



Clifton Scannell Emerson
Associates

Section 38 Report

Eglinton Canal Active Travel Scheme



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1 Introduction & Background

Clifton Scannell Emerson Associates (CSEA) were engaged by Galway City Council (GCC) to carry out consultancy services and PSDP role for the design of approximately 870m in length of infrastructure to facilitate Active Travel along the Eglinton Canal, from the junction with Father Griffin Road to the junction with University Road.

1.1 Project Background

The overall aspiration of the proposed Active Travel Scheme is to provide a safe and comfortable environment for all self-propelled travel in the city and surrounding areas. Active Travel is defined as 'travelling with a purpose using your own energy' and is most commonly observed as walking and cycling. As an area with relatively flat topography and a compact city centre, Galway is well poised to capitalise on active travel as a meaningful form of commuting.

Ireland has a relatively low Active Travel modal share in comparison with similar European counterparts. Through increased provision and upgrading of existing Active Travel infrastructure, Dublin has seen a shift to Active Travel modes. As a densely populated area, Galway City is well placed to benefit from similar Active Travel schemes to improve the quality of life for residents. Through increased connectivity and permeability, the promotion of Active Travel has the capacity to transform a local area and create a more welcoming streetscape to increase uptake in walking and cycling and reduce reliance on private cars as a means of travel.

The proposed solution, which emerged as the preferred option from an options study, proposes to resurface the route and install crossing points with zebra crossings, buildouts and raised platforms at appropriate intervals. The preliminary layout is shown in CSEA Drawing No.'s 19_151-CSE-GEN-XX-DR-C-2131-2134 (Appendix A). This solution will achieve the scheme objectives whilst providing the NTA and GCC with the best value-for-money design for the medium to long term.

2 Need for the Scheme & Existing Conditions

2.1 Need for the Scheme

At present, the route is recognised as lacking quality Active Travel facilities, which discourages people from walking and cycling within this area of Galway and to and from the city centre. Cyclists must share the road with the general traffic in traffic lanes that are wide enough to encourage unreasonably high speeds for the residential nature of these roads. The lack of proper cyclist facilities discourages some people from cycling even for short journey trips (e.g. less than 15minutes trips).

There is a need to provide improved facilities for pedestrians, cyclists and public transport in order to encourage people to switch to sustainable modes of transport and to provide safe and efficient movement of people within Galway City. This provision would be an investment in Galway City and County, its economy, environment and its public realm. The proposed scheme would create a better quality public realm with visual enhancement of the area. This investment would facilitate increased pedestrian and cycle movement across the city improving connectivity between businesses, schools, housing, places of worship, etc creating more attractive and vibrant streets. It would also reduce dependence on the use of cars for short and short to medium trips reducing carbon footprint.

There is opportunity with this scheme to reward the walking and cycling culture by delivering a improved pedestrian and cycling facility along these popular routes and, in doing so, to reinforce the qualities and successes of the places through which it passes. The proposed scheme will not only increase accessibility and permeability within the study area but will also provide enhanced and safer connectivity with other areas and routes. Ultimately, the route should be delivered to improve safety, reduce journey times, and contribute towards increased numbers of trips being made on foot and by bicycle in the local catchment.

2.2 Description of the Scheme

Active Travel has the capacity to contribute positively to both a local area and to its residents through a combination of direct and indirect benefits. The modal shift from private car to walking or cycling, which is particularly feasible for short distance trips, is linked to a reduction in greenhouse gas emissions. This in turn lowers the level of harmful particulate matter in the ambient air. Air quality is further improved upon through reduced vehicular noise and speed levels. Public health is also directly benefited through increased levels of physical activity in the population.

The provision of Active Travel infrastructure to provide a safe, coherent and functional network of cycle and pedestrian facilities encourages uptake through the phenomenon of 'numbers through safety'. Without designated infrastructure and traffic calming measures, the modal share of Active Travel methods for commuting will stagnate due to user hesitance arising from perception of the existing level of service provided to slow modes within a transport network that is dominated by motor vehicles. Increased provision of accessible Active Travel facilities can stimulate demand in vulnerable population cohorts which were previously uncatered for. Modal shift is best stimulated through initiatives which focus on both infrastructural and behavioural change intervention.

Active Travel also provides numerous socio-economic benefits. The space and infrastructure required for large numbers of pedestrians and cyclists are often significantly more economical to provide when compared to the costs associated with new roads or railways. Active Travel trips are also generally short-distance trips and therefore increase the demand for local retailing . Low-income areas also have associated low levels of car ownership. The provision of Active Travel infrastructure can improve accessibility and mobility for lower income groups, as well as for people with mobility impairments or disabilities.

3 Concept and Objectives

The overriding purpose of the project is the delivery of continuous and consistent pedestrian facilities, cycle links and traffic calmed roads along the route. These links will be safe and attractive premium routes that cater for Active Travel, as well as improved accessibility for residents

The proposed scheme must not only increase accessibility and permeability within the immediate study area, but also provide enhanced and safer connectivity with other areas and routes. Ultimately the route should be delivered to improve safety, reduced vehicle speeds, reduce journey times, and contribute towards increased numbers of trips being made by foot and by bicycle in the local catchment.

The scheme aims to provide improved pedestrian and cyclist facilities that provide high quality linkage to the surrounding catchment, including:

- Improvement of footpath & crossing facilities for vulnerable road users and pedestrians, e.g. reduced crossing delays and additional crossing locations for pedestrians;
- Provision of cycling facilities and improvements to cyclist priority and safety along the route, particularly at junctions;
- Reduced vehicle speeds and carriageway widths on self-enforcing traffic calmed roads where cycle facilities are on a shared road surface;
- To provide a safe and legible route for commuter, leisure and delivery cyclists to access the retail and residential premises along the route; and
- Introduce streetscapes that are conducive to cycling, ie; bollards instead of guard rails, providing shelter from wind/rain where possible, provision of smooth surfaces that are free from obstructions, routes that minimise inclines, reducing conflict points for cyclists by providing cyclist priority, avoidance of street clutter, removal of on street parking.
- Improvement of footpath & crossing facilities for vulnerable road users and pedestrians, e.g. reduced crossing delays and additional crossing locations for pedestrians;
- Provision of a cohesive streetscape catering for all types of vehicular, public transport and active transit modes whilst giving public transport and active modes priority where practicable;
- To provide a safe and legible route for commuter and delivery cyclists to access the retail and residential premises along the route; and
- Introduce streetscapes that are conducive to cycling, ie; bollards instead of guard rails, providing shelter from wind/rain where possible, provision of smooth surfaces that are free from obstructions, routes that minimise inclines, reducing conflict points for cyclists by providing cyclist priority, avoidance of street clutter, removal of on street parking.

The proposed solutions will consider the impact on general traffic in the study area as these routes serve as links for public transport and private vehicles also. The proposed solutions will achieve the above objectives whilst providing the best value-for-money design for the medium to long term. A multi-disciplinary approach reflecting the vision of the Design Manual for Urban Roads and Streets (DMURS) for an integrated design process and providing opportunities for improvement of the public realm for all will be taken in the design of this cycle route.

The Scheme aims to provide a local route that provides connectivity at a neighbourhood level by providing Active Travel facilities to access local retail outlets, hospitality services, workplaces, schools and sports clubs with residential hubs.

The overall Scheme objective is to provide a utility network to connect residential, shopping, work and education centres for functional cycle trips. As a secondary effect, the route will likely form a recreational network to provide a route of sufficient length and quality to cater for exercise, social and tourism trips.

The objective of the Eglinton Canal route is to provide a safe, direct, cohesive, comfortable and attractive Active Travel. Table 1 shows the specific route objectives for the route.

