Appendix E. Appropriate Assessment Screening Report

ATKINS

Member of the SNC-Lavalin Group

Glanmire to City Cycle Route (Phase 2)

Appropriate Assessment Screening 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 Appropriate Assessment Screening.

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This document has 85 pages including the cover.

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 0.0	Draft for Comment	SK	SK	KMC	EON	11/10/2023
Rev 1.0	Draft for Comment	SK	SK	KMC	EON	08/12/2023
Rev 2.0	Final Issue	SK	SK	KMC	EON	24/01/2024
Rev 3.0	Final Issue	SK	EON	EON	RAN	27/03/2024
Rev 4.0	Part 8 Issue	SK	EON	EON	RAN	07/05/2024
Rev 5.0	Part 8 Issue	SK	EON	EON	RAN	16/05/2024
Rev 6.0	Part 8 Issue	SK	EON	EON	RAN	17/05/2024

Client signoff

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

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1. Introduction

WS Atkins Ireland Ltd ("Atkins") was commissioned by Cork City Council to prepare an Appropriate Assessment Screening Report in respect of the proposed Glanmire to City Cycle Route (Phase 2) in Cork City ("the proposed works"). The project is a Pathfinder project and forms part of the Inter-Urban Demonstrator (National Link Cork – Waterford) and will complete the city to city cycling route. Figure 1-1 illustrates the extent of the Inter-Urban Demonstrator within Cork City and County and the stage each section is at. (Note the Yougal to Mogeely section has since opened to the public)

Figure 1-1 - Inter-Urban Demonstrator within Cork City and County and the Planning / Construction Stage for Each Section

1.1. Project Location

The Project is located within Cork City on the northern side of the River Lee. The route starts at the junction with Michael Collins Bridge/Penrose Quay where it connects to the existing pedestrian and cycle infrastructure and travels east along Penrose Quay, Horgan's Quay and the N8 Lower Glanmire to the Dunkettle Roundabout where it connects to the Glanmire to City Cycle Route (Phase 1) and the Dunkettle Interchange cycleway.

The location of the proposed works is shown in Figure 1-2 below and an aerial view of the proposed works is shown in Figure 1-3. The Overall Plan Study Area is shown in Figure 1-4. The Layout Plan Route Option A Sheets 1 to 8 are displayed in Figure 1-5 to Figure 1-12, Full scale drawings will accompany the planning application.

The proposed works for the Cycle Route are outlined below in Section 1.2 below. .

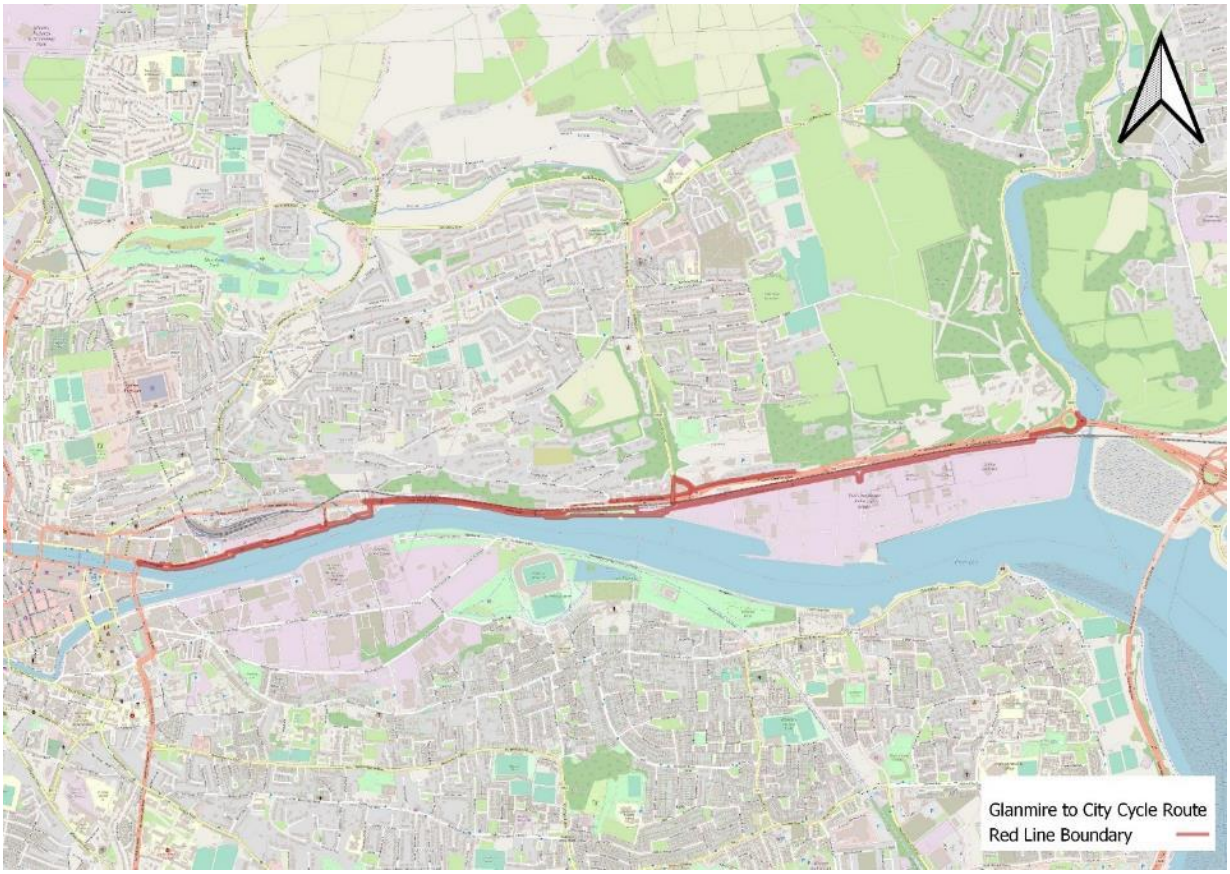

Figure 1-2 - Location of the Proposed Works (Source: OpenStreetMap QGIS)

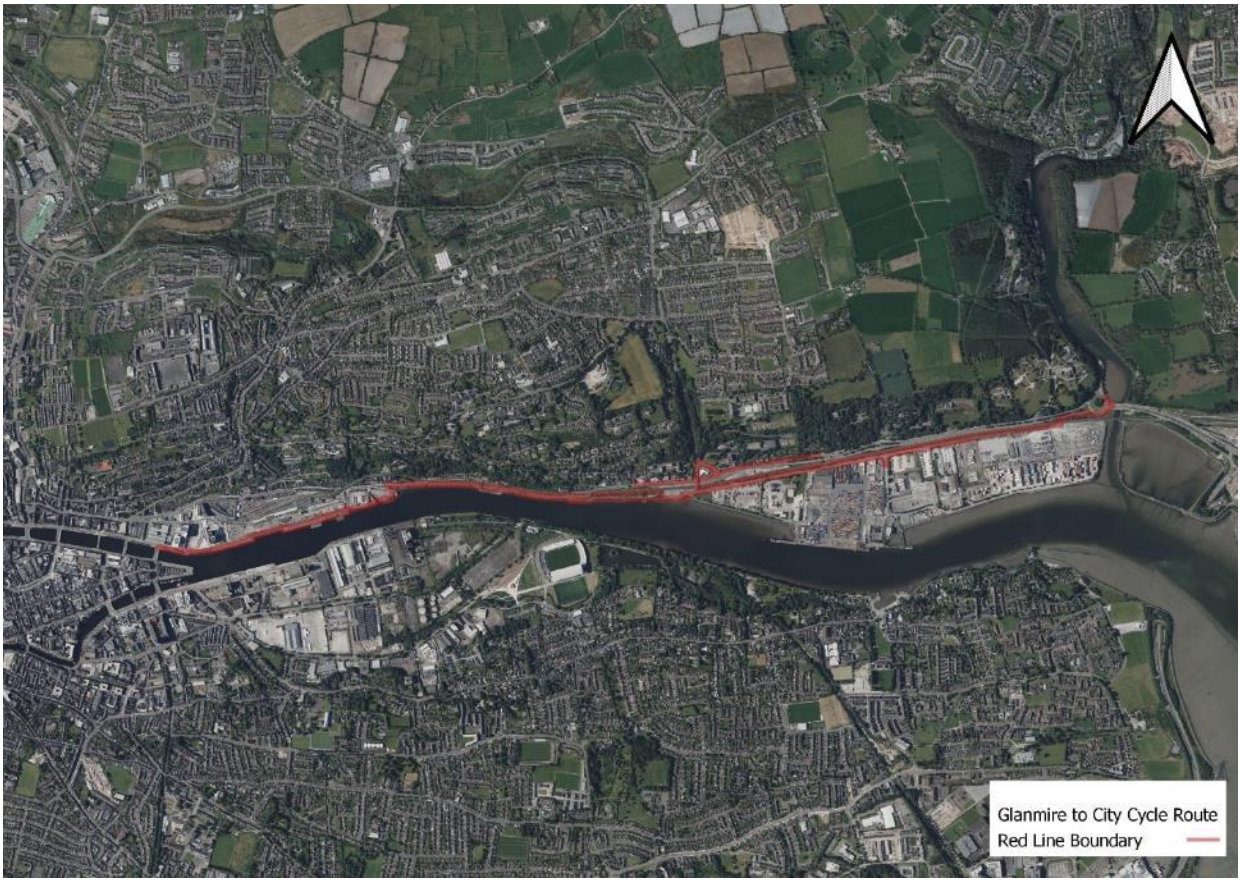

Figure 1-3 – Aerial view of the proposed Glanmire to City Cycle Route (Phase 2) (Source: Bing Aerial Map)

This report comprises the Appropriate Assessment Screening Report in respect of the proposed works and is intended to assist Cork City Council, in its capacity as the competent authority in this case, by providing it with sufficient evidence to make a properly informed determination as to whether or not Appropriate Assessment under Article 6(3) of the Habitats Directive (92/43/EEC) is required in respect of the proposed works.

1.2. Proposed Works

The following is a brief description of the construction for the non-structural sections of the route:

- Existing Quays – This will be a scarifying of the concrete with an application of a bond coat and then approximately 125mm of blacktop laid on top. Refer to Drawings 5218242-ATK-ZZ-ZZ-SK-CE-000002 and 5218242-ATK-ZZ-ZZ-SK-CE-000003.

- Along existing grassed areas, footpaths and verges – The existing material will be excavated to a depth of 200mm and replaced with 100mm of Clause 804 or 808 depending on the site conditions and 100mm blacktop on top of this. Excavated material to be removed off site for disposal in a licensed facility. Refer to Drawings 5218242-ATK-ZZ-ZZ-SK-CE-000004 and 5218242-ATK-ZZ-ZZ-SK-CE-000003.

The following is a brief description of the construction for the structural sections of the route:

Dry Dock Bridge

Substructure to comprise in-situ reinforced concrete abutments founded on bored reinforced concrete piles. 1m deep excavation of the existing ground required within the footprint of the abutments set back from the existing quay walls either side of the dry dock, with the excavated material to be removed off site for disposal in a licensed facility. Suitable temporary protection to be erected along the quay walls during the substructure construction to prevent any material entering the water. The steel truss will be fabricated off site before being transported to site and lifted into position using a suitable size crane. Refer to Drawings 5218242-ATK-ZZ-ZZ-SK-CE-000003 for indicative location of bridge.

Railway Bridge

Substructure to comprise in situ reinforced concrete columns founded on bored reinforced concrete piles. 1m deep excavation of the existing ground required within the footprint of the pile cap at each support location with the excavated material to be removed off site and disposed of at a licensed facility. The ramps will comprise precast prestressed concrete beams fabricated off site and lifted into position with the deck formed by in situ concrete construction. The steel truss will be fabricated off site also and lifted into position using a suitable size crane. Refer to Drawings 5218242-ATK-ZZ-ZZ-SK-CE-000009 for indicative location of rail bridge.

The Tivoli docklands area is likely to be redeveloped in the future. Redevelopment of the area could potentilly require decommissioning of the railway bridge. The span could be removed in one piece, and potentially reused, while the abutments and ramps would be demolished.

Ramp from North Ring Road into Tivoil Access Road

Substructure to comprise in situ reinforced concrete columns founded on bored reinforced concrete piles. 1m deep excavation of the existing ground required within the footprint of the pile cap at each support location with the excavated material to be removed off site and disposed of at a licensed facility. The ramp will comprise precast prestressed concrete beams fabricated off site and lifted into position with the deck formed by in situ concrete construction. Refer to Drawings 5218242-ATK-ZZ-ZZ-SK-CE-000006 for indicative location of ramp.

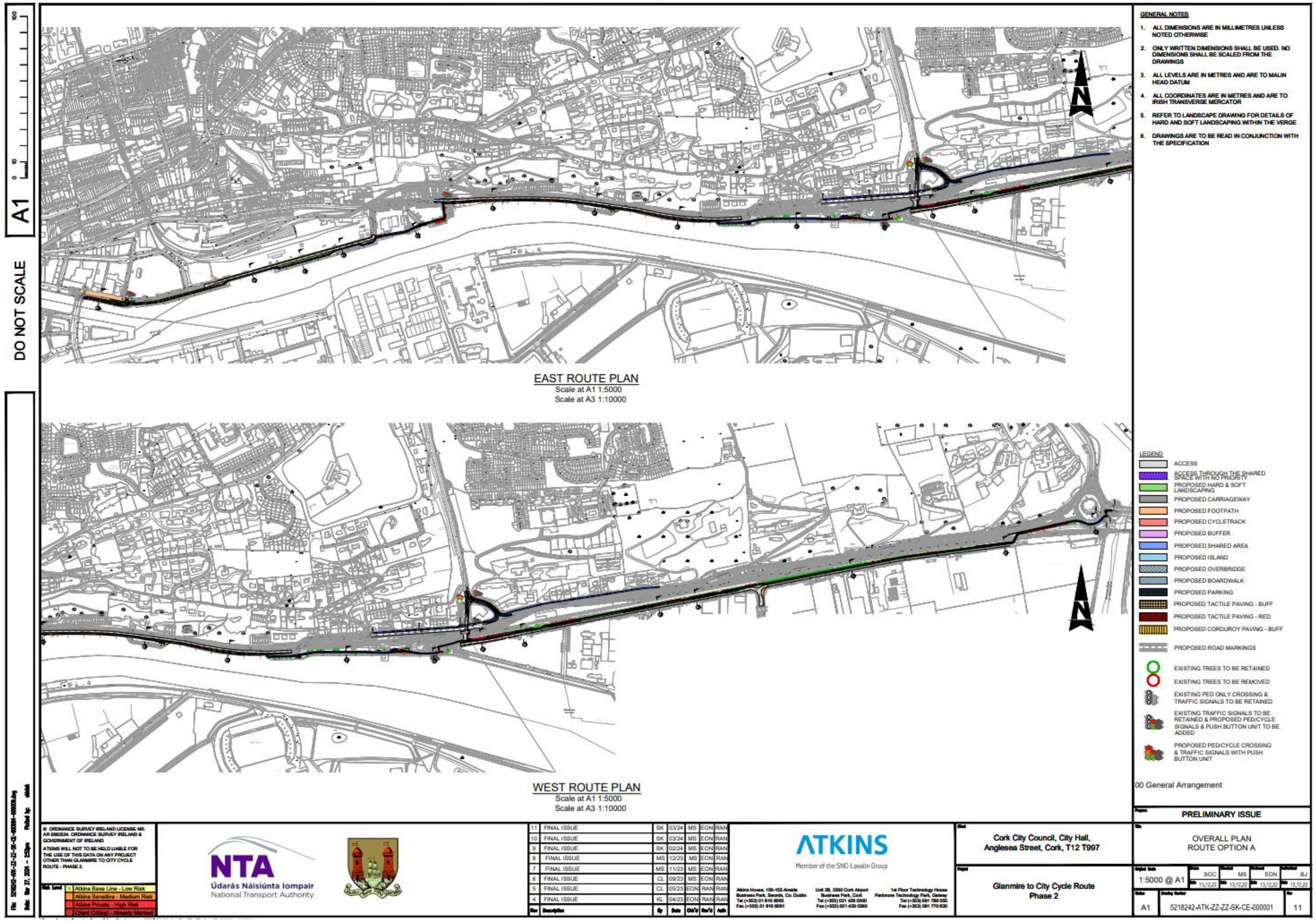

Figure 1-4 – Overall Plan.

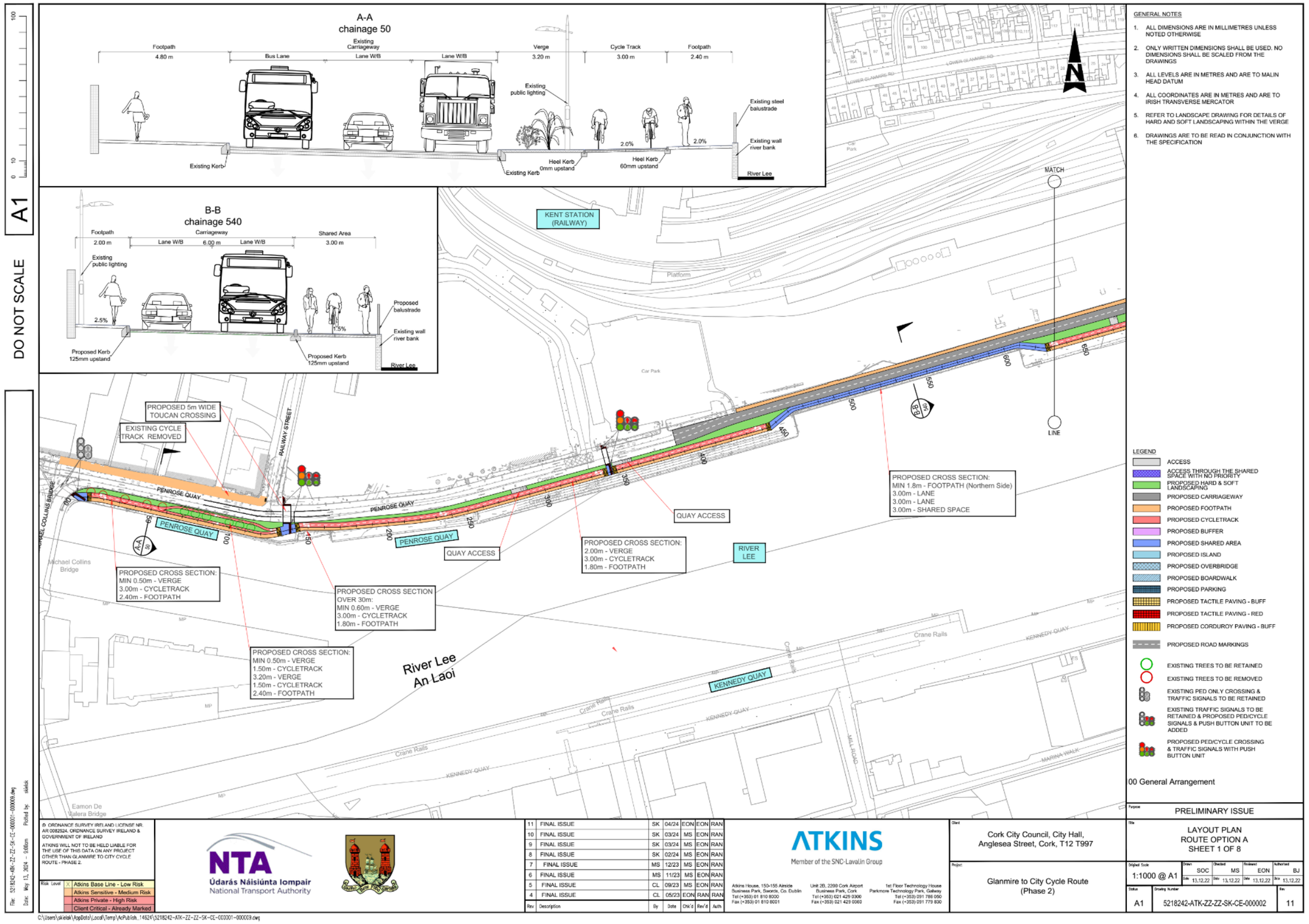

Figure 1-5 – Layout Plan Route Option A (Sheet 1 of 8)

