

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

**Environmental  
Impact  
Assessment  
Screening  
Report**

**BUS  
CONNECTS**

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

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# 1. Introduction

## 1.1 EIA Screening Report

### 1.1.1 Introduction

This report is the Environmental Impact Assessment (EIA) Screening Report for the Kimmage to City Centre Core Bus Corridor (hereafter, Proposed Scheme). This report has been prepared in accordance with the applicable provisions of the Environmental Impact Assessment Directive<sup>1</sup>. This EIA Screening Report has been prepared so as to enable the National Transport Authority (“NTA”) to consider whether the Proposed Scheme is to be subject to an environmental impact assessment, in accordance with the provisions of the EIA Directive.

Certain projects, listed in Annex I to the EIA Directive require mandatory EIA, due to those projects always having the potential for significant environmental effects. Other projects which fall below the relevant thresholds for mandatory EIA (i.e. “sub-threshold development”) may require EIA if it is considered that the development is likely to have a significant effect on the environment. Significant effects may arise due to the nature of the development, its scale or extent and its location in relation to the characteristics of the receiving area, particularly sensitive environments.

This report documents the methodology employed to prepare this EIA Screening Report, having regard and applying the relevant legislation and guidance documents, especially:

- Ministerial Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning and Local Government, 2018);
- Implementation of the EIA Directive 2014/52/EU (European Commission 2018); and
- Environmental Impact Assessment of Projects - Guidance on Screening (European Commission, 2017).

As set out in the Ministerial Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, screening is the initial stage in the EIA process and determines whether or not specified public or private developments are likely to have significant effects on the environment and, as such, require EIA to be carried out prior to a decision on a development consent application being made. A screening determination is a matter of professional judgement, based on objective information relating to the proposed project and its receiving environment. Environmental effects can, in principle, be either positive or negative. For the Proposed Scheme, the EIA Screening stage involved the following:

- 1) Review of the Proposed Scheme against the classes of project set out in Annex I of the EIA Directive. Annex I projects meeting or exceeding the thresholds set out therein require mandatory EIA and, as such, there is no screening determination required; and
- 2) Review of the Proposed Scheme against the thresholds for road development as identified in section 50 of the Roads Act 1993, as amended (“the Roads Act”). Where those thresholds are met or exceeded, once again, EIA is mandatory and no screening determination is required. However, for “sub-threshold” road development, a screening determination is required to be undertaken in order to ascertain whether by virtue, inter alia, of its nature, size or location, road development should be subject to EIA.

The Proposed Scheme does not fall under the list of projects identified in Annex I of the EIA Directive. Moreover, the Proposed Scheme does not meet or exceed the thresholds under section 50 of the Roads Act such that it would automatically trigger the requirement for an EIA. The purpose of this EIA Screening Report, in accordance with section 50(1)(c) of the Roads Act, is to consider whether the Proposed Scheme would be likely to have significant effects on the environment.

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<sup>1</sup> Directive (2011/92/EU) of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014.

### 1.1.2 Overview of the Proposed Scheme

The Proposed Scheme will commence on R817 Kimmage Road Lower at the junction with R818 Terenure Road West, R818 Kimmage Road West and Fortfield Road. The Proposed Scheme will continue along R817 Kimmage Road Lower towards the City Centre, via R137 Harold's Cross Road, Clanbrassil Street Upper and Lower and New Street South, where it will ultimately join the Tallaght/Clondalkin to City Centre Core Bus Corridor Scheme at the R110 Kevin Street Upper Junction. Priority for buses will be provided along the entire route, consisting primarily of dedicated bus lanes in both directions where feasible, with alternative measures proposed at particularly constrained locations such as much of R817 Kimmage Road Lower, Harold's Cross Park West and short sections of R137 Clanbrassil Street Upper and Lower in alternate directions. A complementary cycle route is also proposed to the west of the Proposed Scheme via quiet streets at the southern end of the Proposed Scheme. The Proposed Scheme is described in detail in Section 3.2 and is shown on drawings contained in Appendix A.

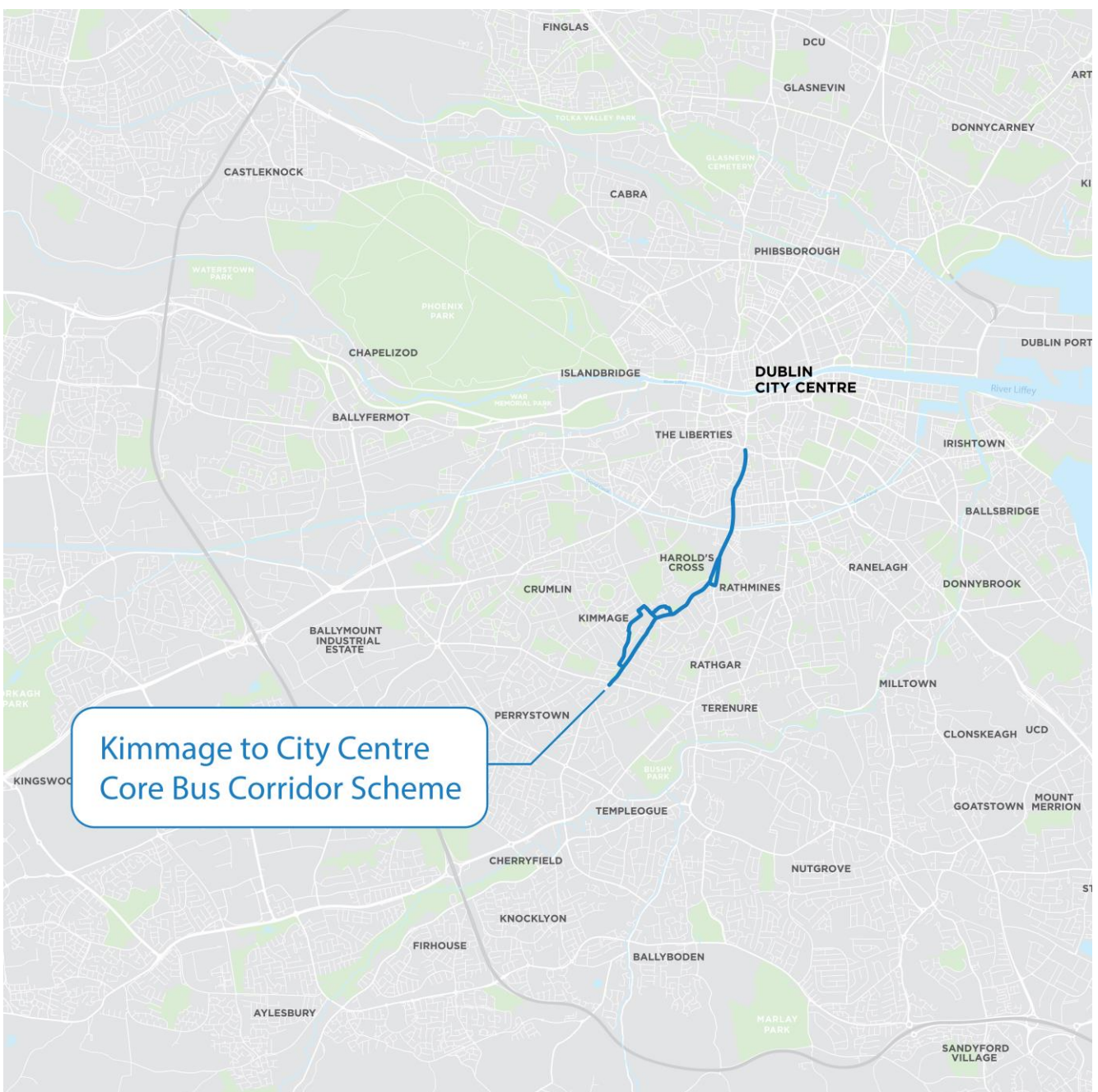


Image 1.1: Kimmage to City Centre Core Bus Corridor Scheme

## 1.2 BusConnects Dublin – Core Bus Corridor Infrastructure Works

The Proposed Scheme is one of the 12 Schemes that make up the BusConnects Dublin – Core Bus Corridor Infrastructure Works, which is being planned with the aim of providing enhanced walking, cycling and bus infrastructure on key access corridors in the Dublin region. The delivery of the BusConnects Dublin – Core Bus Corridor Infrastructure Works will enable and deliver efficient, safe and integrated sustainable transport movement along these corridors.

## 1.3 Objectives for the BusConnects Dublin – Core Bus Corridor Infrastructure Works (including the Proposed Scheme)

The objectives of the BusConnects Dublin – Core Bus Corridor Infrastructure Works (including the Proposed Scheme) 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.

## 1.4 Policy Context

### 1.4.1 National Policy Documents

#### 1.4.1.1 Project Ireland 2040: National Planning Framework (NPF) (Government of Ireland 2018)

Project Ireland 2040 National Planning Framework (hereafter referred to as the NPF) (Government of Ireland 2018a) is the Government's strategic framework to guide development and investment to enhance the wellbeing and quality of life of Irish people. The NPF sets out a number of National Strategic Outcomes (NSO) to shape and grow development in Ireland, a number of which are relevant to the Proposed Scheme.

The most relevant NSOs include NSO1 (Compact growth), NSO2 (Enhanced regional accessibility) and NSO4 (Sustainable mobility). NSO1 covers integrating transport, promoting regeneration, improving accessibility and transitioning towards more sustainable forms of transport. NSO2 covers maintaining the strategic capacity and safety of national roads, planning for future capacity and enabling more effective traffic management. It includes the re-allocation of inner city road-space in favour of bus-based public transport and walking/cycling facilities. NSO4 specifically refers to the delivery of BusConnects as part of the objectives of the Transport Strategy for the Greater Dublin Area (GDA). Under the heading 'Key future growth enablers for Dublin include', the NPF highlights that:

*'The development of an improved bus-based system, with better orbital connectivity and integration with other transport networks.'* And *'Delivery of the metropolitan cycle network set out in the Greater Dublin Area Cycle Network Plan inclusive of key commuter routes and urban greenways on the canal, river and coastal corridors.'*

As part of the NPF, a Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) and Nature Impact Statement (NIS) were produced. The results of the SEA indicated a number of significant potential positive and negative environmental impacts (including cumulative impacts) from the implementation of the NPF. It also identified a number of mitigation measures to reduce the negative impacts such as ensuring that Flood Risk Management informs place-making and integrating Sustainable Drainages Systems (SuDS) to create safe places. The results of the SEA have been taken into account when considering the likely significant effects of the Proposed Scheme. The Proposed Scheme complies with the NPF goals by delivering infrastructure that will facilitate a high quality sustainable public transport network not only facilitating buses but also active travel in cycling and pedestrian infrastructure. The Proposed Scheme will help the transition towards a low carbon and climate resilient society.

#### **1.4.1.2 Project Ireland 2040: National Development Plan (NDP) 2018-2027 (Department of Housing, Planning and Local Government 2018)**

The National Development Plan (hereafter referred to as the NDP) (Government of Ireland 2018b) is the national capital investment strategy plan that is integrated and aligned with the NPF. It sets out the framework of expenditure commitments to secure the Strategic Investment Priorities to the year 2027 and support the delivery of the NSOs identified in the NPF.

Within the NDP, BusConnects is specifically identified as one of the three 'Major National Infrastructure Projects' for appraisal and delivery that aligns with NSO4 of the NPF. Table 3.2 of the NDP shows a significant commitment of an indicative €2.4 billion of Exchequer funding for the delivery of the BusConnects Programme.

BusConnects is identified as a 'Major National Infrastructure Project', with an associated investment commitment, which has been determined as central to the delivery of the NPF vision. Under the heading 'Major National Infrastructure Projects' the NDP sets out a selection of National infrastructure projects included in the Plan for 'appraisal and delivery'. 'BusConnects for Ireland's Cities' is highlighted under the heading 'Sustainable Mobility'.

The Proposed Scheme is an integral part of Ireland's efforts to reduce carbon, it will help to facilitate continued growth by meeting existing and future travel demand. The Proposed Scheme will provide the infrastructure to help facilitate a modal shift to bus and active travel options.

#### **1.4.1.3 Climate Action Plan 2019 (Government of Ireland 2019)**

The Climate Action Plan sets out how Ireland is to meet its European Union (EU) greenhouse gas emission targets. The obligations include reducing carbon emissions by 30% by 2030 and laying the foundations for achieving net zero carbon emissions by 2050. The BusConnects programme is highlighted as a major sustainable-mobility project that will support a modal shift to more sustainable forms of transport.

In regard to modal shift the Climate Action Plan 2019 sets out that:

*'We want to make sure that we provide good public transport, cycling and walking infrastructure, so people are less reliant on their cars, and we can cut congestion. We have already committed to an additional 500,000 public transport and active travel journeys daily by 2035.'*

The Climate Action Plan 2019 further sets out under modal shift that it will:

- *'Implement major sustainable-mobility projects such as DART Expansion, Metro Link, and the BusConnects programme. BusConnects targets a 50% increase in bus passenger numbers over the lifetime of the project in our major cities';*
- *'Expand sustainable-travel measures, including a comprehensive cycling and walking network for metropolitan areas of Ireland's cities, with a particular emphasis on safety of cyclists. We shall also expand greenways, and develop over 200km of new cycling network under BusConnects'; and*
- *'Promote compact growth and greater integration of policies for land use and transport planning, which will reduce the demand for commuter travel and support more efficient patterns of development and travel'.*

The delivery of BusConnects (of which the Proposed Scheme is a key part), is itself a key action of the Climate Action Plan 2019. The proposed transport infrastructure will expand, enhance, and connect to pedestrian and cycle networks and will assist in facilitating the delivery of compact growth on lands zoned in proximity to the Proposed Scheme.

**1.4.1.4 Energy White Paper, Ireland’s Transition to a Low Carbon Energy Future 2015-2030 (Department of Communications, Energy and Natural Resources 2015)**

The Energy White Paper is a statement of Government policy in the energy sector. It sets out an energy policy framework up to 2030 and outlines a transition to a low carbon energy system for Ireland by 2050. It includes the commitment to supporting energy efficient and renewable transport.

In relation to transport, the renewable energy actions that commit to supporting energy efficiency and renewable transport are as follows:

*‘To support energy efficient and renewable transport, we will: ...*

- *...’support transport modal shift through better alignment of land use and transport planning and a continuation of smarter travel programmes administered by the Department of Transport, Tourism and Sport....*

The Proposed Scheme is fully compliant with the renewable energy actions of the Energy White Paper as it will support and facilitate a modal shift to sustainable transport options by providing the infrastructure required for same.

**1.4.1.5 Transport – Climate Change Sectoral Adaptation Plan (Department of Transport, Tourism and Sport 2019)**

This plan sets policy on adaptation strategies for transport, helps to build adaptive capacity within the sector’s administrative structures and assists organisations to better understand the implications of climate change for Ireland and how it may impact on transport infrastructure and services. The overarching goal is to ensure that the transport sector can fulfil its continuing economic, social, and environmental objectives by ensuring that transport infrastructure is safeguarded from the impacts of climate change. Both SEA and AA screening was undertaken and it was determined that neither an SEA or AA was not required for the Plan.

The Proposed Scheme complies with the objectives and actions set out in the plan.

**1.4.1.6 Smarter Travel: A Sustainable Transport Future: A New Transport Strategy for Ireland 2009–2020 (Department of Transport, Tourism and Sport 2009)**

This is the National planning policy document to deliver an integrated transport policy for Ireland. It sets out a series of actions and measures covering infrastructural and policy elements to promote and encourage the vision of a sustainable travel and transport system for the period 2009 to 2020.

To achieve a shift to sustainable transport, the document identifies a series of 49 actions that will have complementary impacts in terms of travel demand and emissions and can be grouped into four overarching goals.

Action 12 outlines efforts to *‘implement more radial bus priority and traffic management’* and to ensure *‘re-design of bus services’* and Action 13 seeks to create a *‘reliable bus service in significant urban areas.’*

In regard to Public Transport, it sets out that:

*‘We estimate that by 2020 we will need to provide public transport to meet the needs of an additional 90,000 commuters on top of the 140,000 likely to be catered for by Transport 21. The bus will be at the heart of moving these additional people.’*



It further comments that:

*'Bus use is particularly important for those without access to a car, the young, older people and people with mobility issues. If we are to encourage the use of public transport in Ireland, the availability of a safe, accessible, integrated and reliable service for 18+ hours of the day is essential in any attempts to increase patronage and gain more users.'*

The Proposed Scheme will help to enhance the effectiveness / efficiency of future bus services required by the Strategy. The Proposed Scheme will maximise the efficiency of the transport network through the integration of cycling and public transport modes and alleviate reliance on car-based journeys.

#### **1.4.1.7 Smarter Travel: Ireland's First National Cycle Policy Framework 2009-2020 (Department of Transport, Tourism and Sport 2009).**

This is Ireland's cycling policy framework. The vision is to create a strong cycling culture in Ireland. This policy framework outlines a breadth of interventions to make cycling easier and safer. It includes interventions related to integrating cycling and public transport and designing / retrofitting cyclist-friendly road infrastructure and management.

The interventions specific to the Proposed Scheme are:

- *'We will pay special attention to integrating cycling and public transport (PT). As commuting distances are lengthening, the importance of combining the bicycle with the bus, tram or train grows. We will provide state-of-the-art cycling parking at all appropriate PT interchanges and stops. We will also ensure that intercity and suburban trains have proper provision for the carriage of bikes – either on all services or (in the case of sub-urban trains) on off peak (counter-peak) services.'*
- *Objective 2: 'Ensure that the urban road infrastructure is designed/retrofitted so as to be cyclist-friendly and that traffic management measures are also cyclist friendly.'*; and
- *Objective 8: 'Ensure proper integration between cycling and public transport' will assist in increasing the uptake in cycling across the region.*

The Proposed Scheme will facilitate sustainable modes of transport and fully complies with the NCPF through the provision of safe cycling infrastructure segregated from general traffic wherever practicable.

## **1.4.2 Regional Policy Documents**

### **1.4.2.1 Transport Strategy for the Greater Dublin Area (GDA) 2016-2035 (NTA 2016)**

The Transport Strategy for the GDA provides a framework for the planning and delivery of transport infrastructure and services. As part of the Transport Strategy the Core Bus network is to be developed to achieve a continuous priority for bus movement on sections of the Core Bus network within the Metropolitan area. This is to be achieved through enhanced bus lane provisions, the removal of delays along the routes and enable the bus to provide a faster mode of transport to cars along these routes.

The Transport Strategy highlights 16 Core Radial Bus Networks and under the heading '*Bus Infrastructure*' sets out that:

*'In order to ensure an efficient, reliable, and effective bus system, it is intended, as part of the Strategy, to develop the Core Bus Network to achieve, as far as practicable, continuous priority for bus movement on the portions of the Core Bus Network within the Metropolitan Area. This will mean enhanced bus lane provision on these corridors, removing current delays on the bus network in the relevant locations and enabling the bus to provide a faster alternative to car traffic along these routes, making bus transport a more attractive alternative for road users. It will also make the overall bus system more efficient, as faster bus journeys means that more people can be moved with the same level of vehicle and driver resources.'*

A SEA, AA and NIS have been undertaken as part of the Transport Strategy for the GDA. In line with legislation governing SEA, a number of reasonable alternative strategies have been devised and assessed, taking into

account the objectives and the geographical scope of the strategy. The provisions of the Transport Strategy (including bus-based transport modes), were evaluated for potential significant effects. The SEA identified that the Transport Strategy had the potential to result in significant adverse effects including habitat loss, disturbance and displacement of protected species and effects on riparian zones where watercourses are crossed. The SEA and the AA identified recommendations which are integrated into the Transport Strategy to mitigate potential adverse effects including the preparation of Construction Environmental Management Plans and Construction Waste Management Plans. The results of the SEA have been taken into account when considering the likely significant effects of the Proposed Scheme.