Eglinton Canal Active Travel Route Scheme Objectives	
Scheme Objectives	• To provide safe, accessible and functional pedestrian network; • To enhance the Active Travel facilities along the route and provide direct cycle access from University Road and NUIG to the north to Father Griffin Road and Claddagh Quay to the south by improving the legibility of the route, the quality of the paving and lighting, and formalising the crossing of the roads that intersect with the route; • To introduce traffic calming measures on the intersecting roads at crossing points (reduced carriageway width, zebra crossings etc) to enhance safety for vulnerable road users.; • To promote walking and cycling as a viable transport modes and hence increase the level of uptake within Galway City; and • To serve as an extension to the Greenway and connect the eastern, western and northern Greenways at Wolf Tone Bridge.
Target Users	Local residents, pedestrians, delivery cyclists, commuter cyclists including students, customers/staff of the local businesses

Table 1: Scheme Objectives

4 Policy Context and Design Guidance

As the existing infrastructure within the study area is considered substandard for some road users, a review of current policy was undertaken so that necessary changes to comply with these current requirements can be proposed.

The following local, regional and national policy documents and relevant national design guidelines have been reviewed.

As the existing infrastructure within the study area is considered substandard for some road users, a review of current policy was undertaken so that necessary changes to comply with these current requirements can be proposed.

The following policy documents and relevant national design guidelines have been reviewed.

4.1 Galway Transport Strategy, August 2016

The Galway Transport Strategy is an integrated transport management programme for Galway City and environs which was published in August 2016.

This Transport Strategy will facilitate Galway with an opportunity to grow both physically and economically, offering better transport choices, and creating a public realm to be enjoyed by residents and visitors alike.

The current issues with respect to the movement of people and goods outlined in the Strategy that are particularly relevant to the proposed Galway Cycle Network Stage 2 scheme include:

- An over-reliance on private cars;
- Large amounts of residential development located proximate to major employment and educational destinations city-wide, but not readily accessible by walking, cycling or public transport, thereby encouraging travel by private car;
- Limited roadspace on most of the principal roads, which reduces opportunities for safe and comfortable cycling.

The Transport Strategy for Cycling includes that *'For cycling to provide a means of 'mass' movement in the city, it will be necessary to provide a 'core' network combining good segregation from traffic where practical, and traffic management elsewhere. Feeder networks will also need to be defined to fill the gaps between core corridors.'*

Chapter 7 of the Strategy relates to Cycling, Walking and Public Realm and Section 7.1 explains how the strategic objectives of the Strategy can be met as follows: *'overall aspiration of the proposed cycle network is to provide a safe and comfortable environment for cyclists in the city and surrounding areas, in turn supporting an increase in the number of cyclists and encouraging a greater modal shift from the private car to cycling.'*

It also notes that: *'As area with relatively flat topography and a compact city centre, Galway is well suited to cycling as a means of transport. However, the existing cycling facilities in the city and surrounding areas are limited and discontinuous. The cycle network proposed in this Transport Strategy is intended to maximise the provision of high quality dedicated cycling facilities and to improve measures giving priority to cyclists, encouraging uptake in cycling both for commuting and as a leisure activity in the city and surrounding areas.'*

Figure 1, below, is an extract from Figure 7.1 of the Galway Transport Strategy showing the Proposed Cycle Network for the west of Galway City. Included on this map are the six routes included in Stage 2 of the Galway Cycle Network.

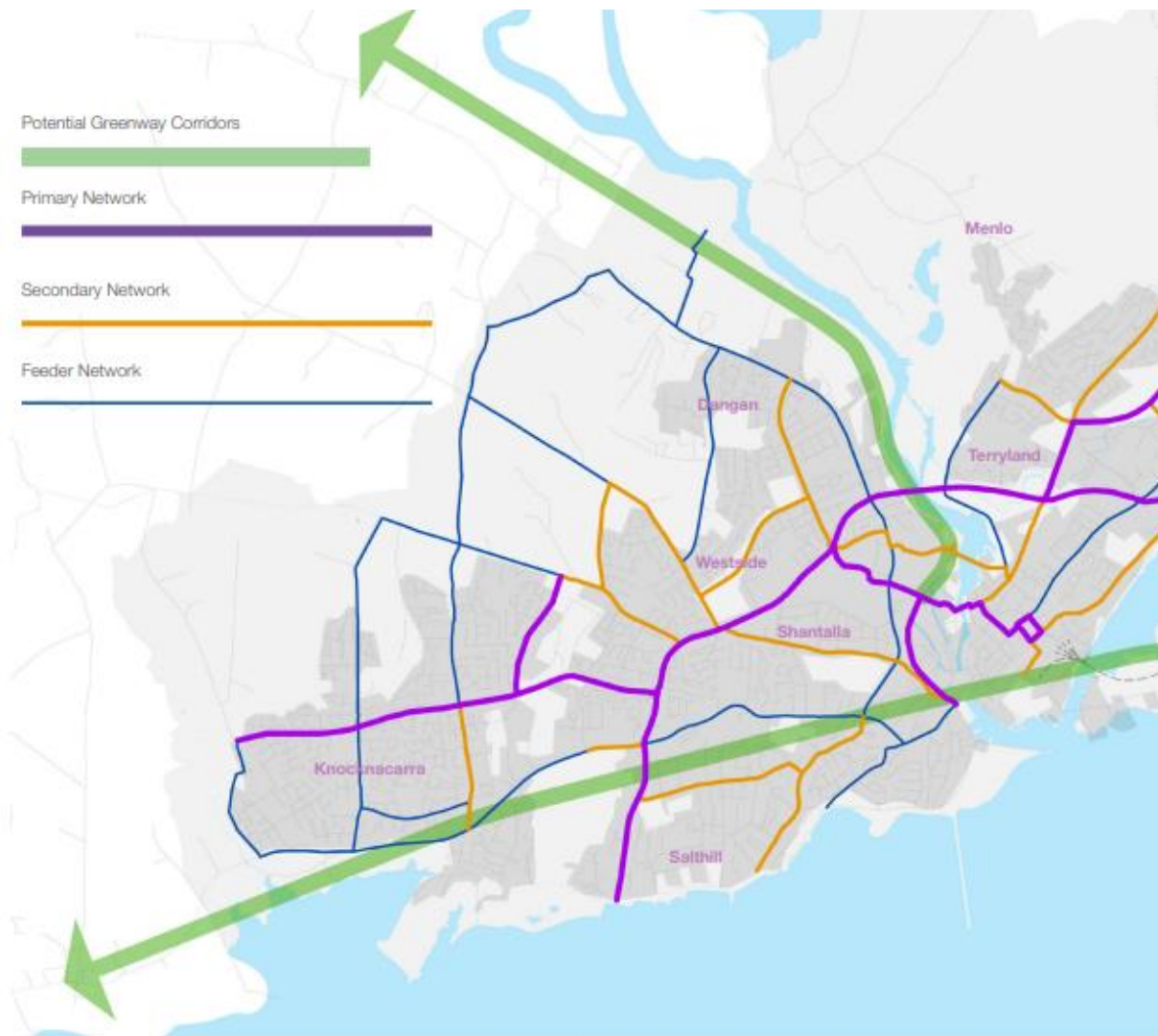


Figure 1: An extract from Figure 7.1 Proposed Cycle Network from the Galway Transport Strategy

Eglinton Canal is shown as a Primary Route that ties-in to a Primary Route on University Road (where the Bus Priority/Bus Only route will run), and interacts with both Secondary and Feeder Routes at its southern end, and may interact with the future Barna Greenway.

Appendix F of the Galway Transport Strategy sets out the development of the proposed cycle network for Galway City, including an audit of constraints, evaluation of feasibility and suitability of each link with regard to the constraints and proposals for alternative facilities or mitigation measures to enable implementation of the overall network.

