

Glanmire to City Cycle Route (Phase 2) Part 8 Planning Report

Cork City Council

May 2024



Notice

This document and its contents have been prepared and are intended solely as information for Cork City Council and use in relation to Glanmire to City Cycle Route (Phase 2)

WS Atkins Ireland Limited assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 149 pages including the cover.

Document history

Decement history						
Revision	Purpose description	Origin- ated	Checked	Reviewed	Author-ised	Date
Rev 0	Draft	SK	EON	EON	RAN	11/12/2023
Rev 1	Issue for Approval	SK	EON	EON	RAN	24/01/2024
Rev 2	Issue for Approval	SK	EON	EON	RAN	27/03/2024
Rev 3	Issue for Part 8	SK	EON	EON	RAN	10/05/2024

Client signoff

Client	Cork City Council
Project	Glanmire to City Cycle Route (Phase 2) (Phase 2)
Job number	5218242
Client signature / date	



Appendix H. Cultural Heritage Impact Report

Contents

Chapter		Page	
1.	Introdu	ction	6
1.1.	Project	Background	6
1.2.	Site Ove		6
1.3.	Summa	ry of Proposals	8
2.	Plannin	g and Development Context	9
3.	Alterna	tive Options Considered	11
	Assessr		11
3.1.		ive Options	11
3.2.		ives Considered	12
3.3. 3.4.		nent of Options d Option	21 22
4 .	Consul		24
4.1.		older Consultation	24
4.2.		Landowners	24
5.	Extent	of Existing Site and Proposed Works	25
5.1.		Site Details	25
5.2.	-	f Proposed Works	27
5.3.	Constru	ction Methodology	32
5.4.	Access	to Site	32
6.	Impact	of Proposed Works	33
6.1.	Appropr	iate Assessment Screening Report	33
6.2.		mental Impact Assessment Screening Report	33
6.3.	Tree Su		34
6.4.		Archaeological Study	35
7.	Conclu	sion	38
Арре	endices		39
Appe	ndix A.	Part 8 Drawings & Photomontages	40
A.1.	Part 8 D	5	40
A.2.		Bridge Drawings	49
A.3.	Photom		52
	ndix B.	Alternative Options Layout Drawings	71
	ndix C.	Existing Layout Drawings	108
	ndix D.	Indicative Landscape Design	118
D.1.		ve View of the Landscaping within the Port of Cork 2000 Garden	139
	ndix E.	Appropriate Assessment Screening Report	141
Appe	ndix F.	Environmental Impact Assessment Report	143
	ndix G.	Tree Survey	145
G.1.	Report		145
G.2.		rvey Drawing	146
Appe	ndix H.	Cultural Heritage Impact Report	148



Tables

Table 3-1 - Section 1 and 2 - Michael Collins Bridge to Water Street (Nodes $1 - 2 - 3$) Summary	13
Table 3-2 - Section 3 – Water Street to Lower Glanmire Road (including the McMahons Site) (Nodes $3 - 4$) Summary	15
Table 3-3 - Section 4 (Nodes 4 – 5) Summary	17
Table 3-4 - Section 5 (Nodes 5 – 6) Summary	18
Table 3-5 – Port of Cork 2000 Garden Sub-Options Summary	20
Table 3-6 – North Ring Road (Sliversprings) to Proposed Facility Sub-Options Summary	20
Table 3-7 - Main Criteria and Sub-Criteria	21
Table 3-8 - Scoring Scale	21
Table 3-9 - Overall Assessment of all options by Nodes	22
Table 3-10 - Overall Assessment of the Preferred Option (Option A)	23

Figures

Figure 1-1 – Project Location & Site Extents Map	7
Figure 3-1 – Indicative Location of Nodes for each Option	12
Figure 3-2 – Indicative Location of Nodes $1 - 2 - 3$	13
Figure 3-3 – Option A Photomontage: Before and After View at Penrose Quay	14
Figure 3-4 – Option A Photomontage: Before and After View at Horgan's Quay	14
Figure 3-5 – Option A Photomontage: Before and After View at Horgan's Quay	14
Figure 3-6 – Indicative Location of Nodes 3 – 4	15
Figure 3-7 – Option A Photomontage: Before and After View at Dry Dock Crossing within McMahons Builder Providers	16
Figure 3-8 – Option A Photomontage: Before and After View along Lower Glanmire Road	16
Figure 3-9 – Indicative Location of Nodes 4 – 5	17
Figure 3-10 – Indicative Location of Nodes 5 – 6	18
Figure 3-11 – Option A Photomontage: Before and After View at Port of Cork 2000 Garden	19
Figure 3-12 – Option A Photomontage: Before and After View at Tivoli Estate Road	19
Figure 5-1 - Existing Road Infrastructure from Michael Collins Bridge to Water Street	25
Figure 5-2 - Existing Road Infrastructure from Water Street Heading East along Lower Glanmire Road	26
Figure 5-3 - Existing Infrastructure from Tivoli 'Skew' Bridge to North Ring Road	26
Figure 5-4 - Existing Infrastructure along the Dual Carriageway up to the Dunkettle Roundabout	27
Figure 5-5 - Artistic Impression of the Proposed Cross Section along Penrose Quay	27
Figure 5-6 - Artistic Impression of the Proposed Share Area along Horgan's Quay	28
Figure 5-7 - Artistic Impression of the Footbridge Crossing the Dry Dock Slipway	28
Figure 5-8 - Artistic Impression of the Lower Glanmire Road	28
Figure 5-9 - Artistic Impression of the Proposed Landscaping within Port of Cork 2000 Garden.	29
Figure 5-10 - Artistic Impression of Biodiverse Planting within the Verges	30
Figure 5-11 - Examples of Bike Parking and Paly Area with Seating	30
Figure 5-12 - Illustrative Palette of Materials for Landscaping & Placemaking	31
Figure 6-1 – Indicative Railings	35
Figure 6-2 – Example of rails treatment at Blackrock, Cork	36

ATKINS

Figure 6-3 – Existing of rails on Horgan's Quay	36
Figure 6-4 – Former Harbour Master's House within McMahons Builders Providers Yard	36
Figure 6-5 – Existing Dry Dock within McMahons Builders Yard	36
Figure 6-6 – Existing Stone Wall at McMahons Builders Providers Yard	37
Figure 6-7 – Existing Stone Wall at Lower Glanmire Road	37



1. Introduction

This report supports the Part 8 planning application being made by Cork City Council for the proposed development - Glanmire to City Cycle Route (Phase 2).

1.1. Project Background

Glanmire to City Cycle Route (Phase 2) is a proposed active travel facility that extends from the City Centre to Dunkettle. This proposal is the second phase of development of a continuous active travel route from Glanmire Village to Cork City.

The proposed scheme is part of the Pathfinder Programme which is an initiative announced by the Minister for Transport in 2022. Under the Pathfinder Programme the scheme will form part of the Inter-Urban Demonstrator, an active travel route linking Cork and Waterford cities.

The purpose of the scheme is to provide improved cycle and pedestrian facilities along the northern side of the River Lee from Michael Collins Bridge on Penrose Quay to the eastern side of the Dunkettle Roundabout. This route will provide a safe and much needed active travel link from the City Centre to Glanmire, and to the surrounding hinterland of Cork City.

As part of the project, a Multi-Criteria Analysis (MCA) was carried out on 5 different options and is detailed in Section 3 of this report. The assessment was carried out in accordance with the Department of Transport, Tourism and Sport (DTTaS) 'Appraisal Guidelines for Regional and Local Roads Capital Projects', Stage 1 – Preliminary Appraisal.

