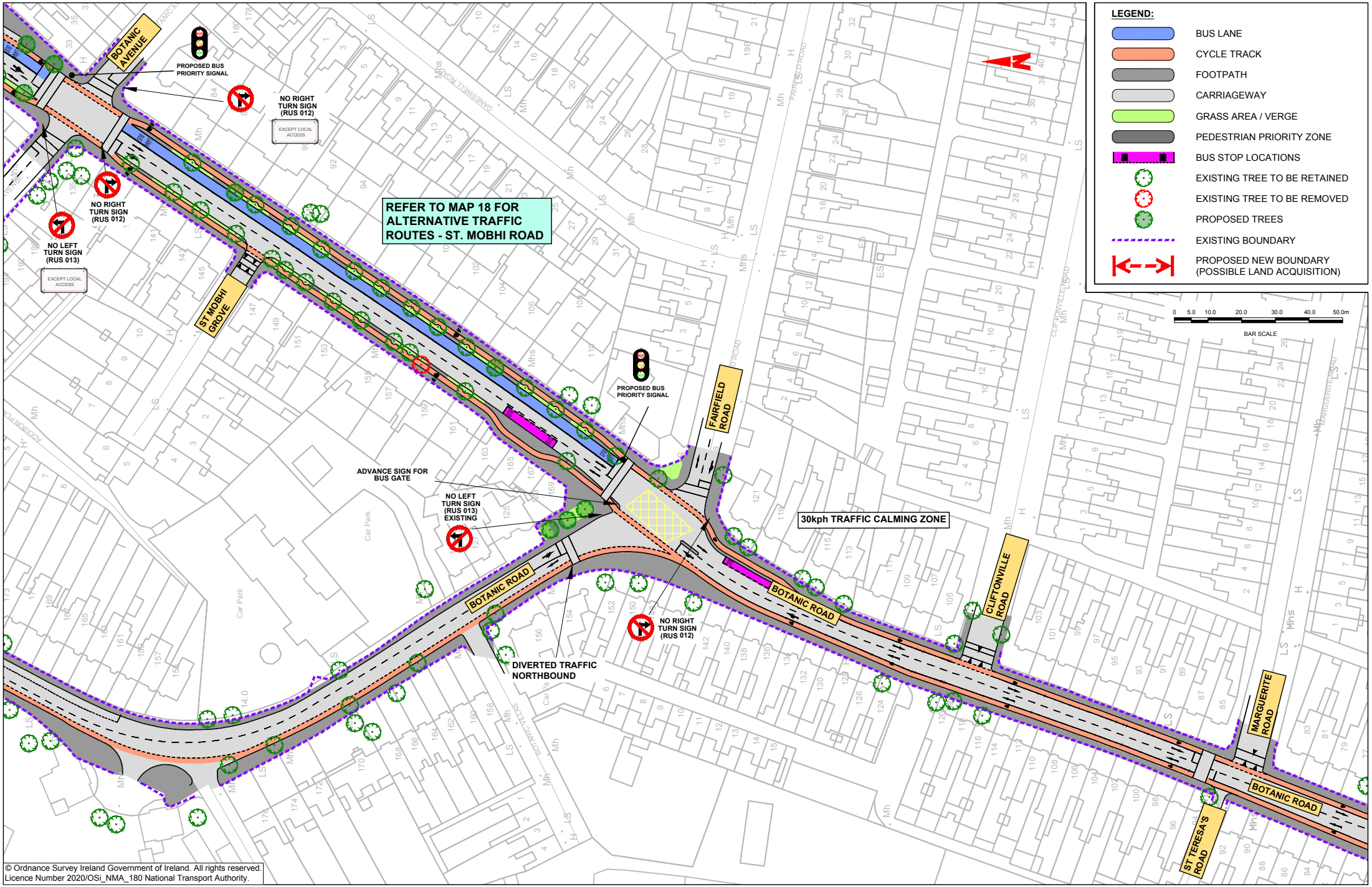
0 5.0 10.0 20.0 30.0 40.0 50.0m
BAR SCALE