Appendix F proposes the following cycling infrastructure summaries for each of the proposed routes in Galway Cycle Network Stage 2:

Primary	Canal Road / Canal paths	The current facility between Fr Griffin Road and University Road varies between a segregated pedestrian and cyclist path and on-road sections. The on-road sections are cul-de-sacs however, so traffic is light and generally slow moving, and should be further reduced by the proposal to make University Road bus and local access only. Proposal is to upgrade paths where necessary to facilitate safe cycling, and install crossing facilities on roads which the route crosses.	880 m
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Figure 2: Extract from Section F4.3 Shantalla of Appendix F of the Galway Transport Strategy

4.2 Galway City Development Plan 2017-2023

'The City Development Plan is centred on a vision for Galway City to be a successful, sustainable, socially inclusive regional capital. It aspires to create prosperity while also being environmentally responsible.'

These goals can be achieved through the following policies and objectives relevant to this report:

- *Continue to progress a sustainable transport solution for the city through the implementation of measures included in the GTS and required supporting projects...* (Policy 3.3)
- *Support the Galway Transport Strategy proposals for a primary cycle network to facilitate safe and convenient medium distance journeys.* (Policy 3.6)
- *Support the Galway Transport Strategy proposals for a secondary cycle network and feeder links to facilitate safe and convenient local journeys and to afford linkage into the primary cycle network.* (Policy 3.6)
- *Implement a structured programme of improvements across the whole city pedestrian network and at road crossings.* (Policy 3.6)
- *Promote, facilitate and maintain maximum connectivity and permeability for pedestrians and cyclists in the design of new developments and in upgrading existing developments in accordance with the Design Manual for Urban Roads and Streets (2013) and Permeability a Best Practice Guide, NTA (2015).* (Policy 3.6)
- *Ensure facilities for pedestrians and cyclists are designed in accordance with national standards.* (Policy 3.6)
- *Implement traffic management and infrastructural changes to facilitate the development of a cycle network including for a core, secondary and feeder network in accordance with the Galway Transport Strategy (GTS).* (Specific Objective, Cycling)

4.3 Smarter Travel – A Sustainable Transport Future

This policy document is A New Transport Policy for Ireland 2009-2020 and includes five key aims, such as:

- Improve quality of life and accessibility to transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport,
- Improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks,
- Minimise the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions,

-
- Reduce overall travel demand and commuting distances travelled by the private car,
 - Improve security of energy supply by reducing dependence on imported fossil fuels.

4.4 National Cycle Policy Framework 2009-2020

This plan sets out a substantial suite of interventions to improve the ease and safety of cycling in order to achieve greater mode share going forward. It states that making provision for cyclists in the urban environment does not merely consist of providing dedicated cycling facilities but also involves wider traffic interventions that benefit all vulnerable road users. It acknowledges that investment in a cycling network has an impact on an entire geographical area not just the linear corridor where the cycle facility is installed. It has an impact on road safety within that area as well as a positive impact on the health of the population using the whole network which amounts to a societal effect.

4.5 National Cycle Manual

The National Cycle Manual (NCM) is a national guidance document to guide planners and engineers in their work to improve cycling provision in urban areas.

Cycling as a vulnerable mode of transport should be supported by a good design with principles of sustainable safety applied.

There are five principles, which should be followed in every design:

- Functionality – cycle facility design is fit for purpose and follows movement related functions and place related functions.
- Homogeneity – reduction in the relative speed, mass and directional differences of different road users sharing the same space.
- Legibility – self-evident, self-explanatory and self-enforcing road environment.
- Forgivingness
- Self-awareness

The NCM also notes that pedestrians are the most vulnerable road users and recognises the need for integration between the two to create a sustainable transport network. This is to be achieved through pedestrian priority to be reinforced by signage and cycling alignment and speed reduction measures.

4.6 Sustainable Mobility Policy Review

The Sustainable Mobility Policy Review, Background Paper 2, Active Travel was published by the Department of Transport, Tourism and Sport to inform public consultation on Ireland's sustainable mobility policy. The purpose of the paper is to provide an opportunity to review public transport policy 'to ensure services are sustainable into the future and area meeting the needs of a modern economy' and by reviewing the role of Active Travel modes in the context of the wider transport network while raising some issues for consideration in developing future policy.

The five benefits of Active Travel that can be capitalised on are identified as:

- Environmental - reduced levels of carbon emissions and greenhouse gases;
- Health - improved levels of fitness and public health generally from increased activity;
- Safety - increased levels of active travel can stimulate the increased provision of quality footpaths and cycle paths by public authorities;

- Economic - increased active travel usage can lead to reduced congestion levels and improved accessibility in urban areas; and
- Social - increased provision for active travel modes can drive improved transport equity.

4.7 Design Manual for Urban Roads and Streets

This document provides guidance relating to the design of urban roads and streets. It outlines principles, approaches and standards that are necessary to achieve balanced, best practice design outcomes with regard to street networks and individual streets. This Manual sets out an integrated design approach influenced by the type of place in which the street is located and balance the needs of all users. It also aims to put well designed streets at the heart of sustainable communities creating physical, social and transport networks that promote real alternatives to car journeys, namely walking, cycling and public transport. The manual key design principles are as follows:

- To support the creation of integrated street networks, which promote higher levels of permeability and legibility for all users, and in particular more sustainable forms of transport.
- The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment.
- The quality of the street is measured by the quality of the pedestrian environment
- Greater communication and co-operation between design professionals through the promotion of a plan-led, multidisciplinary approach design.

4.8 Project Ireland 2040

This document is the Government's high-level strategic plan to improve transport, tourism and sport infrastructure by 2040. Project Ireland 2040 seeks to achieve ten strategic outcomes, building around the overarching themes of wellbeing, equality and opportunity. Two of these ten shared priorities are Sustainable Mobility and Enhanced Amenity and Heritage. Sustainable Mobility's special focus is on the provision of safe alternative active travel options to alleviate congestion and help to meet climate action objectives, where Enhanced Amenity and Heritage aims to investment in high-quality infrastructure to create living space with defined character and attractiveness. Active travel is a feature of the two overarching policy documents – the National Planning Framework and the ten-year National Development Plan (NDP) 2018-2027¹⁶.

Investment in active travel infrastructure will support the realisation of a number of National Strategic Outcomes (NSOs) as identified in Project Ireland 2040, namely:

- NSO 1 – Compact Growth
- NSO 3 – Strengthened Rural Economies and Communities
- NSO 4 – Sustainable Mobility
- NSO 7 – Enhanced Amenity and Heritage
- NSO 8 – Transition to a Low Carbon and Climate Resilient Society

Project Ireland 2040 states the Government's objective to "*ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and accessibility to both existing and proposed developments, and integrating physical activity facilities for all ages.*"

This document supports an ambitious growth target to enable a city like Galway to grow by 50-60% by 2040. The relevant key future growth enablers for Galway are:

- Improving access and sustainable transport links to, and integration with, the existing employment areas to the east of the City at Parkmore, Ballybrit and Mervue;

- Development of a strategic cycleway network with a number of high capacity flagship routes;
- Provision of a Citywide public transport network, with enhanced accessibility between existing and proposed residential areas and the City Centre, third level institutions and the employment areas to the east of the city; and
- Development of a strategic cycleway network with a number of high capacity flagship routes,

4.9 Climate Action Plan 2019

This document is the Government's plan for tackling climate breakdown. It outlines the current state of play across key sectors including Electricity, Transport, Built Environment, Industry and Agriculture and charts a course towards ambitious decarbonisation targets. Climate Action Plan objectives are to achieve a net zero carbon energy system and create a resilient, vibrant and sustainable country.

Modal shift and the sharing economy in transport are noted as being viable responses to tackle climate change through the following 3 no. actions:

- Action 91: Undertake an expansion of cycling infrastructure through the establishment of a "Cycling Project Office" within the National Transport Authority and develop an implementation plan.;
- Action 95: Develop and implement cycle network plans for all major cities.; and
- Action 97: Commence full implementation of the National Cycle Policy Framework.

4.10 Regional Planning Guidelines for the West Region (2010-2022)

SG2 of the Regional Planning Guidelines for the West Region aims to '*put in place an integrated sustainable transport and access infrastructure*' that, among other advantages, '*minimises the need for car-based travel*'.