1.2. Site Overview

The Project is located within Cork City along the northern side of the River Lee, which is part of the Cork Harbour SAC. The route commences in the city just east of the Michael Collins Bridge/ Penrose Quay junction, where it connects to the existing pedestrian and cycle infrastructure heading west into the City Centre. The proposed route continues east along Penrose Quay, Horgan's Quay, the N8 Lower Glanmire Road and all the way to the Dunkettle Roundabout, where it will connect to the Glanmire to City Cycle Route – Phase 1 (currently under construction), the existing sections of the Inter-Urban Demonstrator (National Link Cork – Waterford) from Dunkettle to Midleton, and the Dunkettle Interchange Cycleway.

Figure 1-1 illustrates the site location and the extents of the proposed route.

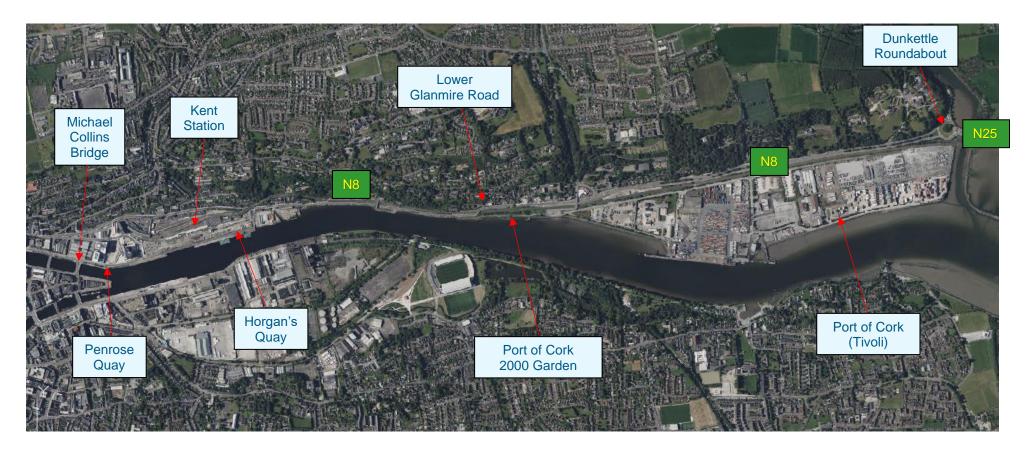


Figure 1-1 – Project Location & Site Extents Map



1.3. Summary of Proposals

The following is a non-exhaustive summary of the proposals being put forward for Part 8 Planning;

- A circa 5km active travel route with a mix of shared and segregated cycle facilities;
- Two new pedestrian & cycle bridges (one dry dock crossing & one railway crossing);
- Five new or enhanced pedestrian & cycle crossings;
- A pedestrian/cycle access ramp at Silversprings (North Ring Road Bridge);
- New public lighting where required along the scheme;
- Tree planting & pollinator friendly planting along the length of the scheme;
- Placemaking opportunities throughout the scheme;
- Relocation of Cork Coat of Arms artwork from N8 verge to Dunkettle roundabout.

The proposals currently being put forward for public consultation align with Cork City Council's broader regeneration plans for the North Docks and Tivoli areas. While this proposal is primarily focused on active travel it also includes placemaking improvements such as enhanced planting, play features etc. Over the course of the next decade there will be significant private sector and public sector investment in the Cork Docklands which will transform the area into a world class destination including high quality quayside amenity spaces. The Glanmire to City Cycle Route (Phase 2) establishes an active travel route through the North Docks and Tivoli which will be enhanced over time with significant investment in the public realm as the area develops.



2. Planning and Development Context

A review of Cork City Development Plan 2022 - 2028 was carried out and concluded that the proposed Glanmire to City Centre Route (Phase 2) is consistent with Cork City Council's current planning and development objectives and policies. As per Volume One: Written Statement of Cork City Development Plan 2022 – 2028, the following Development Plan policies and objectives are relevant to this Project:

Objective 4.1 – CMATS

"Cork City Council will work in cooperation with the NTA, TII and Cork County Council to fully implement the Cork Metropolitan Area Transport Strategy subject to detailed engineering design and environmental considerations, including the projects and programmes in relation to walking, cycling, public transport, Bus Connects, suburban rail, light rail, park and rides and roads infrastructure."

Objective 4.4 – Active Travel

"To actively promote walking and cycling as efficient, healthy, and environmentally friendly modes of transport by securing the development of a network of direct, comfortable, convenient, and safe cycle routes and footpaths across the city."

"To support the expansion of the Cork Bikes scheme. To accommodate other innovations such as electric bikes, public car hire, and other solutions that will encourage active travel. To support the rollout of the NTA 5 Year Cycle Plan. To support and engage with the Safe Routes to School programme."

Objective 4.5 – Permeability

- a. "All new development, particularly alongside the possible routes identified for public transport improvements, shall include permeability for pedestrians, cyclists, and public transport so as to maximise its accessibility.
- b. To maximise permeability, safety, security and connectivity for pedestrians and cyclists by creating direct links to adjacent roads and public transport networks in accordance with the provisions of statutory guidance as prescribed.
- c. Prepare a permeability strategy for areas throughout the city."

Section 4.32 - Cycling

"The National Development Plan (NDP) commits to the delivery of walking and cycling networks for all of Ireland's cities. Key priorities for developing a cycling network for Cork are:

- a. Designating a coherent network of east-west and north-south cycle routes to provide access to all major trip generators;
- b. Improve access to key employment areas and third level education as a priority, followed by schools;
- c. Provide the highest possible level of service on the identified high demand corridors;
- d. Identify and maximise opportunities for high quality greenways; and
- e. Work with key stakeholders and the public in identifying and developing the priority routes."



Section 10.31 – Cork City Docks Transport Strategy

"To implement the City Docks Transport Strategy and its key recommendations, including:

- a. Achieving a 75:25 modal split in favour of sustainable transport modes;
- b. The delivery of the City Docks Transport Network and a clear street hierarchy that confines vehicular access to the City Docks within traffic cells in order to optimise the placemaking and public realm potential of the City Docks;
- c. High quality walking / cycling streets and strategic routes along the quays, including improvements to the pedestrian / cycle realm at Albert Quay / Eamon de Valera Bridge;
- d. Transit orientated development, including the phased delivery of improvements to public transport from bus services, high quality bus services and the LRT;
- e. The delivery of three City Docks Bridges: Kent Station Bridge, Water Street Bridge and the Eastern Gateway Bridge;
- f. The provision of new pedestrian / cycle streets between Monahan's Road and Blackrock Road;
- g. Demand Management measures including maximum car parking standards;
- h. Preparation of a Mobility Hub Feasibility Study during the lifetime of this Plan".

Section 10.39 – Planning the Regeneration of Tivoli Docks

"The following plans and strategies shall be prepared in agreement with Cork City Council prior to the regeneration of Tivoli Docks:

- a. Public Realm and Placemaking Strategy;
- b. Delivery Strategy for Housing, Community and Culture;
- c. Green and Blue Infrastructure Strategy;
- d. Decontamination and Remediation Plan;
- e. Phasing, Infrastructure and Delivery Plan;
- f. Governance, Finance and Funding Strategy.

Planning and capacity constraints identified for the regeneration of Tivoli Docks within this plan shall be fully addressed prior to the delivery of any development on Tier 2 lands within the site.

(2.4 ha to the east of the site)."

Section 10.266 – Walking & Cycling

"Facilitating a modal shift to walking and cycling for local journeys within the town would help ease congestion. There is significant potential for cycle routes in the town given the compact nature of the town and the proximity of most residential areas to the centre."

Section 10.281 – Transport and Connectivity

"Glanmire has local road network challenges, and this is exacerbated by high car dependency with 81% people choosing the private car to travel to work and education. This could improve with improved sustainable and active travel infrastructure and services. These include improved pedestrian and cycle routes, bus network upgrade and development of the proposed greenway adjacent to the Glashaboy River."