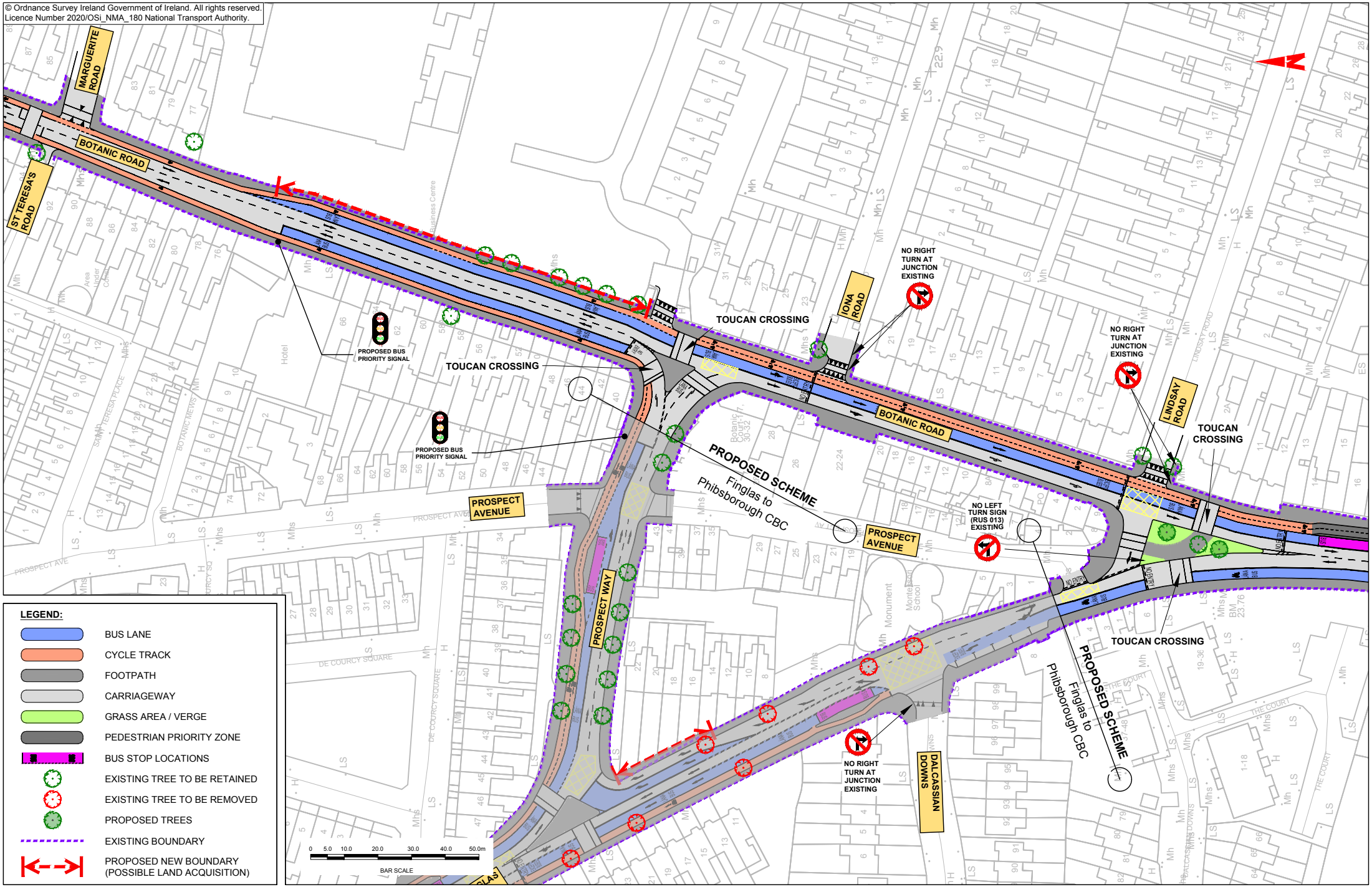

TYPICAL CROSS SECTION
EXISTING TREES RETAINED
2.0m
FOOTBALL PITCH
2.0m min
1.5m
1.0m min
3.0m
3.0m
3.0m
1.0m min
2.3m
2.3m
FOOTPATH (variable)
CYCLE TRACK
GREEN VERGE (variable)
TRAFFIC LANE
TRAFFIC LANE
BUS LANE
GREEN VERGE (variable)
CYCLE TRACK
FOOTPATH
CLG NA FIANNA
HOME FARM FOOTBALL CLUB
INDICATIVE METROLINK GRIFFITH PARK STATION
PROPOSED BUS PRIORITY SIGNAL
NO RIGHT TURN SIGN (RUS 012)
EXCEPT LOCAL ACCESS
ST. MOBHI ROAD
TIE INTO EXISTING SHARED PEDESTRIAN AND CYCLE FACILITY (3.0m)
NO LEFT TURN SIGN (RUS 013)
EXCEPT LOCAL ACCESS
ST. MOBHI DRIVE
SPORTS CLUB
BOTANIC AVENUE
PROPOSED BUS PRIORITY SIGNAL
NO RIGHT TURN SIGN (RUS 012)
NO LEFT TURN SIGN (RUS 013)
EXCEPT LOCAL ACCESS
BOTANIC AVENUE
ST MOBHI GROVE
Tolka River
Glasnevin National School
SAINT TITAS ROAD
0 5.0 10.0 20.0 30.0 40.0 50.0m
BAR SCALE
LEGEND:
BUS LANE
CYCLE TRACK
FOOTPATH
CARRIAGEWAY
GRASS AREA / VERGE
PEDESTRIAN PRIORITY ZONE
BUS STOP LOCATIONS
EXISTING TREE TO BE RETAINED
EXISTING TREE TO BE REMOVED
PROPOSED TREES
EXISTING BOUNDARY
PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)