These RPGs include the following relevant policy objectives:

IO9: Support the sustainable development of an integrated transportation system for Galway City and County Areas;

IP13: Promote on-going Traffic Management policies and plans... ..with particular emphasis on measures to facilitate public transport, walking and cycling;

IP21: Promote a better environment for pedestrians, cyclists and persons with disabilities... ..so as to facilitate increased mobility and access for citizens;

IO32: Promote the development of safe and convenient pedestrian and cycling facilities in Galway City... ..to minimise the dependence on private motor vehicles and to encourage an active and healthy lifestyle.

4.11 Regional Spatial and Economic Strategy for the Northern and Western Region (RSES)

The Draft RSES is a strategic development framework published by the Northern and Western Regional Assembly and sets out a vision for the sustainable physical, economic and social development of the region and provide guidance for local level policies. The relevant priorities from the RSES are;

- Provision of a core, secondary and feeder cycle network which includes segregated cycle routes, on-road cycle lanes and /or wide bus lanes to cater for both buses and cyclists along the same route;

- Provision of a primary network of cycle routes comprising of two greenways connecting into the county settlements – the Oranmore to the City Centre and onwards to Bearna Greenway and City Centre to Oughterard Greenway;
- Provision of additional primary routes including cross-city routes to the north of the city and some key north –south links; and
- Develop a secondary cycle network that will comprise connections from residential areas and areas of employment to the primary network accessing key destinations.

4.12 Metropolitan Area Strategic Plan (MASP)

The MASP forms part of the RSES which focuses on population, employment, housing, retail, travel, development and amenity areas. The relevant objective from the MASP are;

- Sustainable Mobility - Support the development of a strategic cycleway network linking the periphery of the MASP area with Galway City and including the Dublin-Clifden greenway.

Additional Government policy documents that support the above scheme objectives include:

“People, Place and Policy Growing Tourism to 2025”, “Sustainable Residential Development in Urban Areas” and the “Urban Design Manual”.

5 Options Assessment

5.1 Options Development

5 no. options, as shown in Table 2, were developed for the Eglinton Canal route. The 'Do Nothing' option, Option 1, proposes no changes to the existing layout and serves as a basis of comparison to assess the effects of the proposed options.

Table 2: Options developed for Eglinton Canal

Option 1	Do Nothing
Option 2	Do Minimum - Resurface and install crossing points with buildouts and raised platforms at road crossings
Option 3	Resurface and install crossing points with zebra crossings, buildouts and raised platforms
Option 4	Resurface and install crossing points with signalised crossings, buildouts and raised platforms
Option 5	Widen route to a minimum of 4m with boardwalk/cantilever, install crossing points with signalised crossings, buildouts and raised platform at road crossings

5.2 Assessment Methodology

This section outlines the methodology used in the assessment of five scheme options. The proposed options were assessed using 'Multi Criteria Analysis' (MCA) as outlined in the 'Common Appraisal Framework for Transport Projects and Programmes' published by the Department of Transport, Tourism and Sport (DTTAS), March 2016.

The required criteria are as follows:

- Economy
- Safety
- Physical Activity
- Environment
- Accessibility and Social Inclusion
- Integration

Each option was appraised under the criteria outlined above and compared based on a five-point scale, ranging from having significant advantages to having significant disadvantages over other route options. Table 3 below shows the colour coding of the five-point scale, with advantageous routes graded "dark green" and disadvantageous routes graded "red".

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

Table 3: Options Colour Coded Ranking Scale

5.3 Options Assessment

Table 4 summarises the options assessment for the MCA criteria.

Table 4 Route Options Assessment Summary Eglinton Canal

Assessment Criteria	1	2	3	4	5
Economy					
Safety					
Physical Activity					
Environment					
Accessibility & Social Inclusion					
Integration					

5.4 Preferred Option

Having examined the multiple options using a multi criteria analysis, the following emerged as the preferred option:

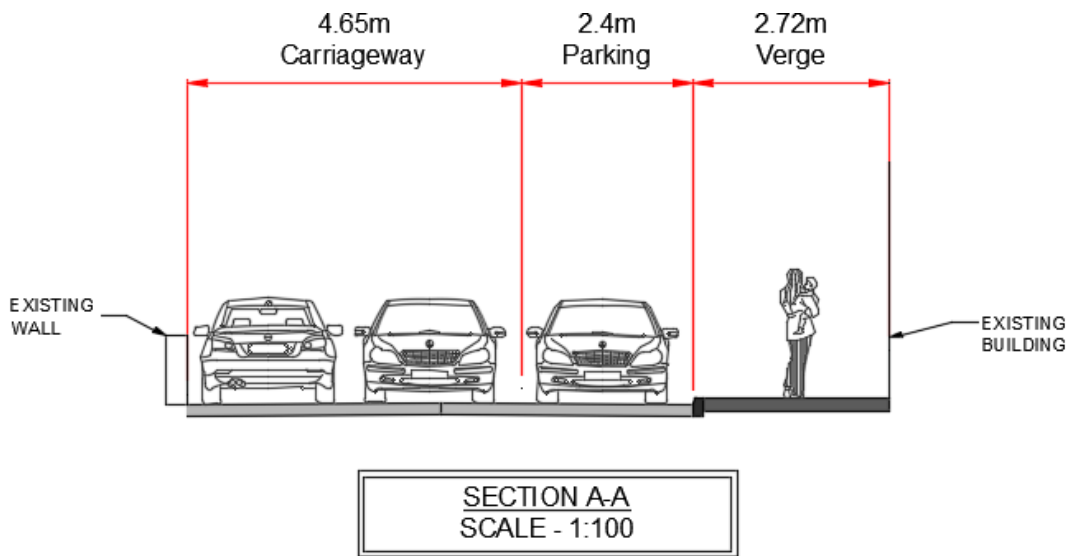
Route	Eglinton Canal from the junction with Claddagh Road to the junction with University Road.
Preferred Option	Option 3, resurface and install crossing points with zebra crossings, buildouts and raised platforms.

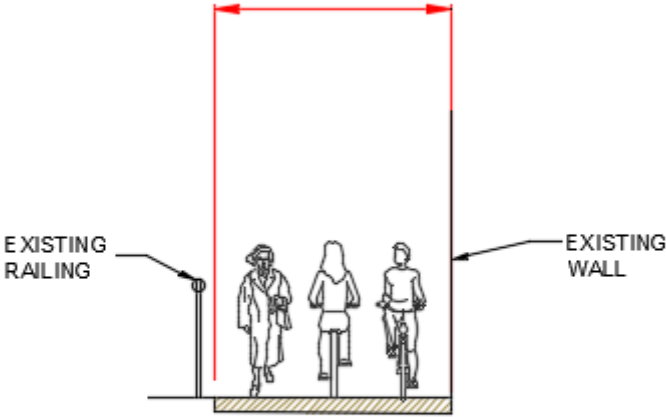
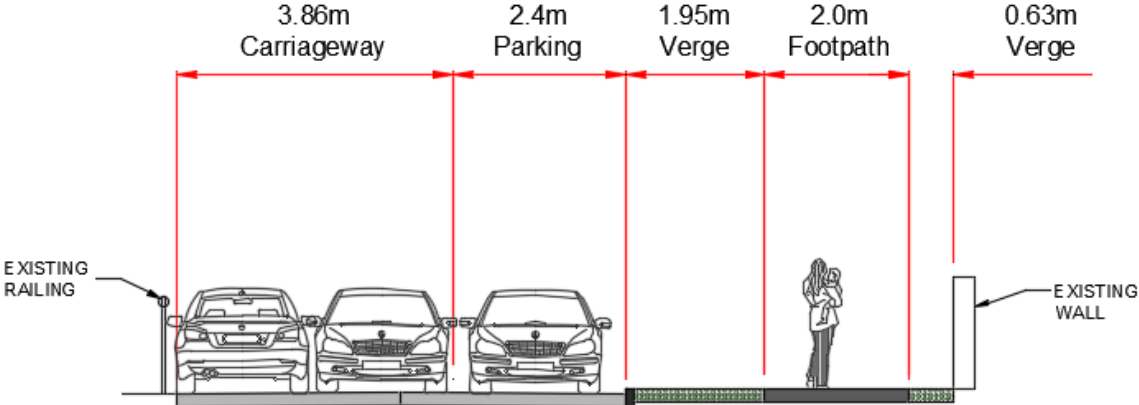
6 Description of the Proposed Works