3. Alternative Options Considered

3.1. Assessment of Alternative Options

The objectives for the scheme are based on the multi criteria requirements outlined in the Department of Transport 'Common Appraisal Framework for Transport Projects and Programmes (March 2016, updated October 2021)' (The 'CAF'). ¹The CAF objectives under the multi-criteria headings relevant to active travel schemes are as follows:

- Safety: To reduce the potential for conflict between all road users along the routes through the provision of a facility which is in line with the current standards. The Scheme will seek to:
 - Reduce the frequency of conflict between all road users by providing a safer route for all users.
 - Improve priority for cyclists at junctions.
 - Improve safety for vulnerable road users and provide a better environment for vulnerable road users within the study area.
- Physical Activity: Provide improved opportunities for pedestrians and cyclists, thereby promoting physical activity, through improvements to footpaths and crossings, and the provision of new cycling facilities.
- Environment: To minimize impacts on the receiving environment.
- Accessibility & Social Inclusion: To improve accessibility for all road users and bring social inclusion benefits to those for whom non-motorized means are the predominate form of transit.
- Integration: To support the strategies set out in national and regional policies and guidelines.
- Economy: To provide an investment that offers good value for money.

Additional to the above high level CAF objectives, the following localised project objectives are applicable:

- The route should be designed so as to provide a safe and high quality of service.
- Improve local movement capabilities by sustainable modes, including access to Glanmire, Carrigtwohill, Midleton and further east and connectivity to Cork City Centre for cyclists and pedestrians.
- Create a sustainable mode of active-travel access to the primary and secondary schools within Cork city.
- Enable sustainable development of the surrounding lands with enhanced connectivity for pedestrians and cyclists;
- Provide a consistent and coherent standard of cycle facilities along the Inter-Urban Demonstrator (National Link Cork-Waterford).
- Improve pavement quality and width, increasing comfort for cyclists.
- Provide safe and convenient junction layouts for pedestrians and cyclists.
- Provide additional recreational links by linking the local communities to the Midleton to Youghal Greenway and cycling routes as far east as the Waterford Greenway.

¹ The objects for the Glanmire to City Cycle Route (Phase 2) and the Preliminary Appraisal Report were completed prior to the issue of the Transport Appraisal Framework (TAF) 13th June 2023



3.2. Alternatives Considered

As part of the scope, a total of five options have been assessed: Options A, B, C, D, and E. As the existing road cross section varies, the route has been divided into five sections based on each sections characteristics The five sections are as shown in Figure 3-1. Layout drawings of the preferred option (Option A) are included in Appendix A, the other four alternatives are shown in Appendix B and the existing layout is included in Appendix C of this report.

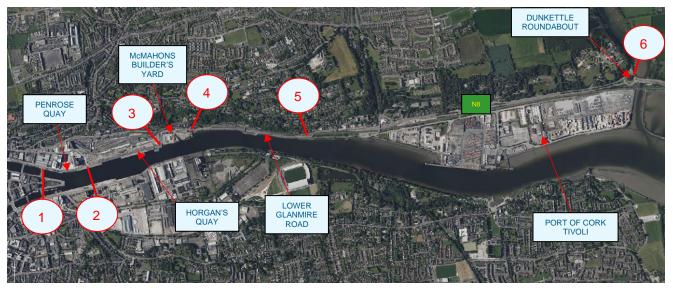
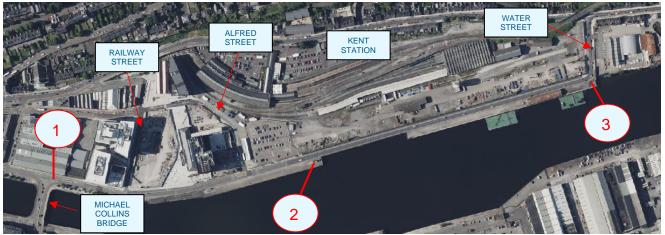


Figure 3-1 – Indicative Location of Nodes for each Option

The following is a summary of the Options, split into the five nodes, that were assessed as part of the preliminary design process.





3.2.1. Section 1 and 2 - (Nodes 1 to 2 and 2 to 3)

Figure 3-2 – Indicative Location of Nodes 1 – 2 – 3

Table 3-1 - Section 1 and 2 - Michael Collins Bridge to Water Street (Nodes 1 – 2 – 3) Summary

		Summary Description
Existing Layout		Existing carriageway width varies from 9.5m to 10.0m wide. The road is one way westbound and consists of two traffic lanes and a bus lane operating from just east of Alfred Street. There are 2 to 3m wide existing footpaths on both sides of the road. The existing eastbound off-road cycle track located on the northern side of Penrose Quay extends from Michael Collins Bridge to Railway Street and the existing westbound on-road cycle track extends from Water Street and connects to the bus lane east of Railway Street.
Preferred Route Option	Option A	The proposed cross section consists of a grassed verge between 0.5m to 6.0m wide, 3.0m wide two-way cycle track, and footpath varying in width from 1.8m to 2.4m located on the southern side of the road. The cross-section transitions into a 3.0m to 4.0m wide shared area at two constraint locations. At these constrained locations, the road width varies between 6.0m and 7.0m with 7.5m elsewhere.
	Option B	The proposed cross section consists of a 1.0m wide grassed verge, 3.0m wide two- way cycle track, and 1.8m wide footpath located on the southern side of the road. To maintain the proposed cross section throughout, the option requires a new boardwalk to be constructed and an existing building on the Horgan's Quay to be demolished and occupants relocated.
	Option C	The route is the same as Option A over this section.
Alternatives Considered	Option D	The proposed cross section from Michael Collins Bridge to Railway Street consists of an off-road single westbound cycle lane, 1.5m wide, and a 2m single westbound cycle track and 2m footpath on the southern side with no change to traffic lanes. From Railway Street to Water Street the cross-section transitions into a grassed verge of varying widths, 2.75 - 3.0m wide two-way cycle track, and 1.8 to 2.0m footpath. The carriageway narrows to 4.0m wide single westbound lane just east of Alfred Street all the way to Water Street.
	Option E	The proposed route commences with a cross section consisting of three 3.0m wide traffic lanes, varying width grassed verge, 3.0m wide two-way cycle track, and 2.5m wide footpath. Past the Kent Station car park, the route transitions to a 2.0m wide footpath on the northern side, two 3.0m wide traffic lanes, 3.0m wide two-way cycle track, and 2.0m wide footpath resulting in land take from Irish Rail yard. Continuing east along Horgan's Quay, the existing 9m wide carriageway is retained and a 3.0m wide two-way cycle track, and 2.0m wide 2.0m wide footpath are proposed on the southern side of the road with no verge. The existing building on Horgan's Quay is to be demolished and occupants relocated.





Figure 3-3 – Option A Photomontage: Before and After View at Penrose Quay



Figure 3-4 – Option A Photomontage: Before and After View at Horgan's Quay



Figure 3-5 – Option A Photomontage: Before and After View at Horgan's Quay

3.2.2. Section 3 - (Nodes 3 to 4)

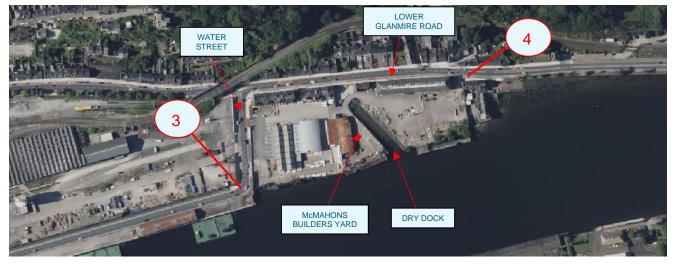


Figure 3-6 – Indicative Location of Nodes 3 – 4

Table 3-2 - Section 3 – Water Street to Lower Glanmire Road (including the McMahons Site) (Nodes 3 – 4) Summary