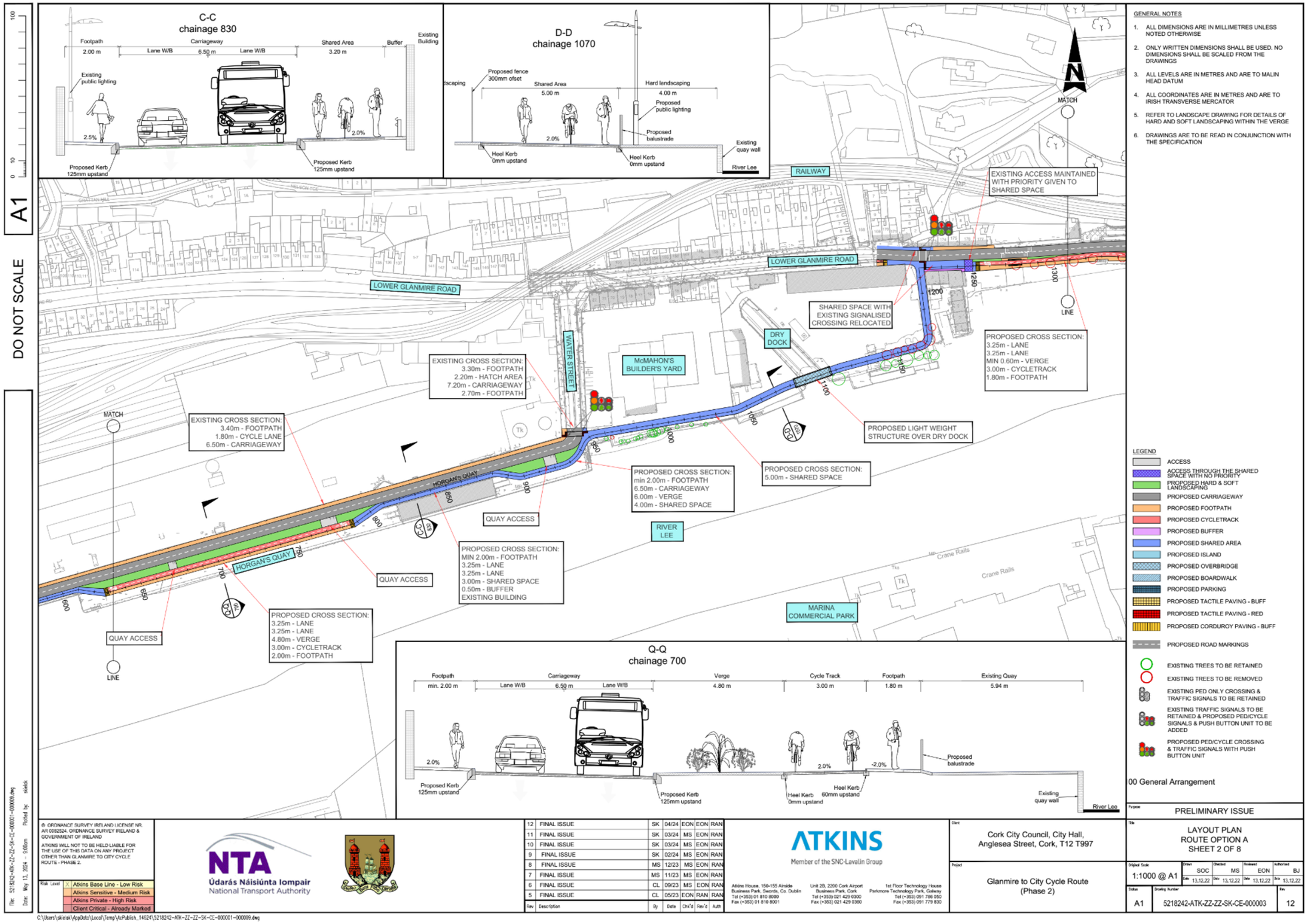

Figure 1-6 - Layout Plan Route Option A (Sheet 2 of 8)

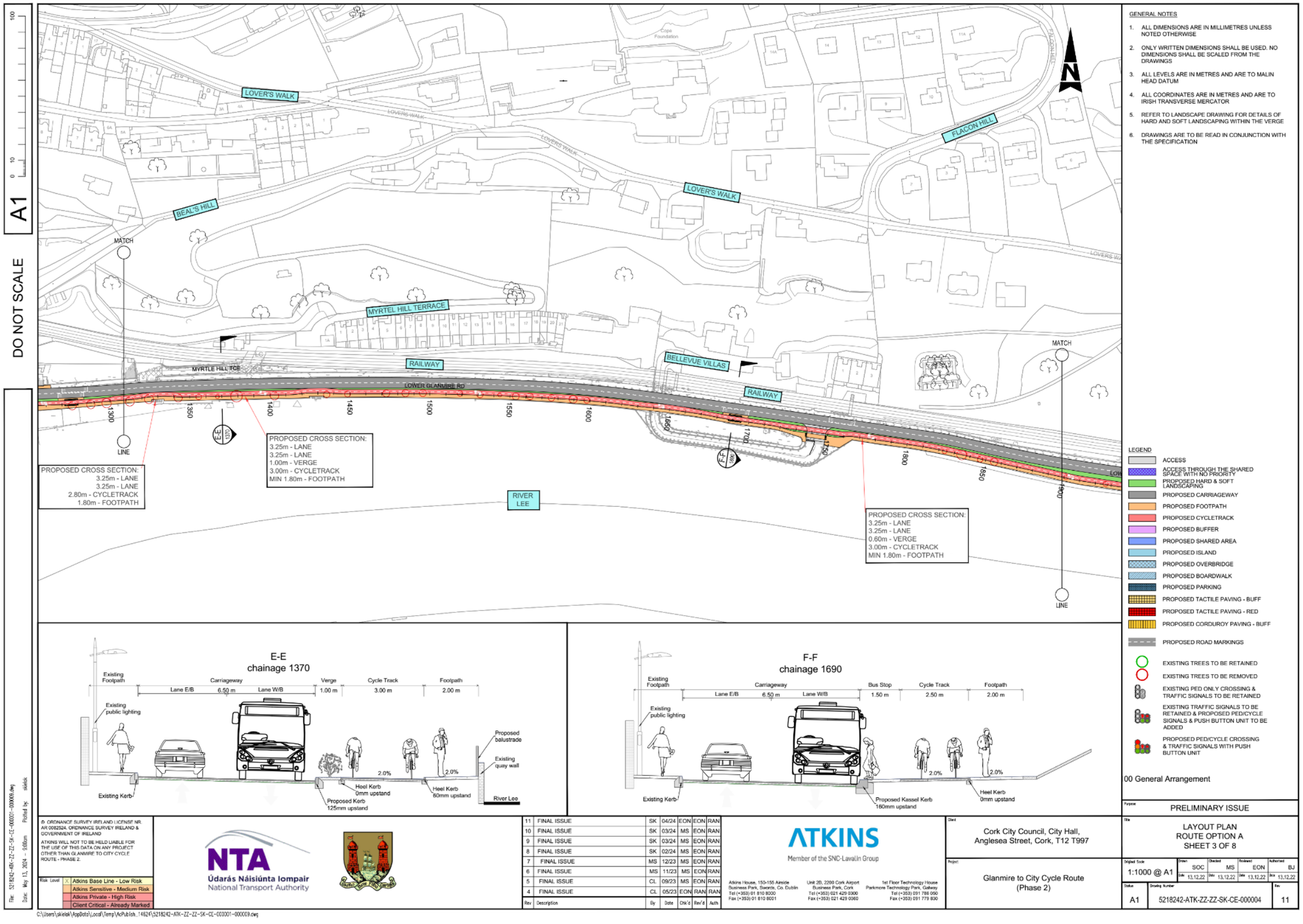

Figure 1-7 - Layout Plan Route Option A (Sheet 3 of 8)

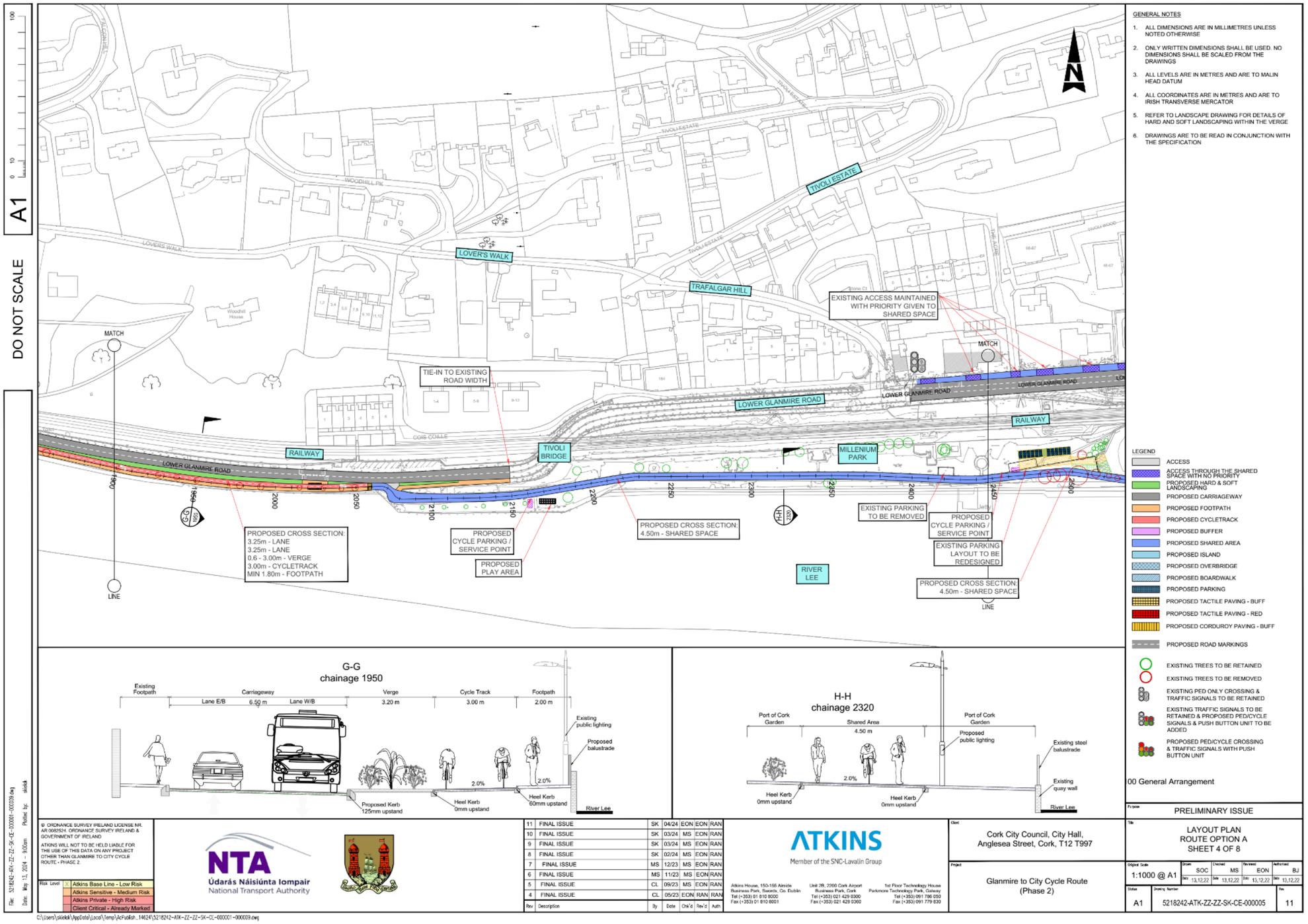

Figure 1-8 - Layout Plan Route Option A (Sheet 4 of 8)

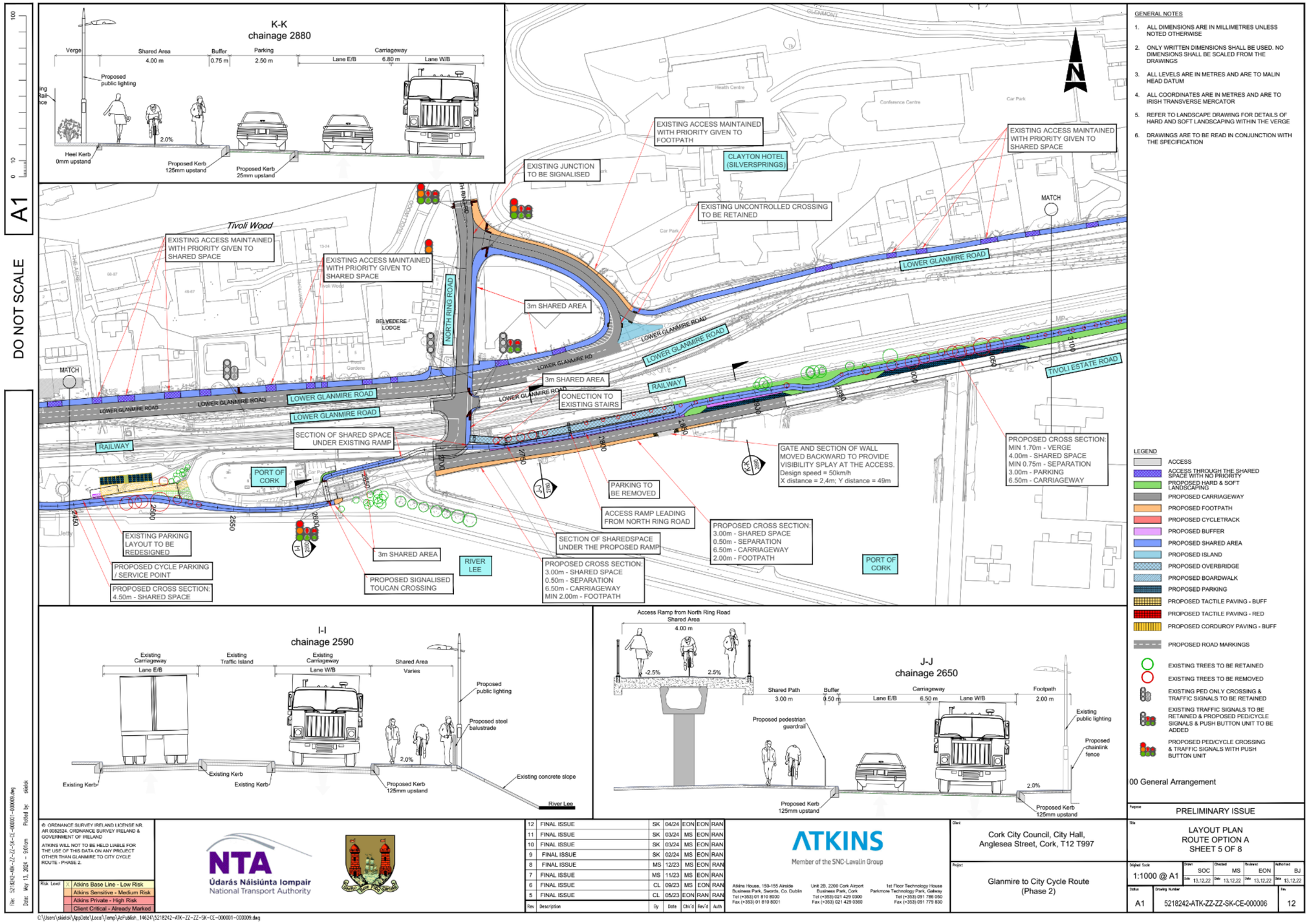

Figure 1-9 - Layout Plan Route Option A (Sheet 5 of 8)

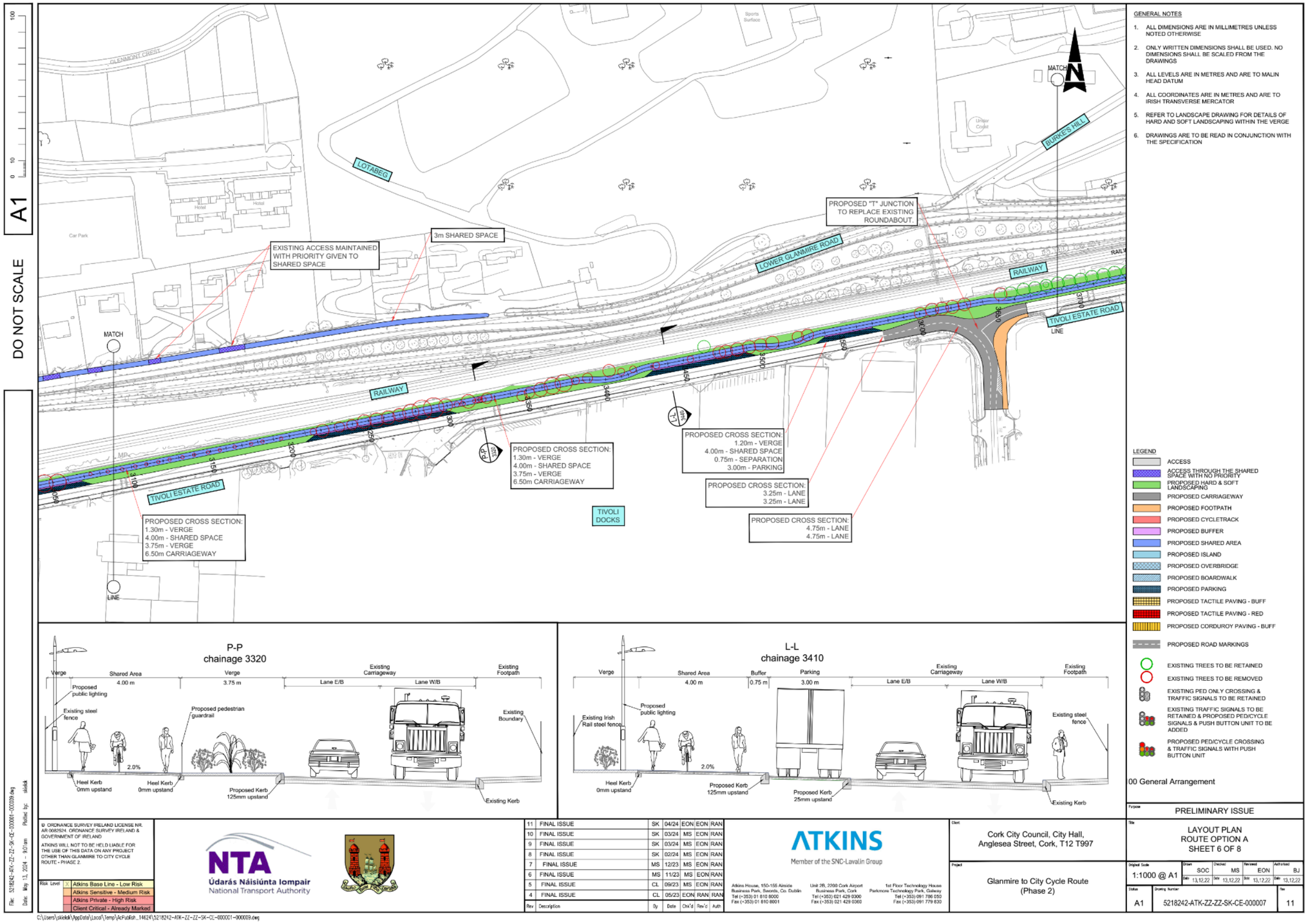

Figure 1-10 - Layout Plan Route Option A (Sheet 6 of 8)

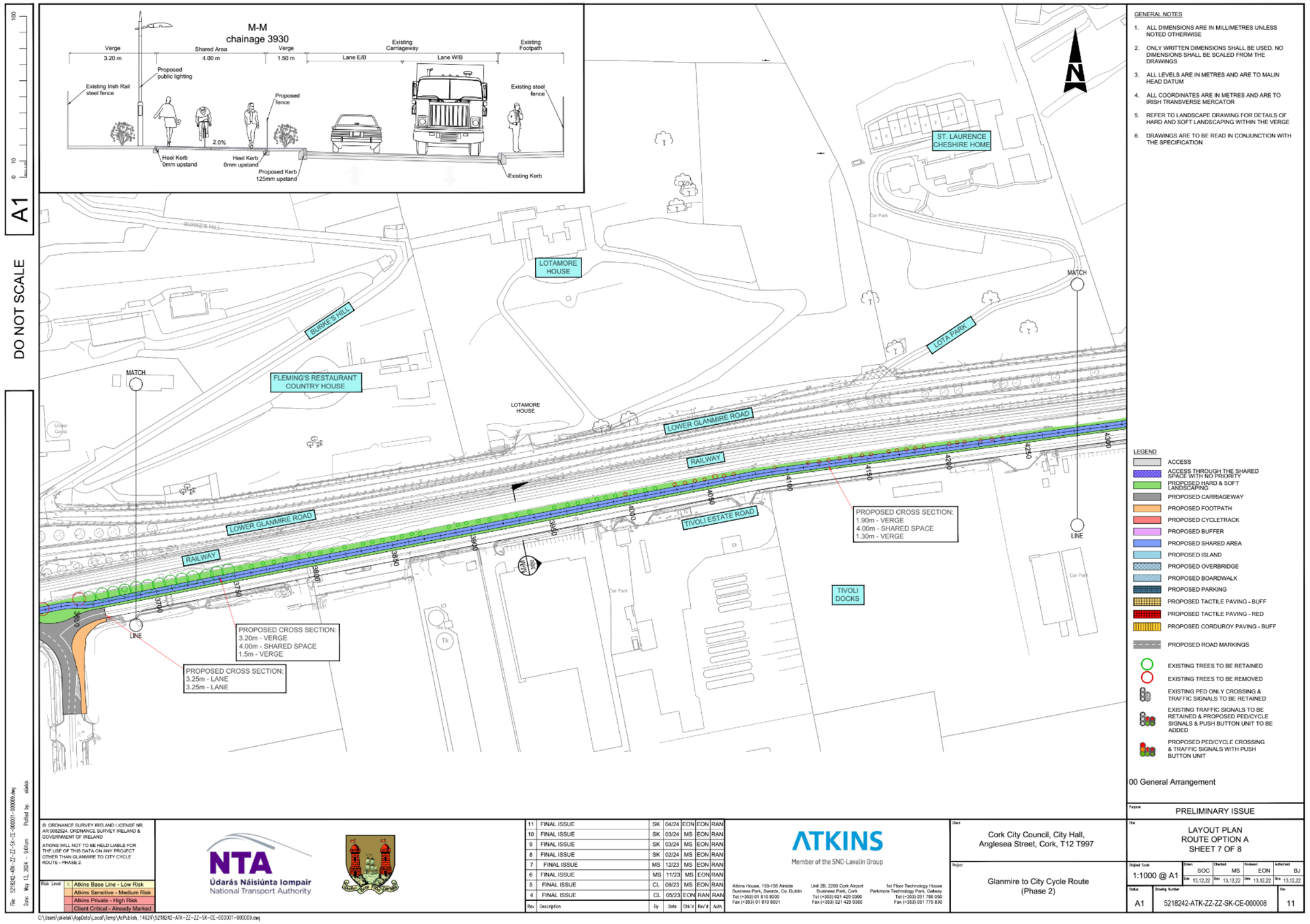

Figure 1-11 - Layout Plan Route Option A (Sheet 7 of 8)