The Proposed Scheme will provide the infrastructure required to facilitate 'a continuous priority for bus movement on sections of the Core Bus network within the Metropolitan area.' The Proposed Scheme will realise the objectives of the Transport Strategy by providing the enhanced bus lanes, removing 'bottlenecks' and making the bus a more attractive option to commuters than car-based transport. The Proposed Scheme is fully compliant with and complementary to the Transport Strategy.

#### **1.4.2.2 Integrated Implementation Plan 2019 – 2024**

The National Transport Authority (NTA) Integrated Implementation Plan 2019 - 2024 (hereafter referred to as the Implementation Plan) (NTA 2019) was prepared to be aligned with the Government's review on capital spending. The Implementation Plan identifies the key objectives and outputs to be followed by the NTA over the period of the NDP and actions taken to ensure effective integration of public transport infrastructure. The key objectives of the Implementation Plan include:

- *'Provide a well-designed and effective bus network that optimises routes and services to meet passenger demand;*
- *Ensure the efficient use of available resources in delivering bus services;*
- *Seek to reduce overall journey times and improve the reliability of bus services;*
- *Improve service patterns by enhancing services in off-peak periods, in the evenings, and at weekends. 24-hour bus services will be introduced on key cross-city corridors in Dublin;*
- *Develop greater interchange with other transport modes;'*
- *'Provide an attractive, comfortable, clean, accessible and modern bus fleet'; and*
- *'Improve the environmental performance of the bus fleet'.*

Specifically, in regard to BusConnects Dublin, the Plan's stated aim is to 'overhaul the current bus system the Dublin region by (inter alia):

- *Building a network of new bus corridors on the busiest bus routes to make bus journeys faster, predictable, and reliable;*
- *Completely redesigning the network of bus routes to provide a more efficient network, connecting more places, and carrying more passengers';*
- *'Implementing a new bus livery providing a modern look and feel to the new bus system;*
- *Rolling out new bus stops with better signage and information and increasing the provision of additional bus shelters'; and*
- *'Transitioning to a new bus fleet using low emission vehicle technologies.'*

The Implementation Plan also sets out under the heading 'Strategic Framework for Investment in Land Transport' that:

*'it is not just the bus system that will be transformed under BusConnects Dublin. The same corridors that are important for buses are also the main cycling routes in the city. BusConnects Dublin will see safe cycling facilities provided along each corridor, segregated as far as practicable from other traffic. The cycling infrastructure delivered under this programme will form the core of the regions cycling network and deliver a radical step change in cycling facilities.'*

The Implementation Plan has been accompanied by the consideration of environmental issues identified in a SEA and Appropriate Assessment. The results of these assessments identified a number of schemes with the potential

negative impacts on the environment in relation to the bus and cycle networks due to land take, habitat loss and disturbance. Mitigation measures identified within the SEA include best practice construction measures and timing and replacement of lost habitats. The results of the SEA have been taken into account when considering the likely significant effects of the Proposed Scheme.

The Proposed Scheme will provide the infrastructure to facilitate the transformational change of the current bus network required to meet objectives such as, greater efficiency, reduction in journey times and improving environmental performance. The Proposed Scheme design takes account of policy objectives in the Integrated Implementation Plan and other Transport strategies.

#### **1.4.2.3 Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region 2019-2031 (Eastern & Midland Regional Assembly (EMRA) 2019)**

The principal purpose of the Eastern and Midlands Regional Assembly (EMRA) Regional Spatial and Economic Strategy for the Eastern and Midland Region 2019 - 2031 (hereafter referred to as the RSES) (EMRA 2019) is to support the implementation of Project Ireland 2040 by providing a long-term strategic planning and economic framework for the development of the Region. The RSES supports the implementation of Project Ireland 2040 by providing a long-term strategic planning and economic framework for the development of the Region. The RSES provides key principles for environmental, economic, and social aspects of the region, with specific objectives related to Healthy Placemaking, Climate Action and Economic Opportunity. In the RSES, the policy responses are known as Regional Policy Objectives (RPOs). Among the relevant RPOs are:

*RPO 5.2: Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes, Bus Connects and the Greater Dublin Metropolitan Cycle Network and ensure that future development maximises the efficiency and protects the strategic capacity of the metropolitan area transport network, existing and planned’.*

*‘RPO 5.3: Future development in the Dublin Metropolitan Area shall be planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use and creating a safe attractive street environment for pedestrians and cyclists.’*

The Dublin Metropolitan Area Strategic Plan (hereafter referred to as the Dublin MASP) (EMRA 2019) is contained within the RSES and identifies the strategic planning and investment framework to enable growth. The Dublin MASP is aligned with the RSOs in the RSES to allow integrated transport and land use. The vision for the MASP is as follows:

*‘Over the years to 2031 and with a 2040 horizon, the Dublin metropolitan area will build on our strengths to become a smart, climate resilient and global city region, expanding access to social and economic opportunities and improved housing choice, travel options and quality of life for people who live, work, study in or visit the metropolitan area’.*

The Dublin MASP sets out a list of key transport infrastructure investments in the metropolitan area as supported by National policy.

*‘RPO 8.7: To promote the use of mobility management and travel plans to bring about behaviour change and more sustainable transport use’.*

*‘RPO 8.9: The RSES supports delivery of the bus projects set out in Table 8.3 subject to the outcome of appropriate environmental assessment and the planning process’.*

The bus projects include:

- ‘Core Bus Corridors comprising 16 radial routes and 3 orbital routes in Dublin’;
- ‘Regional Bus Corridors connecting the major regional settlements to Dublin’.

A SEA, AA and a Regional Flood Risk Assessment have been undertaken as part of the RSES. The results of these assessments identified a number of potential regional concerns including deterioration of habitats and water

quality. Mitigation measures identified in the SEA state that all applications for development consent for projects emanating from any policies will be accompanied by an Environmental Impact Assessment Report and Natural Impact Statement where necessary. The results of the SEA have been taken into account when considering the likely significant effects of the Proposed Scheme.

BusConnects is identified as a key infrastructure project to deliver on the principles of Healthy Placemaking, Climate Action and Economic Opportunity, which will support the regional growth strategy for the Eastern and Midlands Region including the Dublin Metropolitan Area Strategic Plan area. The RSES not only seeks an improved and enhanced bus network but also places cycling at the core of its transport objectives. The Proposed Scheme provides a significant investment in cycling and active travel infrastructure running largely parallel to the bus corridor.

#### **1.4.2.4 Greater Dublin Area Cycle Network Plan (GDACNP) (NTA 2013)**

The GDACNP (NTA 2013) is a regional-level plan for an integrated cycle network across the seven local authorities in the GDA. It sets out proposals for three types of network: the Urban Network (including primary corridors which carry most traffic, supported by secondary corridors providing links between principal cycle routes and local zones), Inter-Urban Network (which links sections of the urban network and National Cycle Network), and a Green Route Network (which is primarily used for tourist, recreational and leisure purposes).

The following are the networks identified in the GDACNP:

- *'The Urban Cycle Network at the Primary, Secondary and Feeder Level':*
  - *'Primary corridors are the main cycle arteries that cross urban area and carry most of the traffic;*
  - *Secondary corridors links between the principal cycle routes and local zones; and*
  - *Feeder corridors are connections from zones to the network levels above and / or cycle routes within local zones.'*
- *'The Inter-Urban Cycle Network linking the relevant sections of the Urban Network and including the elements of the National Cycle Network within the GDA. It shall also include linkages to key transport locations outside of urban areas such as airports and port'; and*
- *'The Green Route Network being cycle routes developed predominately for tourist, recreational and leisure purposes.'*

The Greater Dublin Area Cycle Network Plan has been subject to a SEA to identify options for mitigating adverse effects and opportunities for enhancing or improving the Plan in terms of the environment and the principles of sustainable development. The SEA presented results of the assessment of routes located on existing cycle routes and each individual Greenways route within the GDA. The findings identified potentially significant effects from various greenway routes particularly on biodiversity, landscape and cultural heritage. The SEA identifies mitigation measures such as good construction practice to reduce potential effects during construction. The results of the SEA have been taken into account when considering the likely significant effects of the Proposed Scheme.

The Proposed Scheme complies with the Greater Dublin Area Cycle Network Plan as it will provide infrastructure to facilitate safe cycling segregated from general traffic wherever practicable.

### **1.4.3 Local Policy Documents**

The Proposed Scheme is located within the local authority areas of Dublin City Council (DCC) and South Dublin County Council (SDCC).

#### **Dublin City Council (DCC)**

##### **1.4.3.1 Dublin City Development Plan 2022 - 2028**

Dublin City Council is currently reviewing the current Dublin City Development Plan 2016-2022 and are preparing the new City Development Plan up to 2028. Public consultation is ongoing on the future plan, and it completed public consultation on the Pre-Draft Stage of the Plan on 22<sup>nd</sup> February 2021. The Public Consultation Strategic

Issues Paper sets out under Section 5 (Sustainable Movement and Transport - promoting and using more environmentally-friendly transport options) that the emerging Plan is seeking views on *'How do we encourage more people to walk and cycle and to use more public transport?'* It also sets out that *'The Plan will also need to consider how further public transport network projects such as (inter alia) BusConnects will impact on the development of the City.'* It further continues *'A core focus of the Plan will be to further improve accessibility to important destinations such as our hospitals, universities and sports facilities and to continue to encourage people to walk, cycle and use public transport.'*

A SEA, AA and Strategic Flood Risk Assessment (SFRA), have been undertaken as part of the Dublin City Development Plan. The SEA indicated the potential for significant adverse impacts as a result of policies/objectives to facilitate additional population, economic growth and development, increasing densities and generally facilitating intensification of the city. The results of the SEA identified potential residual adverse effects from the plan on biodiversity, water, architectural heritage, archaeological heritage and landscape. The SEA and AA identified key mitigation measures to be integrated into the Dublin City Development Plan including developing policies to promote green infrastructure network throughout the city, policies to promote modal shift from private car to more sustainable transport modes and policies promote and improve water and air quality in the city. The results of the SEA have been taken into account when considering the likely significant effects of the Proposed Scheme.

#### **1.4.3.2 Dublin City Development Plan 2016-2022**

The Dublin City Development Plan 2016-2022 (DCC 2016) includes Objective MT04 which states that it is an objective of DCC:

*'To support improvements to the city's bus network and related services to encourage greater usage of public transport in accordance with the objectives of the NTA's strategy and the government's 'Smarter Travel' document' (DCC 2016, p.125).*

Within the DCC Local Authority Area, the development plan is supported by area based plans, comprising Strategic Development Zones and Masterplans, giving more refined and detailed policies and objectives, including those relating to improved public transport infrastructure and connectivity.

In addition to the local policy context for the Proposed Scheme, the following national and regional policy documents support the BusConnects Programme and its aims and objectives and a summary of these is provided in the following sections.

#### **1.4.3.3 DCC Climate Change Action Plan 2019-2024**

Dublin City Council's Climate Change Action Plan (CCAP) was adopted in May 2020. It is a collaborative response to the impact that climate change is having on the Dublin Region, and their commitment to lead by example in tackling this global issue. Dublin City Council CCAP is unique to its functional area and contains 219 actions that cover five key areas – Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions and Resource Management (waste and water). There are four key targets:

1. *33% better energy use by the Council by 2020.*
2. *40% reduction in the Council's greenhouse gas emissions by 2030.*
3. *To make Dublin a climate resilient region, by reducing the impacts of future (and current) climate change-related events.*
4. *To actively engage and inform citizens on climate change.*

The CCAP focuses on the sustainable transport measure to reduce pollutants and to achieve modal shift from private car to public transport. One of the Public Transport actions number T22 is specifically related to the Proposed Scheme; *'DCC to liaise with NTA on BusConnects programme'*.

A SEA and AA were produced as part of the CCAP which identified potential adverse effects on cultural heritage and potential significant cumulative effects on resource management. The SEA identified a number of potential positive effects as a result of the CCAP, for example positive effects on human health around modal shift and green infrastructure. Mitigation measures identified within the SEA include best practice in drainage design and

natural flood measures. The results of the SEA have been taken into account when considering the likely significant effects of the Proposed Scheme.

#### **1.4.3.4 LAPs within the Dublin City Area Relevant to the Proposed Scheme**

The Proposed Scheme is within the Liberties LAP 2009 (DCC 2009) from R810 James Street to R108 High Street. The overarching aim of the LAP is:

*To promote the principles of good urban design including improving connectivity and enhancing the legibility and permeability of the Liberties in relation to the wider cityscape.*

*To promote sustainable modes of transport by making them convenient and attractive including walking and cycling routes and by facilitating the provision of public transport infrastructure and optimising its use.*

#### **1.4.3.5 The Heart of Dublin – City Centre Public Realm Masterplan 2016**

The Heart of Dublin – City Centre Public Realm Masterplan (DCC 2016) for Dublin City Centre was published by DCC in 2016. The overall vision is one of a pedestrian friendly core within the City Centre, so that the city can be easy, comfortable, and enjoyable to move within, the strategy will require the full completion of the planned public transport network.

#### **South Dublin County Council (SDCC)**

#### **1.4.3.6 South Dublin County Council Development Plan (SDCCDP) 2016 - 2022**

The South Dublin County Council Development Plan 2016 – 2022 (hereafter referred to as the SDCCDP) (SDCC 2016) sets the strategy for proper planning and sustainable development for the jurisdiction of South Dublin County Council. The overarching considerations of the plan are quality of life, prosperity, sustainability, health and wellbeing, social inclusion, and climate change adaptation. The transport element of the strategy states that:

*'The Transport Strategy for South Dublin County seeks to ensure an integrated strategy for transport and mobility that enhances access and movement within and through the County, while promoting change, in favour of sustainable modes. The strategy addresses all types of traffic including pedestrian, cyclist, public transport, private vehicle and economic through traffic. The settlement, employment and transport strategies are aligned with the aim of strengthening the integration between employment, population and transport services.'*

The SDCCDP sets out an extensive number of policies and objectives relevant to the Proposed Scheme. The SDCCDP establishes a number of zoning objectives to regulate and manage future land uses and the Proposed Scheme will pass through lands subject to zoning objectives.

A SEA and SFRA have been undertaken as part of the South Dublin County Council Development Plan. A Stage One Appropriate Assessment Screening was also completed and concluded that an AA was not required for the South Dublin County Council Development Plan. The SEA identified a number of potential significant negative impacts of the SDCCDP including capacity of wastewater treatment within the council region and development of open space and greenfield areas could impact on landscape character and disturbance of habitat networks and protected species. The SEA identified mitigation measures in order to prevent, reduce and, as fully as possible, offset any significant adverse impacts of the SDCCDP. The mitigation measures within the SEA have been integrated from various assessments including the SEA, SFRA and AA Screening processes. The mitigation measures include various polices which protect and enhance various environmental aspects including biodiversity, water, flooding, landscape, air, noise, transportation and climatic factors. The results of the SEA have been taken into account when considering the likely significant effects of the Proposed Scheme.

#### **1.4.3.7 SDCC Climate Change Action Plan 2019-2024**

SDCC's Climate Change Action Plan was adopted in 2019, it was a collaborative response to the impact that climate change is having on the Dublin Region. The SDCC plan is unique to its functional area. The plan covers

five key areas, Energy & Buildings, Transport, Flood Resilience, Nature-Based Solutions and Resource Management, it sets out 130 actions across the key areas. The four main targets of the plan are:

1. *33% better energy use by the Council by 2020.*
2. *40% reduction in the Council's greenhouse gas emissions by 2030.*
3. *To make Dublin a climate resilient region, by reducing the impacts of future (and current) climate change-related events.*
4. *To actively engage and inform citizens on climate change.*

The Plan focuses on the sustainable transport measure to reduce pollutants and to achieve modal shift from private car to public transport.

A SEA, AA and NIS were prepared as part of the plan. The results of the assessment indicated that in the absence of mitigation, a number of the strategic objectives have the potential to result in adverse effects particularly on human health which is influenced by a range of factors including air quality and noise. Mitigation measures include enhancement of green infrastructure and using nature-based solutions to enhance flood resilience. The results and mitigation measures identified in the SEA and AA have been taken into account when considering the likely significant effects of the Proposed Scheme.

## 2. Legislative Context

### 2.1 EIA Directive

Directive (2011/92/EU) of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment was amended by Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 (hereinafter referred to as “the EIA Directive”). The EIA Directive requires that projects likely to have significant effects on the environment are made subject to an assessment with regard to their effects on the environment before development consent is given for such projects.

Annex I of the EIA Directive (as amended) lists the projects that must be subject to environmental impact assessment. For projects listed in Annex II of the EIA Directive (as amended), these projects should be subject to environmental impact assessment where it is determined that they are likely to have significant effects on the environment.

Where EIA Screening is required, there is a requirement to consider information on the characteristics of the project and its likely significant effects on the environment. A detailed list of information to be provided is specified in Annex IIA of the EIA Directive. The relevant selection criteria to be considered when determining whether an EIAR is required is contained in Annex III to the EIA Directive (as amended).

### 2.2 Roads Act

#### 2.2.1 Requirement for EIA under the Roads Act

Section 50 of the Roads Act makes provision for environmental impact assessment (EIA) for certain proposed “road development”. Section 50(1)(a) provides as follows:

*‘(1)(a) A road development that is proposed that comprises any of the following shall be subject to an environmental impact assessment:*

*(i) the construction of a motorway;*

*(ii) the construction of a busway;*

*(iii) the construction of a service area;*

*(iv) any prescribed type of road development consisting of the construction of a proposed public road or the improvement of an existing public road.’*

Under article 8 of the Road Regulations 1994 [S.I. No. 119 of 1994], as amended (“ the 1994 Regulations”), the prescribed types of “road development” for the purposes of section 50(1)(a)(iv) of the Roads Act are:

*‘(a) the construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area;*

*(b) the construction of a new bridge or tunnel which would be 100 metres or more in length.’*

The Proposed Scheme does not fall within a category of “road development” under section 50(1)(a) of the Roads Act or under article 8 of the 1994 Regulations .

However, section 50(1)(c) of the Roads Act states:

*‘Where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant*



*effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development.'*

In accordance with the above, consideration is given in this EIA Screening Report as to whether the Proposed Scheme is likely to have significant effects on the environment. In the event that the NTA considers that the Proposed Scheme is likely to have significant effects, it is required to inform An Bord Pleanála in writing prior to making any application to the Board for approval under section 51 of the Roads Act in respect of the Proposed Scheme.