		Summary Description
Existing Layout		Existing carriageway width is 9.0m wide. Water Street consists of 2 traffic lanes operating in southbound direction only. Lower Glanmire Road consists of one traffic lane in each direction. There are existing footpaths on either side of both roads, and a short length of existing westbound cycle track located on the southern side of Lower Glanmire Road.
Preferred Route Option	Option A	The proposed cross section consists of a 5.0m wide shared area as it enters the McMahons Builders Yard from Water Street via a break in the existing stone wall and continues east, traversing the dry dock via a proposed light weight structure close to the water's edge, and re-joins the Lower Glanmire Road on the southern side via a break in the existing stone wall.
	Option B	The route enters the McMahons Builders Yard from Water Street via a proposed short section of boardwalk, the proposed cross section consists of a 1m verge, 3.0m wide two-way cycle track and a 2m wide footpath. The route continues east, traversing the dry dock via a proposed light weight structure close to the water's edge, and re-joins the Lower Glanmire Road on the southern side via a break in the existing stone wall.
	Option C	The route is the same as Option A before transitioning to a 5.0m wide boardwalk at the water's edge commencing at the back of Lower Castleview Terrace and continues east towards Lower Glanmire Road.
Alternatives Considered	Option D	The route continues along Water Street with a cross section consisting of 3.0m wide footpath, 0.7m to 3.3m wide grassed verge on the western side. Over this section, Water Street is narrowed from two lanes (6.5m) to one lane (3.25) with a 1.0m wide grassed verge, 3.0m wide two-way cycle track, and a 2.0m wide footpath on the eastern side. Reaching Lower Glanmire Road, the route transitions into a cross section consisting of 2 number 3.0m wide traffic lanes with 1.5m on-road cycle lanes, and minimum 1.6m wide footpaths on either side.
	Option E	The proposed cross section consists of a 3.0m wide two-way cycle track and 2.0m wide footpath as it enters the McMahons Builders Yard on Water Street via a break in the existing stone wall. The route continues east via the existing land bridge and exits again onto Lower Glanmire Road via a break in the existing stone wall.

ATKINS



Figure 3-7 – Option A Photomontage: Before and After View at Dry Dock Crossing within McMahons Builder Providers



Figure 3-8 – Option A Photomontage: Before and After View along Lower Glanmire Road



3.2.3. Section 4 - (Nodes 4 to 5)

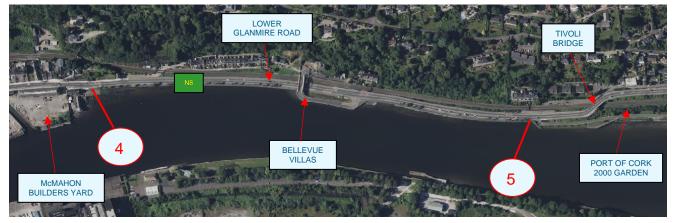


Figure 3-9 – Indicative Location of Nodes 4 – 5

Table 3-3 - Section 4 (Nodes 4 – 5) Summary

		Summary Description
Existing Layout		Existing cross section varies from 7.0 to 8.0m in width. The road consists of a single traffic lane in both directions with a right turn pocket provided at the junction with Bellevue Villas. The existing footpaths vary in width throughout. The existing westbound cycle track located on the southern side of Lower Glanmire Road extends to the western gate of Port of Cork 2000 Garden.
Preferred Route Option	Option A	The proposed cross section consists of two 3.25m wide traffic lanes, a grassed verge varying in width from 0 to 3.0m, a 3.0m wide two-way cycle track, and minimum 1.8m wide footpath.
	Option B	The proposed cross section consists of two 3.25m wide traffic lanes, a grassed verge 1.0m wide, 3.0m wide two-way cycle track, and a minimum 1.8m wide footpath.
	Option C	The route continues east via a 5.0m wide boardwalk on the river side of the existing wall.
Alternatives Considered	Option D	The proposed cross section consists of two 3.0m wide traffic lanes, 1.5m wide on- road cycle lanes, and minimum 2.4m wide footpaths on either side of the road. This cross-section changes as the route approaches the Port of Cork 2000 Garden, transitioning to minimum 1.8m wide footpath, two 3.0m wide traffic lanes, 0.5m wide grassed verge, 3.0m wide two-way cycle track, and 2.0m wide footpath.
	Option E	The route continues east via a 5.0m wide boardwalk on the river side of the existing wall.



3.2.4. Section 5 - (Nodes 5 to 6)



Figure 3-10 – Indicative Location of Nodes 5 – 6

Table 3-4 - Section 5 (Nodes 5 – 6) Summary

		Summary Description
Existing Layout		Existing carriageway varies from 7.0m to 9.0m in width. The road is single carriageway from Port of Cork 2000 Garden and transitions to dual carriageway east of the junction with the North Ring Road. There is an existing footpath of varying widths on either side of the road, and an existing westbound on-road cycle track.
Preferred Route Option	Option A	The route enters the Port of Cork 2000 Garden as a 4.5m wide shared area and continues the garden transitioning to 3.0m wide shared at the entrance to the Port of Cork lands. Along the Tivoli Estate Road, the cross section varies, generally consisting of a grassed verge, 4.0m wide shared area, 6.5m wide road carriageway and 2.5m wide car parking bays or 3m wide truck parking bays with 0.75m buffer zone. Shared facilities on Tivoli Estate Road traverse the existing railway line via a new overbridge, continuing east onto Dunkettle Roundabout. The existing mini roundabout on Tivoli Estate Road is to be converted to a priority T-junction. The 3.0m wide shared facilities on North Ring Road connect to the proposed facilities on Tivoli Estate Road via a new access ramp.
Alternatives Considered	Option B	The route enters the Port of Cork 2000 Garden grounds as a 3.0m wide two-way cycle track and a 2.0m wide footpath continuing into the Port of Cork grounds via a new 4m wide boardwalk. Along the Tivoli Estate Road, the cross section consists of 1.0 to 2.8m wide grassed verge, 3.0m wide two-way cycle track, and a 1.8m wide footpath. The route traverses the existing railway line in advance of the existing mini roundabout via a new overbridge. The route continues east along Lower Glanmire Road towards the Dunkettle Roundabout consisting of a cross section of 1.0m wide grassed verge, 3.0m wide two-way cycle track, and a 1.8m wide footpath. The existing road carriageway is to be narrowed to 3.25m wide traffic lanes as required.
	Option C	The proposed 5.0m wide boardwalk transitions into a railway overbridge constructed parallel to the existing Tivoli 'Skew' Bridge. From here, the route cross section consists of two 3.0m traffic lanes and a 3.0m to 4.0m wide shared area on the southern side of Lower Glanmire Road. A new pedestrian crossing is proposed west of the Castle Avenue at which point pedestrians are required to cross the road to continue east. A grassed verge of varying width and a dedicated 3.0m wide cycle track continue east as far the Dunkettle Roundabout along the 100km/h section of dual carriageway.
	Option D	The route continues east via a new cycle overbridge constructed parallel to the existing Tivoli 'Skew' Bridge. From here, the cross section consists of a 1.8m wide footpath, two 3.0m wide traffic lanes, and a minimum 2.5m wide shared area. Past the existing pedestrian crossing outside the Maxol petrol station, the cross-section transitions again to two 3.0m wide traffic lanes, 1.5m wide on-road cycle lanes, and minimum 1.8m wide footpaths on either side of the 100km/h section of dual carriageway along Lower Glanmire Road.



	Summary Description
Option E	The proposed 5.0m wide boardwalk transitions into an overbridge constructed parallel to the existing Tivoli 'Skew' Bridge. From here, the route transitions to two 3.0m traffic lanes, 3.0m wide two-way cycle track, and 1.8m wide footpath. At the existing pedestrian crossing outside the Maxol petrol station, the cross-section transitions again to 1.8m wide footpath, 1.8m wide cycle track, three 3.0m wide traffic lanes, 1.8m wide cycle track, and 2.0m wide footpath. The route continues east consisting of two 3.0m wide traffic lanes, 1.8m cycle track, and 1.8m wide footpath in each direction along the 100km/h section of dual carriageway. Approaching Dunkettle Roundabout, the proposed cycle tracks increase to 2.0m in width whilst the existing footpaths on either side of the Lower Glanmire Road are to be retained.