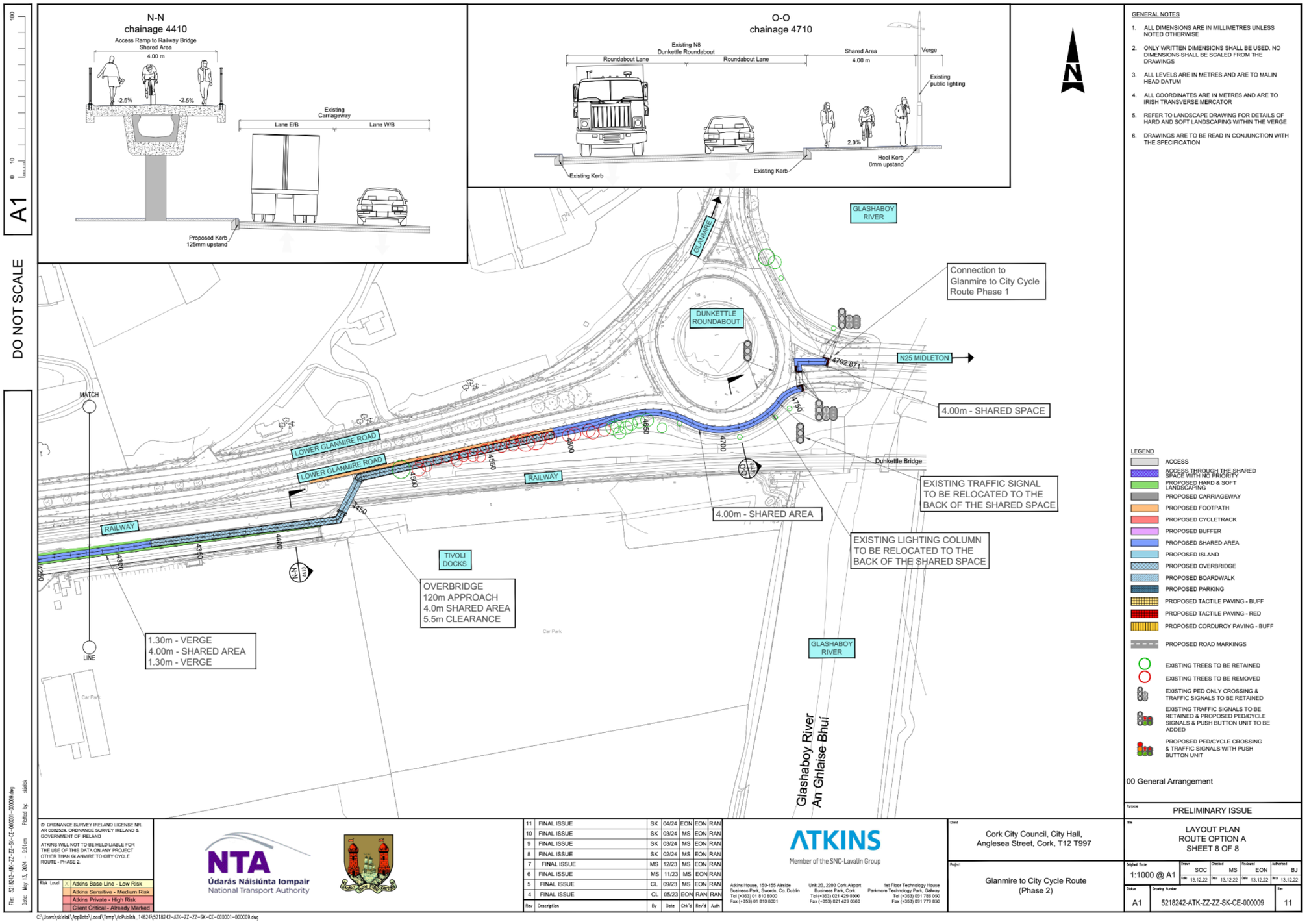

Figure 1-12 - Layout Plan Route Option A (Sheet 8 of 8)

1.3. Landscape Design

A pre-limimary landscape plan for the proposed works has been prepared by Eamonn Byrne Landscape Design Architects. The concept for the landscape plan follows (see seperate landscape sheets for more detail and precedent images):

- Tree planting throughout as shown on the landscape drawings (subject to service locations)
- Colourful high impact ornamental flowering perennials with some low shrub planting to the verges along Penrose/ Horgan's Quay and possibly Lower Glanmire Road, including species that would be attractive to pollinators (see precedent images on landscape sheets)
- Colourful high impact ornamental flowering perennial planting to sections around seating/ existing features (sculptures etc.) within Port of Cork 2000 Park including species that would be attractive to pollinators (see precedent images on landscape sheets)
- Wildflower meadow to some verges east of Port of Cork 2000 Garden along Tivoli Estate Road.
- Low native species hedges to buffer the cycle track along Tivoli Estate Road.


DWG NO. LP-1-02
EXISTING FOOTPATH TO BE RESURFACED TO MATCH EXISTING.
OPPORTUNITY FOR LOW LEVEL PERENNIAL AND TREE PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
PENROSE HOUSE
RAILWAY STREET
PROPOSED SURFACING TO SHARED SPACE.
EXISTING FOOTPATH TO BE RETAINED.
PENROSE QUAY
MICHAEL COLLINS BRIDGE
PROPOSED SURFACING TO SHARED SPACE.
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
EXISTING FOOTPATH TO BE RETAINED.
RIVER LEE
PROPOSED COLOURED ASPHALT SURFACING TO TWO-WAY CYCLE LANE.
EXISTING QUAY WALL RETAINED.
POTENTIAL LOCATION FOR NEW RAILING
POTENTIAL LOCATION FOR SEATING AREA.
EXISTING QUAY RETAINED.
POTENTIAL LOCATION FOR NEW RAILING.
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
COLOURED ASPHALT SURFACING TO CYCLE LANES
EXISTING SURFACING TO BE RETAINED
EXISTING CARRIAGEWAY TO BE RETAINED
PROPOSED PLANTING AREAS
PROPOSED HEDGE PLANTING
EXISTING GRASS/PLANTING AREA TO BE RETAINED
EXISTING GRASS/PLANTING AREA TO BE RENEWED
POTENTIAL NEW BOUNDARY FENCE
POTENTIAL NEW RAILING
TACTILE PAVING (CONTROLLED CROSSING)
TACTILE PAVING (UNCONTROLLED CROSSING)
GRAVEL SURFACING
PROPOSED TREE PLANTING
PROPOSED TREE PLANTING WITHIN PLANTER
EXISTING TREE TO BE RETAINED
PROPOSED SPECIMEN SHRUB PLANTING
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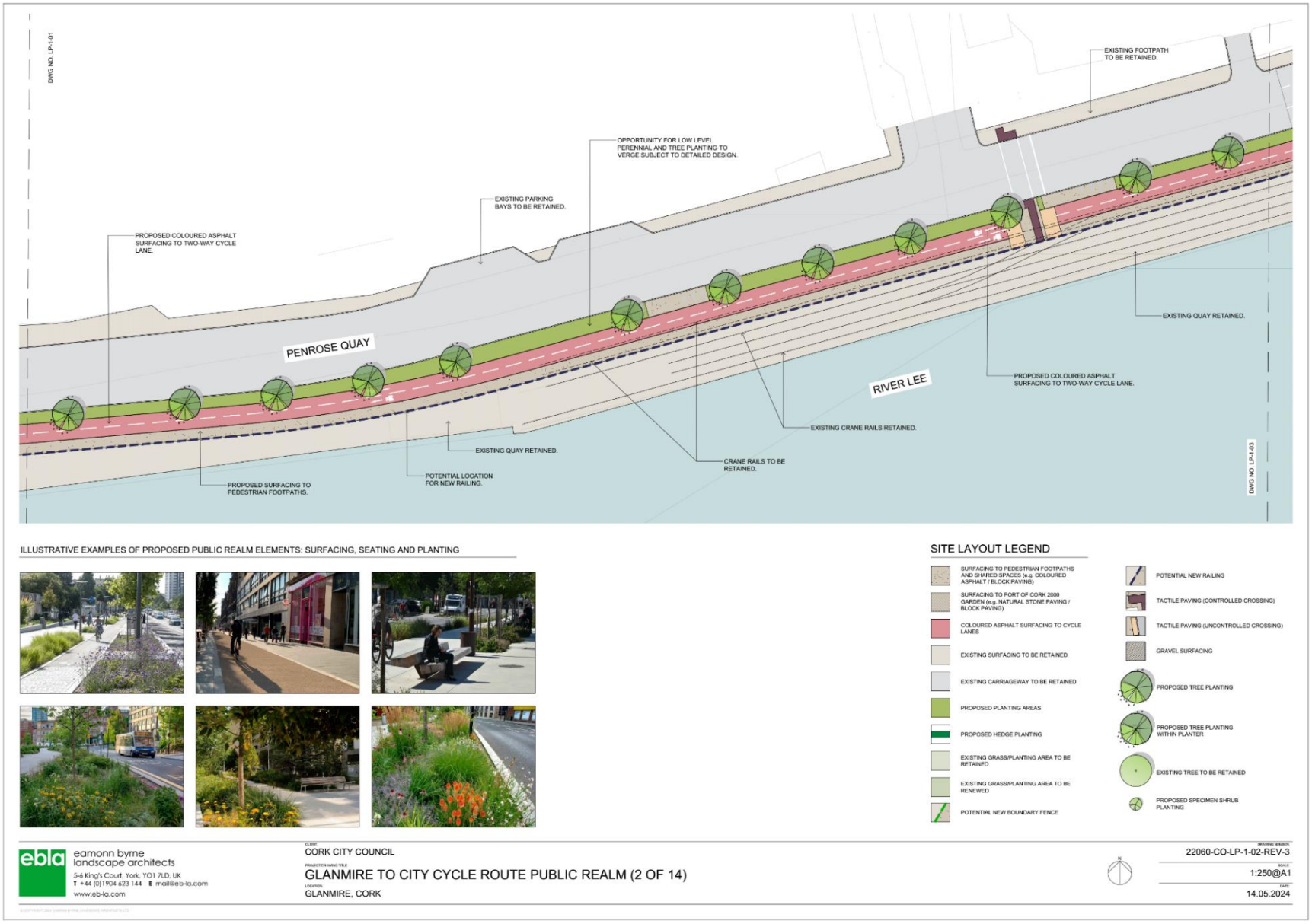
T +44 (0)1904 623 144 E mail@eb-la.com
www.eb-la.com
CLIENT: CORK CITY COUNCIL
PROJECT/DRAWING TITLE: GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (1 OF 14)
LOCATION: GLANMIRE, CORK
DRAWING NUMBER: 22060-CO-LP-1-01-REV-3
SCALE: 1:250@A1
DATE: 14.05.2024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EXISTING FOOTPATH TO BE RETAINED.
OPPORTUNITY FOR LOW LEVEL PERENNIAL AND TREE PLANTING TO VERGE SUBJECT TO DETAILED DESIGN.
EXISTING PARKING BAYS TO BE RETAINED.
PROPOSED COLOURED ASPHALT SURFACING TO TWO-WAY CYCLE LANE.
PENROSE QUAY
EXISTING QUAY RETAINED.
RIVER LEE
PROPOSED COLOURED ASPHALT SURFACING TO TWO-WAY CYCLE LANE.
EXISTING CRANE RAILS RETAINED.
EXISTING QUAY RETAINED.
CRANE RAILS TO BE RETAINED.
POTENTIAL LOCATION FOR NEW RAILING.
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
DWG NO. LP-1-03
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
COLOURED ASPHALT SURFACING TO CYCLE LANES
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EXISTING CARRIAGEWAY TO BE RETAINED
PROPOSED PLANTING AREAS
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POTENTIAL NEW RAILING
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TACTILE PAVING (UNCONTROLLED CROSSING)
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PROJECT/DRAWING TITLE
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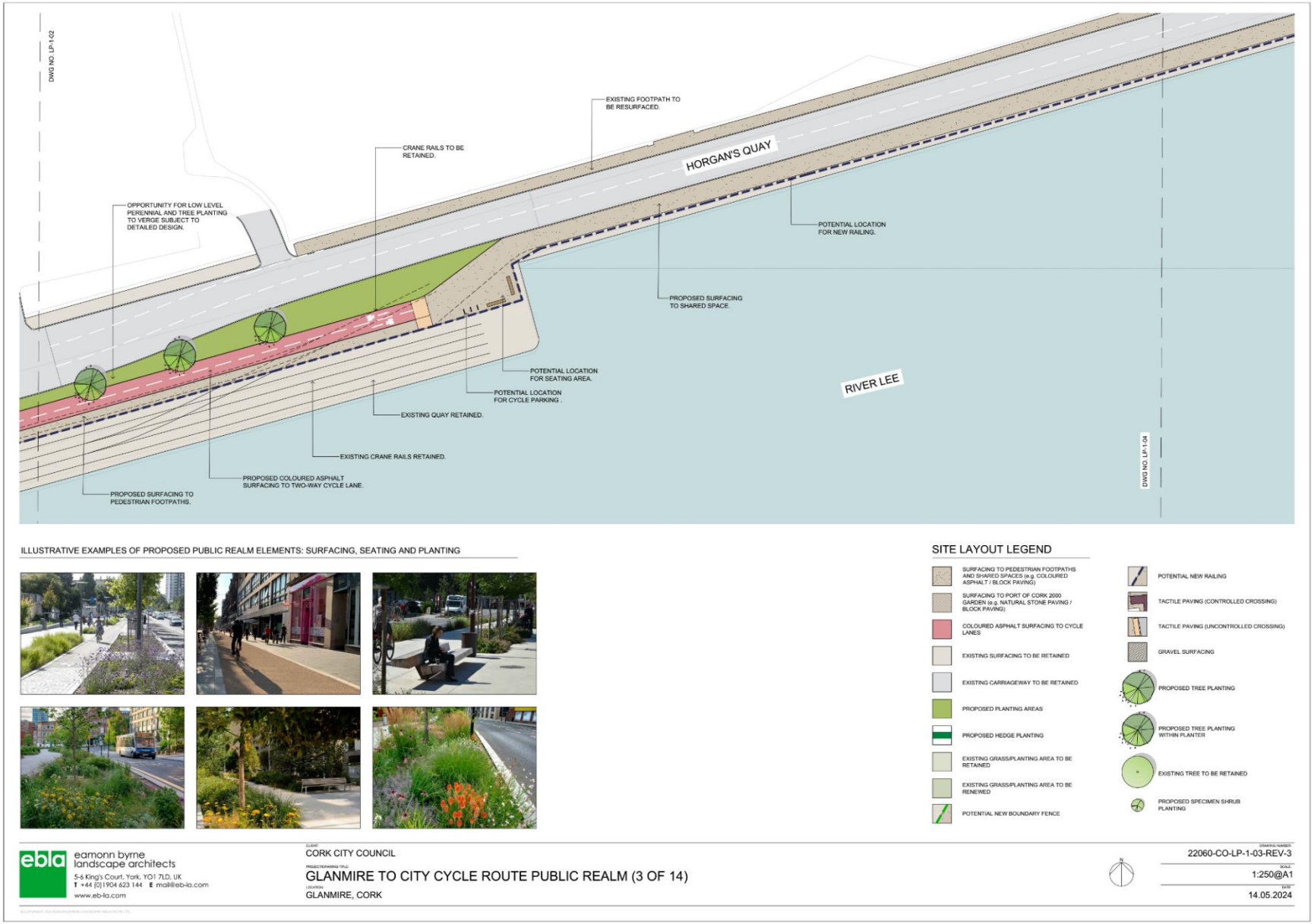
DWG NO. LP-1-02
EXISTING FOOTPATH TO BE RESURFACED.
CRANE RAILS TO BE RETAINED.
HORGAN'S QUAY
OPPORTUNITY FOR LOW LEVEL PERENNIAL AND TREE PLANTING TO VERGE SUBJECT TO DETAILED DESIGN.
POTENTIAL LOCATION FOR NEW RAILING.
PROPOSED SURFACING TO SHARED SPACE.
POTENTIAL LOCATION FOR SEATING AREA.
POTENTIAL LOCATION FOR CYCLE PARKING .
RIVER LEE
EXISTING QUAY RETAINED.
EXISTING CRANE RAILS RETAINED.
PROPOSED COLOURED ASPHALT SURFACING TO TWO-WAY CYCLE LANE.
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
DWG NO. LP-1-04
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
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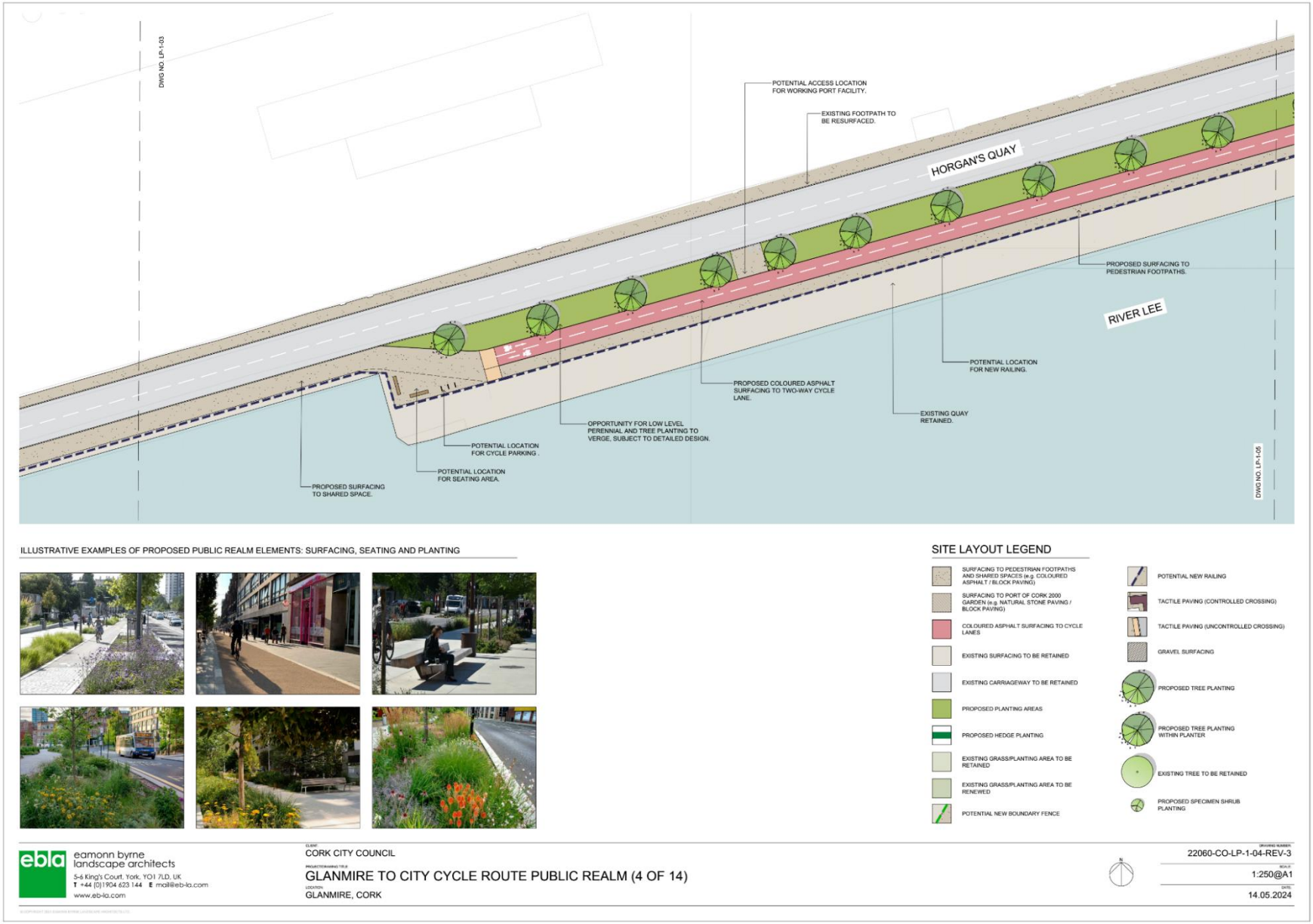
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POTENTIAL ACCESS LOCATION FOR WORKING PORT FACILITY.
EXISTING FOOTPATH TO BE RESURFACED.
HORGAN'S QUAY
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
RIVER LEE
POTENTIAL LOCATION FOR NEW RAILING.
PROPOSED COLOURED ASPHALT SURFACING TO TWO-WAY CYCLE LANE.
EXISTING QUAY RETAINED.
OPPORTUNITY FOR LOW LEVEL PERENNIAL AND TREE PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
POTENTIAL LOCATION FOR CYCLE PARKING .
POTENTIAL LOCATION FOR SEATING AREA.
PROPOSED SURFACING TO SHARED SPACE.
DWG NO. LP-1-05
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
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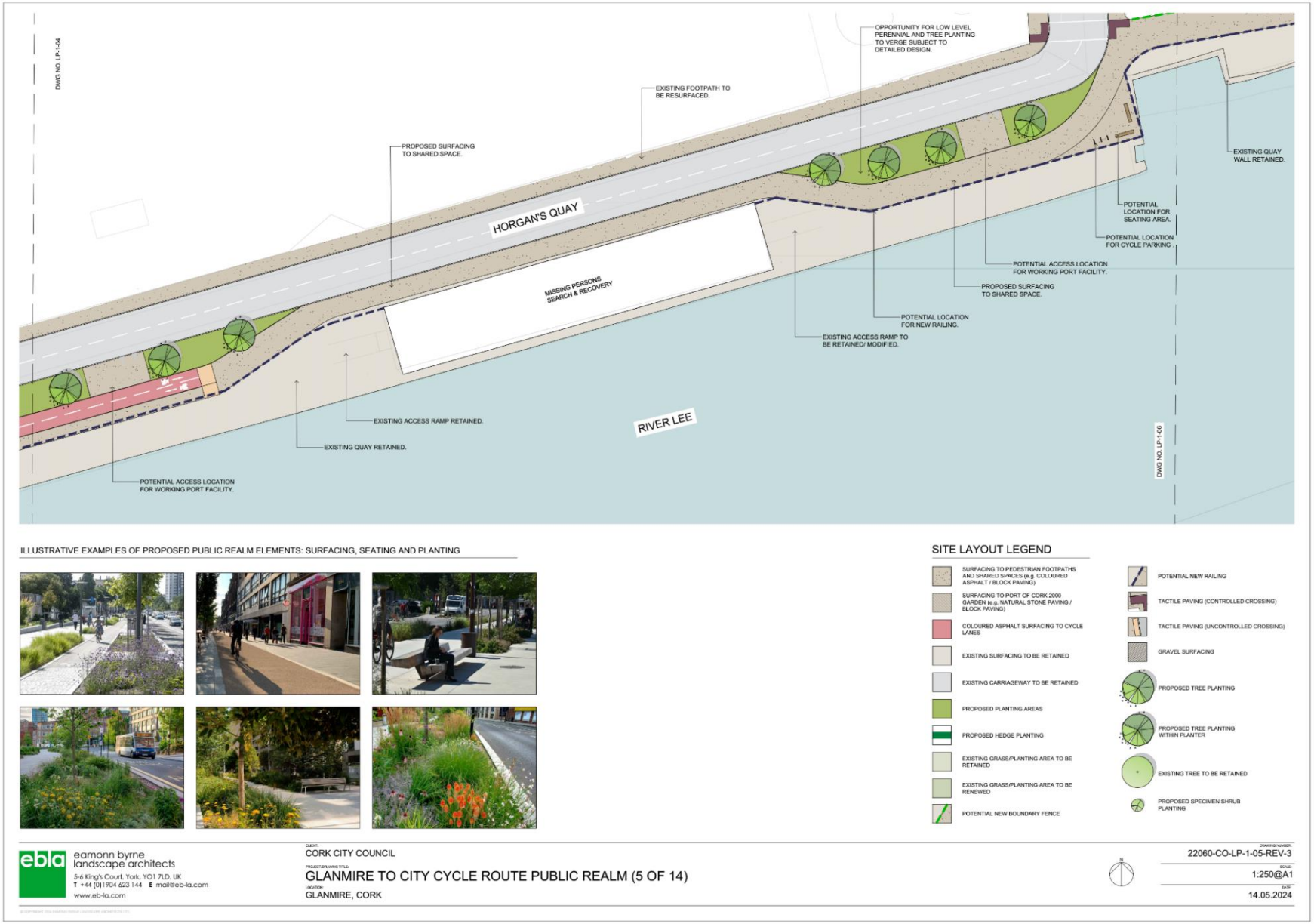
14.05.2024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OPPORTUNITY FOR LOW LEVEL PERENNIAL AND TREE PLANTING TO VERGE SUBJECT TO DETAILED DESIGN.
EXISTING FOOTPATH TO BE RESURFACED.
PROPOSED SURFACING TO SHARED SPACE.
HORGAN'S QUAY
EXISTING QUAY WALL RETAINED.
POTENTIAL LOCATION FOR SEATING AREA.
POTENTIAL LOCATION FOR CYCLE PARKING .
POTENTIAL ACCESS LOCATION FOR WORKING PORT FACILITY.
PROPOSED SURFACING TO SHARED SPACE.
MISSING PERSONS SEARCH & RECOVERY
POTENTIAL LOCATION FOR NEW RAILING.
EXISTING ACCESS RAMP TO BE RETAINED/ MODIFIED.
EXISTING ACCESS RAMP RETAINED.
RIVER LEE
EXISTING QUAY RETAINED.
POTENTIAL ACCESS LOCATION FOR WORKING PORT FACILITY.
DWG NO. LP-1-06
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
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TACTILE PAVING (UNCONTROLLED CROSSING)
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EXISTING TREE TO BE RETAINED
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CLIENT: CORK CITY COUNCIL
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LOCATION: GLANMIRE, CORK
DRAWING NUMBER: 22060-CO-LP-1-05-REV-3
SCALE: 1:250@A1
DATE: 14.05.2024