## **2.3 Content of EIA Screening under the Roads Act**

Under section 50(1)(c) of the Roads Act, where consideration is being given as to whether a road development would be likely to have significant effects on the environment, the relevant selection criteria specified in Annex III to the EIA Directive must be taken into account. The relevant selection criteria set out in Annex III of the EIA Directive (as amended) are as follows:-

### *1. Characteristics of projects*

*The characteristics of projects must be considered, with particular regard to:*

- (a) the size and design of the whole project;*
- (b) cumulation with other existing and/or approved projects;*
- (c) the use of natural resources, in particular land, soil, water and biodiversity;*
- (d) the production of waste;*
- (e) pollution and nuisances;*
- (f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;*
- (g) the risks to human health (for example due to water contamination or air pollution).*

### *2. Location of projects*

*The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to: (a) the existing and approved land use; (b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground; (c) the absorption capacity of the natural environment, paying particular attention to the following areas:*

- (i) wetlands, riparian areas, river mouths;*
- (ii) coastal zones and the marine environment;*
- (iii) mountain and forest areas;*
- (iv) nature reserves and parks;*
- (v) areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC;*
- (vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;*

*(vii) densely populated areas;*

*(viii) landscapes and sites of historical, cultural or archaeological significance.*

**3. Type and characteristics of the potential impact**

*The likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of this Annex, with regard to the impact of the project on the factors specified in Article 3(1), taking into account:*

*(a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);*

*(b) the nature of the impact;*

*(c) the transboundary nature of the impact;*

*(d) the intensity and complexity of the impact;*

*(e) the probability of the impact;*

*(f) the expected onset, duration, frequency and reversibility of the impact;*

*(g) the cumulation of the impact with the impact of other existing and/or approved projects;*

*(h) the possibility of effectively reducing the impact.*

Annex IIA of the EIA Directive (as amended) sets out a detailed list of information to be contained in an EIA Screening Report. Contained in the left hand column of Table 2.1 below is the list of the information set out in Annex IIA of the EIA Directive (as amended) to be contained in an EIA Screening Report and in the right hand column where that information can be located in this EIA Screening Report. This EIA Screening Report meets the requirements of Annex IIA of the EIA Directive (as amended), as identified in Table 2.1.

**Table 2.1: Content of EIA Screening Report**

| Annex IIA of EIA Directive (as amended)  | EIA Screening Report Section   |
|--|--|
| 1) A description of the project, including in particular:<br>a) a description of the physical characteristics of the whole project and, where relevant, of demolition works;<br>b) a description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected.          | Section 3 - Characteristics of the Proposed Scheme<br><br>Section 4 - Location of the Proposed Scheme  |
| 2) A description of the aspects of the environment likely to be significantly affected by the project.   | Section 5 - Description of Likely Significant Effects  |
| 3) A description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from:<br>a) the expected residues and emissions and the production of waste, where relevant;<br>b) the use of natural resources, in particular soil, land, water and biodiversity. | Section 5 - Description of Likely Significant Effects  |
| 4) The criteria of Annex III shall be taken into account, where relevant, when compiling the information in accordance with points 1 to 3.   | Section 3 - Characteristics of the Proposed Scheme<br><br>Section 4 - Location of the Proposed Scheme<br><br>Section 5 - Description of Likely Significant Effects |

## **3. Characteristics of the Proposed Scheme**

### **3.1 Introduction**

Paragraph 1 of Annex III of the EIA Directive sets out the criteria relating to the characteristics of projects which should be considered. This includes the following:

- The size and design of the whole project;
- Cumulation with other existing and / or approved projects;
- The use of natural resources, in particular land, soil, water and biodiversity;
- The production of waste;
- Pollution and nuisances;
- The risk of major accidents having regard in particular to substances or technologies used and / or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;
- The risks to human health (for example due to water contamination or air pollution).

The following sections describe the characteristics of the Proposed Scheme with reference to the criteria listed in Annex III.

### **3.2 Description of the Proposed Scheme**

#### **3.2.1 Overview**

The Proposed Scheme will commence on R817 Kimmage Road Lower at the junction with R818 Terenure Road West, R818 Kimmage Road West and Fortfield Road. The Proposed Scheme will continue along R817 Kimmage Road Lower towards the City Centre, via R137 Harold's Cross Road, Clanbrassil Street Upper and Lower and New Street South, where it will ultimately join the Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme at the R110 Kevin Street Upper Junction. Priority for buses will be provided along the entire route, consisting primarily of dedicated bus lanes in both directions where feasible, with alternative measures proposed at particularly constrained locations such as much of R817 Kimmage Road Lower, Harold's Cross Park West and short sections of R137 Clanbrassil Street Upper and Lower in alternate directions. A complementary cycle route is also proposed to the west of the Proposed Scheme via quiet streets at the southern end of the Proposed Scheme.

The Proposed Scheme is shown on drawings contained in Appendix A.

#### **3.2.2 Lower Kimmage Road from Kimmage Cross Roads to Junction with Harold's Cross Road**

This section of the Proposed Scheme will commence on the R817 Kimmage Road Lower at the junction with the R818 on Kimmage Road West and Terenure Road West. The Proposed Scheme will proceed along this route in a north-eastern direction generally, and will conclude at the junction with R137 Harold's Cross Road at the northern end of Harold's Cross Park.

Priority for buses will be provided along the entire length of this section of the Proposed Scheme, with dedicated bus lanes in either direction from the commencement of the Proposed Scheme to where a southern Bus Gate is proposed just north of the junction of R817 Kimmage Road Lower's and Ravensdale Park. This Bus Gate will operate in tandem with a northern Bus Gate at Harold's Cross Park to preclude through-traffic over the remaining 2km length of this section, to R137 Harold's Cross Road at Harold's Cross Park, securing improved bus priority by deflecting through-traffic off this route but also ensuring enhanced amenity for local residents with the development of a quieter street (with existing parking arrangements unchanged) than currently exists. Local traffic access will be diverted via Sundrive Road or Larkfield Avenue.

The provision of this southern Bus Gate at the Ravensdale Park Junction will require the provision of a number of traffic management measures on adjoining residential streets to prevent through-traffic or 'rat-running'. Poddle Park to the west, and Derravaragh Road to the east of Ravensdale Park will be closed to through-traffic except for cyclists at suitable locations. In addition to this, improvements will be made to the junction of R137 Harold's Cross Road and Kenilworth Park by way of the provision of a southbound right-turn to facilitate local access to R817 Kimmage Road Lower from the north and a westbound Bus Gate from Kenilworth Square.

At-grade cycle tracks will be provided in either direction along the southern sub-section of the Proposed Scheme that precedes the Bus Gate at the Ravensdale Park Junction. After this point, the existing advisory cycle lanes will be retained and not altered, as the road conditions would be much enhanced as a result of the reduced general traffic for which the Bus Gate will facilitate. A secondary cycle route will also be designated, in parallel to R817 Kimmage Road Lower, along Poddle Park, Bangor Road, and Blarney Park to Sundrive Road. From Sundrive Road, cyclists will be directed via a new connection to Mount Argus Way and Mount Argus View via a proposed steel boardwalk structure over the River Poddle (and the Stone Boat feature).

### **3.2.3 Harold's Cross Road from Harold's Cross Park to Grand Canal**

This section of the Proposed Scheme will commence at the junction of R817 Kimmage Road Lower and R137 Harold's Cross Road at the northern end of Harold's Cross Park and will proceed north, concluding upon meeting the Grand Canal at Robert Emmet Bridge.

Priority for buses will be provided along the entire length of this section of the Proposed Scheme, with retention of the existing dedicated bus lanes along R137 Harold's Cross Road.

New segregated cycle tracks will be provided in both directions along R137 Harold's Cross Road.

### **3.2.4 Clanbrassil Street Upper and Lower and New Street from the Grand Canal to the Patrick Street Junction**

This section of the Proposed Scheme will commence on R137 Clanbrassil Street Upper and will proceed along R137 Clanbrassil Street Lower until it reaches the junction with R110 Kevin Street Upper and R137 Patrick Street.

At Robert Emmet Bridge over the Grand Canal, two new footbridge structures are proposed on either side of the existing Robert Emmet Bridge to provide cycle tracks outside of the narrow bridge width. These structures will be three-span bridges supported by steel beams and will be approximately 23.5m in length.

Priority for buses will be provided with some extensions of the existing dedicated bus lanes or bus priority signals at the key junction of Leonard's Corner on R811 South Circular Road.

New at-grade cycle tracks will be provided in both directions along the full length of this section of the Proposed Scheme.

### **3.2.5 Construction Phase**

Construction of the Proposed Scheme is anticipated to take approximately 24 months. In order to mitigate the disruption to traffic and the community, the construction programme will be split into phases and construction activities undertaken within sub-sections of the Proposed Scheme.

Enabling works to existing facilities will be undertaken in order to provide space or access for the main Construction Phase. Enabling works include demolition works, fencing, vegetation clearance and establishing site compounds. At EIA Screening stage it is anticipated that there will be three temporary construction compounds along the Proposed Scheme at the following locations:

- Sundrive Road;
- Our Lady's Hospice; and
- Clanbrassil Street Lower.

During the main Construction Phase, the Contractor will take possession of the main working area, establish fencing, lighting, signage and implement traffic diversions as necessary. The Contractor will then clear the working area and proceed to excavate to formation level. Existing buried services within the excavation areas will be diverted or protected as necessary and new drainage pipes, service ducts and chambers will be installed as required.

Construction of the Proposed Scheme will include the following activities:

- Construction of footpaths, cycle tracks and reallocation of road space across the Proposed Scheme;
- Installation of ancillary road furnishings, including street furniture, signage, lighting, bus stops (platforms, shelters, ticket vending machines, CCTV, information displays etc.) and communication systems;
- Construction of a boardwalk over the River Poddle at Mount Argus View;
- Demolition of a residential property at Clanbrassil Street Upper (north of Robert Emmett Bridge); and
- Construction of pedestrian bridges on either side of the existing Robert Emmett Bridge on the Grand Canal, including a retaining wall structure to support a ramp from the bridge.

### 3.2.6 Operational Phase

Once operational, the Proposed Scheme is anticipated to deliver the following benefits:

- A reduction in journey times for bus services;
- Improved accessibility to Dublin for those dependent on public transport, elderly and mobility impaired;
- Approximately 4.3km of new cycle facilities; and
- Improved and enhanced footpaths, walkways and pedestrian crossings plus urban realm upgrades where feasible.

## 3.3 Cumulative effects

There is the potential for significant cumulative environmental effects as a result of the construction and operation of the Proposed Scheme acting in combination with one or more of the other 11 schemes that make up the BusConnects Dublin – Core Bus Corridor Infrastructure Works Schemes and other major infrastructure and development projects.

The following sources were considered in order to identify all potential projects which may give rise to likely significant cumulative environmental impacts:

- Dublin City Council – (<https://webapps.dublincity.ie/swiftlg/apas/run/wphappcriteria.display>) for local planning applications;
- National Planning Application Database (<https://data.gov.ie/dataset/national-planning-applications>) – for downloadable list of planning applications sent from Local Authorities;
- National Transport Authority website (<https://www.nationaltransport.ie/planning-and-investment/transport-investment/projects/>) – for details of major transport programmes;
- An Bord Pleanála website (<http://www.pleanala.ie/index.htm>) – for details of strategic infrastructure developments and strategic housing developments; and
- The EIA Portal (<https://www.housing.gov.ie/planning/environmental-assessment/environmental-impact-assessment-eia/eia-portal>) maintained by the Department of Housing, Planning and Local Government – for applications for development consent accompanied by an EIAR.

At EIA Screening Stage, the other significant development projects which are considered to have the potential to overlap (either temporally and / or spatially) or involve works in proximity to the Proposed Scheme and therefore have the potential to give rise to significant cumulative effects are the following:

- The other 11 schemes that make up the BusConnects Dublin – Core Bus Corridor Infrastructure Works. In particular, the offline cycle route of the Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme will tie into this scheme at the junction of Harold's Cross Road and Park

Avenue and the Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme which will tie into this scheme junction of New Street South and Dean Street;

- DART+ Programme (tunneling and non-tunneling works);
- MetroLink (to Charlemont);
- LUAS Cross City incorporating LUAS Green Line Capacity Enhancement - Phase 1;
- LUAS Green Line Capacity Enhancement - Phase 2;
- Greater Dublin Area Cycle Network Plan; and
- Approximately 8 other local authority planning applications which are approved by South Dublin County Council including residential schemes and mixed use developments.

The Construction Phase of the Proposed Scheme, when considered in combination with the Construction Phases of the other projects listed above, is likely to have significant cumulative effects. Further consideration of the assessment of likely significant cumulative effects is provided in Section 5.13 below.

### **3.4 Use of Natural Resources, in particular Land, Soil, Water and Biodiversity**

The Construction Phase of the Proposed Scheme will require the use of natural resources such as soil and land and water. The Proposed Scheme will aim to reuse site-won material where possible. However, there will be a need for resources and materials (e.g., aggregate, concrete etc.) to be imported for the construction and maintenance of the Proposed Scheme. It is anticipated that the Proposed Scheme will be connected to the existing drainage infrastructure where possible and further consideration of the effects on the water environment is provided in Section 5.7.

### **3.5 Production of Waste**

Construction activities will include the excavation of materials within and adjacent to the existing road boundary. These construction activities are likely to generate waste from excavated material (asphalt, concrete, made ground and topsoil), demolition of existing infrastructure and road resurfacing. Through the design development process, the Proposed Scheme will aim to avoid or minimise generation of waste through re-use of site-won material where feasible (subject to it meeting the appropriate engineering standard). Further consideration of waste and resources is provided in Section 5.11.

### **3.6 Pollution and Nuisances**

As with any infrastructure project of this type, there is the potential for pollution and disturbance during the Construction Phase. Potential impacts during the Construction Phase and Operational Phase include effects on the local water environment (i.e. as a result of run-off), air quality, traffic and nuisances and disruption caused by construction such as noise, vibration and dust. Further consideration of the likely significant effects is provided in Section 5.

### **3.7 Risk of Major Accidents and Disasters**

The EIA Directive introduced the requirement to assess the *'expected effects deriving from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project concerned'*.

There is currently no clear definition of the term 'major accident and / or disaster' has been outlined in the context of the EIA Directive. The Institute of Environmental Management and Assessment (IEMA) Major Accidents and Disasters in EIA: A Primer (hereafter referred to as the IEMA Primer) (IEMA 2020) includes the following definitions:

- Disaster – a natural hazard (e.g. earthquake) or a man-made / external hazard (e.g. act of terrorism) with the potential to cause an event or situation that meets the definition of a major accident;
- Major Accident – events that threaten immediate or delayed serious environmental effects to human health, welfare and / or the environment and require the use of resources beyond those of the client

or its appointed representatives to manage. Whilst malicious intent is not accidental, the outcome (e.g. train derailment) may be the same and therefore many mitigation measures will apply to both deliberate and accidental events; and

- Significant environmental effect (in relation to a major accident and / or disaster assessment) – includes the loss of life, permanent injury and temporary or permanent destruction of an environmental receptor which cannot be restored through minor clean-up and restoration.

Construction activities to be undertaken are well understood and are commonly undertaken in the Dublin region. During operation, the Proposed Scheme is likely to result in changes in traffic patterns and increase in modal shift and public transport services.

It is not considered likely that there are major accidents and / or disasters risk events which would occur that present a sufficient combination of risk and consequence that would lead to significant residual environmental effects. The Proposed Scheme does not fall within the consultation zone for any Seveso site (i.e., a site subject to Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards), with the nearest Upper Tier Seveso site over 3km away. During the construction phase, there will be appropriate management plans implemented to manage and minimise risk, for example a Construction Environmental Management Plan, a Construction Traffic Management Plan and an Incident Response Plan. Therefore, in the context of major accidents and disasters, significant environmental effects are considered unlikely at EIA Screening Stage and not considered further in Section 5.

### **3.8 Impacts on Population and to Human Health**

The 2014 EIA Directive has introduced the requirement to consider the '*direct and indirect significant effects of a project on...population and human health*'. The Proposed Scheme has the potential to impact on health due to the direct and indirect effects associated with construction activities such as noise, vibration and air quality. Potential operational impacts include direct effects on air quality or noise and indirect impacts on access to public facilities and community services and positive effects on population and human health. Further consideration of the likely significant effects on human health are considered in Section 5.

## 4. Location of the Proposed Scheme

### 4.1 Introduction

Paragraph 2 of Annex III of the EIA Directive sets out the criteria with regard to the location of the Proposed Scheme to be taken into account in determining whether an EIA is required. This section considers the environmental sensitivity of geographical areas likely to be affected by the Proposed Scheme with particular regard to the following:

- a) *the existing and approved land use;*
- b) *the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground; and*
- c) *the absorption capacity of the natural environment, paying particular attention to the following areas:*
  - (i) *wetlands, riparian areas, river mouths;*
  - (ii) *coastal zones and the marine environment;*
  - (iii) *mountain and forest areas;*
  - (iv) *nature reserves and parks;*
  - (v) *areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC;*
  - (vi) *areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;*
  - (vii) *densely populated areas;*
  - (viii) *landscapes and sites of historical, cultural or archaeological significance’.*

The following section describes the relevant details of the location of the Proposed Scheme by reference to the criteria set out in paragraph 2 of Annex III. The Proposed Scheme and its location have previously been described in Section 3.

### 4.2 Existing and Approved Land Use

The Proposed Scheme will pass a number of community and recreational receptors. Existing land use within community areas which are either intersected by or may experience displaced traffic as a result of the Proposed Scheme, is typical of an urban setting with a range of community and recreational facilities as identified in Table 4.1.

**Table 4.1: Community Receptor Type by Community Area (OSI 2020)**

| Community and Recreation Receptors | Schools | Hospital / Health Centre | Place of Worship | Recreation |
|------------------------------------|---------|--------------------------|------------------|------------|
| Templeogue                         | 4       | 0                        | 2                | 3          |
| Kimmage Manor                      | 0       | 0                        | 1                | 0          |
| Terenure                           | 7       | 2                        | 6                | 8          |
| Rathgar                            | 5       | 3                        | 9                | 4          |



| Community and Recreation Receptors | Schools | Hospital / Health Centre | Place of Worship | Recreation |
|------------------------------------|---------|--------------------------|------------------|------------|
| Mount Argus                        | 0       | 2                        | 5                | 3          |
| Harold's Cross                     | 3       | 1                        | 1                | 5          |
| Clogher Road                       | 4       | 1                        | 3                | 4          |
| Harrington Street                  | 6       | 3                        | 2                | 2          |
| Donore Ave                         | 3       | 2                        | 4                | 1          |
| Francis Street                     | 5       | 0                        | 3                | 2          |
| Whitefriar Street                  | 2       | 1                        | 6                | 0          |
| Meath Street and Merchants Quay    | 6       | 1                        | 6                | 6          |
| Total                              | 45      | 16                       | 48               | 38         |

As identified in Table 4.1, notable community receptors along the Proposed Scheme which draw a large number of users include:

- St. Glady's Private Nursing Home, Mount Argus;
- Harold's Cross Park, Harold's Cross;
- Our Lady's Hospice, Harold's Cross Road; and
- St. Clare's Convent National School, Harold's Cross.

Most of the land use adjacent to the Proposed Scheme is residential. The majority of the Proposed Scheme is lined with houses and small commercial premises. There are a number of commercial premises concentrated on the Kimmage Road Lower at Sundrive Road, and at Harold Cross Road. As the Proposed Scheme approaches the City Centre, and particularly as it crosses the Grand Canal, the character becomes more urban and a larger proportion of commercial properties line the route.