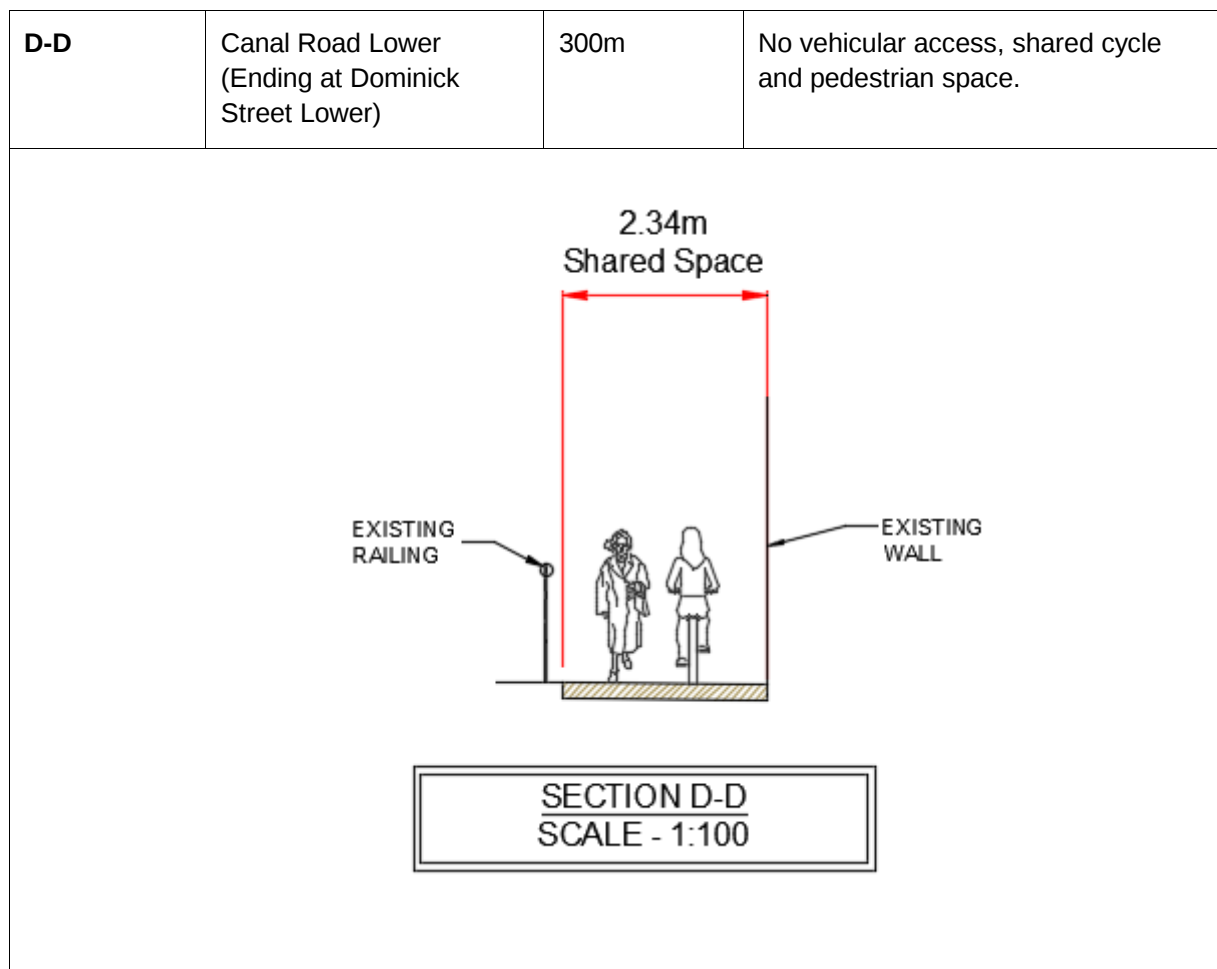
6.1 Proposed Works

The route mostly provides for pedestrian and cyclists with limited vehicular access to private properties and on-street parking facilities. The works propose to resurface the route and install crossing points with zebra crossings, buildouts and raised platforms at appropriate intervals. The route can be broken into four no. sections to illustrate the traffic arrangements, as described in Table 5 and shown in CSEA Drawing No.'s 19_151-CSE-GEN-XX-DR-C-2132-2134 (Appendix A).

Table 5: Proposed Road Type and Mainline Cross Section

Section	Location	Length	Traffic Arrangement
A-A	Canal Road Upper (Starting at University Road)	180m	Cul-de-sac with access/egress to University Road. Two-way vehicular access on a carriageway of width 3.5m with 2.2m wide on-street parking provided. 1.9m verge and 2.0m footpath provided.
 4.65m Carriageway 2.4m Parking 2.72m Verge EXISTING WALL EXISTING BUILDING SECTION A-A SCALE - 1:100			
B-B	Canal Road Upper (Ending at Presentation Road)	120m	No vehicular access, shared cycle and pedestrian space.

2.70m Shared Space  SECTION B-B SCALE - 1:100			
C-C	Canal Road Lower (starting at Presentation Road)	130m	Cul-de-sac with access/egress to Presentation Road. Two-way vehicular access on a carriageway of width 2.8m with 2.3m wide on-street parking provided. 2m verge and 1.5m footpath provided.
3.86m Carriageway 2.4m Parking 1.95m Verge 2.0m Footpath 0.63m Verge  SECTION C-C SCALE - 1:100			



The scheme, which runs in a north-south direction, encompasses east-west junctions with the following minor junctions:

- Canal Road Upper and Canal Court;
- Presentation Road (Raised Zebra Crossing only);
- New Road (Raised Zebra Crossing only); and
- Father Griffin Road (Raised Zebra Crossing only).

These junctions are all priority t-junctions and are proposed to be realigned in accordance with *Section 4.3.3 Corner Radii* has been realigned to widen the corner radii as per *Section 4.3.3 Corner Radii* of DMURS.

The major junctions include:

- Canal Road Upper and University Road;
- Canal Road Lower and Presentation Road
- Dominick Street Lower, Dominick Street Upper, Raven Terrace and Fairhill Rd Upper; and
- Father Griffin Road and Claddagh Quay.

The corner radii at these junction approaches have also been realigned in accordance with *Section 4.3.3 Corner Radii* of DMURS to allow for rigid body trucks/commercial vehicles to turn corners without crossing the centre line of the intersecting road.

The junction crossings have been realigned to allow for installation of raised tables, buff tactile paving and road markings at the uncontrolled crossing as per *Section 4.3.2 Pedestrian Crossings* of DMURS.

6.2 Construction Methodology

6.2.1 Main Construction Works

Construction Compounds

A construction compound(s) will be required for the duration of the construction works. Compound locations will be determined by the appointed Contractor to the approval of GCC.

Potential Impacts on Adjacent Landowners

Residents in the area, and other nearby developments, closest to the construction works will experience some level of noise, vibration and dust arising from general works and construction traffic in close proximity to their properties.

Access to properties is not envisaged to be unduly impacted by the works.

Traffic Management

The impact of construction on users of the existing road network will be likely to include shuttle systems while the works are on site, however, these would be short term in nature.

6.3 Access to Site

Primary access to the site, and site compound, will be via the local road network.

7 Impact of the Proposed Works

7.1 Environmental Assessment

A Screening Report for Appropriate Assessment and Environmental Impact Assessment Screening Report have been prepared, and are given in support of this planning application.

The Screening Report for Appropriate Assessment concludes that the project is not likely, alone or in combination with other plans or projects, to have a significant effect on any European Sites.