Figure 3-11 – Option A Photomontage: Before and After View at Port of Cork 2000 Garden



Figure 3-12 – Option A Photomontage: Before and After View at Tivoli Estate Road

3.2.5. Alignment within Port of Cork 2000 Garden Sub Options

		Summary Description		
Alternatives Considered	Sub-Option A	Widening of the existing 4.5m wide paved area to provide a 3.0m wide two-way cycle track and 2.0m wide footpath. This option reuses the existing paved area and minimises the impact on the garden during construction.		
	Sub-Option A5	Reclamation of land at the river edge with sheet pilling at the bottom of the riverbank slope and infill to existing ground level. This option requires the footpath and cycle track to be positioned at the water's edge. This option will have a major impact on the gardens during construction with sheet pilling, footpath/cycle track construction, railings and reassignment of the existing pavement.		

3.2.6. Connectivity Sub Options from the North Ring Road (Silversprings) to the Proposed Facility

Table 3-6 – North Ring Road (Sliversprings) to Proposed Facility Sub-Options Summary

		Summary Description				
Alternatives Considered	Sub-Option A	Reconstruction of the access steps, with a rail for cyclists to transport their bicycles, descending from North Ring Road to the Tivoli Estate road below.				
	Sub-Option A1	Removal of the steps and provision of a ramp descending from North Ring Road to the northern side of the Tivoli Estate road below and connecting to the at grade pedestrian and cycle facility situated within the verge of the Tivoli Estate road. A signalised pedestrian/cycle crossing at the Port entrance is proposed to provide connectivity from the proposed ramp to the proposed facility on southern side of the Tivoli Estate road heading westbound towards the Port of Cork 2000 Garden and city centre.				
	Sub-Option A2	Reconstruction of the access steps, with a rail for cyclists to transport their bicycles, descending from North Ring Road to the Tivoli Estate road below.				
	Sub-Option A3	Removal of the steps and provision of a ramp descending from North Ring Road to the southern side of the Tivoli Estate road and connecting to the at grade pedestrian and cycle facility at the entrance to the Port of Cork 2000 Garden. The proposed ramp is situated within the narrow verge between the Tivoli Estate road and the River Lee.				
	Sub-Option A4	Removal of the steps and provision of a lift. This option could lead to anti-social behaviour and involve increased maintenance issues.				



3.3. Assessment of Options

There were 8 main criteria under which the options were assessed and given a scoring. Table 3-1 lists the criteria and sub-criteria used in the assessment.

Main Criteria	Sub-Criteria				
Economy	Cost Impacts				
Accessibility & Social Inclusion	Accessibility				
	Social Inclusion				
Safety	Road Safety				
Engineering	Coherence Attractiveness Comfort Operation Impacts Impact on Land and Property Local Business/ Resident Impacts				
Environment	Receiving Environment Ecology Material Assets Archaeology & Cultural Heritage Population & Human Health Land, Soil & Geology				
Physical Activity	Ambience				
Integration	Integration with Transport Networks Other Government Policy Integration Geographical Integration				
Programme	Impact of Delays to the Programme				

Table 3-7 - Main Criteria and Sub-Criteria

A Multi-Criteria Analysis (MCA) was carried out to appraise all five options identified within the study area. All options were ranked against the sub-criteria using the colour coded ranking system described in Table 3-8.

Table 3-8 - Scoring Scale

Colour Coding Rank Description				
	Significant advantages over other options			
	Some advantages over other options			
	Neutral compared to other options			
	Some disadvantage compared to other options			
	Significant disadvantage compared to other options			

Table 3-9 shows the overall assessment of each option by node, including the Do Nothing which is the existing scenario with no further improvements. The best option for each of the 6 nodes is ranked from 1, the best to 6, the worst.



		OPTIONS					
		Do Nothing	Α	В	С	D	E
NODES	1-2	5	1	2	2	3	4
	2-3	6	1	3	4	2	5
	3-4	5	1	3	3	2	4
	4-5	5	1	1	3	2	4
	5-6	6	1	2	3	4	5
Overall Ranking		6	1	2	4	2	5

Table 3-9 - Overall Assessment of all options by Nodes

3.4. Preferred Option

Based on the assessment, Option A has the best performance when assessed against the criteria set out in the Multi-Criteria Analysis. The following elements enabled Option A to perform better than other option:

- **Economy:** This option provides value for money whilst achieving scheme objectives of providing connectivity and integration. The scheme will require typical civil engineering construction works within the existing road corridor with a railway crossing, a pedestrian ramp and a slipway crossing.
- Accessibility: Option A is considered suitable for all users as it is separated from traffic along the route and remote from the dual carriageway section of N8. Where required, Toucan crossings will be provided along the route to provide connectivity to the northern side of the corridor.
- **Safety:** Option A provides a safe route for all users separated from the strategic high speed vehicular traffic on N8 dual carriageway with additional Toucan crossings provided where required.
- **Engineering:** The scheme is predominantly at surface level and can be easily constructed. It includes a crossing of the slipway within McMahons Yard, a ramp from North Ring Road overbridge, and a railway bridge. Unlike the other options, Option A does not require any significant lengths of boardwalk to be constructed.
- Environmental: Construction of the scheme within the road corridor, mainly along the quays, verges and brownfield sites, results in minimum impact on the environment. In addition, practical use of lands, provision of public areas, and minimum removal of car parking provides an improvement for the community.
- **Physical Activity:** Option A provides a safe route for all users separated from the strategic high speed vehicular traffic on N8 with additional Toucan crossings provided, which will encourage active travel, recreational trips, and would be suitable for charitable events.
- Integration: The route provides integration with the future development of suitable modes of transport within Cork City with particular reference to the Cork City Development Plan 2022 2028. In addition, the route provides connectivity to Kent Station, to existing and proposed cycle and pedestrian infrastructure and to proposed developments along the Lower Glanmire Road.
- **Programme:** Construction of the scheme poses no additional requirements for licences under the environmental legislation or approvals which could result in delays to the programme.

Table 3-10 shows how option A performed for each node against each of the assessment criteria compared to all the other options.

Table 3-10 - Overall Assessment of the Preferred Option (Option A)

NODES	1-2	2-3	3-4	4-5	5-6	Overall Assessment of Criteria
Economy						
Accessibility						
Safety						
Engineering						
Environmental						
Physical Activity						
Integration						
Programme						
Overall Assessment						



4. Consultation

4.1. Stakeholder Consultation

Extensive stakeholder consultation has taken place with the following statutory and non-statutory bodies;

- Cork County Council
- Port of Cork
- Irish Rail
- Irish Water
- TII
- Private landowners
- Residents Group

4.2. Affected Landowners

Preliminary meetings have been held between Cork City Council and any affected landowners.

5. Extent of Existing Site and Proposed Works

5.1. Existing Site Details

The scheme is located in the north-eastern suburbs of Cork City extending from Michael Collins Bridge on Penrose Quay, along Horgan's Quay, Lower Glanmire Road (N8), and the Tivoli Docks concluding at Dunkettle Roundabout with an overall scheme length of approximately 4.9km. Penrose Quay and Horgan's Quay have a speed limit of 50kph which progressively increases to 60kph, 80kph and 100kph in the eastern direction along Lower Glanmire Road.

Along Penrose Quay and Horgan's Quay, the cross section is between 9.5m and 10.0m wide. The quays operate westbound only and consists of two traffic lanes and a bus lane located on the northern side of the road. There is an existing 2.0m - 3.0m wide footpath on the northern side and the existing quays on the southern side. There is a section of an existing eastbound off-road cycle track on the northern side of Penrose Quay commencing at Michael Collins Bridge and concluding at the junction with Railway Street where cyclists are required to turn left onto Railway Street where no dedicated cycle facilities are provided.