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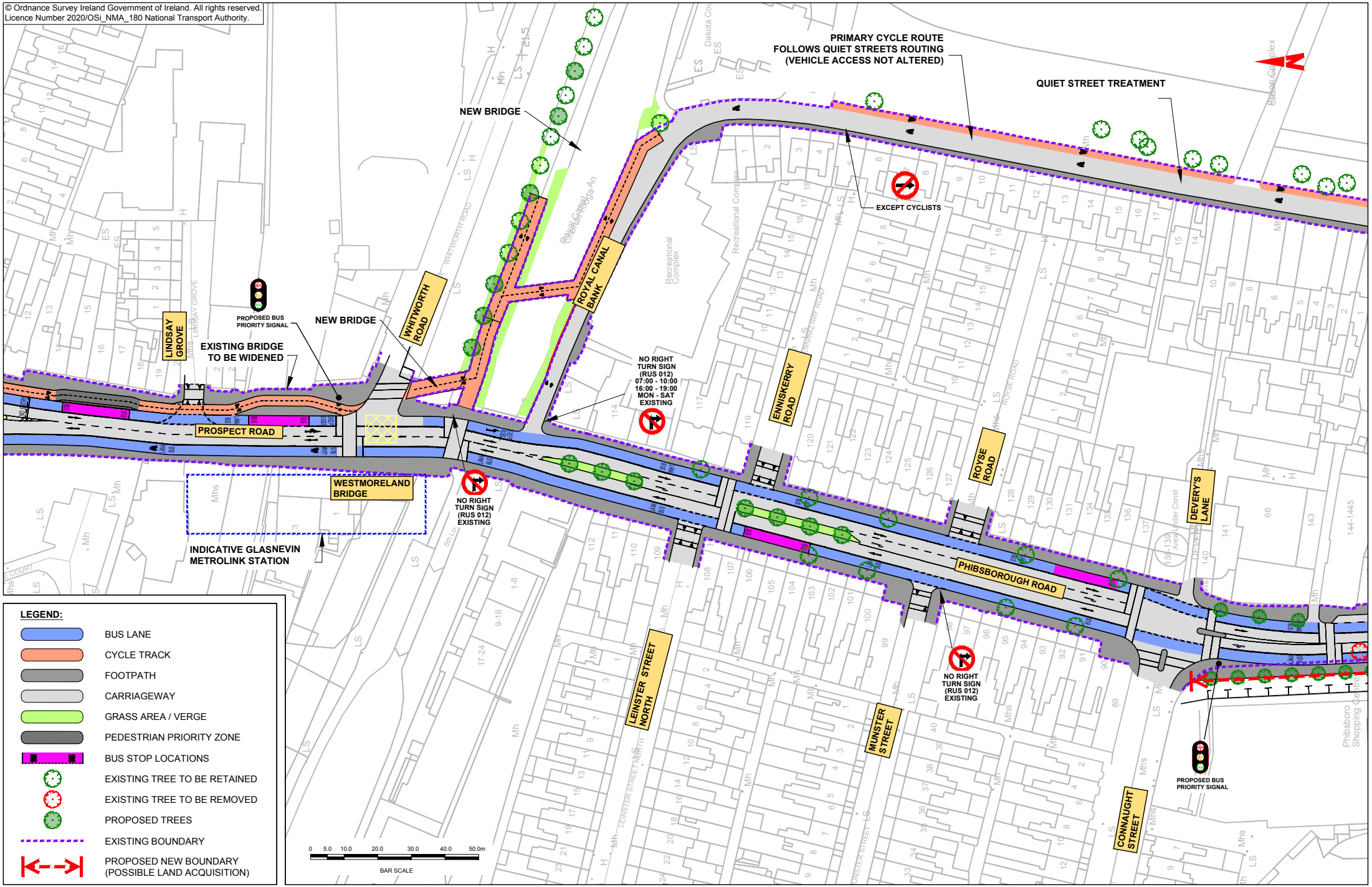