7.2 Flood Risk Assessment

A preliminary flood risk assessment has been undertaken by reviewing information from the Office of Public Works (OPW) Natural Flood Hazard Mapping (www.floodinfo.ie), the Western CFRAM Study. The area is not subject to flooding.

7.3 Built Heritage

The Eglinton Canal and its curtilage, including the tow path and railings are all part of a Protected Structure as referenced under 8501 on the register ([RPS8501.pdf \(galwaycity.ie\)](#)).

A Stage 2 Architectural Conservation survey of the proposed scheme has concluded that elements of the canal infrastructure that could potentially be impacted by the proposal and which need to be safeguarded are:

- Limestone copings along margins of quays
- Wrought-iron railing fixed to copings
- Limestone mooring post or bollard adjacent to the second lock, with its associated limestone paving
- Steps leading down from the towpath to Parkavara

There are also other structures that may possibly be impacted. It is not considered that the protected structures on the eastern side of the canal would be in any way affected provided the works are entirely within the highway and do not encroach within the boundaries of adjacent properties. Two structures that were originally part of the canal project lie alongside the canal and need to be safeguarded from impact:

- Lock House, at 12 Dominick Street Upper
- Sunken basin at Pump Lane

The following mitigation measures are proposed:

- The proposed surface and associated works should avoid covering of, or damage to, the limestone copings at the edge of the canal.
- The wrought-iron railing alongside the canal should be protected from damage by vehicles and machinery or by other factors during construction.
- Should it be necessary to upgrade the railings in any way for reasons of safety this should be done in accordance with a conservation method statement to be compiled by a suitably qualified conservation professional in conjunction with the designers of the works and Galway City Council.
- The limestone mooring post or bollard adjacent to the second lock on the canal and its associated limestone paving should be protected from damage by vehicles and machinery or by other factors during construction.

- The limestone steps leading down to Parkavara and their associated wroughtiron railing should be protected from damage by vehicles and machinery or by other factors during construction.
- The front boundary of Lock House should be protected from damage by vehicles and machinery or by other factors during construction.
- The sunken basin at Pump Lane and its surrounding walls and railings should be protected from damage by vehicles and machinery or by other factors during construction

8 Conclusion

From an economic, safety, physical activity, environmental, accessibility and social inclusion and integration perspective the proposed works are an important development for Canal Road to promote and encourage Active Travel. Following a review of constraints, alternatives, and environmental impacts, the emerging preferred option from the options assessment, shown in CSEA Drawing No.'s 19_151-CSE-GEN-XX-DR-C-2132-2134 (Appendix A) is to be progressed.

There is an opportunity with this scheme to reward the walking and cycling culture by delivering a high-quality pedestrian and cycling facility along these popular routes and, in doing so, to reinforce the qualities and successes of the places through which it passes. The proposed scheme will not only increase accessibility and permeability within the study area but will also provide enhanced and safer connectivity with other areas and routes. Ultimately, the route should be delivered to improve safety, reduce journey times, and contribute towards increased numbers of trips being made by foot and by bicycle in the local catchment.

This project provides improved safety by delivering a facility to current design standards and best practice, and will provide high quality infrastructure for all active transport users including the mobility impaired and those with other disabilities.

The proposed scheme will provide increased opportunity for the residents of Canal Road and Galway City to engage in physical activity through the provision of high quality pedestrian and cycle facilities. This will assist in encouraging modal shift from vehicular traffic to healthier and sustainable modes of travel such as walking and cycling.

9 Legislation

GCC is now submitting the proposed scheme for the necessary planning procedure required by the Planning and Development Act 2000 (as amended), in accordance with the requirements of Section 38 of the Road Traffic Act 1994 (as amended),

The following extract is taken from the Road Traffic Act 1994 2001

38. -

(1) A road authority may, in the interest of the safety and convenience of road users, provide such traffic calming measures as they consider desirable in respect of public roads in their charge.

(2) A road authority may remove any traffic calming measures provided by them under this section.

(3) Before providing or removing traffic calming measures under this section of such class or classes as may be prescribed, a road authority shall

(a) consult with the Commissioner;

(b) publish a notice in one or more newspapers circulating in the functional area of the authority—

(i) indicating that it is proposed to provide or remove the measures, and

(ii) stating that representations in relation to the proposal may be made in writing to the road authority before a specified date (which shall be not less than one month after the publication of the notice);

(c) consider any observations made by the Commissioner or any representations made pursuant to paragraph (b) (ii).

(4) The making of a decision to provide or remove traffic calming measures of a class prescribed under subsection (3) and the consideration of observations or representations under paragraph (c) of that subsection shall be reserved functions.

(5) Traffic calming measures shall not be provided or removed in respect of a national road without the prior consent of the National Roads Authority.

(6) The Minister may issue general guidelines to road authorities relating to traffic calming measures under this section and may amend or cancel any such guidelines and, where any such guidelines are, for the time being, in force, road authorities shall have regard to such guidelines when performing functions under this section.

(7) A traffic calming measure provided under this section shall be deemed to be a structure forming part of the public road concerned and necessary for the safety of road users.

(8)

(a) A person who, without lawful authority, removes or damages or attempts to remove or damage a traffic calming measure provided under this section shall be guilty of an offence.

(b) An offence under this subsection may be prosecuted by the road authority in whose functional area the acts constituting the offence were done.

(9) In this section—

“provide” includes erect or place, maintain and (in the case of an instrument for giving signals by mechanical means) operate and cognate words shall be construed accordingly; and

“traffic calming measures” means measures which restrict or control the speed or movement of, or which prevent, restrict or control access to a public road or roads by,

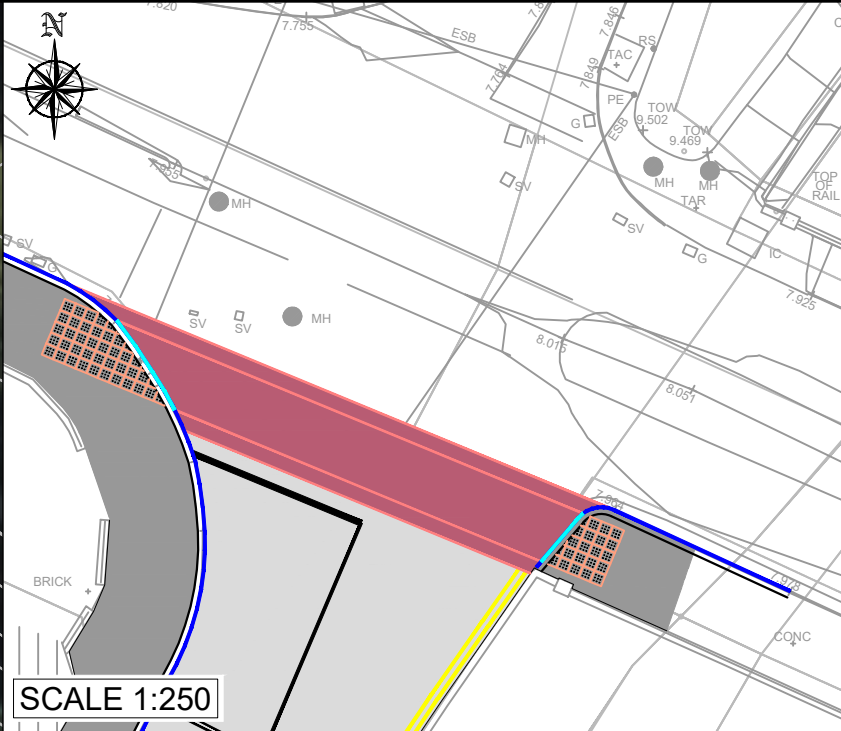
mechanically propelled vehicles (whether generally or of a particular class) and measures which facilitate the safe use of public roads by different classes of traffic (including pedestrians and cyclists) and includes the provision of traffic signs, road markings, bollards, posts, poles, chicanes, rumble areas, raised, lowered or modified road surfaces, ramps, speed cushions, speed tables or other similar works or devices, islands or central reservations, roundabouts, modified junctions, works to reduce or modify the width of the roadway and landscaping, planting or other similar works.