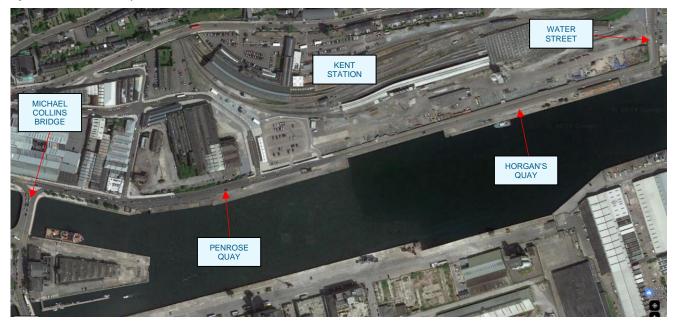


Figure 5-1 - Existing Road Infrastructure from Michael Collins Bridge to Water Street

Along Water Street and Lower Glanmire Road, the cross section is 9.0m wide. Water Street operates southbound only with two traffic lanes whilst Lower Glanmire Road operates east/ west with one traffic lane in each direction. An existing westbound cycle track is provided on the southern side of Lower Glanmire Road. There is an existing parallel parking bay located on the western side of the Water Street, and an existing bus stop located on Lower Glanmire Road.



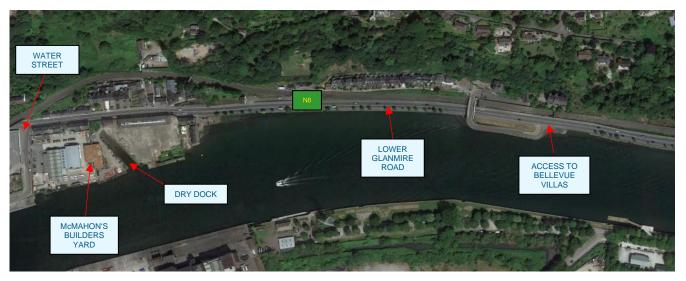


Figure 5-2 - Existing Road Infrastructure from Water Street Heading East along Lower Glanmire Road

Along Lower Glanmire Road, the cross section reduces to 7.0m - 8.0m wide. The route operates west/ east and consists of two-way traffic lanes with westbound on-road cycle lane extending as far as Bellevue Villas. The existing footpath varies in width throughout. The on-road cycle track restarts east of the junction and continues as far as the western gate to Port of Cork 2000 Garden. There are three existing bus stops located on Lower Glanmire Road.

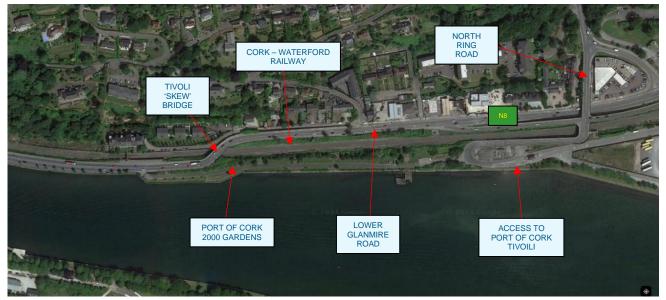


Figure 5-3 - Existing Infrastructure from Tivoli 'Skew' Bridge to North Ring Road

The final section of Lower Glanmire Road, consists of two-way traffic lanes which transition into a dual carriageway. The cross section varies between 7.0m and 9.0m wide. The route operates west/ east and has footpaths of varying widths along both sides of the road. There is an existing westbound on-road cycle track provided on Lower Glanmire Road dual carriageway section which terminates approximately 200m west of the Tivoli 'Skew' Bridge. The westbound cycle track commences opposite the Lotabeg entrance gate and joins a shared space before it effectively terminates just east of the North Ring Road westbound on-ramp. There are three existing bus stops along the final section of Lower Glanmire Road.





Figure 5-4 - Existing Infrastructure along the Dual Carriageway up to the Dunkettle Roundabout

5.2. Extent of Proposed Works

The proposals being put forward for Part 8 Planning are shown in Appendix A Engineering Drawings. The full suite of Part 8 documents including a video fly through of the proposals can be viewed on the following link: <u>https://consult.corkcity.ie/en</u>.

A full description of the proposals is provided below.

• Provision of a segregated cycle track and footpath from Michael Collins Bridge on Penrose Quay to approximately 130m east of Alfred Street.



Figure 5-5 - Artistic Impression of the Proposed Cross Section along Penrose Quay

- Provision of a 3.0m wide shared area over a 150m length of constrained area (due to the existing turning basin for shipping traffic) commencing approximately 130m east of Alfred Street. Footpath on the northern side is reduced to 1.8m over this section and the N8 traffic lanes are reduced to 3m each.
- Provision of a segregated cycle track and footpath from directly east of the shared area to the existing Search and Rescue building on the quay.
- Provision of a 4.0m wide shared area over 450m length commencing at the existing Search and Rescue building and widening to 5m as it continues through McMahons Builder's Yard via a break in the existing wall at the junction with Water Street. The route bridges the slip way and



exits the yard via a break in the existing wall just west of the cottages at Castleview Terrace, connecting to the footpath on the southern side of the Lower Glanmire Road.



Figure 5-6 - Artistic Impression of the Proposed Share Area along Horgan's Quay



Figure 5-7 - Artistic Impression of the Footbridge Crossing the Dry Dock Slipway

• Provision of a segregated cycle track and footpath heading east along Lower Glanmire Road, with the two traffic lanes reduced to 3.25m each. The proposed facility passes under the existing access bridge to Bellevue Villas and across the access ramp entrance on a raised platform.



Figure 5-8 - Artistic Impression of the Lower Glanmire Road

 Provision of a 4.5m shared area as the facility deviates from Lower Glanmire Road at the western entrance to the Port of Cork 2000 Garden as it travels through the garden and exits at the eastern entrance. While maintaining the majority of the existing trees within the garden, a

ATKINS

landscaping design, including seating, play area, bike parking, paved areas and planting of trees/shrubs and biodiverse plants will be developed to further enhance the public realm within the garden. An artistic impression of this proposed improvements to the garden is shown in Figure 5-8.

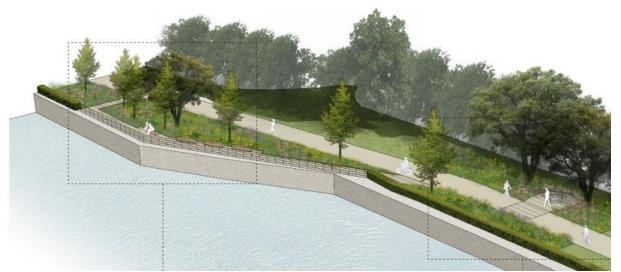
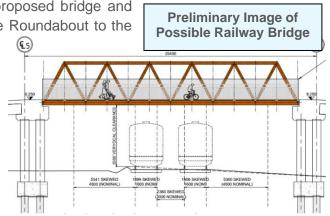


Figure 5-9 - Artistic Impression of the Proposed Landscaping within Port of Cork 2000 Garden.

- Provision of 3.0m minimum shared area as the facility enters the Port of Cork lands and travels
 adjacent to the carriageway, with a Toucan crossing provided at the existing crossing location
 situated just west of the Port security point. Close to this location, a pedestrian/ cycle ramp is
 proposed to connect the North Ring Road to the facility within the Port of Cork lands.
- Provision of 4.0m wide shared area continuing from the proposed toucan crossing on the northern side of the Tivoli Estate Road to a point just west of the end of the estate road. At this point the route crosses the railway via a proposed bridge and

travels along the southern side of Dunkettle Roundabout to the eastern side where it crosses the N25 via an existing Toucan crossing, connecting to the existing pedestrian/ cycle infrastructure. The existing roundabout mid-way along this section will be converted to a priority T-junction. Existing parking along the northern side of the estate road will be reduced to allow for continuity of the shared facilities along this section of the scheme.