DWG NO. LP-1-05
EXISTING JETTY STRUCTURE.
PROPOSED BOUNDARY FENCE .
PROPOSED OVERBRIDGE.
EXISTING JETTY STRUCTURE.
DWG NO. LP-1-07
RIVER LEE
PROPOSED BOUNDARY FENCE.
PROPOSED SURFACING TO SHARED SPACE.
POTENTIAL LOCATION FOR NEW RAILING.
EXISTING QUAY WALL RETAINED.
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CLIENT
CORK CITY COUNCIL
PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (6 OF 14)
LOCATION
GLANMIRE, CORK
N
DRAWING NUMBER
22060-CO-LP-1-06-REV-3
SCALE
1:250@A1
DATE
14.05.2024


PROPOSED SURFACING TO SHARED SPACE.
PROPOSED BOUNDARY FENCE.
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
PROPOSED BOUNDARY FENCE.
DWG NO. LP-1-08
EXISTING JETTY STRUCTURE.
PROPOSED BOUNDARY FENCE.
DWG NO. LP-1-06
PROPOSED OVERBRIDGE.
EXISTING JETTY STRUCTURE.
PROPOSED SURFACING TO SHARED SPACE.
POTENTIAL LOCATION FOR NEW RAILING.
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
COLOURED ASPHALT SURFACING TO CYCLE LANES
EXISTING SURFACING TO BE RETAINED
EXISTING CARRIAGEWAY TO BE RETAINED
PROPOSED PLANTING AREAS
PROPOSED HEDGE PLANTING
EXISTING GRASS/PLANTING AREA TO BE RETAINED
EXISTING GRASS/PLANTING AREA TO BE RENEWED
POTENTIAL NEW BOUNDARY FENCE
POTENTIAL NEW RAILING
TACTILE PAVING (CONTROLLED CROSSING)
TACTILE PAVING (UNCONTROLLED CROSSING)
GRAVEL SURFACING
PROPOSED TREE PLANTING
PROPOSED TREE PLANTING WITHIN PLANTER
EXISTING TREE TO BE RETAINED
PROPOSED SPECIMEN SHRUB PLANTING
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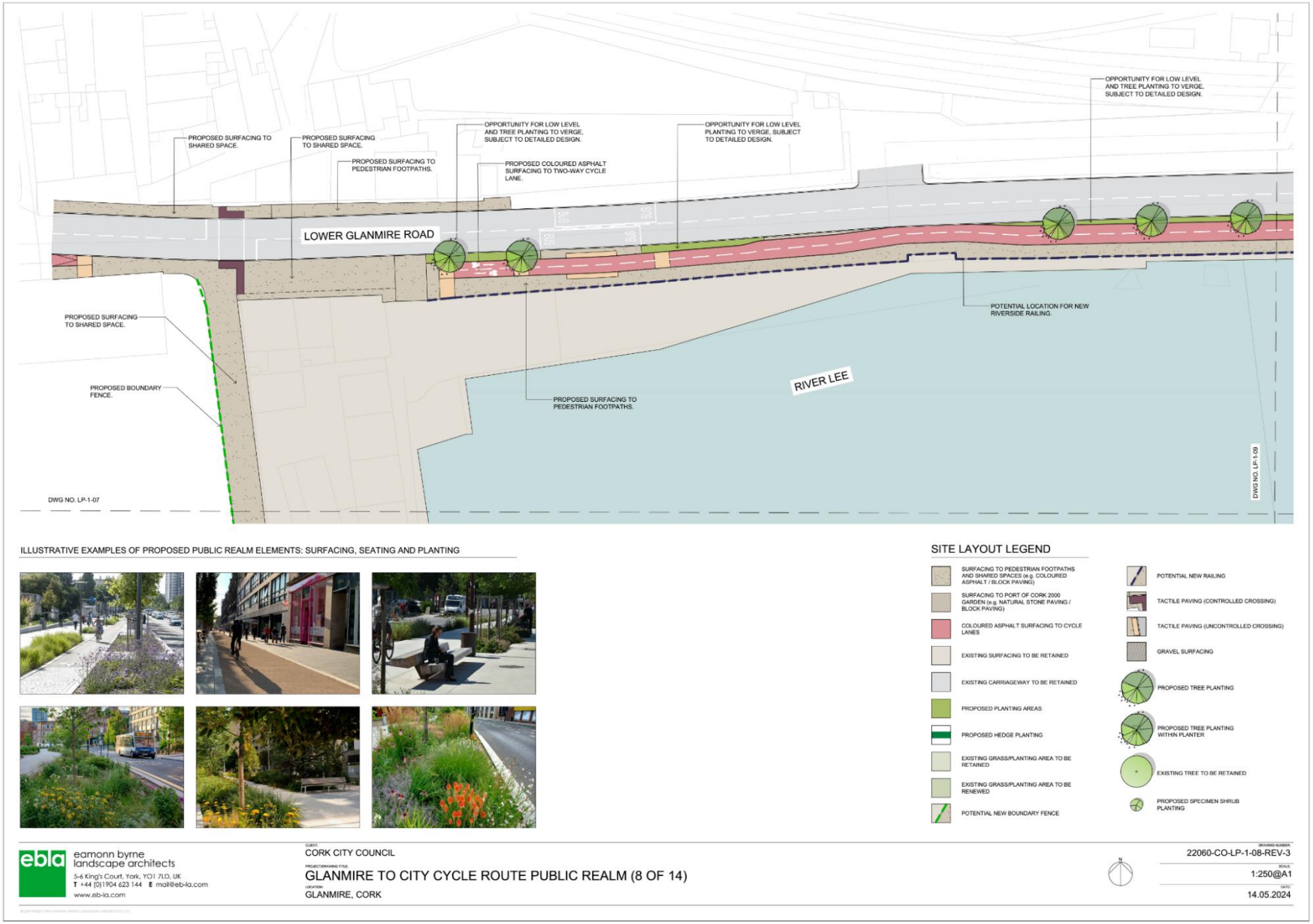
CLIENT
CORK CITY COUNCIL
PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (7 OF 14)
LOCATION
GLANMIRE, CORK
DRAWING NUMBER
22060-CO-LP-1-07-REV-3
SCALE
1:250@A1
DATE
14.05.2024


PROPOSED SURFACING TO SHARED SPACE.
PROPOSED SURFACING TO SHARED SPACE.
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
OPPORTUNITY FOR LOW LEVEL AND TREE PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
PROPOSED COLOURED ASPHALT SURFACING TO TWO-WAY CYCLE LANE.
OPPORTUNITY FOR LOW LEVEL PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
OPPORTUNITY FOR LOW LEVEL AND TREE PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
LOWER GLANMIRE ROAD
PROPOSED SURFACING TO SHARED SPACE.
PROPOSED BOUNDARY FENCE.
POTENTIAL LOCATION FOR NEW RIVERSIDE RAILING.
RIVER LEE
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
DWG NO. LP-1-07
DWG NO. LP-1-09
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
COLOURED ASPHALT SURFACING TO CYCLE LANES
EXISTING SURFACING TO BE RETAINED
EXISTING CARRIAGEWAY TO BE RETAINED
PROPOSED PLANTING AREAS
PROPOSED HEDGE PLANTING
EXISTING GRASS/PLANTING AREA TO BE RETAINED
EXISTING GRASS/PLANTING AREA TO BE RENEWED
POTENTIAL NEW BOUNDARY FENCE
POTENTIAL NEW RAILING
TACTILE PAVING (CONTROLLED CROSSING)
TACTILE PAVING (UNCONTROLLED CROSSING)
GRAVEL SURFACING
PROPOSED TREE PLANTING
PROPOSED TREE PLANTING WITHIN PLANTER
EXISTING TREE TO BE RETAINED
PROPOSED SPECIMEN SHRUB PLANTING
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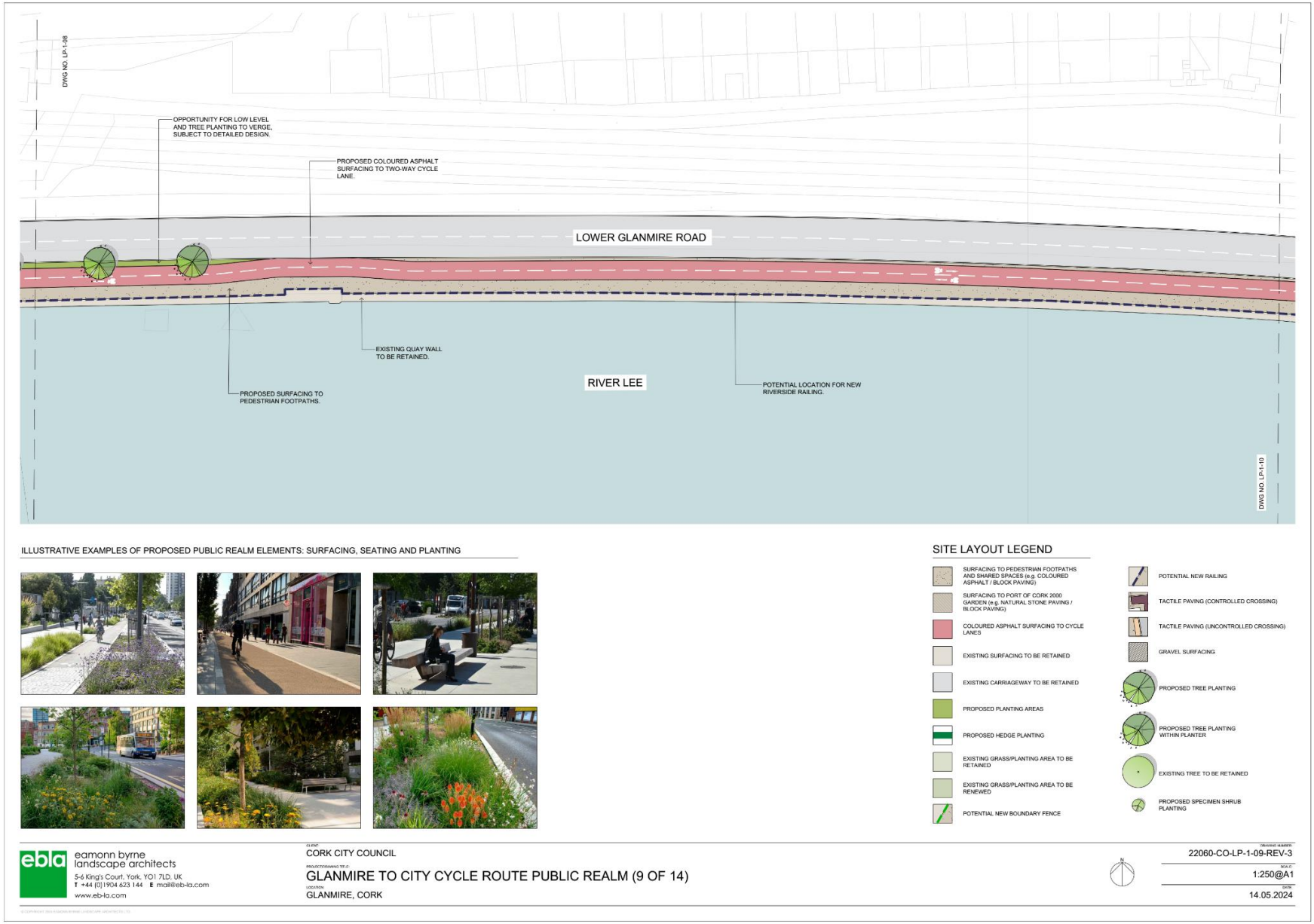
www.eb-la.com
CLIENT
CORK CITY COUNCIL
PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (8 OF 14)
LOCATION
GLANMIRE, CORK
DRAWING NUMBER
22060-CO-LP-1-08-REV-3
SCALE
1:250@A1
DATE
14.05.2024


DWG NO. LP-1-08
OPPORTUNITY FOR LOW LEVEL AND TREE PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
PROPOSED COLOURED ASPHALT SURFACING TO TWO-WAY CYCLE LANE.
LOWER GLANMIRE ROAD
EXISTING QUAY WALL TO BE RETAINED.
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
RIVER LEE
POTENTIAL LOCATION FOR NEW RIVERSIDE RAILING.
DWG NO. LP-1-10
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
COLOURED ASPHALT SURFACING TO CYCLE LANES
EXISTING SURFACING TO BE RETAINED
EXISTING CARRIAGEWAY TO BE RETAINED
PROPOSED PLANTING AREAS
PROPOSED HEDGE PLANTING
EXISTING GRASS/PLANTING AREA TO BE RETAINED
EXISTING GRASS/PLANTING AREA TO BE RENEWED
POTENTIAL NEW BOUNDARY FENCE
POTENTIAL NEW RAILING
TACTILE PAVING (CONTROLLED CROSSING)
TACTILE PAVING (UNCONTROLLED CROSSING)
GRAVEL SURFACING
PROPOSED TREE PLANTING
PROPOSED TREE PLANTING WITHIN PLANTER
EXISTING TREE TO BE RETAINED
PROPOSED SPECIMEN SHRUB PLANTING
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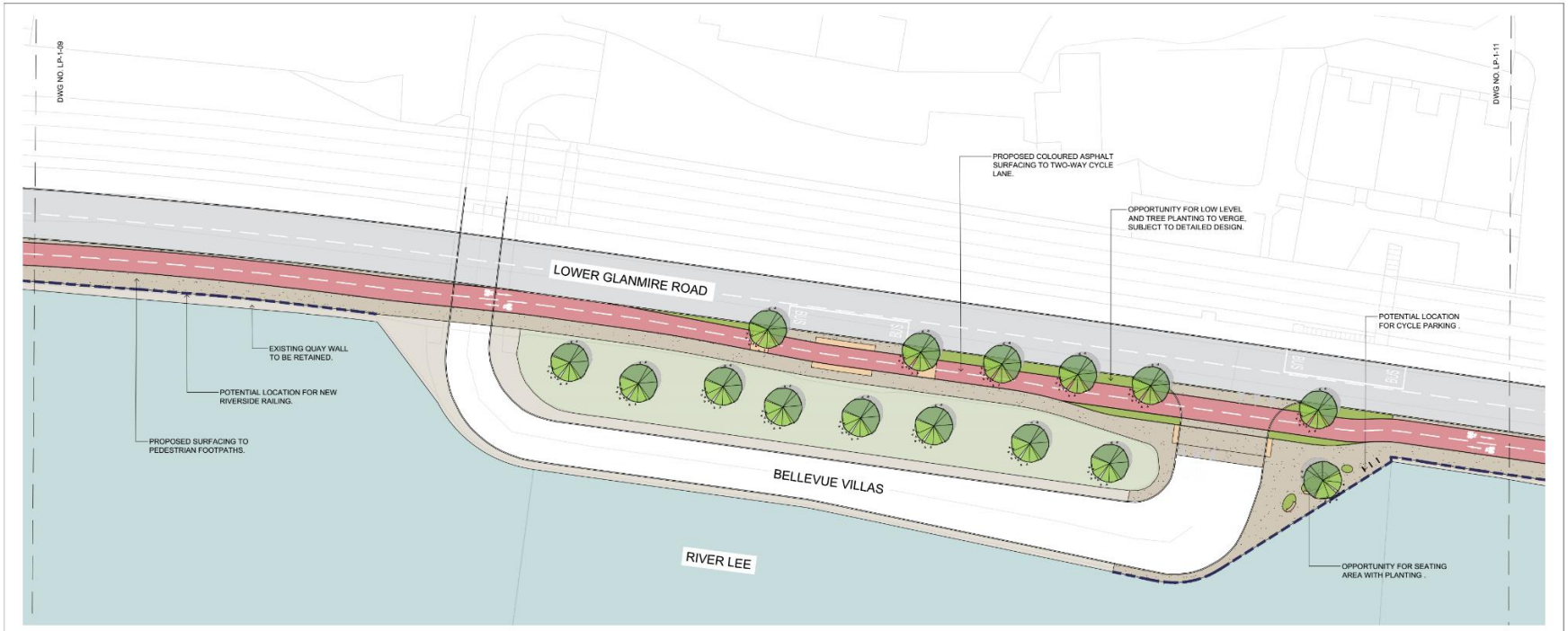
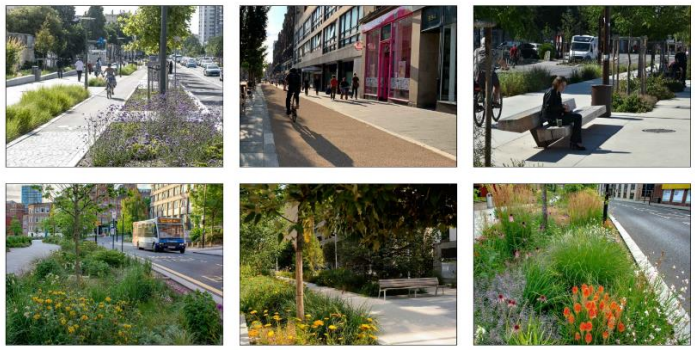
CLIENT
CORK CITY COUNCIL
PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (9 OF 14)
LOCATION
GLANMIRE, CORK
DRAWING NUMBER
22060-CO-LP-1-09-REV-3
SCALE
1:250@A1
DATE
14.05.2024