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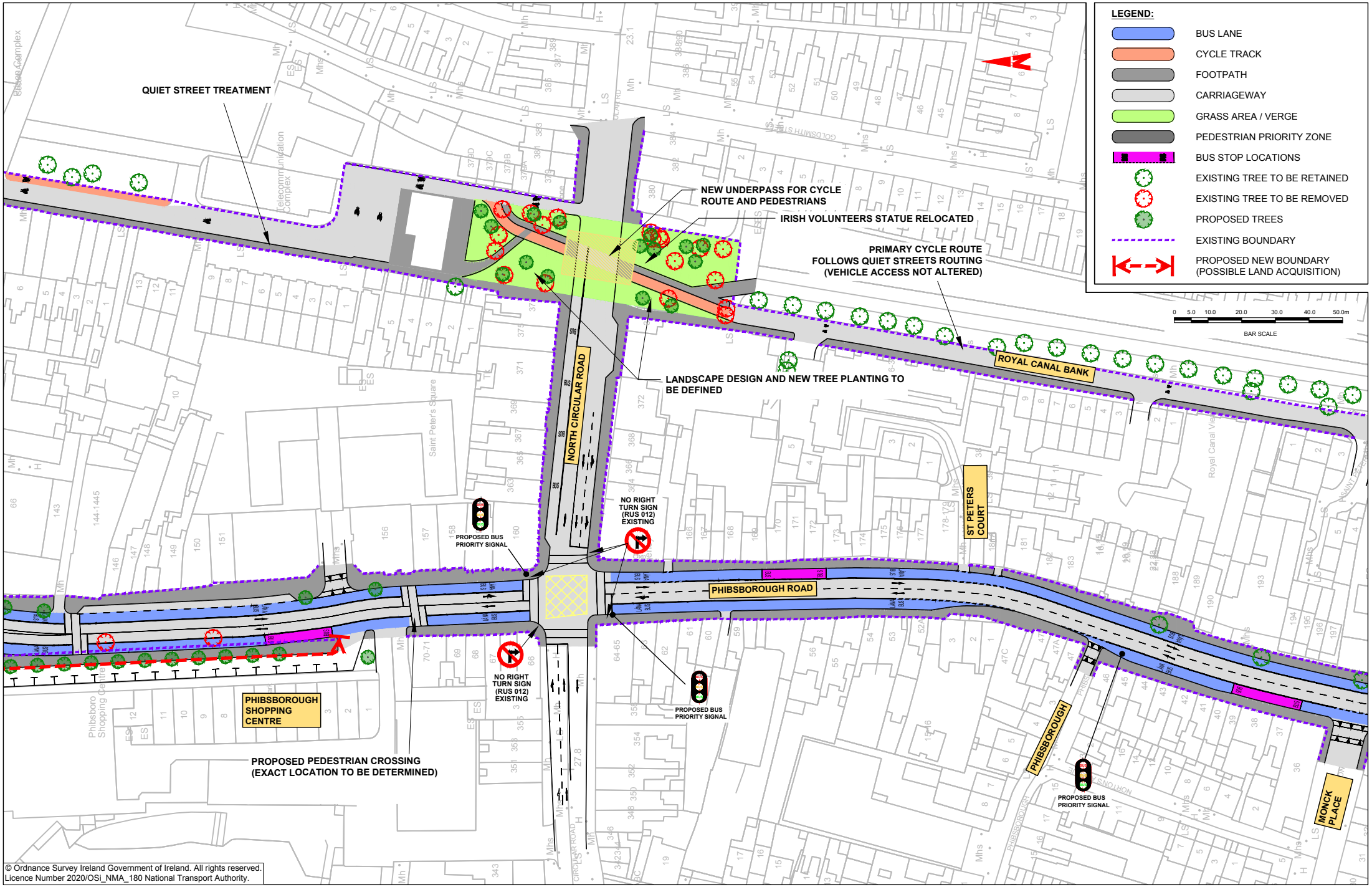