- Provision of shared area along the northern side of Lower Glanmire Road to facilitate access to the proposed pedestrian/ cycle facility via North Ring Road Bridge at Silversprings junction and the proposed ramp down to the Tivoli Edtate Road.
- Provision of road markings, signs and surfacing along the length of the scheme.
- Provision of drainage infrastructure along Penrose/ Horgan's Quay.
- Provision of a pedestrian railing on the water's edge side of the proposed scheme.
- Provision of upgraded/ proposed public lighting.
- Provision of landscaping that will include replacement trees where possible, hedging, pollinator planting and hard landscaping adjacent to the river and at seating areas.





Figure 5-10 - Artistic Impression of Biodiverse Planting within the Verges

• Provision of placemaking opportunities through seating areas, bike parking and a play area.



Figure 5-11 - Examples of Bike Parking and Paly Area with Seating



ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING



Figure 5-12 - Illustrative Palette of Materials for Landscaping & Placemaking



5.3. Construction Methodology

All construction activities, materials, construction waste, machinery and equipment will be contained within the confines of the site.

A Temporary Traffic Management Plan will be developed and implemented on site and may include reduced lane widths, lane closures and a stop-go system to be implemented to manage traffic during construction. All Traffic Management Plans will be agreed with Cork City Council (Local Authority) in advance of works commencing on site.

All road markings and signage will be as per the relevant chapters in the Department of Transport Traffic Signs Manual.

For site safety within the works, appropriate construction related signage will be on display to illustrate the site requirements for the use of personal protective equipment (PPE) while on site, speed limits within the works and on-site notices to inform workers of the risks associated with the works.

5.4. Access to Site

The site is situated between Michael Collins Bridge on Penrose Quay and Dunkettle Roundabout. Access and deliveries onto the site will be possible at a number of locations from the public road network along the scheme. Imperative to successful operation of the site is management of traffic, pedestrians and cyclists and maintenance of access to all properties, businesses, and lands along the scheme throughout the construction stage of the project.



6. Impact of Proposed Works

An Appropriate Assessment Screening Report (AA) and Environmental Impact Assessment Screening Report (EIA), Tree Survey, and Desktop Archaeological Study have been undertaken in relation to the Glanmire to City Centre Cycle Scheme – Phase 2.

6.1. Appropriate Assessment Screening Report

The completed Appropriate Assessment Screening Report (AA) is contained within Appendix D of this report.

The conclusion of the AA Screening Report states the following:

"This Appropriate Assessment Screening Report has examined the details of the proposed works for the Glanmire to City Cycle Route (Phase 2), in County Cork, and the Natura 2000 sites in their Zone of Influence. It has analysed the potential impacts of the proposed works on the receiving natural environments and evaluated their effects, both individually and in combination with other plans and projects, in view of the conservation objectives of the relevant Natura 2000 sites. This report has been prepared in line with the Habitats Directive, as transposed into Irish Law by the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended), Section 177 and Part XAB of the Planning and Development Act, 2000 (as amended) ("the Planning and Development Acts") and relevant case law and guidance from the European Commission, the Department of the Environment, Heritage and Local Government and the Office of the Planning Regulator, on the basis of objective information and adhering to the precautionary principle.

Following the assessment detailed in this report, it can be concluded beyond reasonable scientific doubt that the proposed works, either individually or in combination with other plans or projects, will not give rise to any impacts which would constitute significant effects on Cork Harbour SPA (site code:004030) or any other Natura 2000 site, in view of their conservation objectives. Therefore, it is the recommendation of the authors of this report that Cork City Council, as the competent authority in this case may determine that Appropriate Assessment is not required in respect of the proposed works for the Cycle Route. Should the scope of the proposed works change, a new Appropriate Assessment Screening Report and final determination will be required."

6.2. Environmental Impact Assessment Screening Report

The completed EIA is contained within Appendix E of this report.

This EIA screening report has been carried out in accordance with Section 176B and 177 of the Planning and Development Act 2000 as amended, the European Union, the Planning and Development) (Environmental Impact Assessment) Regulations 2018, and the Planning and Development Regulations as amended 2001- 2023 (which give effect to the provisions of EU Directive 2014/52/EU). The report assessed the impact of the proposed Scheme in conjunction with committed developments in the surrounding area.

The Environmental Impact Assessment Screening Reports states the following in relation to flooding along the scheme:

"With reference to the OPW CFRAM flood mapping and Cork City Council Development Plan (2022-2028) flood mapping for the relevant area, the proposed development predominantly lies within Flood Zone A, 'where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding)' (OPW, 2021). The eastern portion of the proposed scheme lies within Flood Zone B, where the probability of flooding from rivers and the sea is moderated (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 year for coastal flooding. Based on the nature of the proposed cycle route, it is identified as being a water compatible development (Planning System and Flood Risk Management Guidelines, DOEHLG 2009) which can be located within areas at risk of flooding. In the absence of flood defence in the area currently, the management plan will be the closure of the cycle/footpath along with the N8 if flooded, similar to what happens currently when the road floods. Additionally, as the area along which the proposed scheme is located is identified an area prone to a high probability of coastal flooding, it may be subject to future flood defence schemes initiated for Cork City. The contractor will be required to design and implement traffic plans as required in accordance with the 'Guidance for the Control and Management of Traffic at Road Works' (TII, 2010)."

The screening decision of the Environmental Impact Assessment Screening Report states the following:

"Key findings are summarised as follows;

- Due to the limited nature of the works, it is considered that there will be no significant cumulative impacts with other developments in the general area;
- Limited noise, vibration and dust emissions may be generated during construction; however, this is anticipated to be minimal in effect and will cause no significant impacts;
- There will be no significant impact on biodiversity, groundwater, surface water or traffic; and,
- There will be no significant impacts on recorded monuments or historic features.

In summary, no significant adverse impacts to the receiving environment will arise as a result of the proposed project.

Accordingly, we consider that the preparation of an EIAR is not required for the proposed Glanmire to City Cycle Scheme. However, the competent authority will ultimately determine whether an EIA is required or not."

6.3. Tree Survey

The completed Tree Survey is contained within Appendix F of this report.

The completed survey report recognises that none of the existing trees along the route are considered Category A – High value and conservation and as such do not require protection. A total of 303 trees were recorded along the entire route and of these 60 were considered Category B – Moderate value and conservation, 223 were considered Category C - Low value and conservation and 20 were considered Category D - Not suitable for retention.

The report outlines several recommendations in relation to protection of trees throughout the Construction Stage of the project primarily aiming at prevention of damage to the roots and trees situated within the Works Zone with an emphasis on retaining trees wherever possible.

6.3.1. Impact of Scheme on Existing Trees

It is estimated that a total of 204 trees are impacted, and as such, will be removed as part of the works. Based on the assessment by an arborist these 204 trees are categorised as follows:

- 0 Category A High value
- 35 Category B Moderate value
- 150 Category C Low value
- 19 Category D Not suitable for retention

The proposed scheme will include the planting of approximately 138 new trees, 2,965 lin/m of hedging to be selected from native or naturalised species, 2,695m2 of ornamental planting to be selected from



mix of herbaceous perennials, grasses, bulbs and low growing shrubs and 3,363m2 of native wildflower plants including pollinator friendly planting within the proposed verges.