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



SITE LAYOUT LEGEND

- SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
- SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
- COLOURED ASPHALT SURFACING TO CYCLE LANES
- EXISTING SURFACING TO BE RETAINED
- EXISTING CARRIAGEWAY TO BE RETAINED
- PROPOSED PLANTING AREAS
- PROPOSED HEDGE PLANTING
- EXISTING GRASS/PLANTING AREA TO BE RETAINED
- EXISTING GRASS/PLANTING AREA TO BE RENEWED
- POTENTIAL NEW BOUNDARY FENCE
- POTENTIAL NEW RAILING
- TACTILE PAVING (CONTROLLED CROSSING)
- TACTILE PAVING (UNCONTROLLED CROSSING)
- GRAVEL SURFACING
- PROPOSED TREE PLANTING
- PROPOSED TREE PLANTING WITHIN PLANTER
- EXISTING TREE TO BE RETAINED
- PROPOSED SPECIMEN SHRUB PLANTING

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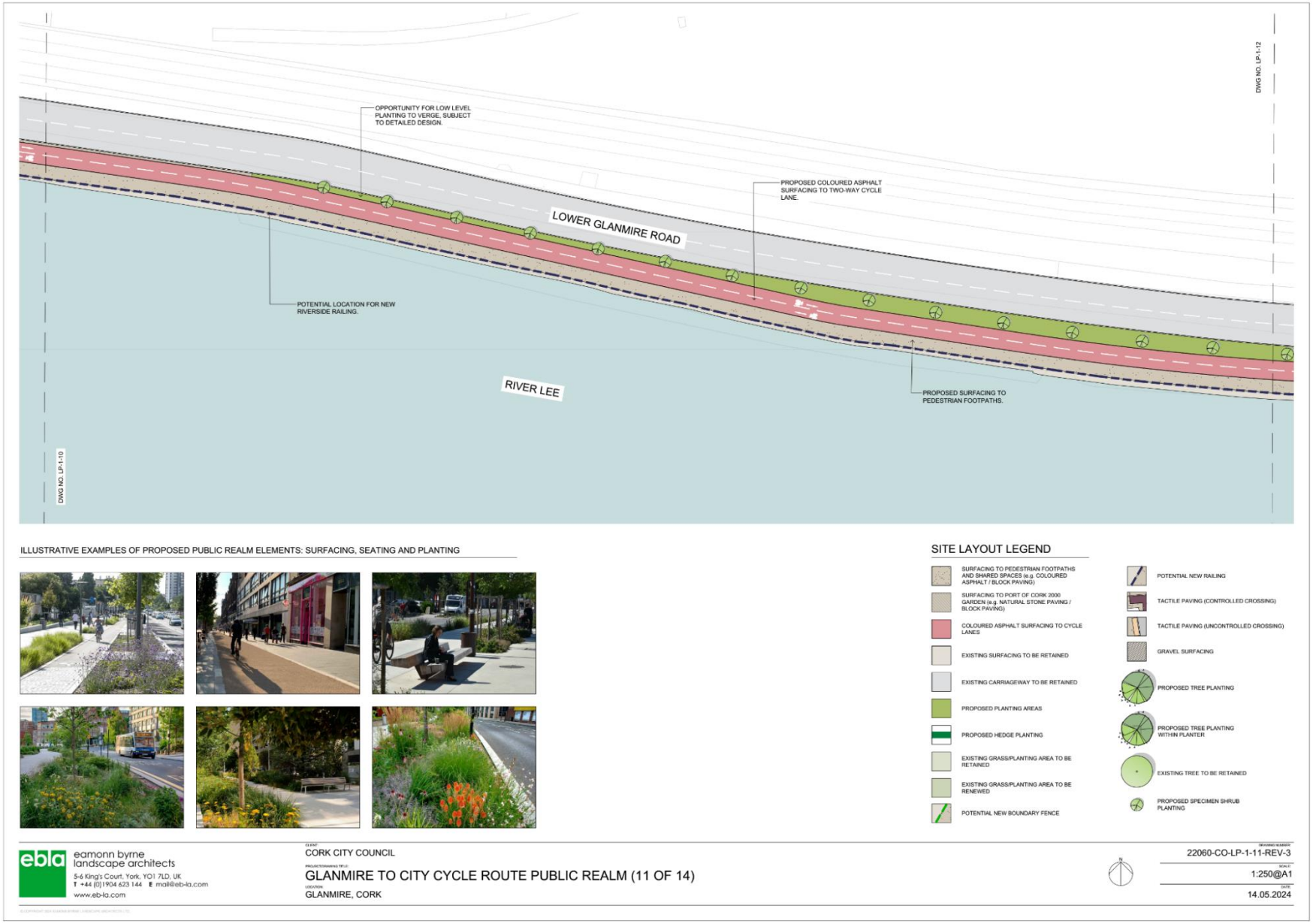
CLIENT: CORK CITY COUNCIL
PROJECT/DRAWING TITLE: GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (10 OF 14)
LOCATION: GLANMIRE, CORK

DRAWING NUMBER: 22060-CO-LP-1-10-REV-3
SCALE: 1:250@A1
DATE: 14.05.2024


OPPORTUNITY FOR LOW LEVEL PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
PROPOSED COLOURED ASPHALT SURFACING TO TWO-WAY CYCLE LANE.
LOWER GLANMIRE ROAD
POTENTIAL LOCATION FOR NEW RIVERSIDE RAILING.
RIVER LEE
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
DWG NO. LP-1-12
DWG NO. LP-1-10
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
COLOURED ASPHALT SURFACING TO CYCLE LANES
EXISTING SURFACING TO BE RETAINED
EXISTING CARRIAGEWAY TO BE RETAINED
PROPOSED PLANTING AREAS
PROPOSED HEDGE PLANTING
EXISTING GRASS/PLANTING AREA TO BE RETAINED
EXISTING GRASS/PLANTING AREA TO BE RENEWED
POTENTIAL NEW BOUNDARY FENCE
POTENTIAL NEW RAILING
TACTILE PAVING (CONTROLLED CROSSING)
TACTILE PAVING (UNCONTROLLED CROSSING)
GRAVEL SURFACING
PROPOSED TREE PLANTING
PROPOSED TREE PLANTING WITHIN PLANTER
EXISTING TREE TO BE RETAINED
PROPOSED SPECIMEN SHRUB PLANTING
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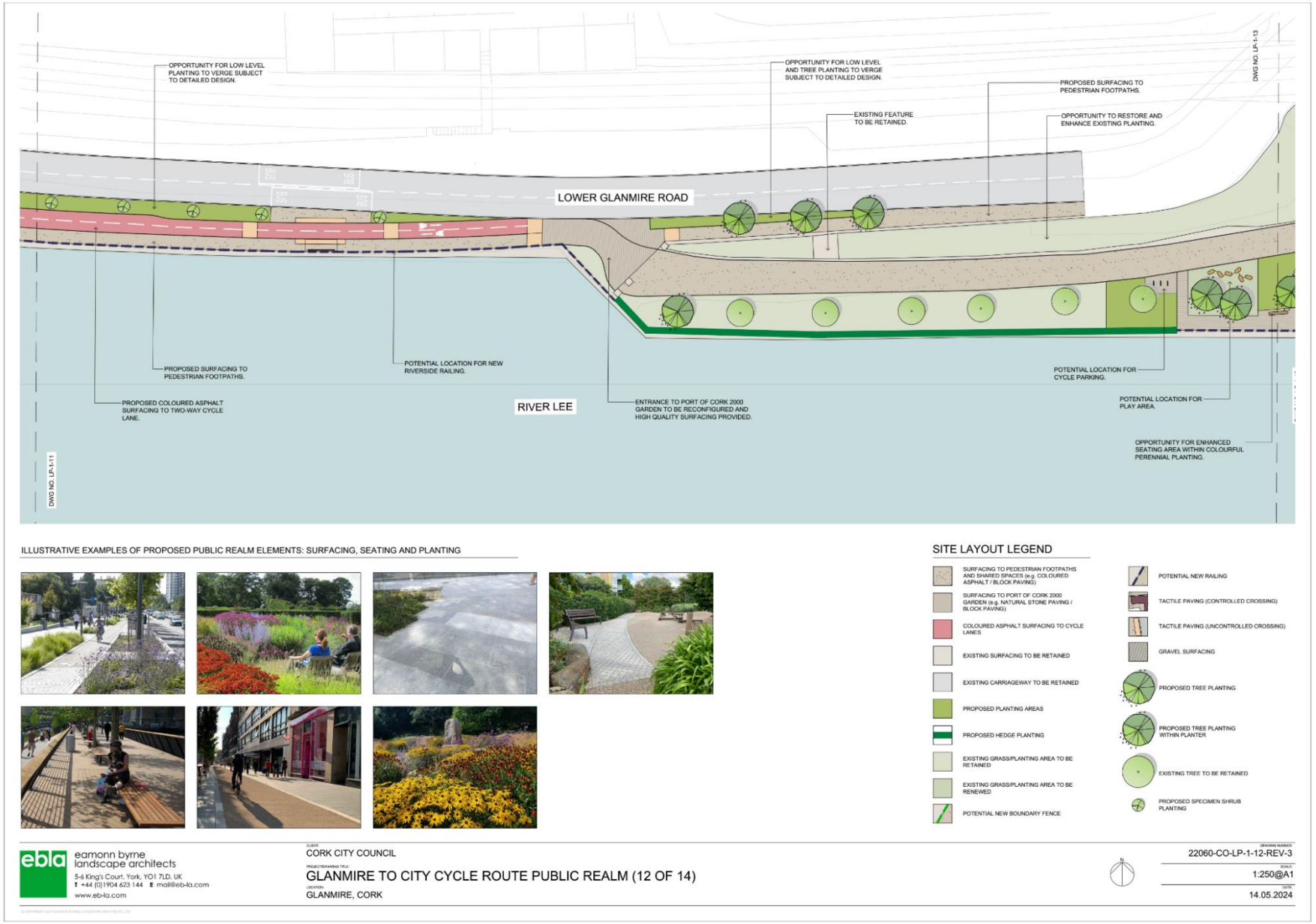
CLIENT
CORK CITY COUNCIL
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (11 OF 14)
LOCATION
GLANMIRE, CORK
DRAWING NUMBER
22060-CO-LP-1-11-REV-3
SCALE
1:250@A1
DATE
14.05.2024


OPPORTUNITY FOR LOW LEVEL PLANTING TO VERGE SUBJECT TO DETAILED DESIGN.
OPPORTUNITY FOR LOW LEVEL AND TREE PLANTING TO VERGE SUBJECT TO DETAILED DESIGN.
EXISTING FEATURE TO BE RETAINED.
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
OPPORTUNITY TO RESTORE AND ENHANCE EXISTING PLANTING.
DWG NO. LP-1-13
LOWER GLANMIRE ROAD
PROPOSED SURFACING TO PEDESTRIAN FOOTPATHS.
POTENTIAL LOCATION FOR NEW RIVERSIDE RAILING.
POTENTIAL LOCATION FOR CYCLE PARKING.
PROPOSED COLOURED ASPHALT SURFACING TO TWO-WAY CYCLE LANE.
RIVER LEE
ENTRANCE TO PORT OF CORK 2000 GARDEN TO BE RECONFIGURED AND HIGH QUALITY SURFACING PROVIDED.
POTENTIAL LOCATION FOR PLAY AREA.
OPPORTUNITY FOR ENHANCED SEATING AREA WITHIN COLOURFUL PERENNIAL PLANTING.
DWG NO. LP-1-11
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
COLOURED ASPHALT SURFACING TO CYCLE LANES
EXISTING SURFACING TO BE RETAINED
EXISTING CARRIAGEWAY TO BE RETAINED
PROPOSED PLANTING AREAS
PROPOSED HEDGE PLANTING
EXISTING GRASS/PLANTING AREA TO BE RETAINED
EXISTING GRASS/PLANTING AREA TO BE RENEWED
POTENTIAL NEW BOUNDARY FENCE
POTENTIAL NEW RAILING
TACTILE PAVING (CONTROLLED CROSSING)
TACTILE PAVING (UNCONTROLLED CROSSING)
GRAVEL SURFACING
PROPOSED TREE PLANTING
PROPOSED TREE PLANTING WITHIN PLANTER
EXISTING TREE TO BE RETAINED
PROPOSED SPECIMEN SHRUB PLANTING
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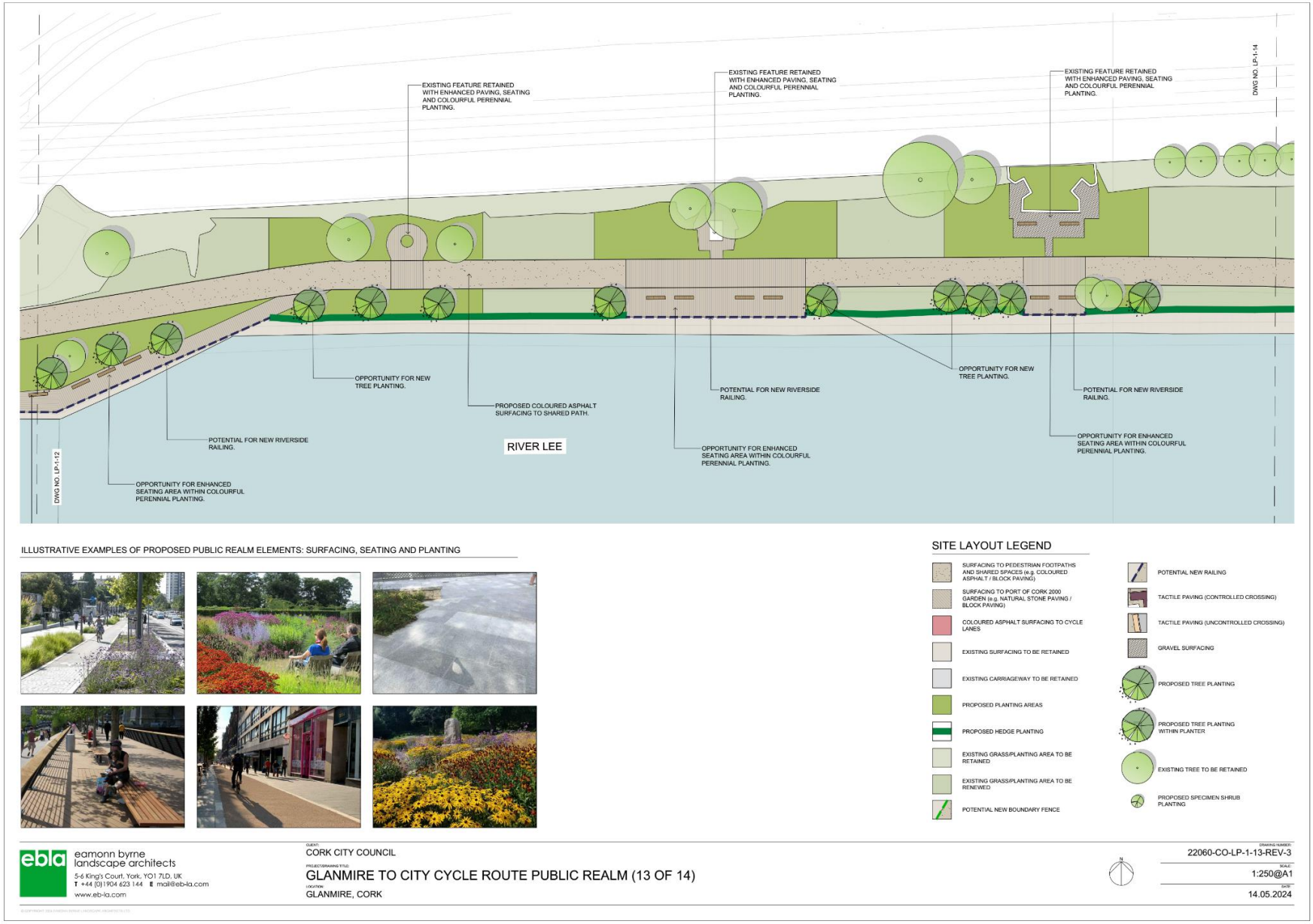
CLIENT
CORK CITY COUNCIL
PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (12 OF 14)
LOCATION
GLANMIRE, CORK
DRAWING NUMBER
22060-CO-LP-1-12-REV-3
SCALE
1:250@A1
DATE
14.05.2024


EXISTING FEATURE RETAINED WITH ENHANCED PAVING, SEATING AND COLOURFUL PERENNIAL PLANTING.
EXISTING FEATURE RETAINED WITH ENHANCED PAVING, SEATING AND COLOURFUL PERENNIAL PLANTING.
EXISTING FEATURE RETAINED WITH ENHANCED PAVING, SEATING AND COLOURFUL PERENNIAL PLANTING.
DWG NO. LP-1-14
OPPORTUNITY FOR NEW TREE PLANTING.
PROPOSED COLOURED ASPHALT SURFACING TO SHARED PATH.
POTENTIAL FOR NEW RIVERSIDE RAILING.
RIVER LEE
OPPORTUNITY FOR ENHANCED SEATING AREA WITHIN COLOURFUL PERENNIAL PLANTING.
POTENTIAL FOR NEW RIVERSIDE RAILING.
OPPORTUNITY FOR NEW TREE PLANTING.
POTENTIAL FOR NEW RIVERSIDE RAILING.
OPPORTUNITY FOR ENHANCED SEATING AREA WITHIN COLOURFUL PERENNIAL PLANTING.
DWG NO. LP-1-12
OPPORTUNITY FOR ENHANCED SEATING AREA WITHIN COLOURFUL PERENNIAL PLANTING.
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
COLOURED ASPHALT SURFACING TO CYCLE LANES
EXISTING SURFACING TO BE RETAINED
EXISTING CARRIAGEWAY TO BE RETAINED
PROPOSED PLANTING AREAS
PROPOSED HEDGE PLANTING
EXISTING GRASS/PLANTING AREA TO BE RETAINED
EXISTING GRASS/PLANTING AREA TO BE RENEWED
POTENTIAL NEW BOUNDARY FENCE
POTENTIAL NEW RAILING
TACTILE PAVING (CONTROLLED CROSSING)
TACTILE PAVING (UNCONTROLLED CROSSING)
GRAVEL SURFACING
PROPOSED TREE PLANTING
PROPOSED TREE PLANTING WITHIN PLANTER
EXISTING TREE TO BE RETAINED
PROPOSED SPECIMEN SHRUB PLANTING
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CLIENT
CORK CITY COUNCIL
PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (13 OF 14)
LOCATION
GLANMIRE, CORK
N
DRAWING NUMBER
22060-CO-LP-1-13-REV-3
SCALE
1:250@A1
DATE
14.05.2024