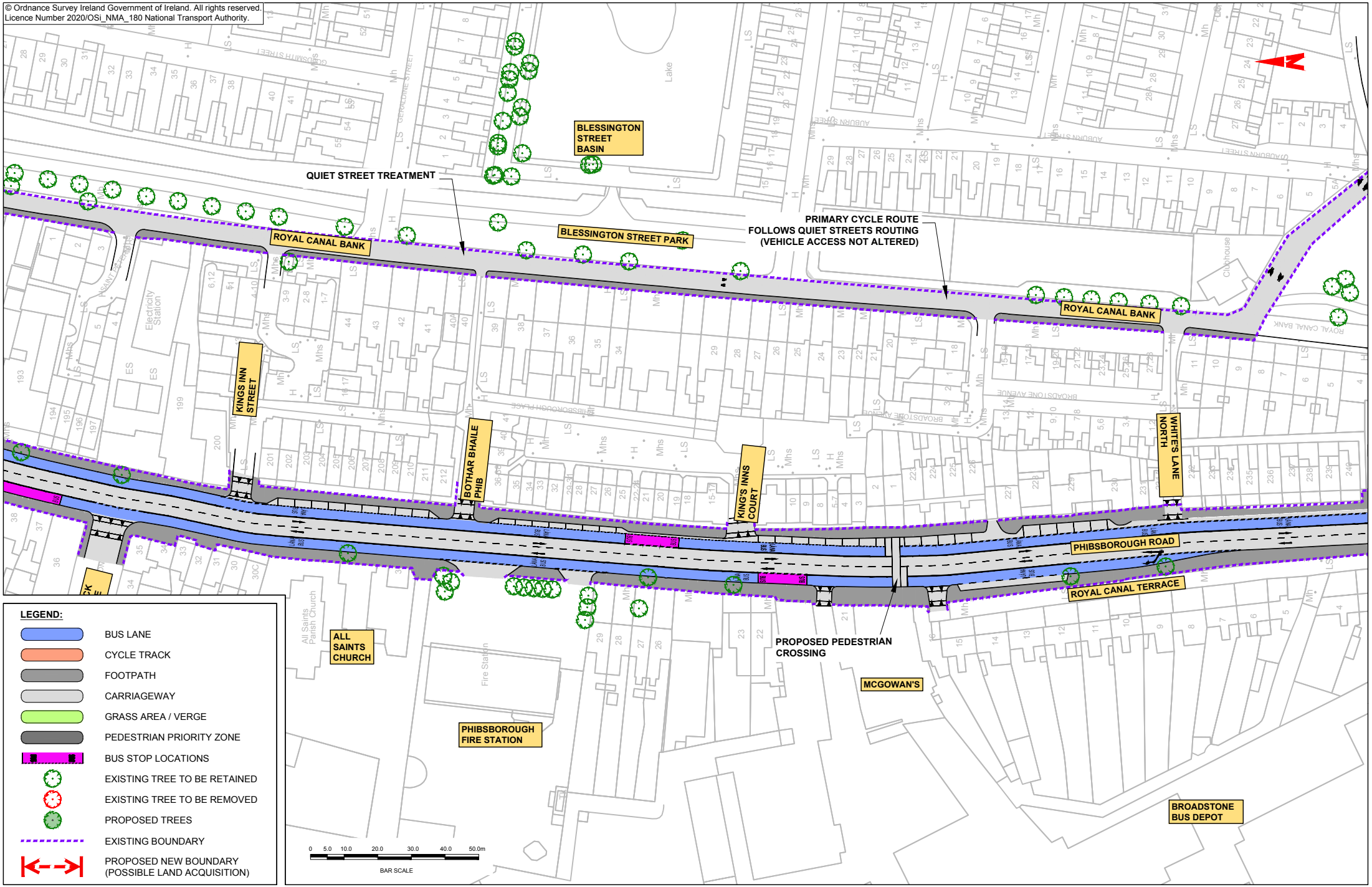

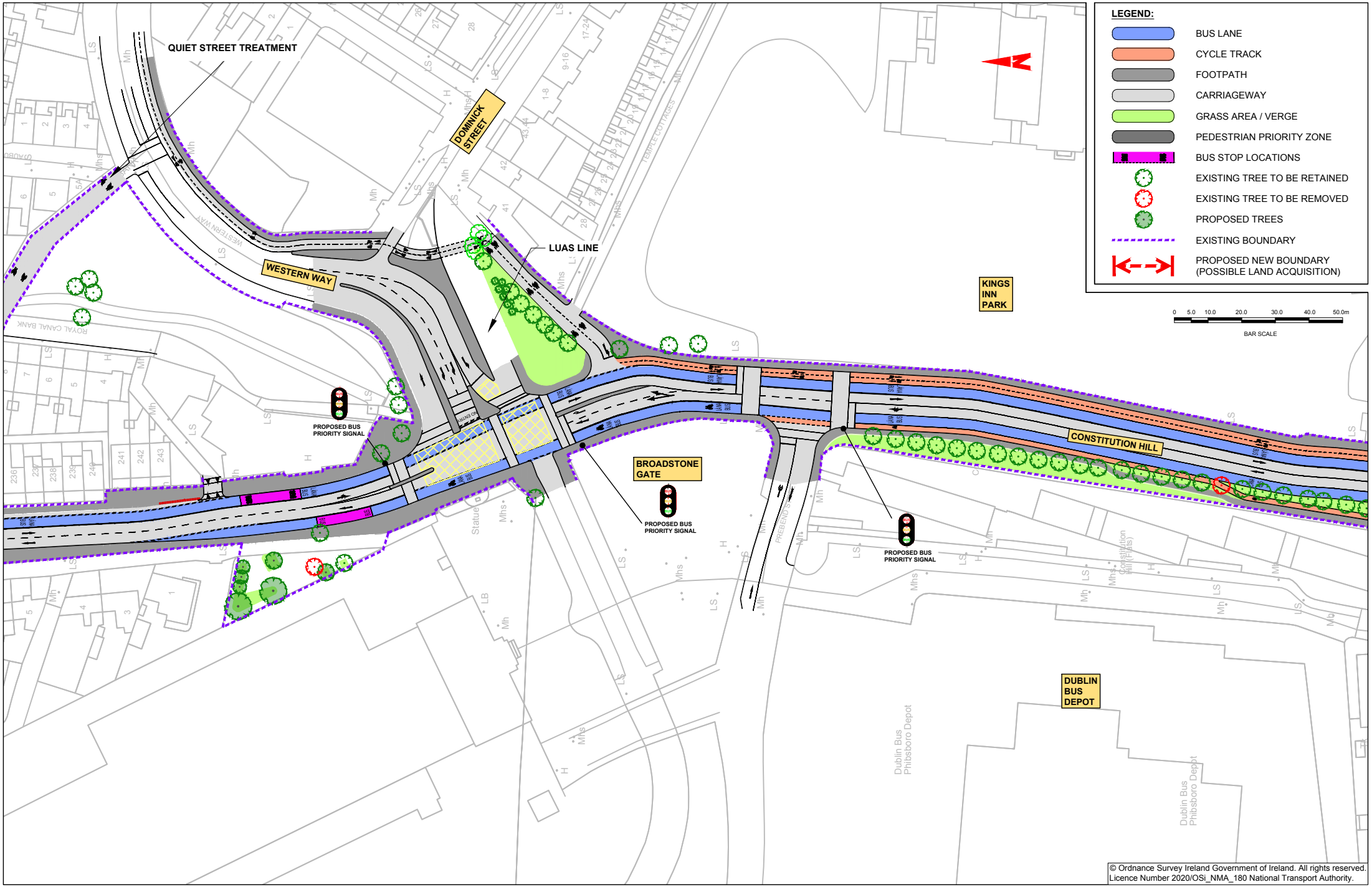