The largest number of commercial receptors are located in Meath Street and Merchant's Quay. Key centres of employment within the vicinity of the Proposed Scheme include Greenmount Industrial Estate and KCR Industrial Estate.

In terms of existing and approved land use, the Proposed Scheme will represent a continuation of the immediate land use as a transport corridor which will pass through, or in close proximity to a number of receptors, namely residential, industrial, commercial / employment centres and tourism amenities.

### 4.3 Abundance, Quality and Regenerative Capacity of Natural Resources

Natural resources are considered to include soil, land, water and biodiversity. The Proposed Scheme will be located along an existing transport corridor which is currently connected with natural resources via existing infrastructure. It is anticipated that the Proposed Scheme will tie into the existing drainage were feasible.

The Proposed Scheme will cross the Grand Canal proposed Natural Heritage Area (pNHA), as well as the River Poddle, which are hydrologically connected with downstream waterbodies such as the South Dublin Bay and River Tolka Estuary Special Protection Area (SPA). Details of the status of these waterbodies is provided in Table 4.2, which shows the River Poddle is at risk of not achieving WFD 'good'<sup>2</sup> status by 2027.

<sup>2</sup> In accordance with the EU Water Framework Directive (Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (as amended))

## 4.4 Absorption Capacity of Natural Resources

This section considers the natural environment as outlined in Paragraph 2(c) of Annex III of the EIA Directive (as amended) and identified in Section 4.1 above.

The Proposed Scheme is located in Dublin City which is densely populated and will be located along a well-established transport corridor between south Dublin and Dublin City Centre.

The watercourses and waterbodies identified in Table 4.2 are within 500m of the Proposed Scheme. OPW mapping indicates a high fluvial flood risk at multiple locations along the Proposed Scheme, including at Mount Argus Housing Estate, Mount Argus Park, Sundrive Road, Poddle Park and Harold's Cross.

**Table 4.2: Water Framework Directive (WFD) status**

| Watercourse  | WFD Sub-Catchment | Waterbody ID                                  | Heavily Modified? | Type  | Status (2013 to 2018)     | Key Pressures: Elements Causing or with Potential to Cause Less Than Good Status | Risk Categorisation |
|--------------|-------------------|---|-------------------|-------|---------------------------|--|---------------------|
| River Poddle | Dodder_SC_010     | Poddle_010                                    | Unknown           | River | Unassigned                | Urban runoff; Hydromorphology  | At Risk             |
| Grand Canal  | N/A               | Grand Canal Main Line (Liffey and Dublin Bay) | Yes – AWB         | Canal | Good ecological potential | N/A  | Not at Risk         |

The Proposed Scheme will be located in proximity to the ecological and geological protected sites identified in Table 4.3.

**Table 4.3: Designated Sites**

| Designation Type               | Designated Site |
|--------------------------------|-----------------|
| Proposed Natural Heritage Area | Grand Canal     |
| County Geological Site         | River Poddle    |

The Proposed Scheme will upgrade an existing well-established transport corridor, through a heavily developed suburban and urban landscape. A number of regional and scheduled monument records within 50m of the Proposed Scheme as identified in Table 4.4.

**Table 4.4: Monument Records**

| RMP / SMR No. | Name / Type              | Townland / Street Address                           | ITM            |
|---------------|--------------------------|---|----------------|
| DU018-043004  | Watercourse              | River Poddle - Kimmage Road Lower / Mount Argus Way | 714511, 731773 |
| DU018-043003  | Weir - regulating        | River Poddle (Mount Argus Wa)                       | 713915, 731387 |
| DU022-078     | Windmill site            | River Poddle, Crumlin                               | 713565, 731014 |
| DU022-077001  | Mill site                | River Poddle, Crumlin                               | 713662, 731212 |
| DU022-077002  | Mill pond site           | River Poddle, Crumlin                               | 713662, 731212 |
| DU018-050     | Settlement               | Harold's Cross                                      | 714653, 731859 |
| DU018-050001  | Maypole site             | Harold's Cross Park                                 | 714653, 731864 |
| DU018-050002  | Watermill - unclassified | Harold's Cross Park                                 | 714653, 731859 |
| DU018-050004  | Gallows                  | Harold's Cross Park                                 | 714651, 731851 |

| RMP / SMR No. | Name / Type   | Townland / Street Address                      | ITM            |
|---------------|---|--|----------------|
| DU018-048002  | Mill - unclassified                                 | Our Lady's Hospice                             | 714562, 732165 |
| DU018-020200  | Redundant record                                    | Kevin Street Upper                             | N/A            |
| DU018-020360  | House – 18 <sup>th</sup> / 19 <sup>th</sup> century | New Street South                               | 715019, 733247 |
| DU018-020404  | Redundant record                                    | Kevin Street Upper                             | N/A            |
| DU018-020399  | Mill – unclassified                                 | Kevin Street / New Street South junction       | 715049, 733439 |
| DU018-020041  | Bridge site   | Patrick Street / Kevin Street junction         | 715046, 733460 |
| DU018-020355  | Redundant record                                    | Kevin Street Upper                             | N/A            |
| DU018-020197  | Bridge site   | Patrick Street / Kevin Street junction         | 715031, 733472 |
| DU018-020199  | House – medieval                                    | New Street South                               | 715076, 733381 |
| DU018-020625  | Redundant record                                    | New Street South                               | N/A            |
| DU018-020108  | Castle site   | Patrick Street                                 | 715054, 733471 |
| DU018-020405  | House- indeterminate date                           | Kevin Street Upper                             | 715084, 733456 |
| DU018-020800  | College   | Patrick Street                                 | 715057, 733492 |
| DU018-020111  | College   | St. Patrick's Close                            | 715092, 733488 |
| DU018-020113  | Ecclesiastical residence                            | Kevin Street Upper                             | 715144, 733445 |
| DU018-020118  | House – medieval                                    | St. Patrick's Close                            | 715188, 733465 |
| DU018-020109  | House – medieval                                    | Kevin Street Upper                             | 715150, 733393 |
| DU018-020123  | Pillory   | Kevin Street Upper                             | 715205, 733419 |
| DU018-020383  | Prison  | Kevin Street Upper                             | 715217, 733410 |
| DU018-020128  | Cross site  | New Bride Street (at corner with Kevin Street) | 715263, 733371 |
| DU018-020195  | House – medieval                                    | New Bride Street                               | 715282, 733321 |
| DU018-020101  | Building  | Patrick Street                                 | 715059, 733498 |
| DU018-020603  | Tannery   | Patrick Street / Dean Street junction          | 715015, 733506 |
| DU018-020602  | Industrial site                                     | Patrick Street / Dean Street junction          | 715015, 733515 |

A review of the National Inventory of Architectural Heritage (NIAH) building survey for Dublin (NIAH 2020a) has shown that in addition to the recorded monuments and protected structures identified in Table 4.4, there are 88 structures or sites located within the receiving environment of the Proposed Scheme.

Air quality, while not considered explicitly in Annex III of the EIA Directive (as amended) requirements is considered within this EIA Screening Report due to the potential for reductions in air quality to impact human receptors and also habitats. As part of the implementation of the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011) (as amended), four air quality zones have been defined in Ireland for air quality management and assessment purposes by the EPA. Dublin is defined as Zone A and air quality is generally good. Long-term Nitrogen dioxide (NO<sub>2</sub>) trends have generally been below both the annual and 1-hour limit values. With respect to Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>), continuous monitoring has been carried out at a number of the monitoring stations with long-term data showing a general flat to downward trend.

With regard to NO<sub>2</sub>, continuous monitoring data from the Environmental Protection Agency (EPA) at locations in close proximity to the Proposed Scheme was reviewed (EPA 2019). There is sufficient data available for suburban monitoring stations in Ballyfermot, Swords, Rathmines and Dún Laoghaire to observe long-term trends over the period 2015 to 2019. Results average between 13µg/m<sup>3</sup> to 22µg/m<sup>3</sup> for the annual mean concentrations between

2015 to 2019 at each location compared to the annual limit value of 40µg/m<sup>3</sup> with no exceedances of the one-hour limit value of 200µg/m<sup>3</sup> in 2019.

## 4.5 Summary of Natural Environment Aspects

Natural resources aspects are summarised in Table 4.5.

**Table 4.5: Summary of Natural Resources**

| Annex III (2c) of the EIA Directive (as amended)   | Summary   |
|--|---|
| Wetlands, riparian areas, river mouths   | The Proposed Scheme will cross the Grand Canal and the River Poddle.  |
| Coastal zones and the marine environment   | Dublin Bay is the nearest marine environment which is located approximately 4km east of the Proposed Scheme.  |
| Mountain and forest areas  | There are no known mountain or forest areas.  |
| Nature reserves and parks  | The Grand Canal is a known pNHA.<br>The Proposed Scheme is located adjacent to Ravensdale Park, Poddle Park, Mount Argus Park and Harold's Cross Park.  |
| Areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC  | The following EU Designated Sites are located approximately 4km of the Proposed Scheme along the east coast of Dublin City:<br>Special Protection Areas (SPA): South Dublin Bay and River Tolka Estuary, North Bull Island.<br>Special Areas of Conservation (SAC): South Dublin Bay, North Dublin Bay, Howth Head, Rockabill to Dalkey Island. |
| Areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure | The Poddle_010 is At Risk of not achieving Good status by 2027:   |
| Densely populated areas  | The Proposed Scheme is located in Dublin City and has an extensive linear route to Dublin City Centre.  |
| Landscapes and sites of historical, cultural or archaeological significance  | There are a number of archaeological, architectural and cultural heritage assets along the Proposed Scheme. These include monuments, Architectural Heritage and Protected Structures.   |
| Other - Air Quality  | Air quality in Dublin is generally good with long term trends below the limit values. In the local context around the Proposed Scheme, air quality trends are below the limit values for PM10 and PM2.5 and NO2.  |

## **5. Description of Likely Significant Effects**

### **5.1 Introduction**

This Section of the EIA Screening Report provides a description of the potential significant effects of the Proposed Scheme during construction and operation. The likely significant effects identified in this section have taken into account, where relevant, the available results of other relevant assessments of effects on the environment, including SEA, AA and SFRA. In addition, Section 5.13 considers the likely significant cumulative effects during construction and operation in combination with other development projects.

### **5.2 Traffic and Transport**

The Proposed Scheme is designed to promote travel by sustainable modes such as walking, cycling and bus while reducing the need to travel by private car. The characteristics of the Proposed Scheme are such that road space in some instances is reallocated from private car for the provision of sustainable modes. Although these characteristics will contribute to broader environmental positive impacts, as both the share of public transport and active travel modes (walking and cycling) increase, there is the potential for negative impacts along the Proposed Scheme and surrounding roads, as a result of the reallocation of existing road space, reduction in capacity and redistribution of traffic during both the Construction and Operational Phases of the Proposed Scheme.

The Construction Phase of the Proposed Scheme has the potential to impact people's day-to-day travel activities. Temporary traffic diversions, and in some instances temporary lane or road closures, may be required to undertake construction activities necessary to complete the Proposed Scheme. Temporary traffic diversions and road closures may also reduce traffic capacity. Furthermore, during the Construction Phase of the Proposed Scheme there will be a requirement to remove both excavated material and deliver construction materials resulting in HGV movements which may increase traffic congestion. Construction may also result in temporary footpath diversions and closures which may have a temporary negative impact on access to local amenities such as bus stops, traffic crossings, private dwelling and business. Impacts during the Construction Phase has the potential for temporary significant negative effects.

During the Operational Phase, the Proposed Scheme will result in improvements in terms of cycling, walking and public transport facilities and in some areas, are likely to result in permanent significant positive effects, including to population and human health. However, the reallocation of the road space may lead to changes in traffic patterns and redistribution of traffic and a reduction in parking and loading along the Proposed Scheme which have the potential for significant negative effects.

### **5.3 Air Quality**

Emissions to air during the Construction and Operational Phases have the potential to affect sensitive receptors (human and ecological receptors) both within the immediate vicinity and wider distances from the Proposed Scheme.

Construction activities such as utility diversions, road excavation and road resurfacing works have the potential to cause dust and particulate emissions which can be exacerbated by winds and dry weather. Dust emissions have the potential for temporary significant negative effects, particularly on road users and sensitive receptors adjacent to construction sites and compounds. Furthermore, there is the potential for temporary significant negative effects on air quality due to vehicle emissions resulting from traffic diversions.

Potential impacts to air quality during the Operational Phase relate to alterations to traffic patterns for example the introduction of a new bus lane or where bus or traffic lanes are moving closer to sensitive receptors. During the Operational Phase there may be permanent changes to traffic patterns along the Proposed Scheme. Depending on the extent and nature of these changes, this is the potential for permanent significant (positive and negative) effects on air quality at sensitive receptors along the Proposed Scheme and the adjacent road links.

## 5.4 Noise and Vibration

Noise and vibration can be a source of disturbance at sensitive receptors. Given the urban context of the Proposed Scheme, sensitive noise and vibration receptors include buildings (residential, medical and educational dwellings) and road users in the immediate vicinity of the existing road boundary. Noise sensitive locations adjacent to and along the Proposed Scheme include R817 Kimmage Road Lower, R818 Kimmage Road West, R137 Harold's Cross Road, R137 Clanbrassil Street Lower and Upper and Lombard Street West, R137 New Street South, Poddle Park, Ravensdale Park, Mount Argus Square, Greenmount Avenue.

A variety of noise and vibration emitting construction plant will be used during construction such as excavators, lifting equipment and dumper trucks. Additionally, there is the potential for exceedances of construction noise criteria at the proposed construction compounds at Sundrive Road and Out Lady's Hospice, which are in proximity to number of noise-sensitive locations. Construction activities are considered to be temporary, however the Proposed Scheme has the potential for temporary significant negative effects, particularly during intense periods of construction such as road resurfacing.

During the Operational Phase, the Proposed Scheme may lead to changes in traffic patterns due to the reconfiguration of the road carriageway. These changes may occur along the Proposed Scheme and the adjacent road links. Depending on the extent and nature of these changes, there is the potential for permanent significant (positive and negative) effects at noise sensitive receptors.

## 5.5 Population and Human Health

The Proposed Scheme represents a continuation in use of an existing transport corridor. Sensitive human receptors include residential, community and recreational facilities, commercial (existing business and development lands), educational and medical developments along the Proposed Scheme.

During the Construction Phase of the Proposed Scheme, a construction compound may be located at Our Lady's Hospice, which would require land take. Additionally, there may be disruption to traffic along Harold's Cross Road which may negatively impact on the Hospice access road. This is likely to result in temporary very significant effects due to impacts on very vulnerable people. Across the Proposed Scheme increases in traffic during the Construction Phase are likely to result in temporary significant negative effects due to increased levels of stress and disruption, particularly on vulnerable road users and members of the public living, working, or commuting through the area.

Temporary land take may be required from a number of residential, community and commercial properties along the Proposed Scheme during the Construction Phase. This is likely to result in temporary significant effects on sensitive receptors due to construction works in close proximity. Permanent land take may also be required from residential and community properties along the Proposed Scheme and the demolition of one residential property near to the Robert Emmett Bridge on Clanbrassil Street Upper, which have the potential to result in permanent significant negative effects.

The Operational Phase of the Proposed Scheme will facilitate greater public transport reliability, reduce public transport journey time and improve facilities for pedestrians and cyclists. These operational benefits have the potential to have a permanent significant positive effect on the local community through improved access to walking and cycling, increased safety for vulnerable road users. However, the Proposed Scheme may lead to changes in traffic patterns which may impact on amenity value. These changes have the potential to result in likely permanent significant (positive and negative) effects.

## 5.6 Biodiversity

The Proposed Scheme is located in proximity to a number of waterbodies. The nearest EU designated sites, located east of the Proposed Scheme, are:

- Special Protections Areas (SPAs): South Dublin Bay and River Tolka Estuary and North Bull Island; and
- Special Conservation Areas (SACs): South Dublin Bay, North Dublin Bay.

Direct impacts on EU designated sites are not anticipated. Indirect impacts may occur via hydrological connectivity between the Proposed Scheme and the EU designated sites. For example, a pollution event, introduction of invasive species, or changes to the hydrological regime during the Construction Phase have the potential to result in negative impacts (both temporary and permanent) on aquatic / wetland habitats downstream.

The EU designated sites of relevance to the Proposed Scheme are designated for Special Conservation Interest (SCI) species which may forage or roost at a number of inland sites in proximity to the Proposed Scheme. Therefore, construction activity associated with the Proposed Scheme may lead to disturb / displace SCI populations which have the potential for negative impacts on SCI species.

The assessment of likely significant effects on designated sites will be considered further in the Appropriate Assessment (AA) Screening Report and Natura Impact Statement which will be submitted as part of the development consent application.

The construction of the pedestrian boardwalk will require works adjacent to the River Poddle and the construction of two pedestrian bridges at Robert Emmet Bridge will require works within the Grand Canal (discussed below). During the Construction Phase, contaminated or heavily silted surface water runoff, pump discharges and / or an accidental spillage or pollution event discharging into the watercourses have the potential to result in temporary significant negative effects on water quality and consequently on aquatic habitats. Construction activity associated with these structures may also damage aquatic fauna and have short term impacts on riparian bird species, particularly if any activity is undertaken during bird breeding season, which have the potential to result in significant negative effects.

There may be non-native invasive plant species along, or in proximity to, the Proposed Scheme. During the Construction and Operational Phases, management and maintenance of the Proposed Scheme has the potential to introduce or spread non-native invasive species which would undermine the conservation objectives of downstream EU designated sites which have the potential for significant (both temporary and permanent) negative effects on existing habitats.

## **5.7 Water**

Construction of a boardwalk over the River Poddle at Mount Argus View will be supported by piles in the riverbank, which has the potential for temporary, significant negative effects on the riverbank, although works in the waterbody itself are not required.

At the proposed construction compounds on Sundrive Road and Clanbrassil Street Lower there is risk of spillages of fuels or chemicals entering surface water drains, which has the potential for significant negative effects on the waterbodies connected to these drains. Major works are proposed for the bridge over the Grand Canal associated with the construction of footbridges on either side of the existing Robert Emmett Bridge, which will require in-stream works. These works have the potential to impact on the Grand Canal, for example increased sediment loads or the introduction of a contamination pathway between the Proposed Scheme and the Grand Canal, which have the potential for significant (both temporary and permanent) negative effects.

During the Operational Phase, increased areas of hardstanding may increase the rate of runoff of pollutants and sediment loads from widened roads resulting in the deterioration of water quality. Likewise, increased runoff may alter and disturb the riverbed and the riverbanks of nearby watercourses. Therefore, the Operational Phase of the Proposed Scheme has the potential to result in significant negative effects (both temporary and permanent) on the watercourses which are hydrologically connected with the Proposed Scheme.

## **5.8 Land, Soils, Geology and Hydrogeology**

The majority of soils in Dublin City are classified as 'made ground', with areas of alluvial, estuarine and marine deposits present that may be associated with recent and ancient waterbodies. The Proposed Scheme is underlain by a locally important aquifer which is moderately productive only in local zones. The 'Lucan Formation' (locally known as Calp Limestone) forms the majority of the bedrock and groundwater vulnerability is variable, ranging from 'extreme' where bedrock is close to or at the surface to 'low' in areas where thick subsoil deposit is present. Considering its urban nature, there may be sources of contamination within the made ground.