EXISTING TREES RETAINED.
EXISTING CAR PARKING TO BE REMOVED.
EXISTING FEATURE RETAINED AND PAVING ENHANCED.
EXISTING CAR PARKING TO BE REMOVED.
PROPOSED REINFORCED GRASS AREA TO THE ENTRANCE.
EXISTING TREES RETAINED.
RIVER LEE
DWG NO. LP-1-13
PROPOSED COLOURED ASPHALT SURFACING TO SHARED PATH.
OPPORTUNITY FOR COLOURFUL PERENNIAL PLANTING AROUND FEATURE.
POTENTIAL FOR NEW RIVERSIDE RAILING.
OPPORTUNITY FOR ENHANCED SEATING AREA.
POTENTIAL LOCATION FOR CYCLE PARKING.
OPPORTUNITY FOR SEGREGATED PARKING AREA FOR PORT OF CORK 2000 GARDEN VISITORS.
OPPORTUNITY FOR NEW TREE PLANTING.
ENTRANCE TO PORT OF CORK 2000 GARDEN TO BE RECONFIGURED (INCLUDING SEPARATE CAR PARK ACCESS) AND HIGH QUALITY SURFACING TO BE PROVIDED.
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING, SEATING AND PLANTING
SITE LAYOUT LEGEND
SURFACING TO PEDESTRIAN FOOTPATHS AND SHARED SPACES (e.g. COLOURED ASPHALT / BLOCK PAVING)
SURFACING TO PORT OF CORK 2000 GARDEN (e.g. NATURAL STONE PAVING / BLOCK PAVING)
COLOURED ASPHALT SURFACING TO CYCLE LANES
EXISTING SURFACING TO BE RETAINED
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PROPOSED PLANTING AREAS
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EXISTING GRASS/PLANTING AREA TO BE RENEWED
POTENTIAL NEW BOUNDARY FENCE
POTENTIAL NEW RAILING
TACTILE PAVING (CONTROLLED CROSSING)
TACTILE PAVING (UNCONTROLLED CROSSING)
GRAVEL SURFACING
PROPOSED TREE PLANTING
PROPOSED TREE PLANTING WITHIN PLANTER
EXISTING TREE TO BE RETAINED
PROPOSED SPECIMEN SHRUB PLANTING
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CLIENT
CORK CITY COUNCIL
PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (14 OF 14)
LOCATION
GLANMIRE, CORK
N
DRAWING NUMBER
22060-CO-LP-1-14-REV-3
SCALE
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DATE
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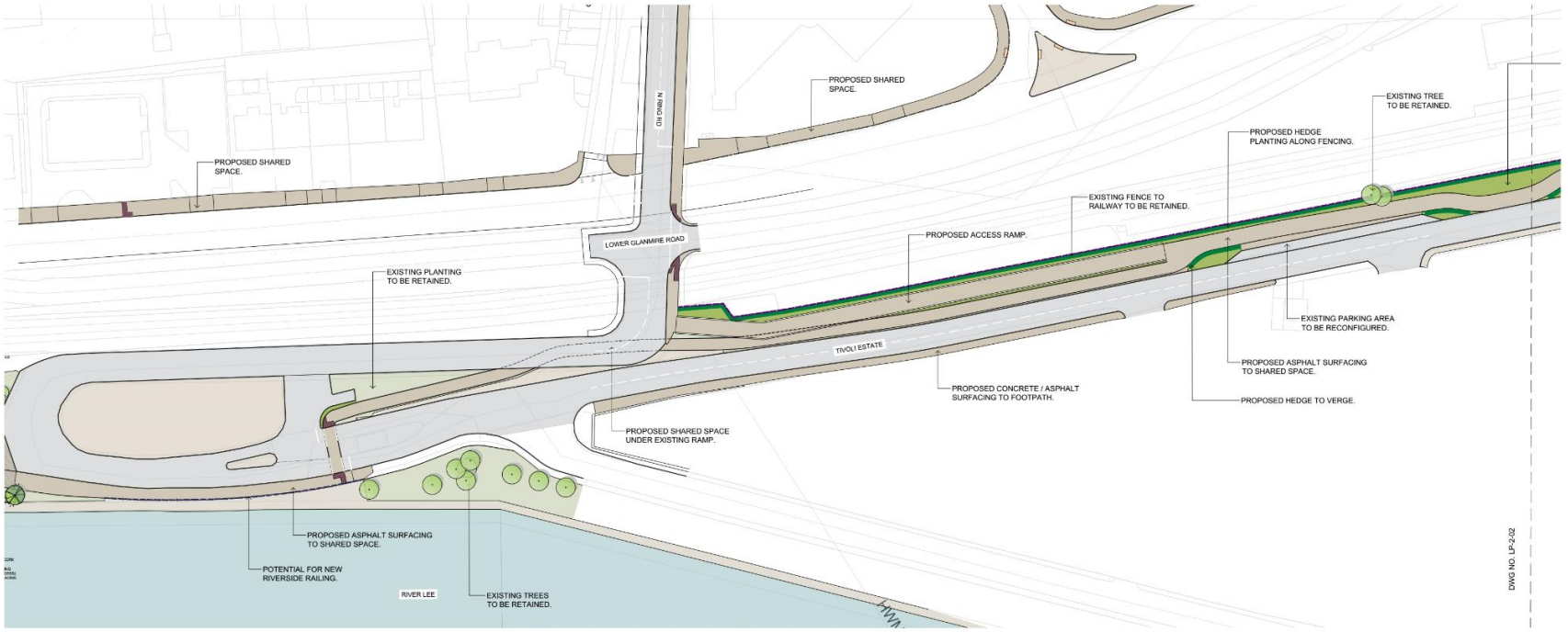

ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING AND PLANTING

SITE LAYOUT LEGEND

- PROPOSED ASPHALT / CONCRETE SURFACING
- EXISTING CONCRETE SURFACING TO BE RETAINED
- EXISTING CARRIAGEWAY TO BE RETAINED
- PROPOSED PLANTING AREAS
- PROPOSED HEDGE PLANTING
- EXISTING GRASS / PLANTING AREA TO BE RETAINED
- POTENTIAL NEW RAILING
- EXISTING FENCING TO BE RETAINED
- TACTILE PAVING (CONTROLLED CROSSING)
- TACTILE PAVING (UNCONTROLLED CROSSING)
- PROPOSED TREE PLANTING
- EXISTING TREE TO BE RETAINED

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CLIENT
CORK CITY COUNCIL

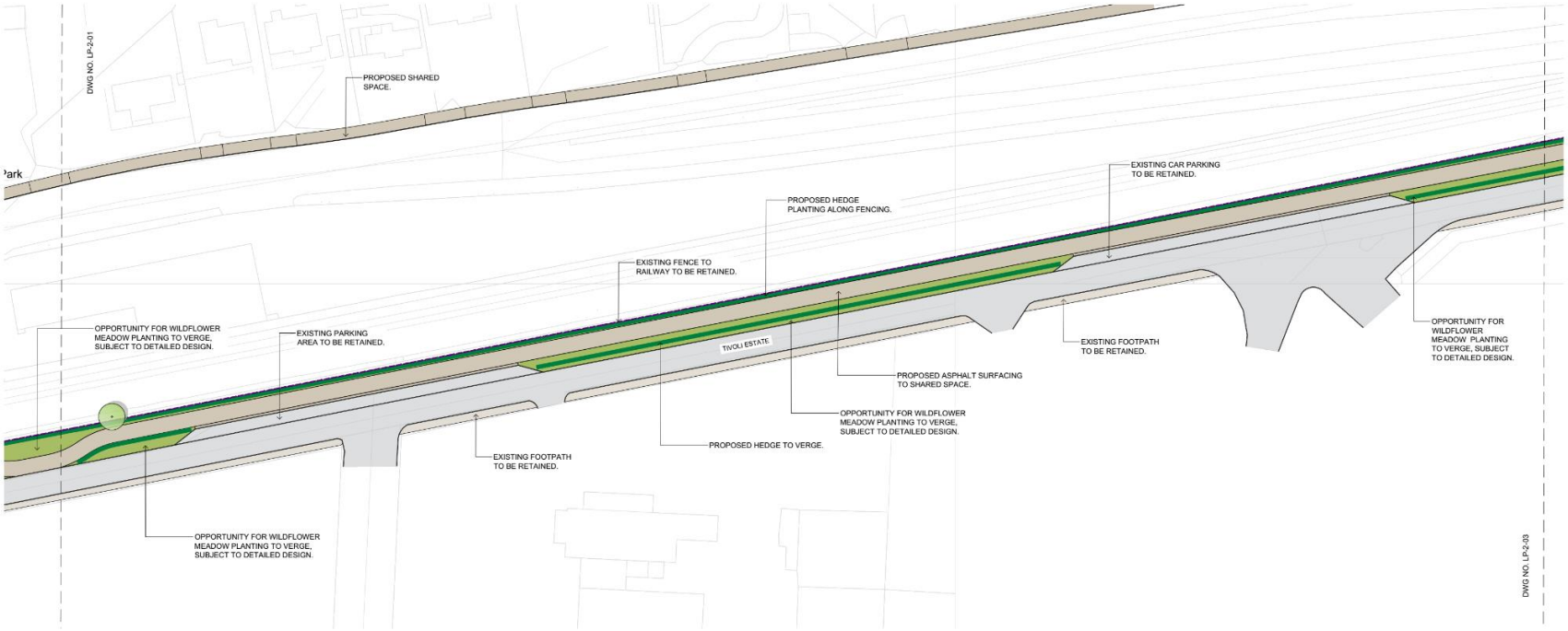
PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (1 OF 6)

LOCATION
GLANMIRE, CORK

PROJECT NUMBER
22060-CO-LP-2-01-REV-3

SCALE
1:500@A1

DATE
14.05.2024



ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING AND PLANTING



SITE LAYOUT LEGEND

- PROPOSED ASPHALT / CONCRETE SURFACING
- EXISTING CONCRETE SURFACING TO BE RETAINED
- EXISTING CARRIAGEWAY TO BE RETAINED
- PROPOSED PLANTING AREAS
- PROPOSED HEDGE PLANTING
- EXISTING GRASS / PLANTING AREA TO BE RETAINED
- POTENTIAL NEW RAILING
- EXISTING FENCING TO BE RETAINED
- TACTILE PAVING (CONTROLLED CROSSING)
- TACTILE PAVING (UNCONTROLLED CROSSING)
- PROPOSED TREE PLANTING
- EXISTING TREE TO BE RETAINED

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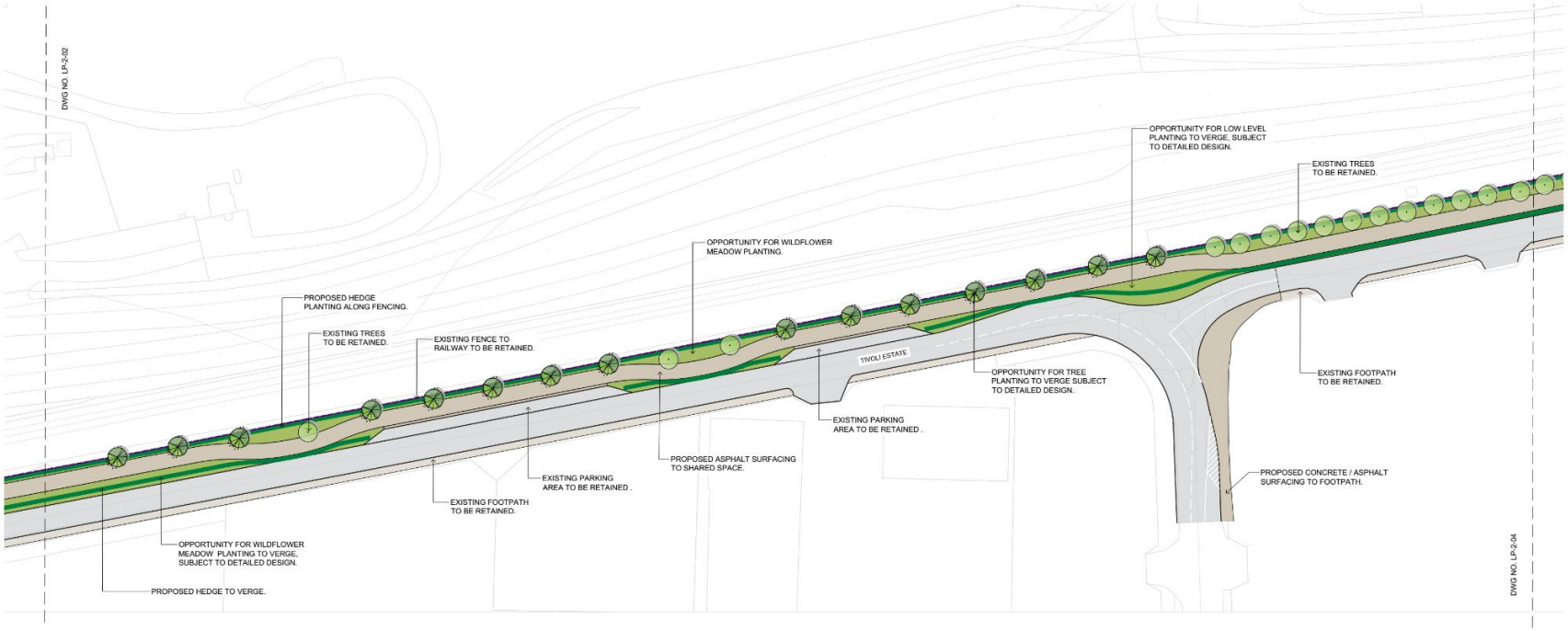
CLIENT: CORK CITY COUNCIL
PROJECT/Drawing TITLE: GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (2 OF 6)
LOCATION: GLANMIRE, CORK
DRAWING NUMBER: 22060-CO-LP-2-02-REV-3
SCALE: 1:500@A1
DATE: 14.05.2024



ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING AND PLANTING



SITE LAYOUT LEGEND

- PROPOSED ASPHALT / CONCRETE SURFACING
- EXISTING CONCRETE SURFACING TO BE RETAINED
- EXISTING CARRIAGEWAY TO BE RETAINED
- PROPOSED PLANTING AREAS
- PROPOSED HEDGE PLANTING
- EXISTING GRASS / PLANTING AREA TO BE RETAINED
- POTENTIAL NEW RAILING
- EXISTING FENCING TO BE RETAINED
- TACTILE PAVING (CONTROLLED CROSSING)
- TACTILE PAVING (UNCONTROLLED CROSSING)
- PROPOSED TREE PLANTING
- EXISTING TREE TO BE RETAINED

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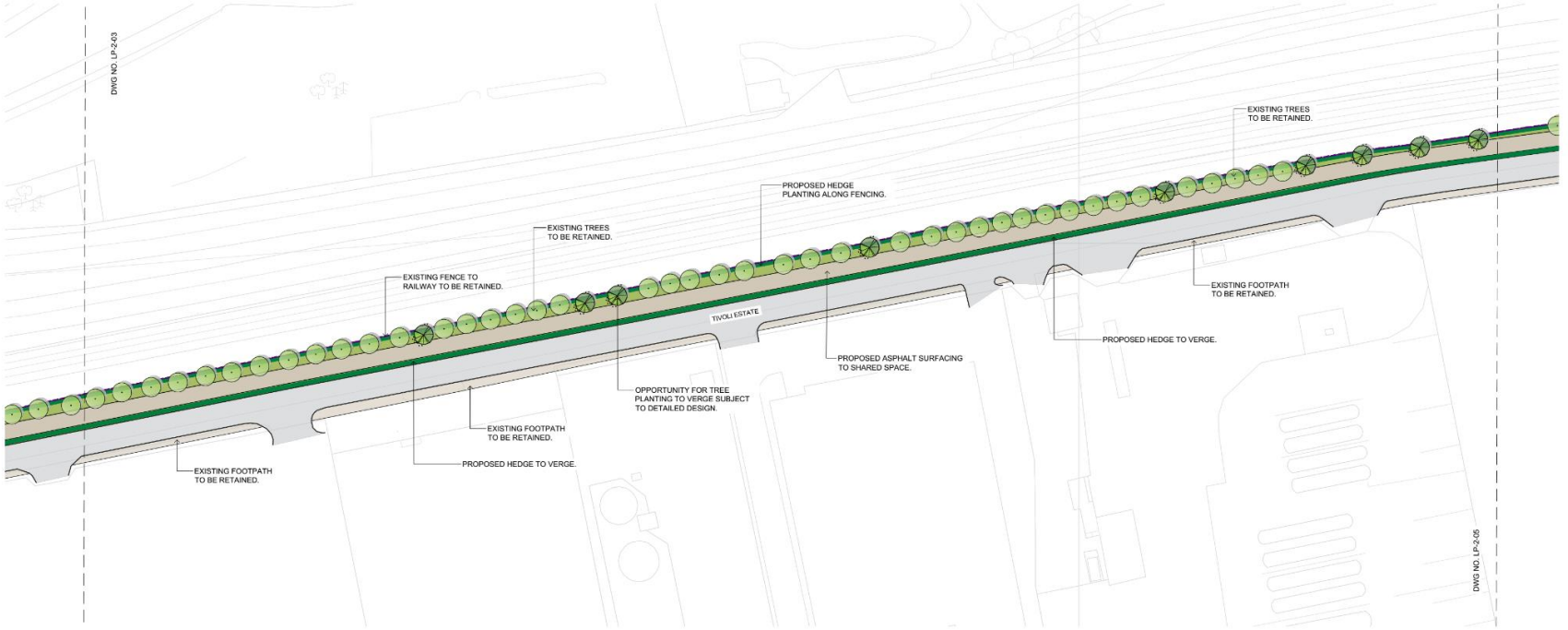
CLIENT: CORK CITY COUNCIL
PROJECT/DRAWING TITLE: GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (3 OF 6)
LOCATION: GLANMIRE, CORK

DRAWING NUMBER: 22060-CO-LP-2-03-REV-3
SCALE: 1:500@A1
DATE: 14.05.2024



ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING AND PLANTING



SITE LAYOUT LEGEND

- PROPOSED ASPHALT / CONCRETE SURFACING
- EXISTING CONCRETE SURFACING TO BE RETAINED
- EXISTING CARRIAGEWAY TO BE RETAINED
- PROPOSED PLANTING AREAS
- PROPOSED HEDGE PLANTING
- EXISTING GRASS / PLANTING AREA TO BE RETAINED
- POTENTIAL NEW RAILING
- EXISTING FENCING TO BE RETAINED
- TACTILE PAVING (CONTROLLED CROSSING)
- TACTILE PAVING (UNCONTROLLED CROSSING)
- PROPOSED TREE PLANTING
- EXISTING TREE TO BE RETAINED

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CLIENT: CORK CITY COUNCIL

PROJECT/DRAWING TITLE: GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (4 OF 6)

LOCATION: GLANMIRE, CORK

DRAWING NUMBER: 22060-CO-LP-2-04-REV-3

SCALE: 1:500@A1

DATE: 14.05.2024


DWG NO. LP-2-04
OPPORTUNITY FOR HEDGE PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
PROPOSED OVERBRIDGE.
OPPORTUNITY FOR TREE PLANTING TO VERGE SUBJECT TO DETAILED DESIGN.
PROPOSED HEDGE PLANTING ALONG FENCING.
TIVOLI ESTATE
OPPORTUNITY FOR LOW LEVEL PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
PROPOSED ASPHALT SURFACING TO SHARED SPACE.
EXISTING FOOTPATH TO BE RETAINED.
EXISTING FOOTPATH TO BE RETAINED.
OPPORTUNITY FOR WILD FLOWER MEADOW PLANTING TO VERGE, SUBJECT TO DETAILED DESIGN.
PROPOSED HEDGE TO VERGE.
DWG NO. LP-2-06
ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING AND PLANTING
SITE LAYOUT LEGEND
PROPOSED ASPHALT / CONCRETE SURFACING
EXISTING CONCRETE SURFACING TO BE RETAINED
EXISTING CARRIAGEWAY TO BE RETAINED
PROPOSED PLANTING AREAS
PROPOSED HEDGE PLANTING
EXISTING GRASS / PLANTING AREA TO BE RETAINED
POTENTIAL NEW RAILING
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TACTILE PAVING (CONTROLLED CROSSING)
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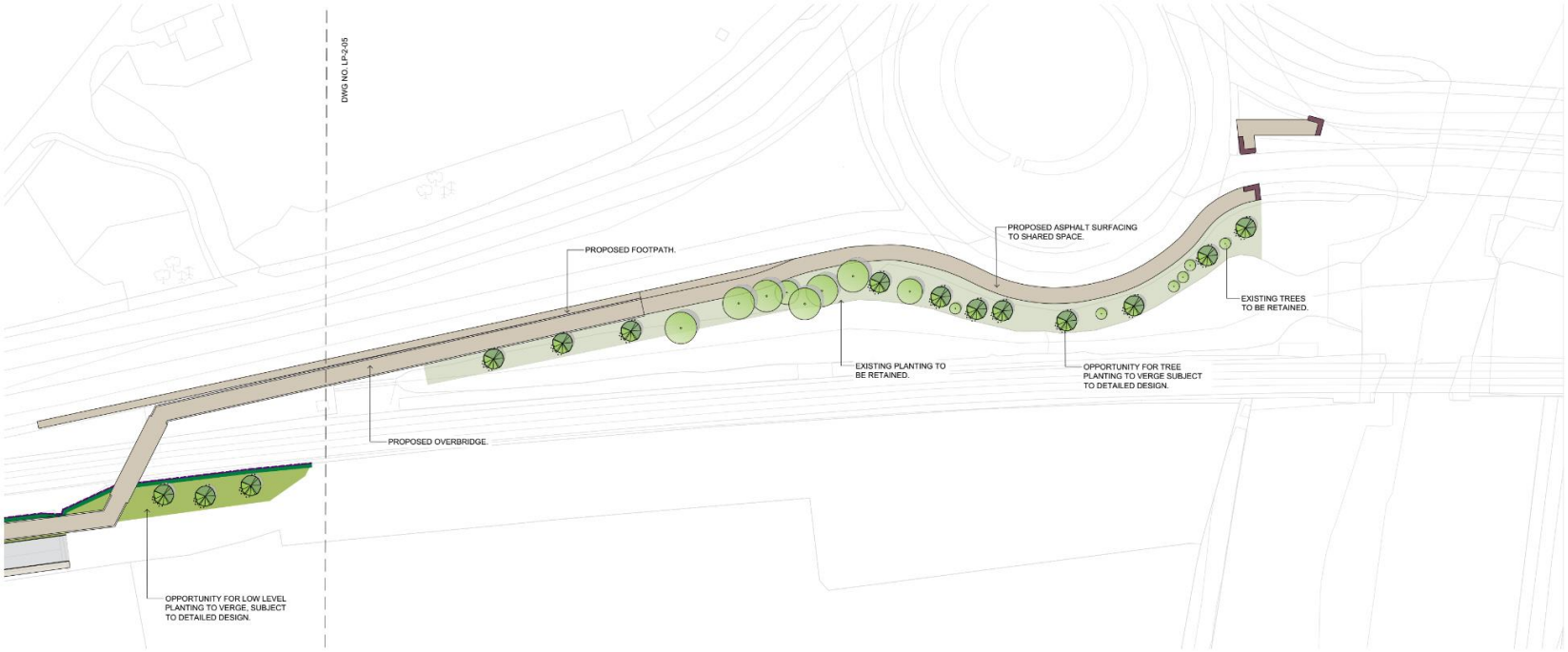
CLIENT
CORK CITY COUNCIL
PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (5 OF 6)
LOCATION
GLANMIRE, CORK
DRAWING NUMBER
22060-CO-LP-2-05-REV-3
SCALE
1:500@A1
DATE
14.05.2024