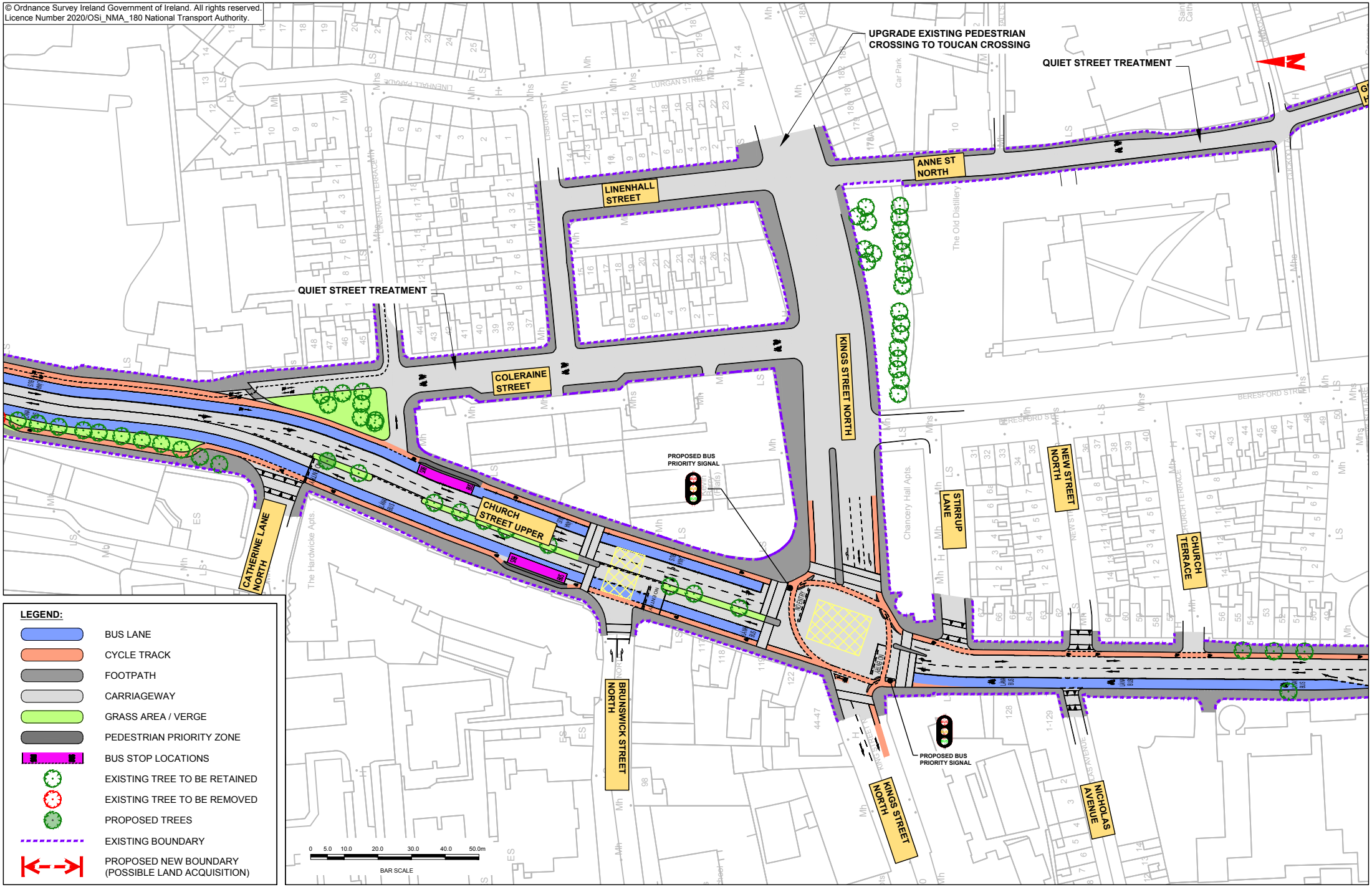

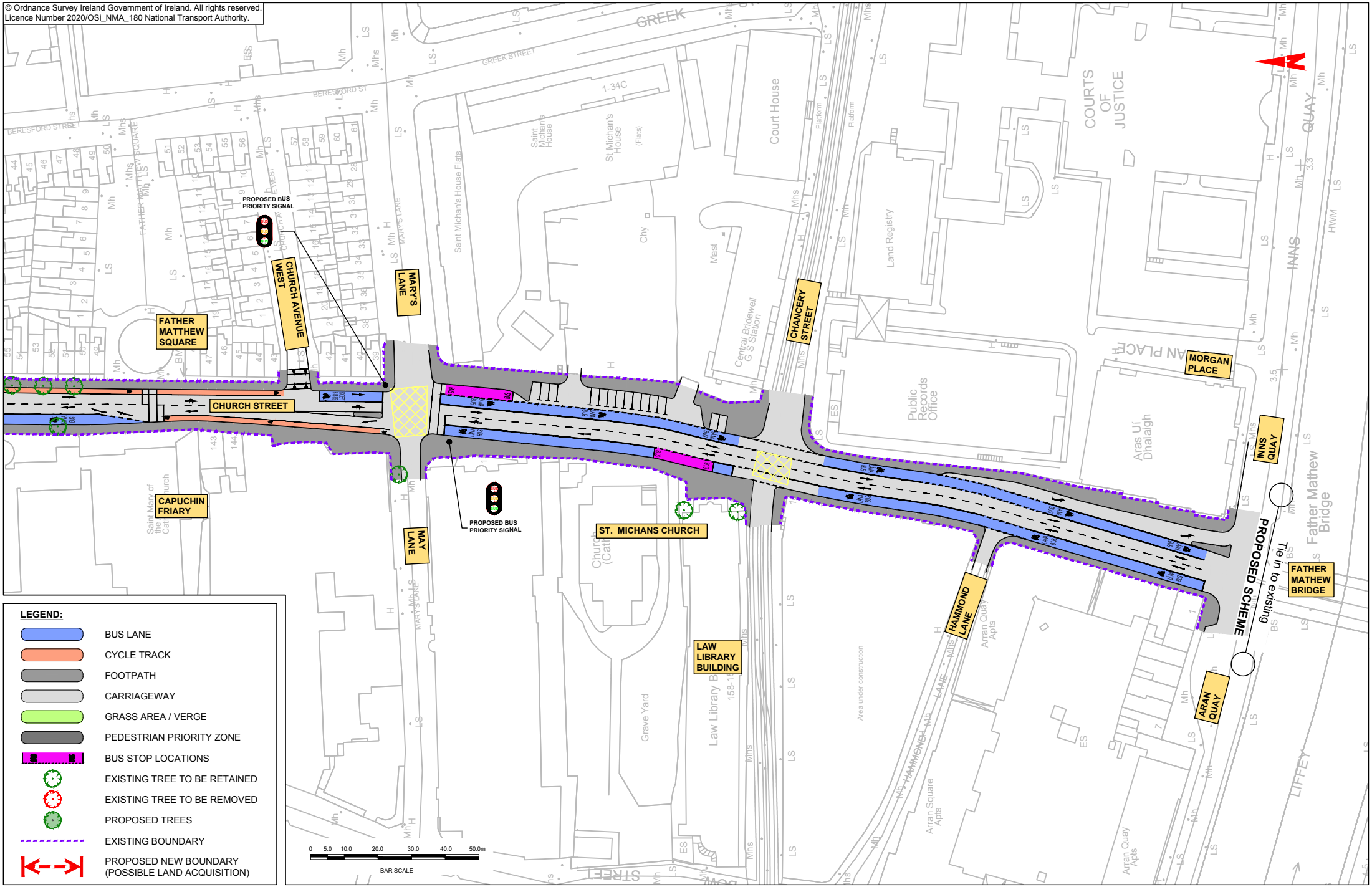