Construction activities will require the excavation of existing made ground and the existing road bed. Construction activities may create pathways between contaminants from the existing made ground and the local environment and groundwater resources which have the potential for significant (both temporary and permanent) negative effects.

During the Operational Phase, the Proposed Scheme may lead to pollution of soils and geology from accidental spillages on the road which have the potential for both temporary and permanent significant negative effects.

## **5.9 Archaeology, Architectural and Cultural Heritage**

The Proposed Scheme will pass through an area which includes numerous protected structures, national monuments, sites of archaeological and cultural heritage merit, archaeological conservation areas and conservation areas. There are a number of archaeological, architectural and cultural heritage records / assets along the Proposed Scheme.

Construction activities such as excavation may directly impact on heritage assets and indirectly impact on the fabric and setting of heritage assets.

Potential direct impacts include where the construction activity encroaches the curtilage of a heritage asset (e.g. the removal or relocation of historical post boxes, kerbs and kerbstones) or disturbance of below ground archaeological remains. The Proposed Scheme will require intervention to the Robert Emmet Bridge on the Grand Canal to facilitate the installation of pedestrian footbridges, which has the potential for significant negative effects on the Robert Emmet Bridge. At Mount Argus Way, the site of a weir known locally as the 'Stone Boat', is located below the proposed boardwalk. Although there will be no works on the weir itself, there will be works on the adjacent riverbank, which has the potential to result in significant permanent negative effects.

There is potential for the discovery of previously unknown below ground archaeological features during construction works along the Proposed Scheme and at the three proposed construction compounds. This has the potential to result in permanent significant negative effects to archaeological features, such as those associated with the following features and their zones of archaeological potential (ZAP): medieval City Watercourse, historical settlements of Harold's Cross and the Historic City of Dublin. Additionally, ground-breaking works on Clanbrassil Street and New Street may be in the vicinity of the recorded location of possible medieval city defences consisting of walls, towers and gates, which are considered to be a National Monument. This has the potential to result in significant permanent negative effects on any surviving below-ground sections of Dublin City's defences.

Indirect impacts include the visible impact of construction activities and hoarding in the vicinity of historic monuments and other elements of architectural heritage, changes to traffic patterns and diversions and the increased movement of HGV. Given that the Proposed Scheme will be located in an area with a large number of archaeological, architectural and cultural heritage assets, there is the potential for permanent significant negative effects during construction.

During the Operational Phase, the Proposed Scheme will lead to changes within the road boundary which may impact on the sense of place. Operational impacts have the potential for permanent significant negative effects on the setting of architectural and cultural heritage assets.

## **5.10 Landscape (Townscape) and Visual**

The Proposed Scheme is located within an existing built-up area which includes various land uses from residential suburbs to inner city high rise residential developments, industrial, recreational and commercial land uses.

There is the potential for temporary significant negative townscape and visual effects during construction due to general construction activity, removal of trees, impacts on property boundaries, traffic diversions and streetscape disturbance. In particular, works associated with the Robert Emmet Bridge have the potential to result in temporary significant negative effects on the Grand Canal Conservation Area. Construction works within, or in proximity to, a number of amenity areas also have the potential to result in temporary significant effects including: the River Poddle Corridor, the Grand Canal Corridor and Harold's Cross Park.



During the Operational Phase, the Proposed Scheme may alter townscape and visual amenity due to the new features within the streetscape, changes in traffic flows, lighting, signage, new boundaries and landscape planting treatments. Permanent land take at a number of residential properties on Harold's Cross Road will result in the loss of property / garden areas which has the potential to result in permanent significant effects. There is also the potential for permanent significant positive effects on public realm through proposed changes to the streetscape.

## 5.11 Waste and Resources

The Construction Phase is currently estimated to generate more than 80,000 tonnes of construction and demolition waste during excavation of the existing carriageway, trenches, piled foundations and tree pits and excavation to facilitate construction of new carriageway and footpaths. The material generated is anticipated to be typical of a road improvement project and may include contaminated and uncontaminated material, such as concrete, bituminous mixtures and soils. There is the potential for both temporary and permanent significant negative effects as a result of the waste arisings during the Construction Phase of the Proposed Scheme. As identified in the Traffic and Transport Section (Section 5.2), HGV movements may increase due to the removal and delivery of materials which may increase congestion, which has the potential for temporary significant negative effects.

During the Operational Phase, the Proposed Scheme will require material as part of road maintenance, however, this is unlikely to have a significant effect.

## 5.12 Material Assets

There are a number of utilities in place along and crossing the existing road along the Proposed Scheme, the majority of which are buried within and along the roadways. These utilities include gas, electricity, water and telecommunication lines and associated infrastructure. The Proposed Scheme will also require materials to be imported from outside the Proposed Scheme including plant and machinery, the main construction materials (e.g. metals, cement, road coursing materials) and finishing materials (e.g. paving, surfacing, street furniture).

During construction, the Proposed Scheme has the potential for significant (both temporary and permanent) negative effects on major public utilities due to the requirement to divert or modify existing infrastructure.

During the Operational Phase, the Proposed Scheme is unlikely to have a significant effect on material assets such as major public utilities.

## 5.13 Cumulative Effects

The construction of the Proposed Scheme, when considered in combination with the Construction Phases of the other projects listed below, has the potential to result in significant cumulative effects:

- The other 11 schemes that make up the BusConnects Dublin – Core Bus Corridor Infrastructure Works. In particular, the offline cycle route of the Templeogue / Rathfarnham to City Centre Core Bus Corridor will tie into this scheme at the junction of Harold's Cross Road and Park Avenue and the Tallaght / Clondalkin to City Centre Core Bus Corridor which will tie into this scheme at the junction of New Street South and Dean Street;
- DART+ Programme (tunnelling and non-tunnelling works);
- MetroLink (to Charlemont);
- LUAS Cross City incorporating LUAS Green Line Capacity Enhancement - Phase 1;
- LUAS Green Line Capacity Enhancement - Phase 2;
- Greater Dublin Area Cycle Network Plan; and
- Other planning applications which are approved by Dublin City Council, such as residential schemes and mixed use developments.

All of these projects are located in the heavily urbanised Dublin area in proximity to sensitive receptors and therefore the construction of these projects, has the potential to give rise to significant environmental effects including:

- Traffic impacts associated with the construction activities for the projects;
- Noise and vibration impacts;
- Air quality impacts;
- Visual impacts associated with the introduction of new infrastructure;
- Archaeology, architectural and cultural heritage impacts;
- Water quality impacts to watercourses due to the Construction Phase of the projects;
- Amenity and community severance impacts; and
- Waste management impacts.

Where the Construction Phase of the Proposed Scheme overlaps with the Construction Phases of the other projects there is potential for significant negative effects due to the combination of effects listed above.

At EIA Screening stage, it is considered that there is the potential for the following significant cumulative effects during construction of the Proposed Scheme and other development projects:

- Increased severance and driver and pedestrian delay as a result of congestion caused by construction vehicles and temporary diversions / closure of footpaths and roads:
  - For example, the cumulative effect of the Proposed Scheme in combination with the Templeogue / Rathfarnham to City Centre Core Bus Corridor has the potential to increase construction vehicles and introduce diversions and closures along a significant portion of the local road network, particularly along Harold's Cross Road where both schemes meet.
- Increased dust emissions and noise and vibration effects associated with construction activities, such as excavation, demolition, road re-surfacing:
  - For example, the cumulative effect of the Proposed Scheme in combination with the Templeogue / Rathfarnham to City Centre Core Bus Corridor due to construction activities require along Harold's Cross Road, and with the Tallaght / Clondalkin to City Centre Core Bus Corridor due to construction activities around the junction of New Street South and Dean Street, has the potential for impacts from dust emissions and noise and vibration along the Proposed Scheme.
- Pollution and contamination caused by construction activities, which cumulatively effect soils, waterways and groundwater;
  - For example, if the GDA Cycle Network Plan Route proceeded concurrently there is the potential for cumulative effects of the Proposed Scheme in combination with Route SO1 along the Grand Canal and Route 9 along the River Poddle, where there may be an increase in areas of hard standing in proximity to the watercourses. In this scenario, there is the potential for significant effects on water quality and flood risk.
- Cumulative effects on archaeology, architectural heritage and cultural heritage;
  - For example, if the GDA Cycle Network Plan Route proceeded concurrently there is the potential for cumulative effects of the Proposed Scheme in combination with Route SO1 along Parnell Road, parallel to the Grand Canal, particularly at the Robert Emmet Bridge. Construction activities may impact on the setting of this area and in this scenario, there is the potential for significant effects on cultural heritage.
- Cumulative effects on materials and waste resource due to demolition, excavation and transportation (removal and delivery) of materials;
  - The other projects will generate quantities of excavation, construction and demolition wastes. When considered in conjunction with the Proposed Scheme, there is the potential for significant effects.
- Cumulative effects on material assets due to the diversion or modification of utilities.
  - For example, the cumulative effect of concurrent large scale infrastructure projects requiring diversion or modifications of utilities, such as the DART+ Programme, LUAS projects and Metrolink.

At EIA Screening stage, there is the potential for the following cumulative effects during the Operational Phase of the Proposed Scheme and other development projects:

- Cumulative effects on air quality and noise as a result of changes to junctions, traffic levels and traffic patterns in combination with the other BusConnects Dublin – Core Bus Corridor Infrastructure Works, including the Tallaght / Clondalkin to City Centre, Liffey Valley to City Centre and Templeogue / Rathfarnham to City Centre Core Bus Corridors, all of which are in proximity to the Proposed Scheme towards the City Centre; and
- Cumulative effects on sense of place and streetscape due to changes to public transport provision, particularly at bus stops and public transport stations and hubs.

Overall, there is the potential for significant effects on the environment due to the cumulative effects associated with the temporal and spatial overlap of the Proposed Scheme with one or more of the other development projects.

## 6. Conclusion

An EIA for the Proposed Scheme is not automatically triggered under section 50(1)(a) of the Roads Act. This EIA Screening Report considers whether, in accordance with section 50(1)(c) of the Roads Act, the Proposed Scheme is likely to have significant effects on the environment such that an Environmental Impact Assessment Report (EIAR) should be prepared and an Environmental Impact Assessment (EIA) carried out.

For the reasons set out in detail in this EIA Screening Report, it is considered that the Proposed Scheme is likely to have significant effects on the environment and, as such, requires EIA to be carried out prior to a decision being made to grant development consent. This EIA Screening Report identifies the following likely significant impacts:

- Cumulative effects (during the Construction and Operational Phases) as a result of the overlap of the Proposed Scheme and other development projects;
- Effects on the environment during construction of the Proposed Scheme, including the following:
  - Increased congestion as a result of traffic diversions and the movement of construction related traffic;
  - Air quality effects as a result of dust emissions from construction activities and emissions from construction vehicles and diverted traffic;
  - Noise and vibration effects arising from construction activities, particularly during intense periods of construction;
  - Increased levels of stress and disruption, particularly on vulnerable road users and members of the public living, working, or commuting through the area;
  - Biodiversity effects due to the loss of habitats including trees / other vegetation and the spread of non-native invasive species;
  - Water quality effects should a pollution event occur within or adjacent to a watercourse during construction;
  - Soils and geology and potential contamination effects on groundwater resources as a result of excavating made ground and the existing road bed;
  - Archaeological and cultural heritage effects and disturbance of below ground archaeological remains arising from excavation activities;
  - Townscape and visual effects due to general construction activity from removal of trees, impacts on property boundaries and streetscape disturbance;
  - Impacts as a result of material arising from the excavation of the road bed; and
  - Effects on utilities due to diversions and modifications of utility infrastructure.
- Effects on the environment as a result of the Operational Phase of the Proposed Scheme, including the following:
  - Reallocation of the road space leading to changes in parking and loading provision;
  - Air quality and noise impacts due to changes in traffic patterns along the Proposed Scheme and adjacent road links;
  - The potential to introduce or spread non-native invasive species during maintenance activities;
  - Water quality and flooding impacts due to increases in area of hardstanding which may increase the rate of runoff;
  - Soils and geology and potential contamination impacts as a result of accidental spillages;
  - Impacts on the setting of cultural heritage assets due to changes within the road boundary; and
  - Changes to the transport corridor effecting the sense of place, townscape and visual amenity due to the new features within the streetscape, changes in traffic flows, lighting, signage, new boundaries and landscape planting treatments.

The EU Guidance on Screening (European Commission 2017) contains an EIA Screening Checklist which has been completed for the Proposed Scheme. The completed EIA Screening Checklist (Appendix B) supports the conclusion that the Proposed Scheme is likely to have significant effects on the environment and, as such, requires EIA to be carried out prior to a decision being made to grant development consent.

## 7. References

- Department of the Environment, Climate and Communications (DECC) (2020). The White Paper: Ireland's Transition to a Low Carbon Energy Future 2015-2030
- Department of Housing, Planning and Local Government (2018). Ministerial Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment
- Department of Transport (2015). Climate Change Sectoral Adaptation Plan
- Department of Transport (2009). A Smarter Travel: A Sustainable Transport Future: A New Transport Strategy for Ireland 2009–2020
- Department of Transport (2009). Smarter Travel: Ireland's First National Cycle Policy Framework 2009-2020
- DTTAS (2009). Smarter Travel: A Sustainable Transport Future: A New Transport Strategy for Ireland 2009 – 2020
- Dublin City Council (DCC) (2016). Dublin City Development Plan 2016-2022
- Eastern & Midland Regional Assembly (EMRA) (2019). Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region 2019-2031.
- Environmental Protection Agency (EPA) (2019). Air Monitoring Station Data from the EPA's SAFER-Data Archive
- European Commission (2015). Interpretation of definitions of project categories of annex I and II of the EIA Directive
- European Commission (2017). Environmental Impact Assessment of Projects - Guidance on Screening
- European Commission (2018). Implementation of the EIA Directive 2014/52/EU
- Government of Ireland (2018a). Project Ireland 2040 National Planning Framework
- Government of Ireland (2018b). Project Ireland 2040 National Development Plan 2018 – 2027
- Government of Ireland (2019). Climate Action Plan 2019 – To Tackle Climate Breakdown
- Institute of Environmental Management and Assessment (IEMA) (2020) Major Accidents and Disasters in EIA: A Primer
- National Inventory of Architectural Heritage (NIAH) (2020). Building and Garden Surveys - Dublin
- National Transport Authority (NTA) (2016). Transport Strategy for the Greater Dublin Area 2016 –2035
- National Transport Authority (NTA) (2019). Integrated Implementation Plan 2019-2024
- National Transport Authority (NTA) (2013). Greater Dublin Area Cycle Network Plan (GDACNP)
- Office of Public Works (OPW) (2019). Flood Maps Viewer. [Online] Available from [www.floodinfo.ie](http://www.floodinfo.ie)
- Ordnance Survey of Ireland (OSI) (2020). GeoHive Online Map Viewer [Online] Available from <http://map.geohive.ie/mapviewer.html>

**Directives and Legislation**

Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment

Roads Act 1993 (No. 14 of 1993)

Roads Regulations 1994 (No. 119 of 1994)

Planning and Development Regulations 2011 (600 of 2001)

European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulations 2019

European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018

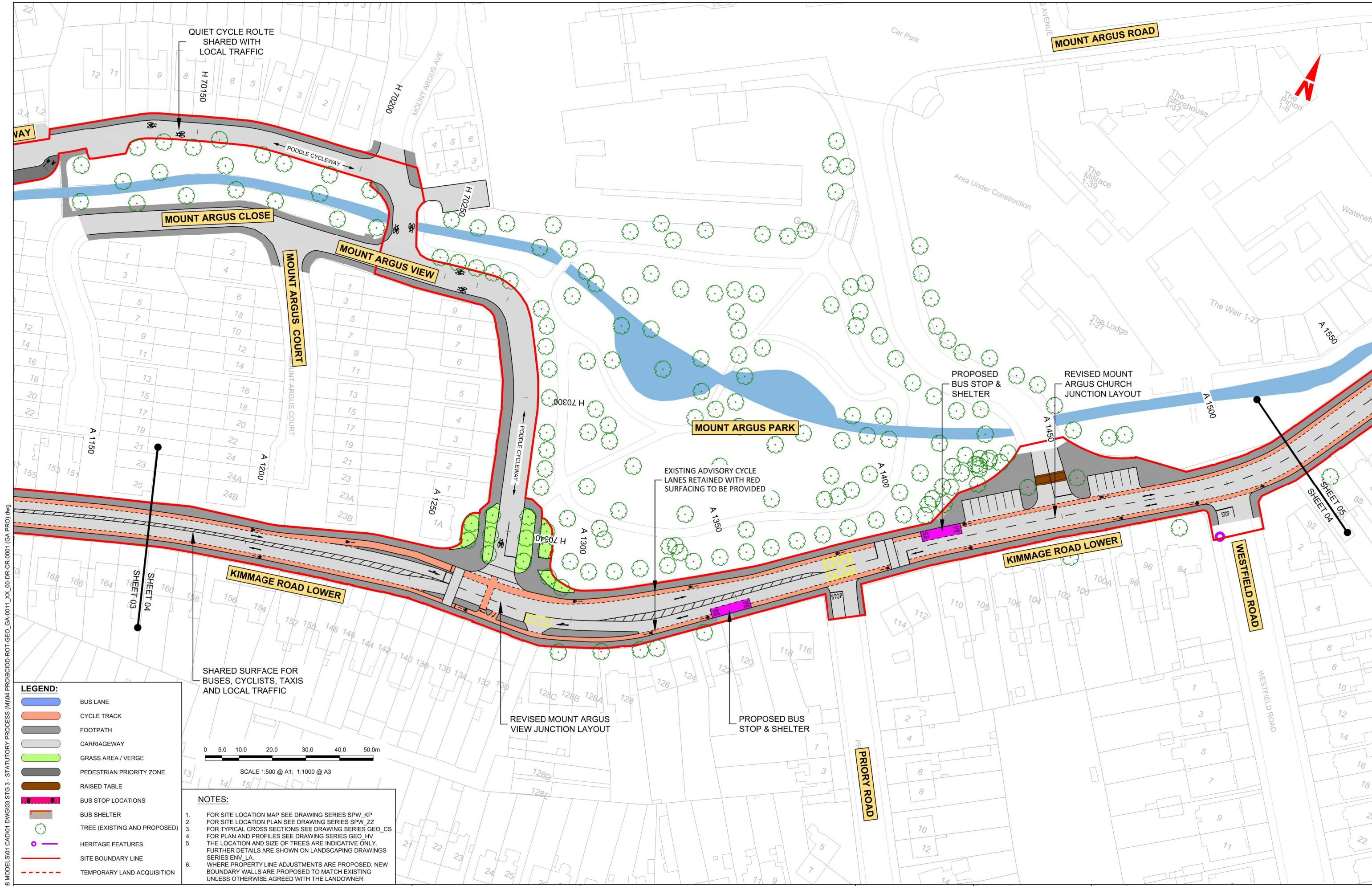
## **Appendix A. Scheme Drawings**







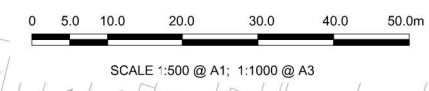




**LEGEND:**

|  |                              |
|--|------------------------------|
|  | BUS LANE                     |
|  | CYCLE TRACK                  |
|  | FOOTPATH                     |
|  | CARRIAGEWAY                  |
|  | GRASS AREA / VERGE           |
|  | PEDESTRIAN PRIORITY ZONE     |
|  | RAISED TABLE                 |
|  | BUS STOP LOCATIONS           |
|  | BUS SHELTER                  |
|  | TREE (EXISTING AND PROPOSED) |
|  | HERITAGE FEATURES            |
|  | SITE BOUNDARY LINE           |
|  | TEMPORARY LAND ACQUISITION   |