ILLUSTRATIVE EXAMPLES OF PROPOSED PUBLIC REALM ELEMENTS: SURFACING AND PLANTING



SITE LAYOUT LEGEND

- PROPOSED ASPHALT / CONCRETE SURFACING
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CLIENT
CORK CITY COUNCIL

PROJECT/DRAWING TITLE
GLANMIRE TO CITY CYCLE ROUTE PUBLIC REALM (6 OF 6)

LOCATION
GLANMIRE, CORK

DRAWING NUMBER
22060-CO-LP-2-06-REV-3

SCALE
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DATE
14.05.2024

2. Scope of Study

This report comprises the Appropriate Assessment Screening Report in respect of the proposed works intended to provide supporting information to assist Cork City Council, in its capacity as the competent authority, in making its Appropriate Assessment Screening Determination in respect of the proposed works.

2.1. Legislative Context

2.1.1. Natura 2000

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive") is a legislative instrument of the European Union (EU) which provides legal protection for habitats and species of Community interest. Article 2 of the Directive requires the maintenance or restoration of such habitats and species at a favourable conservation status, while Articles 3 to 9, inclusive, provide for the establishment and conservation of an EU-wide network of special areas of conservation (SACs), known as Natura 2000, which also includes special protection areas (SPAs) designated under Article 4 of Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds ("the Birds Directive"). Both SACs and SPAs are commonly referred to as "European sites" or "Natura 2000 sites".

SACs are selected for natural habitat types listed on Annex I to the Habitats Directive and the habitats of species listed on Annex II to the Habitats Directive. SPAs are selected for species listed on Annex I to the Birds Directive and other regularly occurring migratory species. The habitats and species for which a Natura 2000 site is selected are referred to as the "qualifying interests" of that site and each is assigned a "conservation objective" aimed at maintaining or restoring its "favourable conservation condition" at the site, which contributes to the maintenance or restoration of its "favourable conservation status" at national and European levels.

2.1.2. Appropriate Assessment

Article 6 of the Habitats Directive deals with the management and protection of Natura 2000 sites. Articles 6(3) and (4) set out the decision-making process, known as "Appropriate Assessment" (AA), for plans or projects in relation to Natura 2000 sites. Article 6(3) states: -

> *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."*

The first sentence of Article 6(3) provides a basis for determining which plans and projects require AA, i.e., those "*not directly connected with or necessary to the management of [one or more Natura 2000 sites] but likely to have a significant effect thereon, either individually or in combination with other plans or projects*". In *Waddenzee* (C-127/02), the Court of Justice of the European Union (CJEU) ruled that significant effects must be considered "likely" if "*it cannot be excluded, on the basis of objective information*", that they would occur. This clearly sets a low threshold, such that AA is required wherever there is a reasonable possibility of significant effects on a Natura 2000 site. In the same judgment, the CJEU established that the test of significance relates specifically to the conservation objectives of the site concerned, i.e., "significant effects" are those which, "*in the light, inter alia, of the characteristics and specific environmental conditions of the site*", could undermine the site's conservation objectives. In addition to the effects of the plan or project on its own, the combined effects arising from the plan or project under consideration and other plans and projects must also be assessed (see Section 7 for more details).

The last part of the first sentence of Article 6(3) defines AA as an assessment of the "*implications [of the plan or project] for the site in view of the site's conservation objectives*". In the second sentence, Article 6(3) requires that, prior to agreeing to a plan or project, the competent authority must "ascertain" that "*it will not adversely affect the integrity of the site concerned*". In *Sweetman v. An Bord Pleanála* (C-258/11), the CJEU ruled that a plan or

project "*will adversely affect the integrity of that site if it is liable to prevent the lasting preservation of the constitutive characteristics of the site that are connected to the presence of a priority natural habitat whose conservation was the objective justifying the designation of the site in the list of sites*". On that basis, EC (2018) described the "integrity of the site" as "*the coherent sum of the site's ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated*". As such, the "integrity" of a specific site is defined by its conservation objectives and is "adversely affected" when those objectives are undermined. In *Waddenzee*, the CJEU ruled that the absence of adverse effects can only be ascertained "*where no reasonable scientific doubt remains*".

The "precautionary principle" applies to all of the legal tests in AA, i.e., in the absence of objective information to demonstrate otherwise, the worst-case scenario is assumed. Where the tests established by Article 6(3) cannot be satisfied, Article 6(4) applies (see explanation in Section 2.2, below).

2.1.3. Competent authority

The requirements of Articles 6(3) and (4) are transposed into Irish law by, inter alia, Part 5 of the European Communities (Birds and Natura Habitats) Regulations, 2011 (as amended) ("the Habitats Regulations"), and Section 177 and Part XAB of the Planning and Development Act, 2000 (as amended) ("the Planning and Development Acts"). As per the second sentence of Article 6(3), it is the "competent national authorities" who are responsible for carrying out AA and, by extension, for determining which plans and projects require AA. The competent authority in each case is the authority responsible for consenting to or licensing a plan or project, e.g., local authorities, An Bord Pleanála, Transport Infrastructure Ireland (TII) or a Government Minister. In all cases, it is the competent authority who is ultimately responsible for determining whether or not a plan or project requires AA and for carrying out the AA, where required.

2.2. Appropriate Assessment Process

The AA process can be described as being made up of three distinct stages, as described below, the need to progress to each stage being determined by the outcome of the preceding stage.

Stage 1: Screening – This stage involves a determination by the competent authority as to whether or not a given plan or project required AA. As explained in Section 2.1, AA is required in respect of any plan or project not directly connected with or necessary to the management of a Natura 2000 site, but for which the possibility of likely significant effects on one or more Natura 2000 sites cannot be excluded. In *People Over Wind* (C-323/17), the CJEU ruled that measures intended to avoid or minimise harmful effects on a Natura 2000 site cannot be considered in making this determination. Consideration of the potential for in-combination effects is also required at this stage.

Stage 2: Appropriate Assessment – This stage involves a detailed assessment of the implications of the plan or project, individually and in combination with other plans and projects, for the integrity of the Natura 2000 site(s) concerned. This stage also involves the development of appropriate mitigation to address any adverse effects and an assessment of the significance of any residual impacts following the inclusion of mitigation. In *Kelly v. An Bord Pleanála* (IEHC 400), the High Court ruled that a lawful AA must contain complete, precise, and definitive findings based on examination and analysis, and conclusions and a final determination based on an evaluation of the findings. In the same judgment, the High Court stressed that, in order for the findings to be complete, precise, and definitive, the AA must be carried out in light of best scientific knowledge in the field and cannot have gaps or lacunae. In *Holohan v. An Bord Pleanála* (C-461/17), the CJEU clarified that AA must "*catalogue the entirety of habitat types and species for which a site is protected*" (i.e. the qualifying interests of the site) and assess the implications of the plan or project for the qualifying interests, both within and outside the site boundaries, and other, non-qualifying interest habitats and species, whether inside or outside the site boundaries, "*provided that those implications are liable to affect the conservation objectives of the site*". The proposer of a plan or project requiring AA is furnishes the competent authority with the scientific evidence upon which to base its AA by way of a Natura Impact Statement (NIS) or Natura Impact Report (NIR). If it is not possible to ascertain that the plan or project will not adversely affect one or more Natura 2000 sites, authorisation can only be granted subject to Article 6(4).

Stage 3: Article 6(4) – If a plan or project does not pass the legal test at Stage 2, alternative solutions to achieve its aims must be considered and themselves subject to Article 6(3). If no feasible alternatives exist, authorisation can only be granted where it can be demonstrated that there are imperative reasons of overriding public interest

(IROPI) justifying its implementation. Where this is the case, all compensatory measures must be taken to protect the overall coherence of Natura 2000.

The three stages described above are illustrated in Figure 2-1.

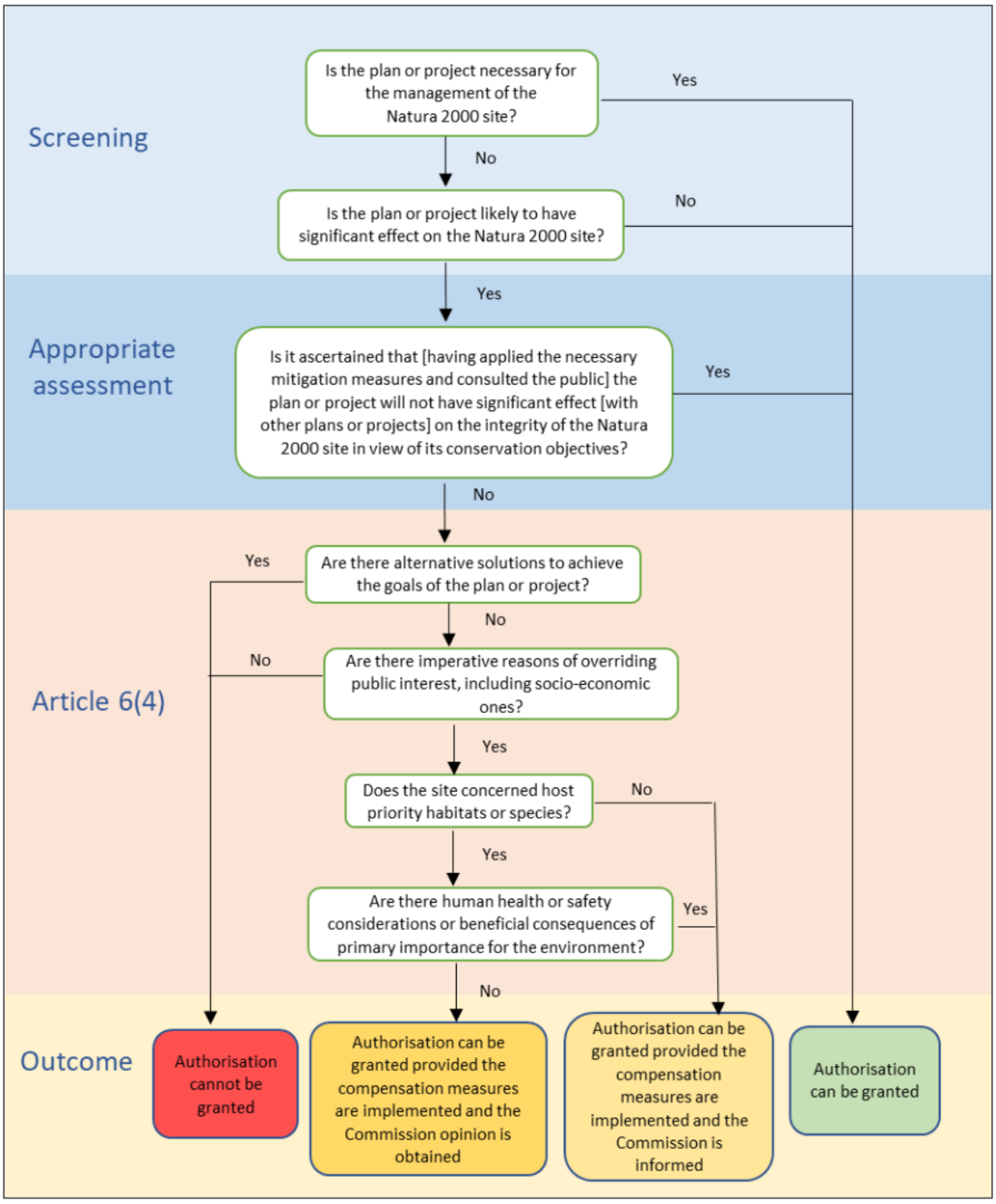

Figure 2-1 - Stages of the Appropriate Assessment process (EC, 2021a).

3. Methods

3.1. Legislation and Guidance

This report was prepared with due regard to the relevant European and Irish legislation, case law and guidance, including but not limited to: -

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna. *Official Journal of the European Communities* L 206/7-50.
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. *Official Journal of the European Union* L 20/7-25.
- European Communities (Birds and Natural Habitats) Regulations, 2011. *S.I. No. 77/2011* (as amended) ("the Habitats Regulations").
- Planning and Development Act, 2000. *No. 30 of 2000* (as amended) ("the Planning and Development Acts").
- Planning and Development Regulations, 2001. S.I. No. 600/2001 (as amended) ("the Planning Regulations").
- EC (2018) *Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.* European Commission, Brussels.
- EC (2021a) *Assessment of plans and projects in relation to Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. C(2021) 6913.* European Commission, Brussels.
- EC (2021b) *Guidance document on the strict protection of animal species of Community interest under the Habitats Directive. C(2021) 7301.* European Commission, Brussels.
- DEHLG (2010a) *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Revised 11/02/2010.* Department of the Environment, Heritage and Local Government, Dublin.
- DEHLG (2010b) *Circular NPW 1/10 & PSSP 2/10. Dated 11/03/2010.* Department of the Environment, Heritage and Local Government, Dublin.
- NPWS (2012a) *Marine Natura Impact Statements in Irish Special Areas of Conservation. A Working Document. April 2012.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.
- NPWS (2021) Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland. *National Parks & Wildlife Service Guidance Series* 1, Department of Housing, Local Government and Heritage, Dublin.
- Mullen, E., Marnell, F. and Nelson, B. (2021) Strict Protection of Animal Species – Guidance for Public authorities on the Application of Articles 12 and 16 of the EU Habitats Directive to development/works undertaken by or on behalf of a Public authority. *National Parks & Wildlife Service Guidance Series* 2, Department of Housing, Local Government and Heritage, Dublin.
- OPR (2021) *Appropriate Assessment Screening for Development Management. OPR Practice Note PN01.* Office of the Planning Regulator, Dublin.
- *Applications for Approval for Local Authority Developments made to An Bord Pleanála under 177AE of the Planning and Development Act, 2000, as amended (Appropriate Assessment) – Guidelines for Local Authorities*.

- Case law, including *Waddenzee* (C-127/02), *Sweetman v. An Bord Pleanála* (C-258/11), *Kelly v. An Bord Pleanála* (IEHC 400), *Commission v. Germany* (C-142/16), *People Over Wind* (C-323/17), *Holohan v. An Bord Pleanála* (C-461/17), *Eoin Kelly v. An Bord Pleanála* (IEHC 84) and *Heather Hill* (IEHC 450).

- Sundseth, K. and Roth, P. (2014) *Article 6 of the Habitats Directive – Rulings of the European Court of Justice.* Ecosystems LTD (N2K Group), Brussels.

3.2. Desk Study and Consultation

A desktop study was carried out to collate information available on European sites in the vicinity of the proposed project. These areas were viewed using Google Earth, Google maps and Bing maps (last accessed on the 28th of September 2023).

The National Parks and Wildlife Service (NPWS) and National Biodiversity Data Centre (NBDC) online databases were reviewed concerning European sites and their features of interest in the vicinity of the proposed project.

The locations and boundaries of Natura 2000 sites in relation to the proposed works were reviewed on the NPWS Designations Viewer (NPWS, 2023c). Information on the qualifying interests and the structures and functions of the relevant Natura 2000 sites was found in the Site Synopsis, Natura 2000 Standard Data Form, Conservation Objectives and supporting documents for each site. Reporting under Article 17 of the Habitats Directive (NPWS, 2019a-c; ETC/DB, 2023a) and Article 12 of the Birds Directive (NPWS, 2023d; ETC/BD, 2023b) provided further information on the habitats and species concerned at the national level.

Spatial and other data regarding rivers and other waterbodies were obtained from the Environmental Protection Agency (EPA) using its online facility EPA Maps: Water (EPA, 2023). Other sources consulted included the National Biodiversity Data Centre (NBDC) Biodiversity Maps (NBDC, 2023), the Ordnance Survey Ireland (OSi) GeoHive Map Viewer (OSi, 2023) and the Environmental Sensitivity Mapping Tool (ESM Webtool, 2023).

Other plans and projects in the surrounding area were identified using the Cork City Council planning enquiry system. Search criteria were implemented to identify other plans and project with potential, in combination with the proposed works, to adversely affect the integrity of European sites.

Baseline data regarding the receiving environment, including Natura 2000 sites, was gathered through desk study and consultation with relevant bodies, most importantly the National Parks & Wildlife Service (NPWS).

3.3. Site Visit

An ecological walkover survey was carried out on the proposed works area by Atkins Ecologist Caroline Downey on the 22nd of June 2023. The study area was revisited by Atkins Ecologist Caroline Downey and Kevin Mc Caffrey on 29th of September 2023. The survey was undertaken for the purpose of identifying ecological constraints and sensitive ecological feature within the proposed works area.

Ecological survey methods were in general accordance with those outlined in the following documents: -

- *A Guide to Habitats in Ireland* (Fossitt, 2000);

- *Best Practice Guidance for Habitat Survey and Mapping* (Smith *et al*., 2011);

- *Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes* (NRA, 2009)

Potential sensitive ecological receptors present within the survey area were recorded, including the presence of protected species and habitats or habitats that would support protected species, in addition to noting connectivity to Natura 2000 sites. Any presence of non-native invasive species was also recorded.

3.4. Statement of Authority

This report was prepared by Sinéad Kinsella. This report was reviewed by Kevin Mc Caffrey.

Sinéad Kinsella has a BSc in Applied Freshwater and Marine Biology. She has experience in preparing Appropriate Assessment Screening Reports, Natura Impact Statements and prepares Ecological Impact Assessment Reports and undertakes a range of ecological surveys (e.g., mammal and bat surveys) for a range of proposed developments.

Kevin Mc Caffrey has a BSc (Hons) in Applied Freshwater and Marine Biology and a MSc in Environmental Sustainability. He is a Senior Ecologist with over 10 years' experience in freshwater and marine ecology, environmental surveying, impact assessment and as an Ecological clerk of Works. He has prepared and reviewed a wide range of technical reports including Environmental Impact Assessment, AA screening, Natura Impact Statement and sanitary surveys.

3.5. Impact Assessment

The assessment detailed in this report was undertaken in the following steps, following the best practice guidance highlighted above: -

1. Description of the proposed works, including their locations, nature, scale, duration, and potential impacts on the natural environment.

2. Description of the baseline conditions in the receiving environment, focussing on habitats, species, ecological corridors, and any known threats, pressures, and activities.

3. Establishment of a Zone of Influence, and identification and description of Natura 2000 sites therein.

4. Identification of source-pathway-receptor chains between the proposed works and the qualifying interests of Natura 2000 sites, and evaluation of effects in view of the relevant conservation objectives.

5. Consideration of the potential for significant effects in combination with other plans and projects.

6. Conclusion and recommendation.

Further details of the methodology and the rationale behind it are provided in the relevant sections.