Appendix A

CSEA Drawing No.'s 19_151-CSE-GEN-XX-DR-C-2131-2134



EGLINGTON CANAL ACTIVE TRAVEL SCHEME



- LEGEND :**
- CARRIAGEWAY -
 - PROPOSED CONCRETE PATH -
 - LANDSCAPED AREA -
 - RAISED CROSSING -
 - PROPOSED CYCLE TRACK -
 - PROPOSED CYCLE PATH -
 - EXISTING KERB LINE -
 - PROPOSED 125mm IN SITU UPSTAND EXTRUDED CONCRETE KERB TO TII CC-SCD-01102 -
 - PROPOSED 6mm IN SITU DROPPED KERB TO TII CC-SCD-01102 -
 - PROPOSED 25mm IN SITU BEVELLED DROPPED KERB TO TII CC-SCD-01102 -
 - PROPOSED RAILING -
 - PROPOSED TACTILE PAVING -
 - PROPOSED CORDUROY PAVING -
 - EXISTING TREES TO BE RETAINED -
 - PROPOSED BELISHA BEACON -

DRAWING IS PRODUCED USING THE IRISH TRANSVERSE MERCATOR (ITM) GEOGRAPHIC COORDINATE SYSTEM

A1

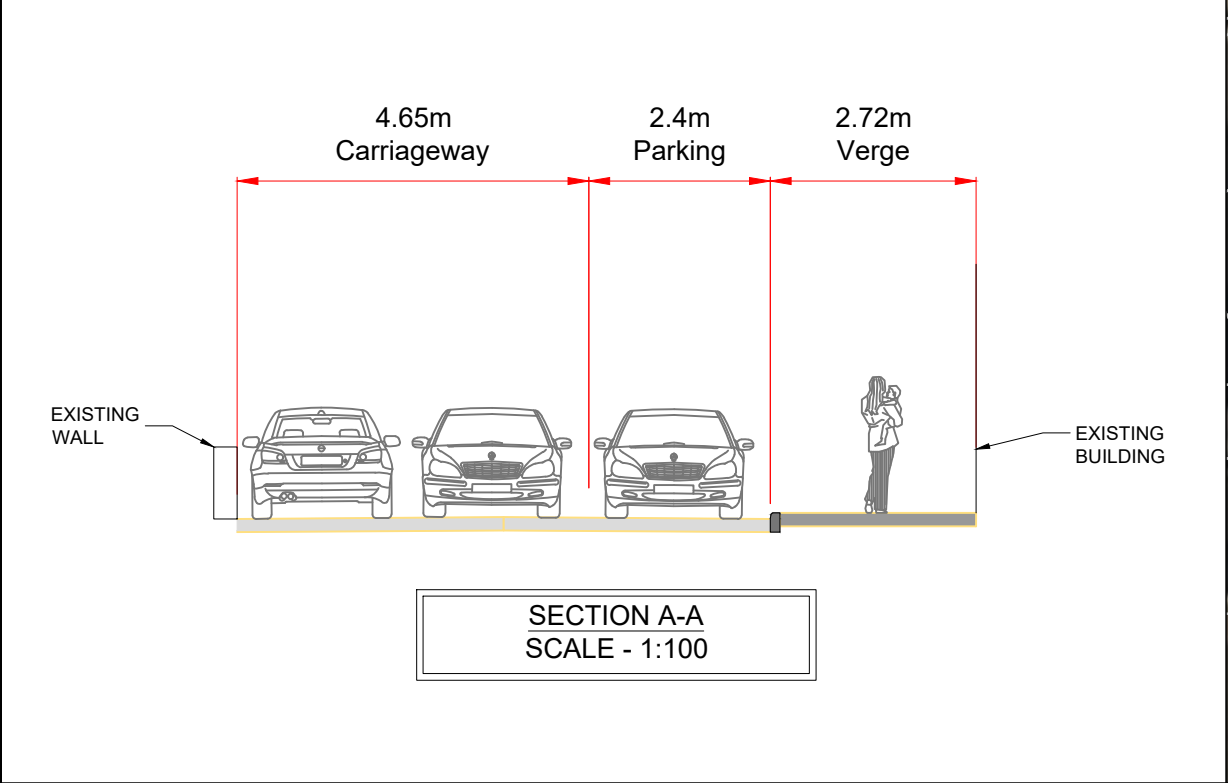
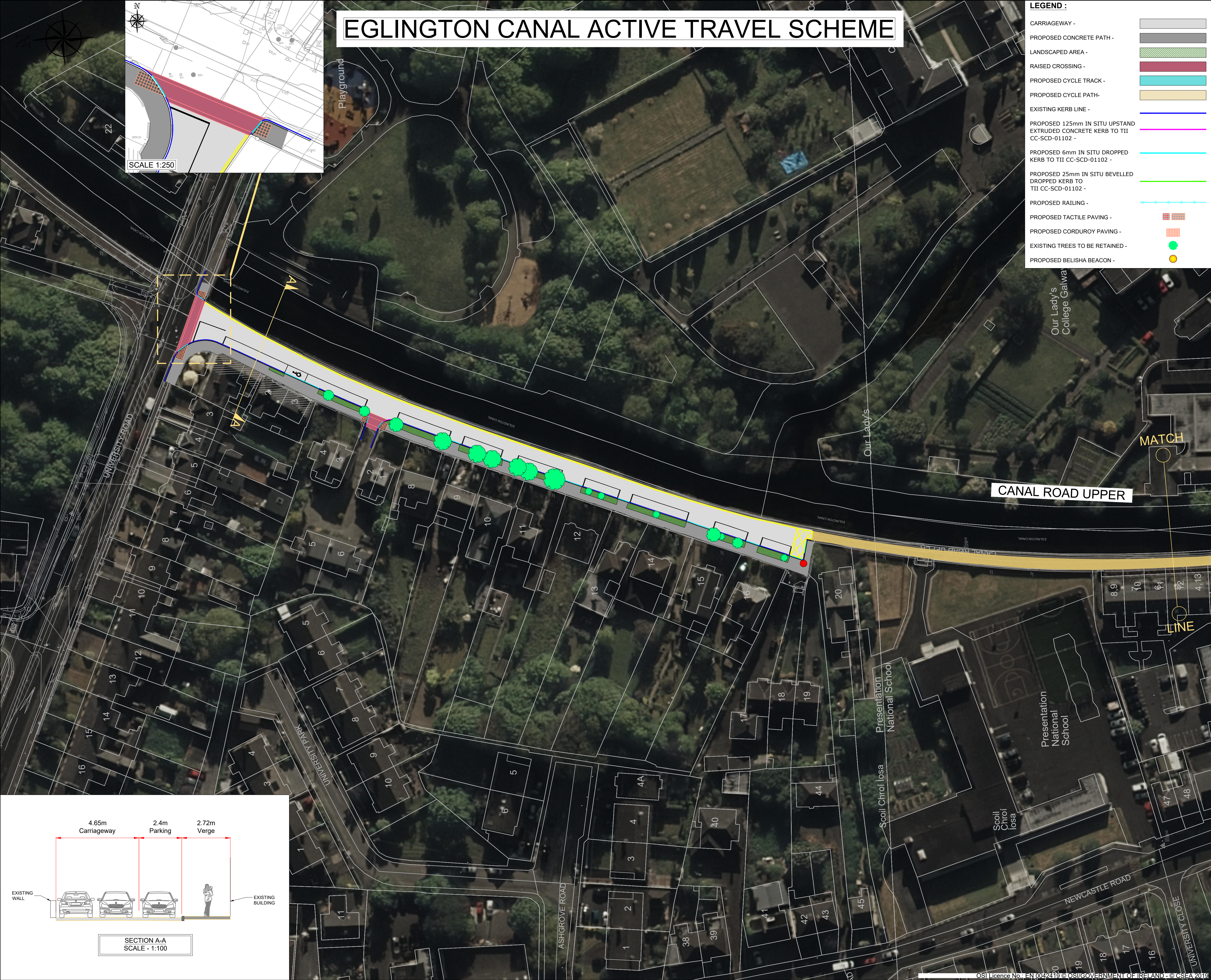
Project Ireland 2040
Building Ireland's Future