SHARED SURFACE FOR BUSES, CYCLISTS, TAXIS AND LOCAL TRAFFIC



- NOTES:**
- FOR SITE LOCATION MAP SEE DRAWING SERIES SPW\_KP
  - FOR SITE LOCATION PLAN SEE DRAWING SERIES SPW\_ZZ
  - FOR TYPICAL CROSS SECTIONS SEE DRAWING SERIES GEO\_CS
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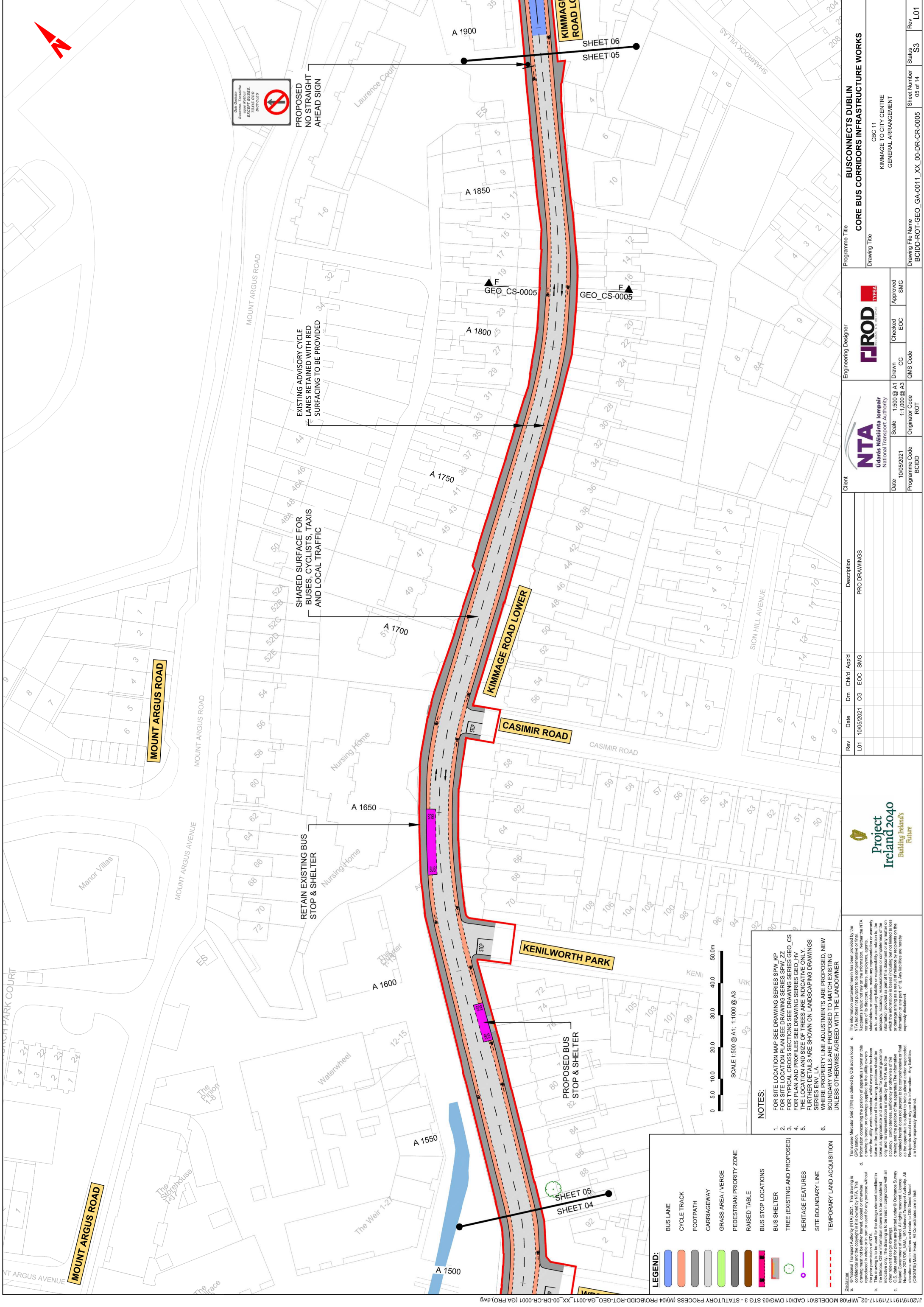


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| Programme Code | Originator Code            | QMS Code |         |          |
| BCIDD          | ROT                        |          |         |          |

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|---|--------------|--------|-----|
| <b>Programme Title</b><br>BUSCONNECTS DUBLIN<br>CORE BUS CORRIDORS INFRASTRUCTURE WORKS |              |        |     |
| <b>Drawing Title</b><br>CBC 11<br>KIMMAGE TO CITY CENTRE<br>GENERAL ARRANGEMENT         |              |        |     |
| Drawing File Name   | Sheet Number | Status | Rev |
| BCIDD-ROT-GEO_GA-0011_XX_00-DR-CR-0004  | 04 of 14     | S3     | L01 |

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PROPOSED  
NO STRAIGHT  
AHEAD SIGN

EXISTING ADVISORY CYCLE  
LANES RETAINED WITH RED  
SURFACING TO BE PROVIDED

SHARED SURFACE FOR  
BUSES, CYCLISTS, TAXIS  
AND LOCAL TRAFFIC

RETAIN EXISTING BUS  
STOP & SHELTER

PROPOSED BUS  
STOP & SHELTER

**LEGEND:**

|  |                              |
|--|------------------------------|
|  | BUS LANE                     |
|  | CYCLE TRACK                  |
|  | FOOTPATH                     |
|  | CARRIAGEWAY                  |
|  | GRASS AREA / VERGE           |
|  | PEDESTRIAN PRIORITY ZONE     |
|  | RAISED TABLE                 |
|  | BUS STOP LOCATIONS           |
|  | BUS SHELTER                  |
|  | TREE (EXISTING AND PROPOSED) |
|  | HERITAGE FEATURES            |
|  | SITE BOUNDARY LINE           |
|  | TEMPORARY LAND ACQUISITION   |

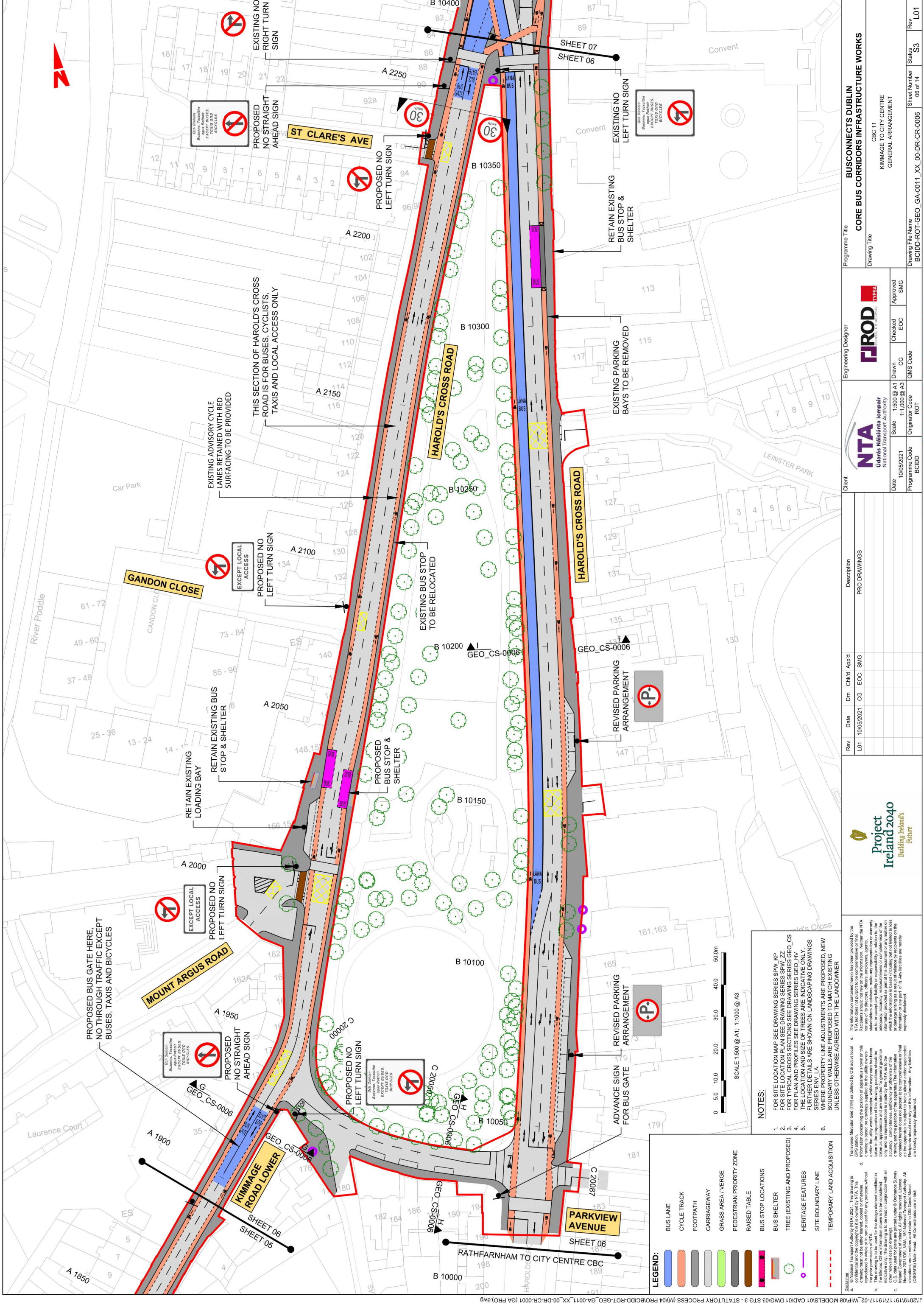
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- FOR SITE LOCATION PLAN SEE DRAWING SERIES SPW\_ZZ
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|   |  |  |  |   |  |
|---|--|--|--|---|--|
|   |  |  |  | <b>BUSCONNECTS DUBLIN</b><br><b>CORE BUS CORRIDORS INFRASTRUCTURE WORKS</b>                                   |  |
| Date: 10/05/2021<br>Scale: 1:500 @ A1<br>1:1,000 @ A3 |  | Checked: EOC<br>Drawn: CG<br>Approved: SMG                       |  | Drawing File Name: BCIDD-ROT-GEO_GA-0011_XX_00-DR-CR-0005<br>Sheet Number: 05 of 14<br>Status: S3<br>Rev: L01 |  |
| Programme Code: BCIDD<br>Originator Code: ROT         |  | Client:  |  | Programme Title:  |  |
| Description: PRO DRAWINGS                             |  | Rev: L01<br>Date: 10/05/2021<br>Dm: CG<br>Chkd: EOC<br>Appd: SMG |  | Drawing Title:  |  |
|   |  | Notes:   |  | Drawing Title:  |  |

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**LEGEND:**

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- RAISED TABLE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

**NOTES:**

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| Engineering Designer | FIROD<br>Infrastructure & Planning                              |
| Programme Code       | BCDD  |
| Originator Code      | ROT   |
| Scale                | 1:500 @ A1<br>1:1,000 @ A3                                      |
| Date                 | 10/05/2021  |
| Checked              | CG  |
| Drawn                | A1  |
| QC                   | A3  |
| Checked              | EOC   |
| Approved             | SMG   |

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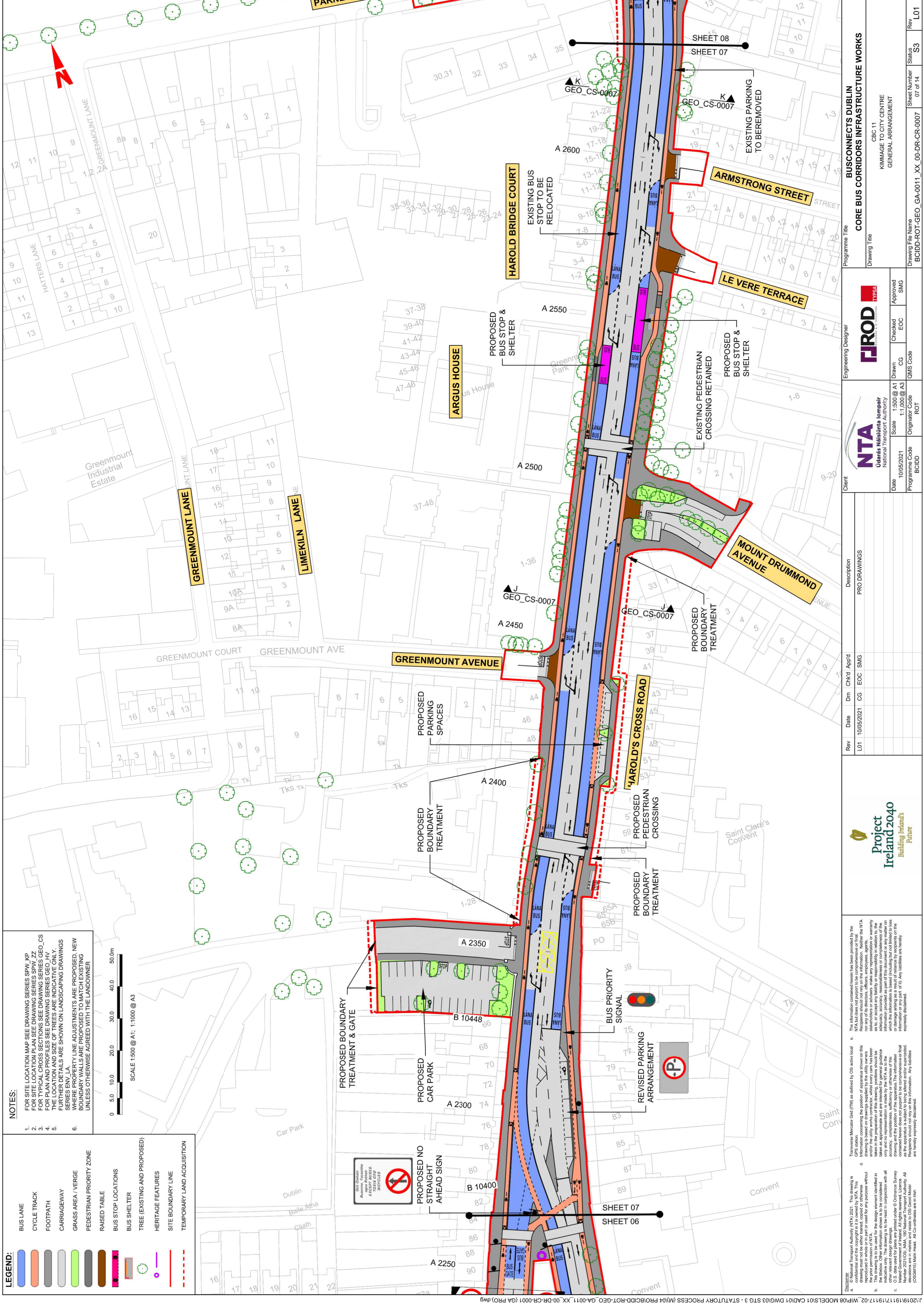
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| Programme Title   | BUSCONNECTS DUBLIN                      |
| Drawing Title     | CORE BUS CORRIDORS INFRASTRUCTURE WORKS |
| Drawing File Name | BCDD-ROT-GEO_GA-0011_XX_00-DR-CR-0006   |
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**LEGEND:**

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- RAISED TABLE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

SCALE 1:500 @ A1; 1:1000 @ A3

0 5.0 10.0 20.0 30.0 40.0 50.0m

|  |  |  |  |
|--|--|--|--|
| <p><b>Client</b></p> <p><b>NTA</b><br/>Údarás Náisiúnta Iompair<br/>National Transport Authority</p> <p>Date: 10/05/2021<br/>Scale: 1:500 @ A1<br/>1:1,000 @ A3</p> <p>Programme Code: BCDD<br/>Originator Code: ROT</p> |  | <p><b>Engineering Designer</b></p> <p><b>FIROD</b><br/>Infrastructure &amp; Planning</p> <p>Checked: EOC<br/>Drawn: CG<br/>Approved: SMG</p> |  |
| <p><b>Programme Title</b></p> <p><b>BUSCONNECTS DUBLIN</b></p> <p><b>CORE BUS CORRIDORS INFRASTRUCTURE WORKS</b></p> <p>Drawing Title: KIMMAGE TO CITY CENTRE GENERAL ARRANGEMENT</p>                                    |  | <p><b>Description</b></p> <p>PRO DRAWINGS</p>  |  |
| <p><b>Rev</b></p> <p>L01 10/05/2021 CG EOC SMG</p>   |  | <p><b>Date</b></p> <p>10/05/2021</p>   |  |
| <p><b>Dr</b></p> <p>CG EOC SMG</p>   |  | <p><b>Chkd</b></p> <p>CG EOC SMG</p>   |  |
| <p><b>Apprd</b></p> <p>CG EOC SMG</p>  |  | <p><b>Apprd</b></p> <p>CG EOC SMG</p>  |  |
| <p><b>Rev</b></p> <p>L01 10/05/2021 CG EOC SMG</p>   |  | <p><b>Date</b></p> <p>10/05/2021</p>   |  |
| <p><b>Dr</b></p> <p>CG EOC SMG</p>   |  | <p><b>Chkd</b></p> <p>CG EOC SMG</p>   |  |
| <p><b>Apprd</b></p> <p>CG EOC SMG</p>  |  | <p><b>Apprd</b></p> <p>CG EOC SMG</p>  |  |