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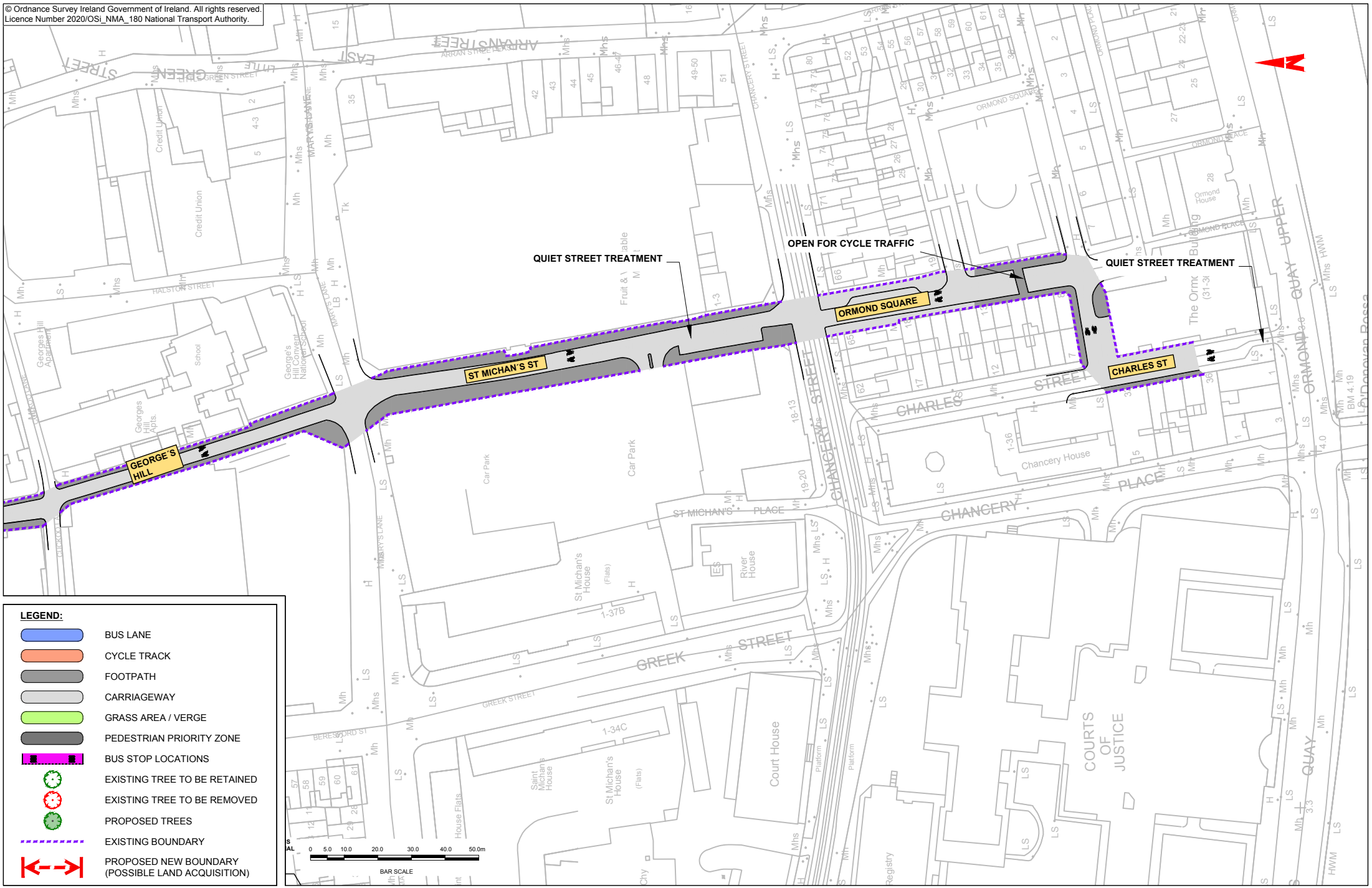