Udarás Náisiúnta Iompair
National Transport Authority

Comhairle Cathrach na Gaillimhe
Galway City Council

Key Plan

Scale : NTS



P01 FOR DISCUSSION			
Rev	Description	Drawn	Checked
Clifton Scannell Emerson Associates Limited Consulting Engineers, Seafort Lodge, Castledawson Avenue, Blackrock, Co. Dublin, Ireland, A94 P768 T: +353 1 288 5006 F: +353 1 283 3466 E: info@csea.ie W: www.csea.ie			
COMHAIRLE CATHRACH NA GAILLIMHE GALWAY CITY COUNCIL GALWAY CYCLE NETWORK STAGE 2 PUBLIC ENGAGEMENT DRAWING PROPOSED CANAL ROAD			
Client			
Project			
Dwg. Title			
Drawn By	MR	Date	20.05.21
Checked By	CB	Scale	1:500 @ A1
Project Code	Originator	Zone/Phase	Level
19_151 - CSE - GEN - XX - DR - C - 2132			
S2	FOR INFORMATION		
Status Code	Suitability Description		
P01	PRELIMINARY		
Revision	Project Status		

EGLINTON CANAL ACTIVE TRAVEL SCHEME

LEGEND :

- CARRIAGEWAY -
- PROPOSED CONCRETE PATH -
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- PROPOSED CORDUROY PAVING -
- EXISTING TREES TO BE RETAINED -
- PROPOSED BELISHA BEACON -

SECTION B-B
SCALE - 1:100

3.86m Carriageway
2.4m Parking
1.95m Verge
2.0m Footpath
0.63m Verge

EXISTING RAILING
EXISTING WALL

SCALE 1:250

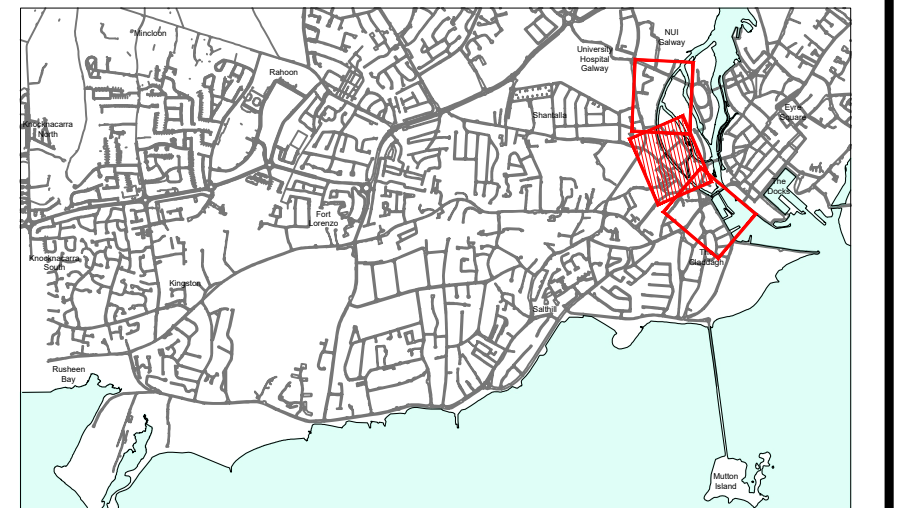
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CARRIAGEWAY -	
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LANDSCAPED AREA -	
RAISED CROSSING -	
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EXISTING TREES TO BE RETAINED -	
PROPOSED BELISHA BEACON -	

A1



Comhairle Cathrach na Gaillimhe
Galway City Council



Key Plan

ale : NTS

P01	FOR DISCUSSION	-	-	-
Rev	Description	Drawn	Checked	Date



Clifton Scannell Emerson
Associates

Stanton Scannell Emerson
Associates Limited
 Consulting Engineers,
 Tabor Lodge,
 Castledawson Avenue,
 Clontarf, Co. Dublin,
 Ireland, A94 P768
 Tel: +353 1 288 5006
 Fax: +353 1 283 3466
 Email: info@csea.ie
 Website: www.csea.ie

COMHAIRLE CATHRACH NA GAILLIMHE

GALWAY CITY COUNCIL

GALWAY CYCLE NETWORK

STAGE 2

PUBLIC ENGAGEMENT DRAWING

PROPOSED CANAL ROAD

Drawn By	MR	Date	20.05.21	19_151
Checked By	CB	Scale	1:500 @ A1	
CSEA Job No.				

Project Code	Originator	Zone/ Phase	Level	Type	Role	Dwg. No.
19_151 - CSE - GEN - XX - DR - C - 2133						

S2	FOR INFORMATION
Status Code	Suitability Description

P01 PRELIMINARY

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EGLINGTON CANAL ACTIVE TRAVEL SCHEME

LEGEND :

- | | |
|---|---|
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| PROPOSED CONCRETE PATH - |  |
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| PROPOSED BELISHA BEACON - |  |

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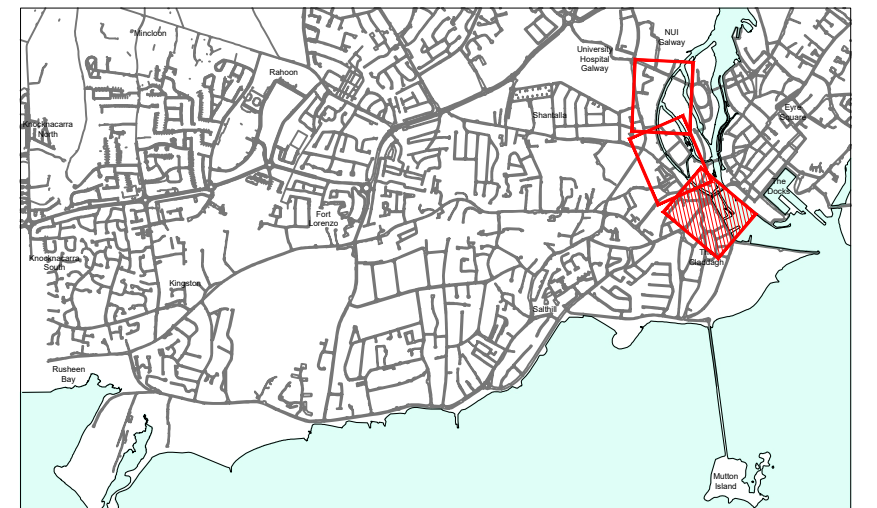
A1



Project Ireland 2040
Building Ireland's Future



Comhairle Cathrach na Gaillimhe
Galway City Council



Key Plan

Scale : NTS

P01	FOR DISCUSSION	-	-	-
Rev	Description	Drawn	Checked	Date



Clifton Scannell Emerson
Associates

**Clifton Scannell Emerson
Associates Limited**
Consulting Engineers,
Seaforth Lodge,
Castledawson Avenue,
Blackrock, Co. Dublin,
Ireland, A94 P768

+353 1 288 5006
+353 1 283 3466
info@csea.ie
www.csea.ie

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STAGE 2

PUBLIC ENGAGEMENT DRAWING

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			CSEA Job No.	

19 151 - CSE - GEN - XX - DR - C - 2134

S2	FOR INFORMATION
Status Code	Suitability Description

P01 PRELIMINARY

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Clifton Scannell Emerson Associates Limited, Civil & Structural Consulting Engineers

Mentec House, Bakers Point, Pottery Road, Dun Laochaire, Co Dublin.

T. +353 1 288 5006 F. +353 1 283 3466 E. info@csea.ie W. www.csea.ie