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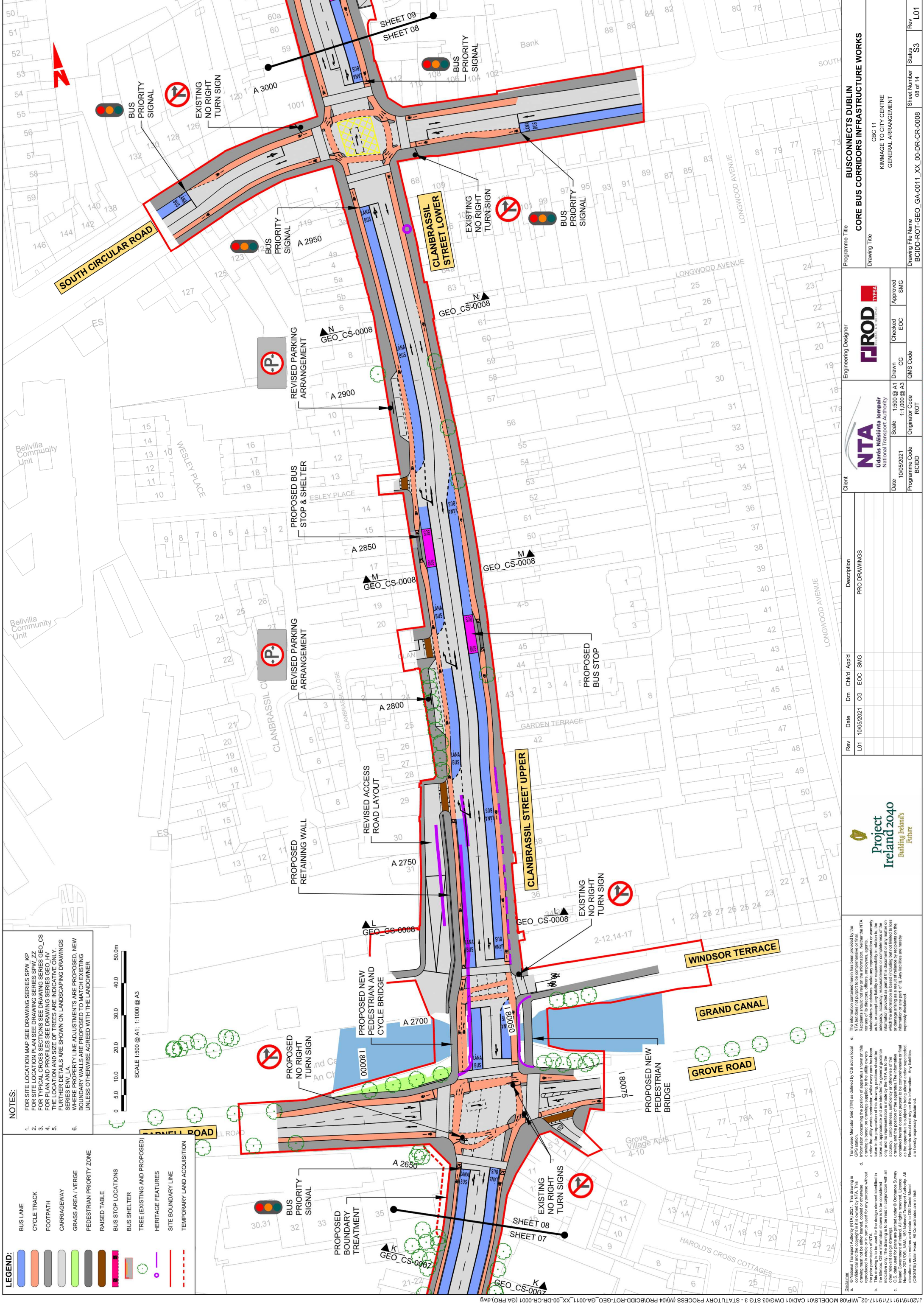
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  - WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE PROPOSED TO MATCH EXISTING UNLESS OTHERWISE AGREED WITH THE LANDOWNER

**LEGEND:**

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- RAISED TABLE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

SCALE 1:500 @ A1; 1:1000 @ A3

0 5.0 10.0 20.0 30.0 40.0 50.0m

**Programme Title**  
**BUSCONNECTS DUBLIN**  
**CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

**Drawing Title**  
 KIMMAGE TO CITY CENTRE  
 GENERAL ARRANGEMENT

**Client**  
 NTA  
 Údarás Náisiúnta Iompair  
 National Transport Authority

**Engineering Designer**  
 FROD  
 CONSULTANTS LTD

**Date**  
 10/05/2021

**Scale**  
 1:500 @ A1  
 1:1,000 @ A3

**Programme Code**  
 BCDD

**Originator Code**  
 ROT

**QMS Code**  
 EOC

**Checked**  
 EOC

**Drawn**  
 CG

**Approved**  
 SMG

**Drawing File Name**  
 BCDD-ROT-GEO\_GA-0011\_XX\_00-DR-CR-0008

**Sheet Number**  
 08 of 14

**Rev**  
 L01

| Rev | Date       | Dr | Chkd | Appd | Description  |
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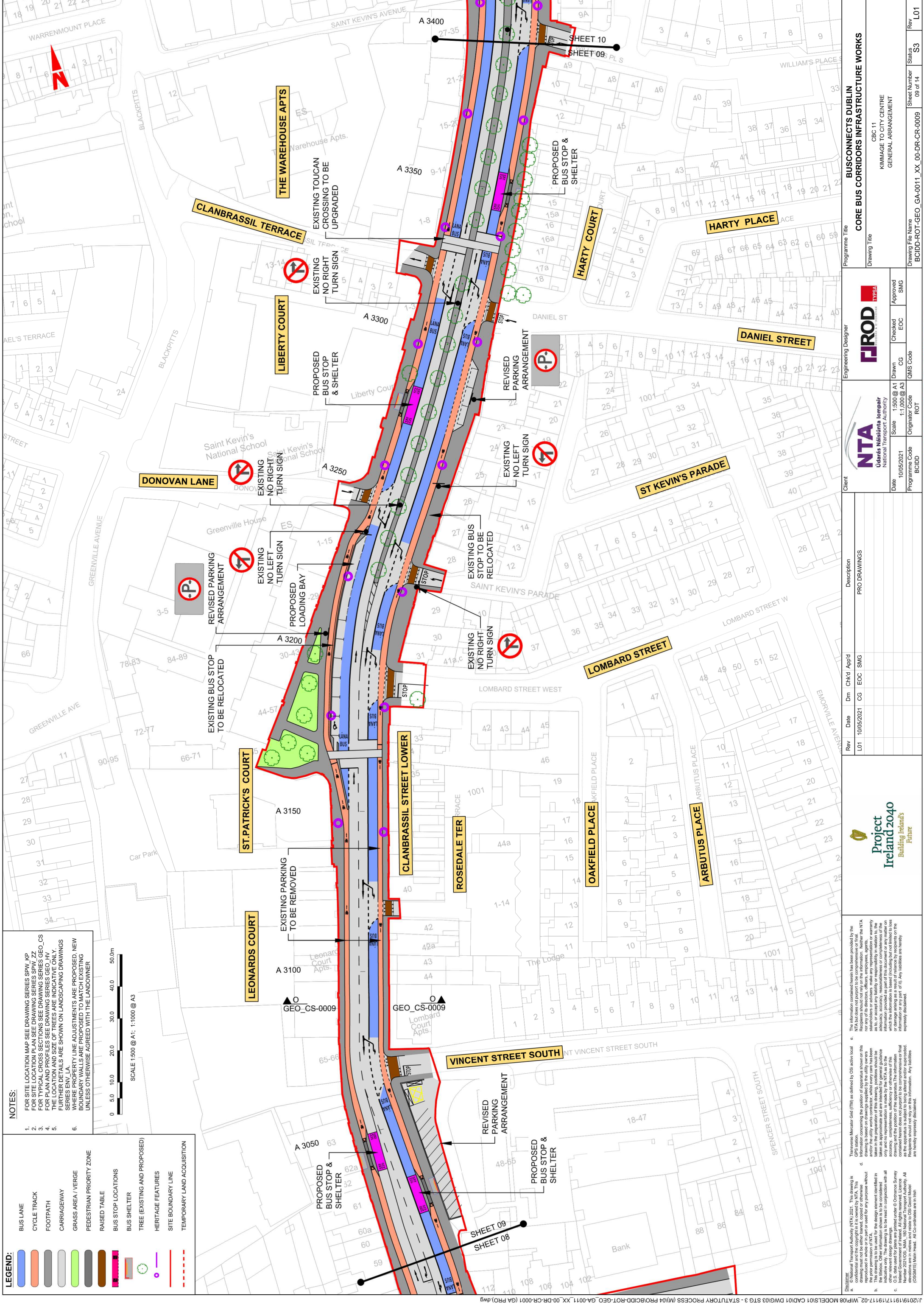
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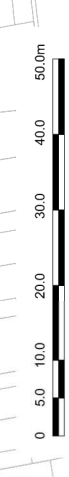
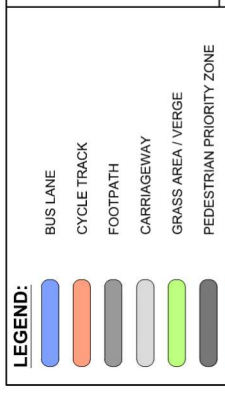
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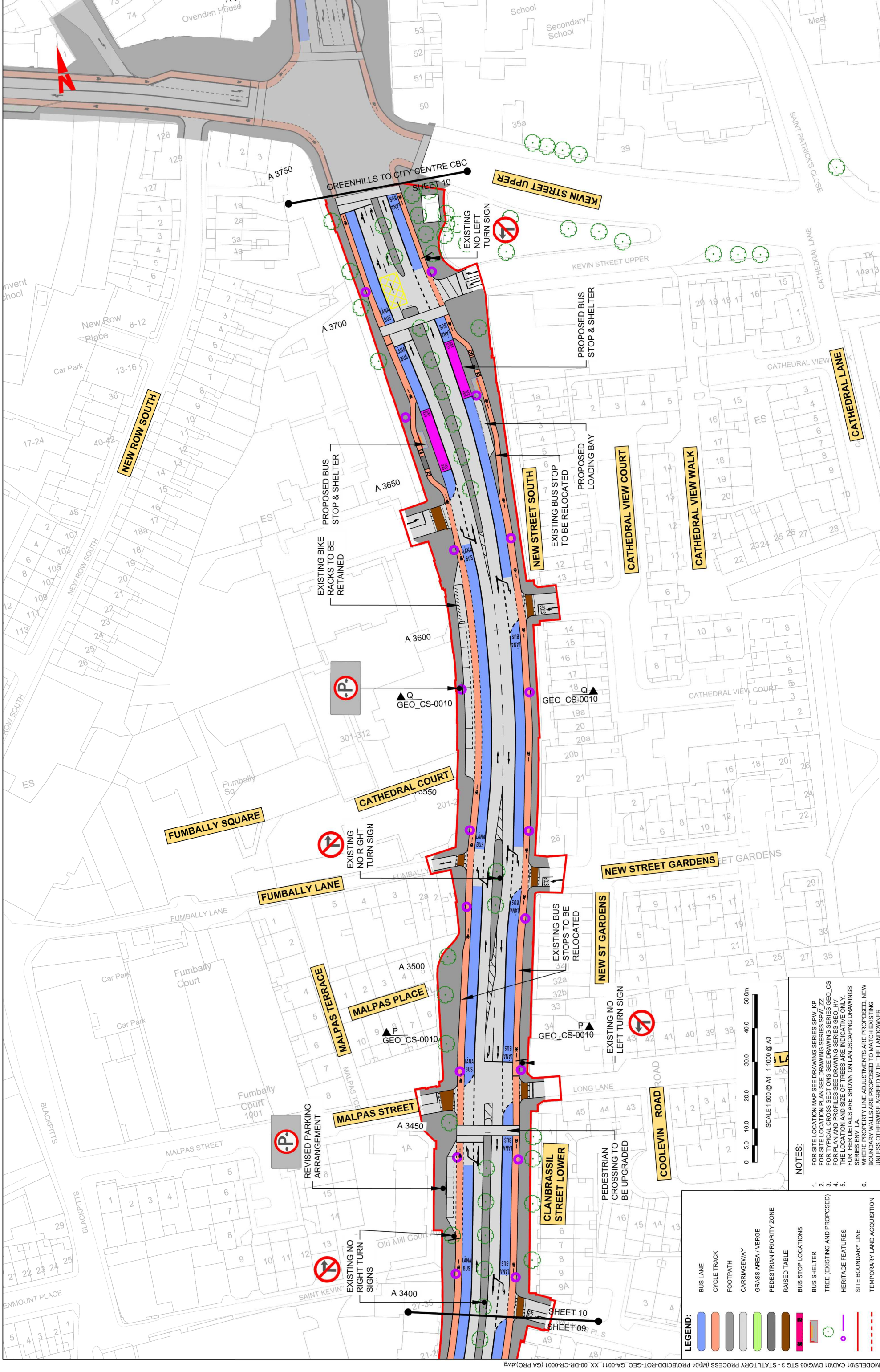
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|   |  |   |  |   |  |
|---|--|---|--|---|--|
| <p><b>Client</b></p> <p><b>NTA</b><br/>Udara Néiláunta Iompair<br/>National Transport Authority</p> <p>Date: 10/05/2021<br/>Scale: 1:500 @ A1<br/>1:1,000 @ A3</p> <p>Programme Code: BCDD<br/>Originator Code: ROT</p> |  | <p><b>Engineering Designer</b></p> <p><b>FROD</b><br/>Infrastructure &amp; Planning</p> <p>Checked: EOC<br/>Drawn: CG<br/>Approved: SMG</p>   |  | <p><b>Programme Title</b></p> <p><b>BUSCONNECTS DUBLIN</b></p> <p><b>CORE BUS CORRIDORS INFRASTRUCTURE WORKS</b></p> <p>Drawing Title: KIMMAGE TO CITY CENTRE GENERAL ARRANGEMENT</p>   |  |
| <p><b>Description</b></p> <p>PRO DRAWINGS</p>   |  | <p><b>Rev</b></p> <p>10/05/2021</p>   |  | <p><b>Chkd</b></p> <p>EOC</p>   |  |
| <p><b>Date</b></p> <p>10/05/2021</p>  |  | <p><b>CG</b></p> <p>EOC</p>   |  | <p><b>SMG</b></p> <p>SMG</p>  |  |
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| <p><b>Drawing File Name</b></p> <p>BCDD-ROT-GEO_GA-0011_XX_00-DR-CR-0009</p>  |  | <p><b>Sheet Number</b></p> <p>09 of 14</p>  |  | <p><b>Rev</b></p> <p>L01</p>  |  |

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**LEGEND:**

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- RAISED TABLE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

**NOTES:**

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**Client**

**NTA**  
 Údarás Náisiúnta Iompair  
 National Transport Authority

**Engineering Designer**

**FIROD**  
 17254

**Scale** 1:500 @ A1  
 1:1,000 @ A3

**Date** 10/05/2021

**Programme Code** BCDD

**Originator Code** ROT

**QMS Code** EOC

**Checked** EOC

**Drawn** CG

**Approved** SMG

**Programme Title**  
**BUSCONNECTS DUBLIN**

**Drawing Title**  
**CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

**CBC 11**  
 KIMMAGE TO CITY CENTRE  
 GENERAL ARRANGEMENT

**Drawing File Name**  
 BCDD-ROT-GEO\_GA-0011\_XX\_00-DR-CR-0010

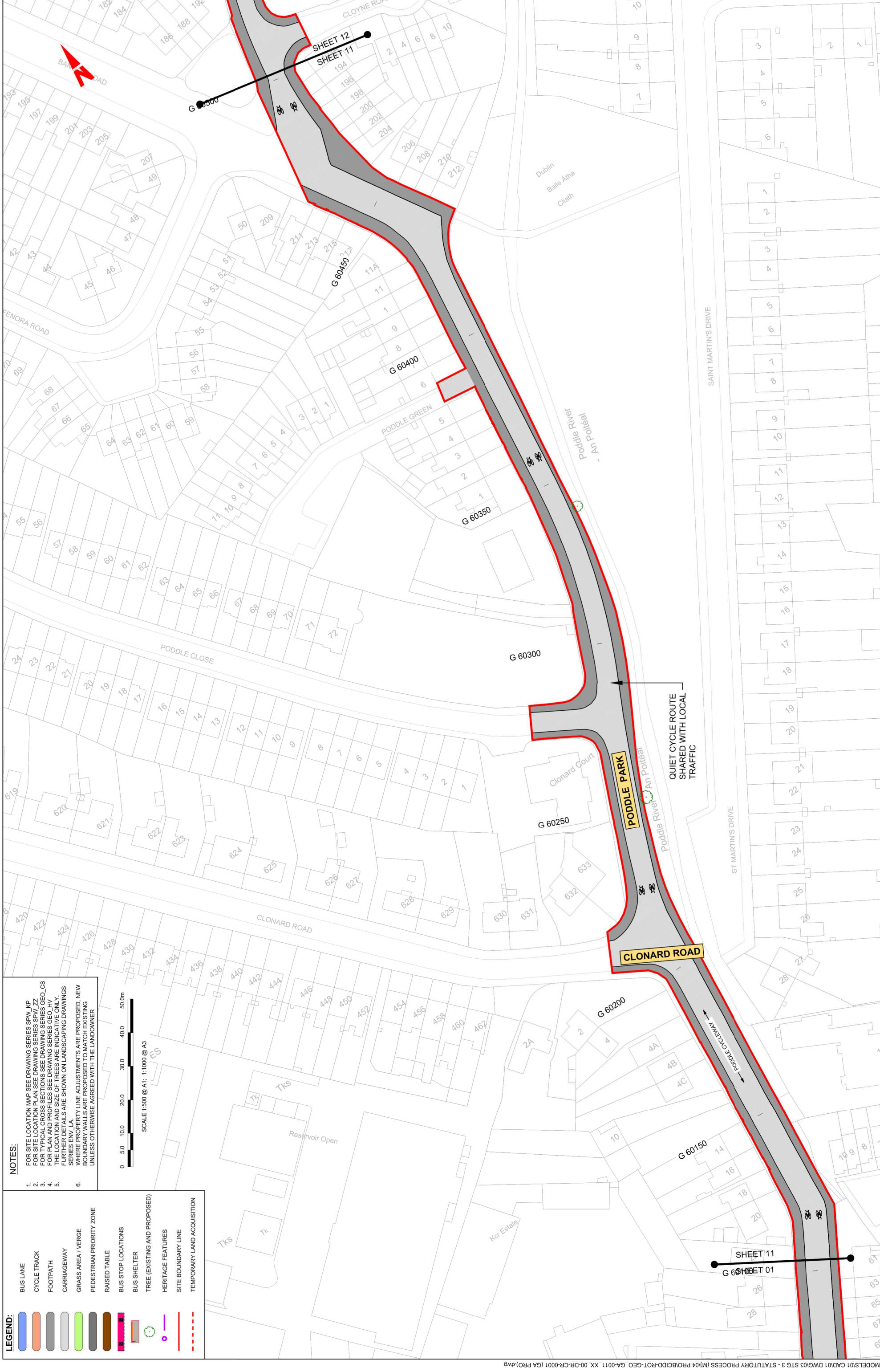
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 10 of 14

**Rev**  
 L01

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**LEGEND:**

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- RAISED TABLE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