6.4. Desktop Archaeological Study

The completed Desktop Archaeological Study is contained within Appendix G of this report and states the following:

"There are 17 no. reported National Inventory of Architectural Heritage (NIAH) sites within or adjacent to the proposed scheme as follows;

- Penrose House: Office Reg No. 20506339;
- Horgan's Quay/Wharf Reg No. 20506358;
- Railway Bridge Reg No. 20507082;
- 11 Lower Glanmire Road Reg No. 20507165;
- Harbour Commissioners: Workshop Reg No. 20507163;
- Footbridge Reg No. 20863155;
- Footbridge Reg No. 20863156;
- Footbridge Reg No. 20863164;
- St Laurence Cheshire Home: gates / railings / walls Reg No. 20864022;
- Lotamore: gate lodge Reg No. 20864012;
- Post-box Reg No. 20864008;
- Tivoli Gardens Reg No. 20864029;
- Belvedere Lodge Reg No. 20864009;
- Lotabeg: demesne walls / gates / railings Reg No. 20864013;
- Lotabeg: gate lodge Reg No. 20864012;
- Steps Reg No. 20507128; and
- Locomotive Shed Reg No. 20507180

There are 7 no. Records of Protected Structures within or directly adjacent to the proposed scheme as follows;

- City of Cork Steam Packets Office Ref. No. PS281;
- Patent Slipway, Former Port of Cork dockyard Ref. No. PS923;
- Former Harbour Master's House Ref. No. PS922;
- Old Harbour Commission House Ref. No. PS933;
- Pedestrian Bridge at Carrig House Ref. No. PS741;
- Pedestrian Bridge at Bellevue Villas Ref. No. PS743; and
- Pedestrian Bridge at Woodhill Villas Ref. No. PS742.

The proposed scheme lies within the Zone of Notification (ZoN) of 2 no. SMR features, one near the footbridge on Lower Glanmire Road (reg. no. 20863155) and one near the gateway and walls around the Lotabeg area (Reg. no. 20864013)."

6.4.1. Impact of Scheme on Protected Structures on the Quays

The proposed scheme will include the creation of sections of pedestrian guardrails along riverside areas of the cycleway on Horgan's Quay, which will be set back from the existing quay walls. The Cultural Heritage Impact report states "this will have the

potential to result in adverse visual effects on the setting of the

Figure 6-1 – Indicative Railings



quayside". Detailed designs of the morphology, exact locations and foundation details for these proposed safety features will be formulated during detailed design and an accurate assessment of the significance of any potent adverse effects is, therefore, not currently considered feasible but may potentially range from slight to moderate in range. It is noted that the proposed pedestrian guardrails are intended as interim safety measures that will be removable in order to facilitate any future North Dock public realm design proposals, and potential negative visual effects on the setting of the quayside arising from this element of the proposed scheme will, therefore, be reversible.

The limestone quay wall and associated wharf along Horgan's Quay were constructed in the 19th century with later extensions of concrete construction. These quay features are not protected structures but are listed in the NIAH. The concreted surfaces of the wharves contain crane rails, metal mooring posts and a large, corrugated warehouse at the east end, which is only depicted on the 1956 OS map indicating it dates to the first half of the 20th century. While the proposed scheme extends along the roadside section of the concreted surface of the wharf, this will not entail any interventions to the timber wharf structure,



Figure 6-3 – Existing of rails on Horgan's Quay



Figure 6-2 – Example of rails treatment at Blackrock, Cork

quay posts or warehouse by the cycleway or any associated features such as pedestrian guardrails which will set back from the guay walls. A section of crane rails along the wharf does extend into the scheme boundary and these will be raised to suit the proposed ground level and treated as a feature forming a part of the works. Future treatment to be formulated as part of the detailed design process in conjunction with the Cork City

Council Archaeologist and Conservation Officer.

6.4.2. Impact of Scheme on Protected Structures within the McMahons Builders vard Site

wall,

mooring

The McMahons Builders Providers property at the east end of Horgan's Quay fronts onto Water Street at the west, Lower Glanmire Street at north and the River Lee on the south and east. This was the site of a number of shipbuilding operations during the 19th century, and it still retains a number of structures associated with this activity which are listed as protected structures or are included within the NIAH. These comprise a Former Harbour Master's House, a Former Port of Cork workshop and a slipway.



The proposed scheme will not require any direct interventions



Figure 6-5 – Existing Dry Dock within McMahons Builders Yard

to any of the designated architectural heritage

Figure 6-4 – Former Harbour Master's House within McMahons **Builders Providers Yard**

constraints within the McMahons property or to the remaining wharf features along the river front. The scheme will include the construction of a clear span bridge over the south end of the extant slipway (CHC 6) and this will stand on footings set back from both sides of the slipway structure to avoid any impacts on its stonework.



The proposed scheme will require the removal of a c.15 to 20m long section of a c.3m high boundary wall along the south end of the west side of McMahons property that fronts onto Water Street. The remainder of this wall has been reduced and now only retains the basal (c.0.8m high) which is topped by a modern metal fence line.

A section (approx. 11m long x 3m high) of the random rubble



Figure 6-7 – Existing Stone Wall at Lower Glanmire Road

along the east end of the north side of the McMahons



Figure 6-6 – Existing Stone Wall at McMahons Builders Providers Yard

yard, fronting onto Lower Glanmire Road will be required to be removed as part of the scheme. This section of the boundary wall follows a slightly curvilinear line which matches the line of the boundary wall shown in this area on the 1902 OS map but does not appear to be present on the 1845 map, indicating that the wall may have been constructed at the same time as the adjacent workshop in 1890.

The Cultural Heritage Impact report states the following:

"The proposed scheme will not result in any predicted impacts on the known archaeological resource and will also not require any large-scale ground excavation works on in-channel interventions which would have the potential to impact any unrecorded, sub-surface archaeological remains that may exist within the study area. It is, therefore, recommended that no archaeological mitigation measures should be required during the construction or operation phases of the proposed scheme.

The scheme boundary contains a number of architectural heritage constraints and works will comprise the creation of a cycleway on the concreted surface of Horgan's Quay wharf (CHC 3), the removal of two sections of the random rubble boundary wall around the McMahons Builder Provision premises (formerly a 19th century shipyard) and the installation of a clear span bridge over an extant slipway (CHC 6) within that property. It is recommended that a built heritage specialist be appointed to supervise construction phase works in these areas. The appointed specialist should also carry out a detailed written and photographic record of the existing streetscape along the extent of the scheme in advance of the commencement of the construction phase, and this should include a written, drawn and photographic record of the section of the McMahons yard boundary wall that will be removed. An annotated photographic record of all areas of the scheme should also be compiled at the conclusion of the construction phase in order to create a thorough record of the amendments to the existing environment. All information compiled during these inputs should be compiled in a built heritage report to be submitted to the Planning Authority at the conclusion of the project."



7. Conclusion

The Glanmire to City Centre Cycle Scheme (Phase 2) will provide dedicated cycle and pedestrian facilities along the Lower Glanmire Road and adjacent to the River Lee from Michael Collins Bridge at Penrose Quay to the Dunkettle Roundabout. The proposed scheme will be the second phase in the provision of a continuous pedestrian and cycle route from Glanmire to the City Centre. This route will provide a safe and much needed connection for pedestrians and cyclists wishing to travel east-west, linking the N8 Dunkettle Roundabout to the City Centre, and creating a sustainable transport corridor connecting Glanmire, and the surrounding hinterland to Cork City. In addition, the scheme will provide sustainable transport modes for the development of the North Docklands, McMahons Builders Yard and the Regeneration of Tivoli Docks which is considered a strategic development.

This scheme will include design measures aiming to transform the 4.9km section of existing infrastructure from an existing high-speed national road with limited existing cycle and pedestrian facilities to an environment with enhanced safe and attractive dedicated pedestrian and cycle facilities along the length of the route while also providing a key connection between Glanmire and Cork City.

The scheme has progressed through the Feasibility and Options Assessment Stage of the project and in doing so completed the Environmental and Heritage Assessments, Liaison with Affected Properties, and the development of Preliminary Design drawings. The proposed design is in line with Cork City Council objectives identified in the Cork City Development Plan 2022 to 2028 and strategic design documents.