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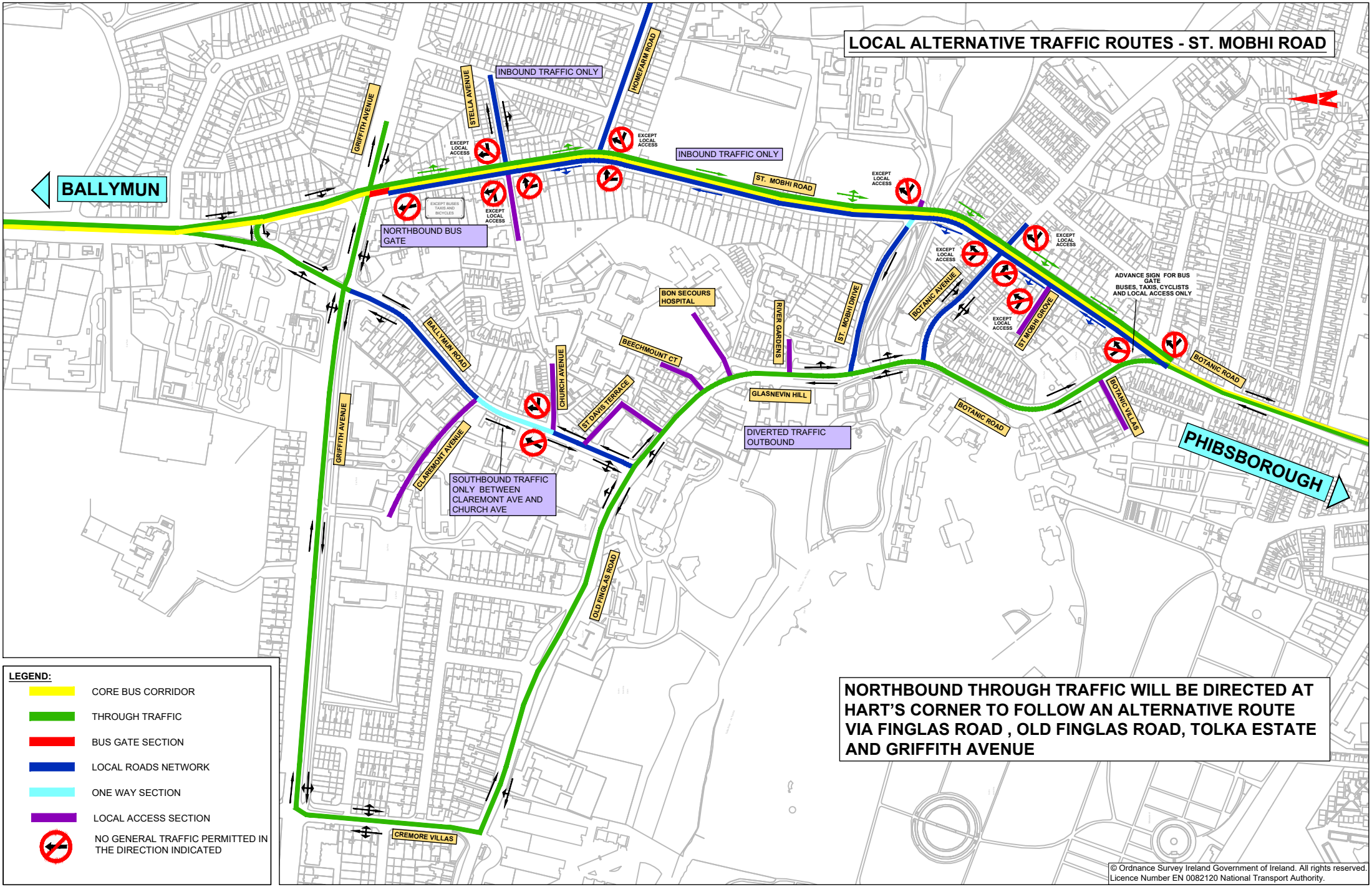

Appendix C. Feasibility Study and Options Assessment Report

https://busconnects.ie/initiatives/core-bus-corridor-background-information/technical-documents/

Appendix D. Emerging Preferred Route Brochure

https://busconnects.ie/initiatives/core-bus-corridor-background-information/emerging-preferred-route/

NTA
Údarás Náisiúnta Iompair
National Transport Authority
Harcourt Lane,
Dún Scéine,
Dublin 2.
D02 WT20

Jacobs ARUP SYSTRA