**Client**  
**NTA**  
 Údarás Náisiúnta Iompair  
 National Transport Authority

**Engineering Designer**  
**FROD**  
 CONSULTANTS & ENGINEERS

**Programme Title**  
**BUSCONNECTS DUBLIN**  
 CORE BUS CORRIDORS INFRASTRUCTURE WORKS

**Drawing Title**  
 KIMMAGE TO CITY CENTRE  
 GENERAL ARRANGEMENT

**Date** 10/05/2021  
**Scale** 1:500 @ A1  
 1:1,000 @ A3

**Programme Code** BCDD  
**Originator Code** ROT

**Checked** EOC  
**Drawn** CG  
**Approved** SMG

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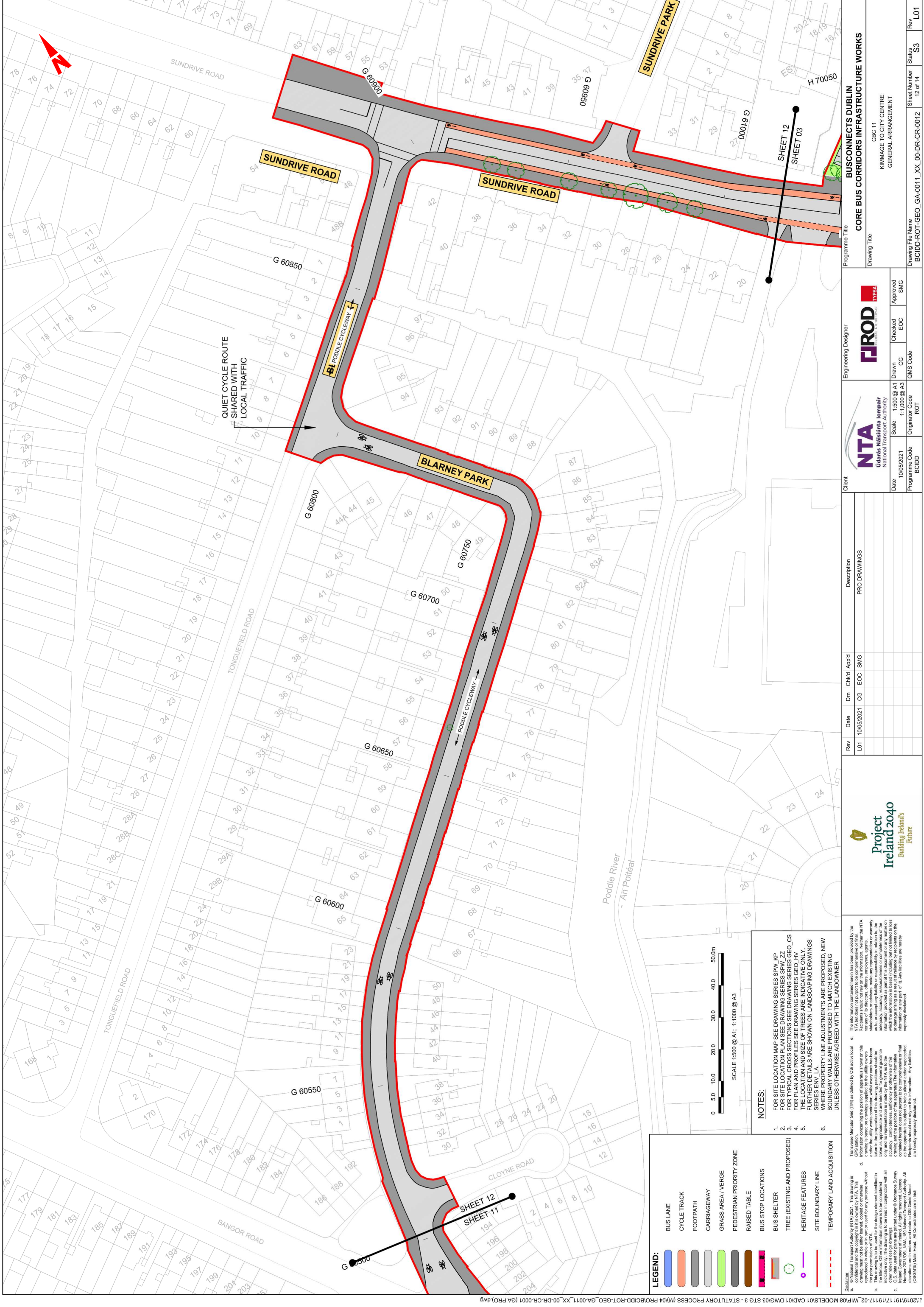
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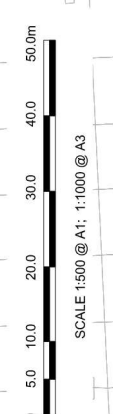
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**LEGEND:**

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
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**Client**

**Engineering Designer**

**Scale** 1:500 @ A1  
1:1,000 @ A3

**Date** 10/05/2021

**Programme Code** BCDD

**Originator Code** ROT

**QMS Code**

**Checked** EOC

**Drawn** CG

**Approved** SMG

**Programme Title** BUSCONNECTS DUBLIN

**Drawing Title** CORE BUS CORRIDORS INFRASTRUCTURE WORKS

**Programme Code** BCDD-ROT-GEO\_GA-0011\_XX\_00-DR-CR-0012

**Sheet Number** S3

**Rev** L01

**Drawing File Name** BCDD-ROT-GEO\_GA-0011\_XX\_00-DR-CR-0012

**Sheet Number** 12 of 14

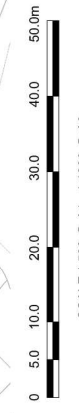
**Rev** L01

**Client** CBC 11

**Project** KIMMAGE TO CITY CENTRE

**General Arrangement** GENERAL ARRANGEMENT

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**LEGEND:**

|  |                              |
|--|------------------------------|
|  | BUS LANE                     |
|  | CYCLE TRACK                  |
|  | FOOTPATH                     |
|  | CARRIAGEWAY                  |
|  | GRASS AREA / VERGE           |
|  | PEDESTRIAN PRIORITY ZONE     |
|  | RAISED TABLE                 |
|  | BUS STOP LOCATIONS           |
|  | BUS SHELTER                  |
|  | TREE (EXISTING AND PROPOSED) |
|  | HERITAGE FEATURES            |
|  | SITE BOUNDARY LINE           |
|  | TEMPORARY LAND ACQUISITION   |

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**Client**

**NTA**  
Údarás Náisiúnta Iompair  
National Transport Authority

**Engineering Designer**

**FROD**  
Infrastructure & Planning

**Scale** 1:500 @ A1  
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**Date** 10/05/2021

**Programme Code** BCDD

**Originator Code** ROT

**QMS Code**

**Checked** EOC

**Drawn** CG

**Approved** SMG

**Programme Title**

**BUSCONNECTS DUBLIN**

**CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

**Drawing Title**

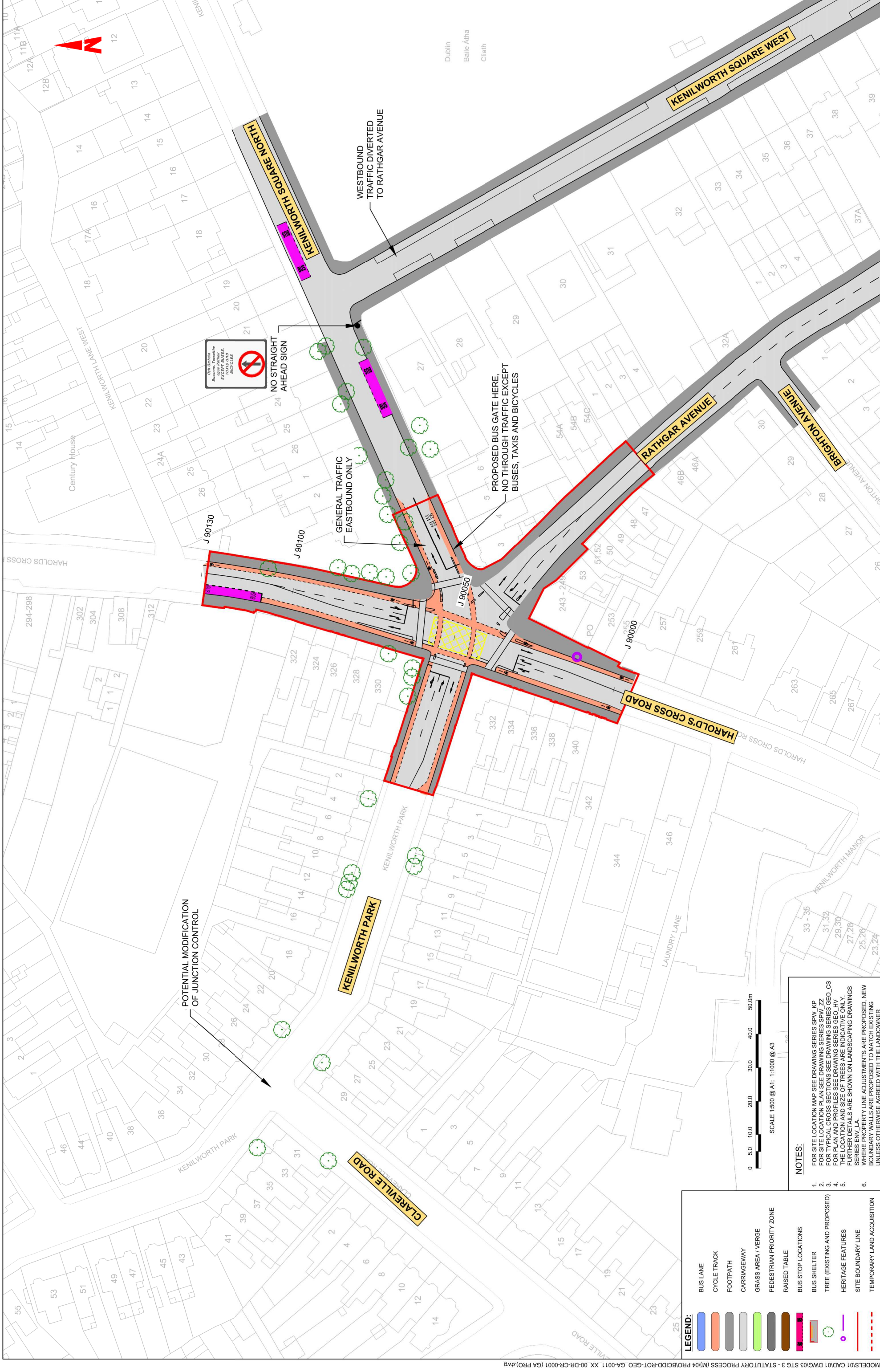
KIMMAGE TO CITY CENTRE  
GENERAL ARRANGEMENT

**Drawing File Name** BCDD-ROT-GEO\_GA-0011\_XX\_00-DR-CR-0013

**Sheet Number** S3

**Rev** L01

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- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- RAISED TABLE
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SCALE 1:500 @ A1; 1:1000 @ A3

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**Engineering Designer**  
**FROD**  
FROD LTD  
17/25A  
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| Rev | Date       | Drn | Chkd | Appd | Description  |
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| Date       | Scale                      | 1:500 @ A1 | 1:1,000 @ A3 | Drawn | Checked | Approved |
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 Sheet Number: S3  
 Rev: L01

## Appendix B. EIA Screening Checklist

| Brief Project Description - Refer to Description of Potential Environmental Effects (Section 5)   | Yes/<br>No | Is this Likely to Result in a Significant Impact<br>Yes / No - Why   |
|---|------------|--|
| 1. Will construction, operation, decommissioning or demolition works of the project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc.)?                         | Yes        | Yes<br>The Proposed Scheme represents a continuation of the existing land use as a transport corridor. Receptors include the immediate surrounding areas which consist residential, educational, commercial and lands zoned for development adjacent to the road boundary. Construction activities are likely to result in significant effects where public and private property needs to be acquired to provide the infrastructure.   |
| 2. Will construction or operation of the project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?   | Yes        | Yes<br>The Construction Phase of the Proposed Scheme will require the use of construction materials, such as aggregate, concrete etc to construct road pavement where necessary. During the Operational Phase there will be road upkeep required which will also consume natural resources.  |
| 3. Will the project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health? | Yes        | No<br>Storage, transport, handling or production of materials is not considered to give rise to likely significant environmental effects.  |
| 4. Will the project produce solid wastes during construction or operation or decommissioning?   | Yes        | Yes<br>Construction activities will include the excavation of materials within and adjacent to the existing road boundary. These construction activities are likely to generate waste from excavated material (asphalt, concrete, made ground and topsoil), demolition of existing infrastructure and road resurfacing. The Proposed Scheme will aim to avoid or minimise generation of waste through re-use of site-won material (subject to it meeting the appropriate engineering standard). There is the potential for a significant cumulative effect on materials during the Construction Phase of the Proposed Scheme and other projects. |
| 5. Will the project release pollutants or any hazardous, toxic or noxious substances to air or lead to exceeding Ambient Air Quality standards in Directives 2008/50/EC and 2004/107/EC?  | Yes        | Yes<br>It is expected that dust will be emitted during the Construction Phase. Emissions from construction plant and vehicles will arise during the Construction Phase.<br>During operation there may be changes in traffic patterns as a result of the Proposed Scheme, which may give rise to air quality impacts.   |
| 6. Will the project cause noise and vibration or release of light, heat energy or electromagnetic radiation?  | Yes        | Yes<br>A variety of potential noise and vibration emitting construction plant are likely to be used during the Construction Phase. Construction noise and vibration impacts are anticipated to be temporary in nature, however, there is the potential for significant noise and vibration impacts to arise.<br>During the Operational Phase there may be changes in traffic patterns as a result of the Proposed Scheme, which may give rise to noise impacts.  |
| 7. Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?   | Yes        | Yes<br>The Construction Phase will require works within / near existing structures where the Proposed Scheme crosses waterbodies. Construction works will also include excavation and relocation of utilities  |

Environmental Impact Assessment Screening Report

| Brief Project Description - Refer to Description of Potential Environmental Effects (Section 5)  | Yes/<br>No | Is this Likely to Result in a Significant Impact<br>Yes / No - Why  |
|--|------------|---|
|  |            | which have the potential to create pathways for pollutants to enter watercourses and indirectly impact on water quality.  |
| 8. Will there be any risk of accidents during construction or operation of the project which could affect human health or the environment?   | Yes        | No<br>The Proposed Scheme is unlikely to increase the risk of major accidents and disasters that could affect human health or the environment.  |
| 9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?  | Yes        | Yes<br>The Proposed Scheme is part of the BusConnects Dublin – Core Bus Corridor Infrastructure Works which will facilitate improved public transport and improve facilities for pedestrians and cyclists. It will allow for greater accessibility to sustainable modes of travel.  |
| 10. Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality?                          | Yes        | Yes<br>When considered in combination with other strategic infrastructure projects including the other 11 schemes that make up the BusConnects Dublin – Core Bus Corridor Infrastructure Works and other major projects, there is the potential for significant cumulative effects particularly during the Construction Phase arising from traffic, noise and air quality impacts.  |
| 11. Is the project located within or close to any areas which are protected under international, EU, or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project?                            | Yes        | Yes<br>The Proposed Scheme is located approximately 6.7km west of the South Dublin Bay and River Tolka Estuary SPA (SPA Code 004024). The site is designated due to its extensive intertidal flats which support wintering waterfowl which are part of the overall Dublin Bay population.<br>Indirect impacts may occur via hydrological connectivity between the Proposed Scheme and the designated sites. For example, where construction works are necessary adjacent to water bodies. |
| 12. Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project? | Yes        | Yes<br>Urban vegetation provides habitat corridors for protected species, for example tree lines provide foraging habitat for bats. The Proposed Scheme is likely to have direct and permanent impacts on private property, trees and habitats during the Construction Phase. It is anticipated that the loss of habitats due to construction could impact on the connectivity of habitats and foraging habitats of protected species.  |
| 13. Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?                   | Yes        | Yes – as per above.   |
| 14. Are there any inland, coastal, marine or underground waters (or features of the marine environment) on or around the location that could be affected by the project?   | Yes        | Yes<br>The Proposed Scheme crosses the River Poddle and Grand Canal, with in-stream works required in the Grand Canal. The watercourses are hydrologically connected to the South Dublin Bay and River Tolka Estuary Special Protection Area (SPA).   |
| 15. Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the project?  | Yes        | Yes<br>There is the potential for significant townscape and visual effects due to general construction activity, impacts on property boundaries, traffic diversions and streetscape disturbance.  |

| Brief Project Description - Refer to Description of Potential Environmental Effects (Section 5)  | Yes/<br>No | Is this Likely to Result in a Significant Impact<br>Yes / No - Why   |
|--|------------|--|
|  |            | During the Operational Phase, the Proposed Scheme is anticipated to alter townscape and visual amenity due to the new features within the streetscape, changes in traffic flows, lighting, signage, new boundaries and landscape planting treatments. There is the potential for significant impacts on public realm space due to changes in the layout and the character of areas.  |
| 16. Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?  | Yes        | Yes<br>During the Construction Phase there may be a need to divert traffic and the Operational Phase of the Proposed Scheme may give rise to changes in traffic patterns which may affect how people undertake their journeys when travelling by car. However, the Proposed Scheme will be constructed in a manner which will seek to minimise disturbance to existing road users (pedestrians, cyclists, public transport and general vehicular traffic) and local communities (residential and commercial) along the route.  |
| 17. Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?  | Yes        | Yes<br>Congestion is one of the most significant challenges facing the Dublin region and needs to be addressed to safeguard the growth of the Dublin region and keep people moving. The intention for BusConnects Dublin - Core Bus Corridor Infrastructure Dublin Works is to develop continuous bus priority, safe segregated cycling infrastructure to relieve congestion.<br>During the Operational Phase there may be changes in traffic patterns as a result of the Proposed Scheme, which may change how people undertake car journeys.                                     |
| 18. Is the project in a location where it is likely to be highly visible to many people?   | Yes        | Yes<br>There is the potential for changes to townscape and visual amenity due to general construction activity, impacts on property boundaries, traffic diversions and streetscape disturbance.<br>During Operational Phase, the Proposed Scheme is anticipated to alter townscape and visual amenity due to the new features within the streetscape, changes in traffic flows, lighting, signage, new boundaries and landscape planting treatments. There is the potential for significant impacts on public realm space due to changes in the layout and the character of areas. |
| 19. Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?   | Yes        | Yes<br>The Proposed Scheme will traverse an area which may include protected structures, national monuments, sites of archaeological and cultural heritage merit, archaeological conservation areas and conservation areas.  |
| 20. Is the project located in a previously undeveloped area where there will be loss of greenfield land?   | Yes        | No<br>The Proposed Scheme is not located in a previously undeveloped area where there will be loss of greenfield land.   |
| 21. Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project? | Yes        | Yes<br>The Proposed Scheme will require land take at a number of commercial, community and residential properties, both temporarily and permanently, such as from properties on Harold's Cross Road and from Our Lady's Hospice. Additionally, the demolition of one property near to the Robert Emmett Bridge on Clanbrassil Street Upper is required.  |



| Brief Project Description - Refer to Description of Potential Environmental Effects (Section 5)   | Yes/<br>No | Is this Likely to Result in a Significant Impact<br>Yes / No - Why  |
|---|------------|---|
| 22. Are there any plans for future land uses on or around the location which could be affected by the project?  | Yes        | No<br>By improving access to sustainable transport options and improved connectivity with Dublin City Centre, indirect impacts on land use during operation are considered to be beneficial for example, where the Proposed Scheme improves access to areas zoned for future development. |
| 23. Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project?  | Yes        | Yes<br>The Proposed Scheme is located in a densely populated urban area – in Dublin City. There is the potential for significant temporary effects during the Construction Phase and cumulative effects, particularly in regard to noise, vibration and air quality.                      |
| 24. Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?   | Yes        | Yes<br>The Proposed Scheme is located in a densely populated urban area – in Dublin City and therefore may pass by sensitive land uses like schools and community facilities.   |
| 25. Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?                    | Yes        | Yes<br>The Proposed Scheme is located in an urban area. There may be direct and indirect effects as a result of the Proposed Scheme.  |
| 26. Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?                                      | Yes        | Unknown<br>The Proposed Scheme is located in an urbanised area. There is the potential that areas within and adjacent to the Proposed Scheme may be subject to pollution from existing or historic land uses.   |
| 27. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems? | No         | No<br>The Proposed Scheme requires minimal changes to land cover and will likely have a negligible impact on the existing fluvial flood regime.   |



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