4. Receiving Environment

The proposed works run east along the quays and Lower Glanmire Road towards the Dunkettle Roundabout. The most westerly point of the proposed Glanmire to City Cycle Route (Phase 2) is located directly adjacent to the Lee (Cork) Estuary Lower. Lee (Cork) Estuary Upper is located directly "upstream" of the Lee (Cork) Estuary Lower and it is located adjacent to the most westerly point of the proposed works site. Glashaboy Estuary is located ca. 10m from the proposed works at Dunkettle Roundabout and Lough Mahon is located ca. 40m to the south-east of the proposed works at this location. Cork Harbour SPA (Special Protection Area) (site code: 004034) is comprised of both Glashaboy Estuary and Lough Mahon.

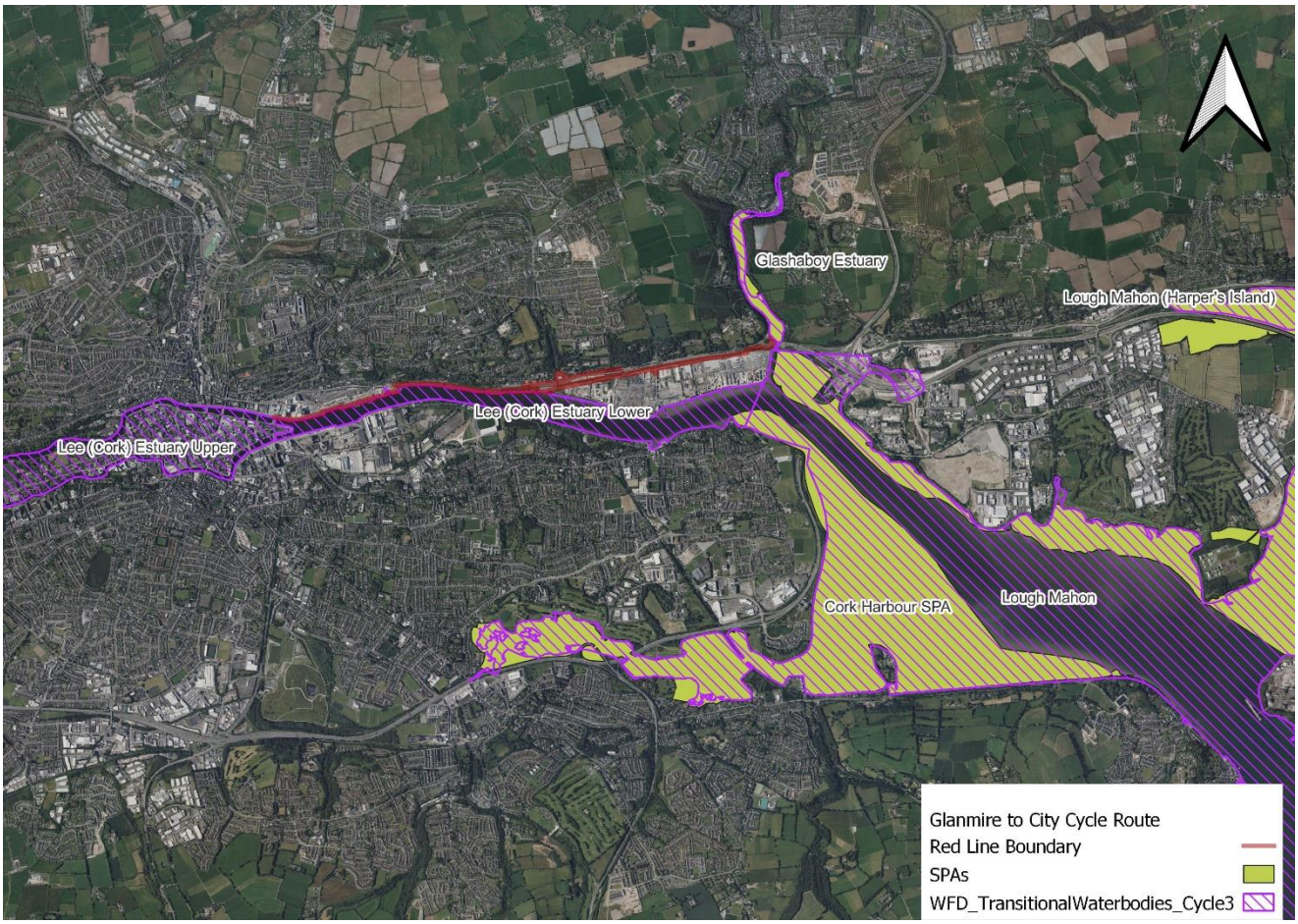

Figure 4-1 - The proposed works in relation to the surrounding estuaries and Cork Harbour SPA (Source: Bing Aerial Map QGIS)

4.1. Desktop Review

The most recent water quality data for The Lee (Cork) Estuary Upper and the Lee (Cork) Estuary Lower is from the Water Framework Directive (WFD) for 2016-2021, which classifies both as 'Moderate' water quality. Glashaboy Estuary is classified as being of 'Bad' quality by the WFD for 2016-2021. Lough Mahon is classified as 'Moderate' by WFD for 2016-2021.

The proposed works area is located within Hydrometric Area no. 19, the Lee, Cork Harbour and Youghal Bay catchment and the Kiln_SC_010.

The proposed works area is located ca. 5m (at the closest point) to Cork Harbour SPA (site code: 004030) at Dunkettle Roundabout.

The proposed works are located within three 2km grid squares: W67W, W77B and W77G (NBDC). Japanese Knotweed (*Fallopia japonica*) has been recorded within all of these 2km grid squares, with records at 'Kent railway station' in 2015 within close proximity to Glanmire Road. Japanese Knotweed (*Fallopia japonica*) has also been recorded along the Glanmire Road at 'Tivoli B townland' in 2009. Butterfly Bush (*Buddleja davidii*) has also been recorded by the NBDC at 'Summerhill North' within close proximity to the proposed works in 2016 and along the 'Lower Glanmire Road' in 2012.

Invasive plant species recorded within the wider W67W 2km grid square are Butterfly-bush (*Buddleja davidii*), Cherry Laurel (*Prunus laurocerasus*), Himalayan Knotweed (*Persicaria wallichii*), Indian Balsam (*Impatiens glandulifera*), Japanese Knotweed (*Fallopia japonica*), Sycamore (*Acer pseudoplatanus*), Three-cornered Garlic (*Allium triquetrum*), Traveller's-joy (*Clematis vitalba*) and Harlequin Ladybird (*Harmonia axyridis*).

Invasive plant species recorded within the wider W77B 2km grid square are Butterfly-bush (*Buddleja davidii*), '*Fallopia japonica* x *sachalinensis* = F. x *bohemica',* Himalayan Honeysuckle *(Leycesteria formosa)*, Himalayan Knotweed (*Persicaria wallichii*), Japanese Knotweed (*Fallopia japonica*), Sycamore (*Acer pseudoplatanus*), Three-cornered Garlic (*Allium triquetrum*), Traveller's-joy (*Clematis vitalba*) and Harlequin Ladybird (*Harmonia axyridis*).

Invasive plant species recorded within the wider W77G 2km grid square are '*Fallopia japonica* x *sachalinensis* = F. x *bohemica*', Giant Hogweed (*Heracleum mantegazzianum*), Himalayan Honeysuckle (*Leycesteria formosa*), Himalayan Knotweed (*Persicaria wallichii*), Japanese Knotweed (*Fallopia japonica*) and Traveller's-joy (*Clematis vitalba*).

4.2. Site Visit

A site visit was carried out by Caroline Downey on the 22nd of June 2023 from Horgan's Quay travelling east along the Lower Glanmire Road to the Dunkettle Roundabout. The site was revisited on 29th of September 2023 by Caroline Downey and Kevin Mc Caffrey with particular focus on key areas such as bridge and ramp locations.

The following notes were recorded during the site survey and have been recorded in sections relating to the Layout Plan Route shown in Figure 1-5 to Figure 1-12.

4.2.1. Section 1

The first area that was surveyed is the area within Figure 1-5 and 1-6 above.

- Existing drainage to be utilised for cycleway with possible SuDs features incorporated into the proposed landscaping – no laying of new drainage for any of the scheme.
- All laying of cycleway to be done on existing quay with no excavations required – surface level to be scarified and relayed.
- Standard cycleway cross section is 4.8m with a minimum 0.6m verge. There are several short sections of pinch points present along the proposed route where a 3m wide shared area, with no verge, will be provided to avoid building over/in the water etc.
- A shared space occurs in this section (e.g., the cycle lane and pedestrian footpath become one to acommodate existing contraints) – Footpath on opposite side of the road will be reduced in width over the length of the turning basin to accommodate the traffic lanes and beyond this point the existing on-road cycle track will be returned to footpath as a fully segregated cycle/pedestrian facility will now be provided on the southern side of Penrose Quay and Horgan's Quay. Existing wall in this section to be retained. Existing vehicle retraint barrier on the southern side to be removed and a balustrade railing will be provided on the southern side of the proposed cycle/footpath facility.

Plate 4-1 - Existing Quay where scarifying will be required prior to laying of blacktop.

Plate 4-2 – View of the Quay – pedestrian/cycleway is set back from the water's edge by minimum 5m with pedestrian balustrade running along the back of the footpath

4.2.2. Section 2

The second area that was surveyed is the area within Figure 1-6.

- Vegetation for removal includes a large stand of Japanese knotweed (*Reynoutria japonica* synonym *Fallopia japonica*) on rubble in the south east corner of McMahon's building supply yard (See Plate 4-5).
- Butterfly bush (*Buddleja davidii*) also occurs in almost all sections to the back McMahon's building supply yard.
- It is proposed that a bridge will be installed to cross the dry dock – foundation of the bridge will be within the existing quay but behind the quay wall.
- A section of wall at the south western boundary of McMahon's building supply yard is to be knocked to allow the greenway to continue along from the existing quay through McMahon's Builders Yard (approx. 1.5m minimum back from the water/quay edge and back onto Lower Glanmire Road where another section of wall will be demolished to allow the greenway continue on Lower Glanmire Road.
- 2 no. Grey Heron (*Ardea cinerea*) and a Blackbird (*Turdus merula*) were recorded here.
- Trees to be removed include Sycamore (*Acer pseudoplatanus*).

Plate 4-3 - Vegetation at the back of McMahon's building supply yard

Plate 4-4 - Butterfly Bush (*Buddleja davidii*) at the back of McMahon's building supply yard

Plate 4-5 - Japanese knotweed (*Fallopia japonica*) at the back of McMahon's building supply yard

Plate 4-6 – Bridge will be installed to cross Dry dock.

4.2.3. Section 3

The third area that was surveyed is the area within Figure 1-7 to 1-8.

- All existing drainage to be used.
- The segregated cycle/pedestrian facility will follow the Lower Glanmire Road heading east – existing stone wall to be retained and a pedestrian barrier (fence) to be installed inside the wall.
- Approximately 4 no. areas where the verge is dropped and the footpath narrows to a minimum 1.8m width to allow for steps down into the water.
- Trees to be removed along footpath primarily sycamore of which most are in poor condition.

Plate 4-7 – Lower Glanmire Road heading East - existing Stone wall to be retained

Plate 4-8 –Stone wall to be retained

Plate 4-9 - Trees to be removed along footpath- primarily sycamore

4.2.4. Section 4

The fourth area that was surveyed is the area within Figure 1-8.

- Up to Port of Cork 2000 Garden the facility will be the same as the previous drawing.
- Port of Cork 2000 Garden – a shared area will be contained within the existing pavement, no extra infrastructure to be built i.e., path does not need to be widened but will be resurfaced – approximately 10m from water's edge.
- Grey heron (*Ardea cinerea*) and 2 no. Shag (*Gulosus aristotelis*) recorded from the wooden jetty.
- No tree/vegetation removal proposed.

Plate 4-10 – Port of Cork 2000 Garden - shared area to be contained within the existing pavement

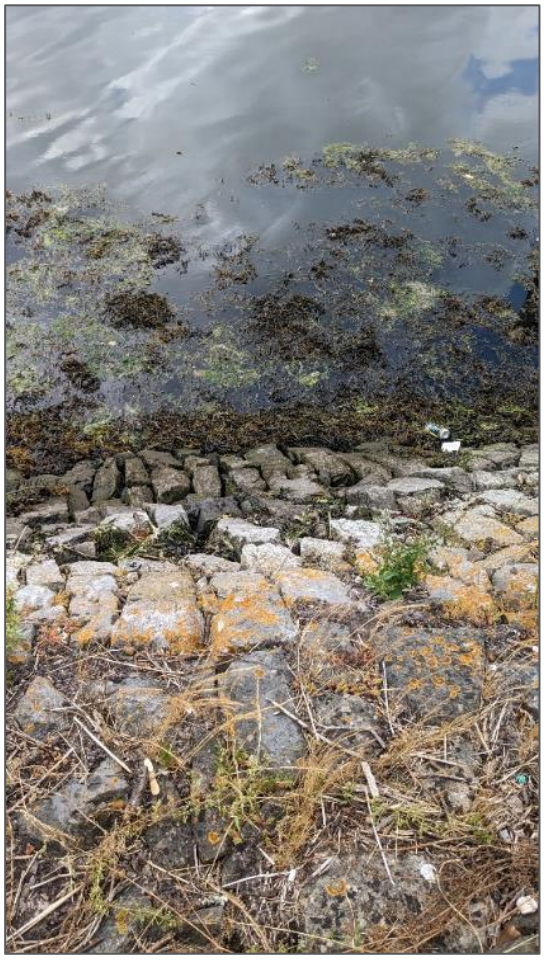

Plate 4-11 - Slope down to water's edge from pathway

4.2.5. Section 5

The fifth area that was surveyed is the area within Figure 1-9.

- Shared area along Tivoli Estate Road road from North Ring Road Ramp to just beyond the proposed ramp from the North Ring Road bridge.
- Vegetation to be removed includes primarily sycamore (*Acer pseudoplatanus*) and fuchsia (*Fuchsia magellanica*) – greenway will cut through vegetation to the immediate south of the Port of Cork 2000 Garden east entrance (avoiding existing entrance gates).
- Existing slope into harbour ca. 3m with steepest slope at narrowest point and then flaring out. A shared area (minimum 2m width) to be provided in this area above the existing concrete slope.
- Vegetation to be removed for the installation of an accessibility ramp includes a line of approx. 8 silver maple trees, travellers joy abundant, litter present and parking area to be removed to facilitate ramp installation.
- Shared area (2 - 3m in width) on south side of road before crossing and joining where the ramp meets the ground.
- Cherry laurel (*Prunus laurocerasus*), sycamore (*Acer pseudoplatanus*) and traveller's joy (*Clematis vitalba*) abundant in vegetation lining fence bordering train track.

Plate 4-12 – Existing slope into the harbour ca. 3m

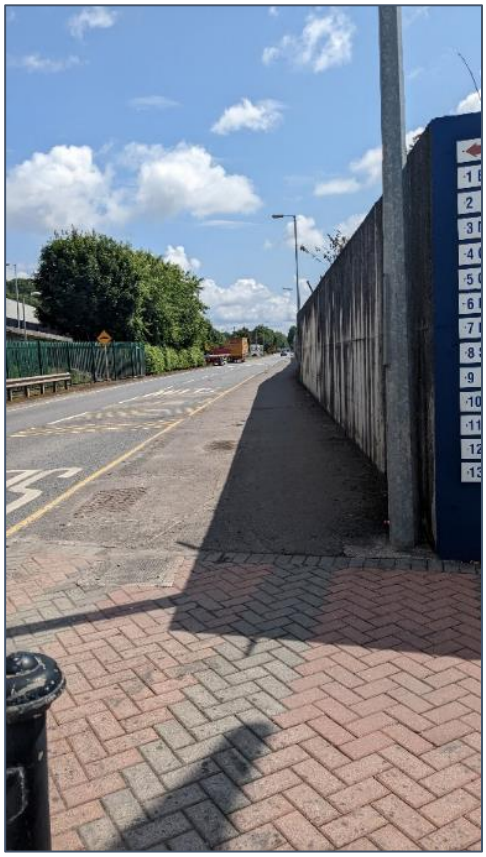

Plate 4-13 – View of footpath where shared area will be provided.

Plate 4-14 - North side of the road – shared area will be within the existing verge parallel to the road.

4.2.6. Section 6

The sixth area that was surveyed is the area within Figure 1-10.

- Shared area along Tivoli Estate road to be constructed within existing verge.
- Treeline including beech (*Fagus Sylvatica*), sycamore (*Acer pseudoplatanus*) and hazel (*Corylus avellana*).
- Field layer including dock (*Rumex*), thistle (*Cirsium arvense*), oxeye daisy (*Leucanthemum vulgare*).
- Ivy (*Hedera helix*), Butterfly bush (*Buddleja davidii*) and travellers joy (*Clematis vitalba*) dominates vegetation growing on the railway boundary fence- along this section of the route.
- Rabbit droppings recorded along this section.

Plate 4-15 – View of existing verge where shared area will be constructed parallel to the road.

Plate 4-16 - Treeline including beech (*Fagus Sylvatica*), sycamore *(Acer pseudoplatanus*), Cherry laurel (*Prunus caroliniana*) and hazel (*Corylus avellana*).

4.2.7. Section 7

The seventh area that was surveyed is the area within Figure 1-11.

- Shared area along Tivoli Estate road to be constructed within existing verge.
- The route borders the railway along this section. Rabbit recorded, nettles, thistle – vegetation on railway boundary fence is dominated by Travellers Joy (*Clematis vitalba*) and ivy (*Hedera helix*)

Plate 4-17 - Hedgerow bordering the railway line

Plate 4-18 - Vegetation on railway line border fence

4.2.8. Section 8

The eighth area that was surveyed is the area within Figure 1-12.

- Roundabout recently tarmacked (approximately in the last 2 weeks prior to site survey).
- Ramps and a railway bridge are to be installed to cross the railway line with minimum 5.3m clearance but may need to be over >6m to allow for future proofing, support columns every 20m will be installed for structural support on 1m piles.
- Oak saplings (*Quercus robur*), traveller's joy (*Clematis vitalba)*, ivy (*Hedera helix*), butterfly bush (*Buddleja davidii*), common hogweed (*Heracleum sphondylium*) and bramble (*Rubus fruticosus*) were all recorded.
- Dry weir identified with large quantity of debris including vegetation, litter, household items (Coordinates: 51.905920, -8.400197)
- A drainage channel has been dug through the embankment in this section. Approx. 30cm at opening and gradually got narrower. Recorded off the Dunkettle Roundabout at 51.906171, -8.397952. Evidence of mammal tracks at the back of the embankment leading towards the water. Just above the high-water mark under a small tree was an area of trampled grass which may be an otter couch/resting place. Walking westwards further into the backwater two other potential couches were recorded. No evidence of an otter holt was recorded in the area.
- Existing footpath to be widened into the carriageway to provide 1.8m wide footpath to maintain the existing footpath along the dual carriageway. The proposed shared area is continued around the Dunkettle roundabout within the verge. (ca. 4m of grass/vegetation removal)

- Backchannel (non-EPA monitored) visited at low tide, no evidence of otter (spraint/holts/shells). During the revisit of site the backwater was surveyed further west and a number of potential otter rest sites were recorded. Stones closer to the high tide line very dry (indicating low water level in recent times) – some mussel shells and small empty crab shells – likely washed in by the tide rather than otter evidence given the spread-out nature and abundance of shells.

- Large grass embankment at 51.906125, -8.397089 that was inaccessible for survey due to deep mud.

- Metal gate at narrow point of backchannel at 51.906007, -8.397811 – possible barrier.

- Area of vegetation (possibly a garden historically) at 51.906000, -8.399671 including large tropical plants such as Yucca species..

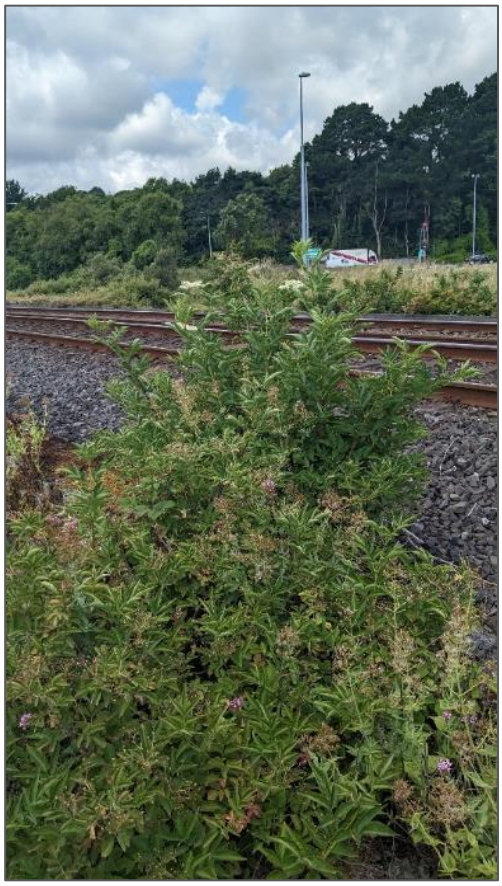

Plate 4-19 – View of train track

Plate 4-20 - View of Back Channel at low tide

Plate 4-21 – Dunkettle Roundabout – shared area to be constructed in verge

Plate 4-22 – Back Channel at low tide

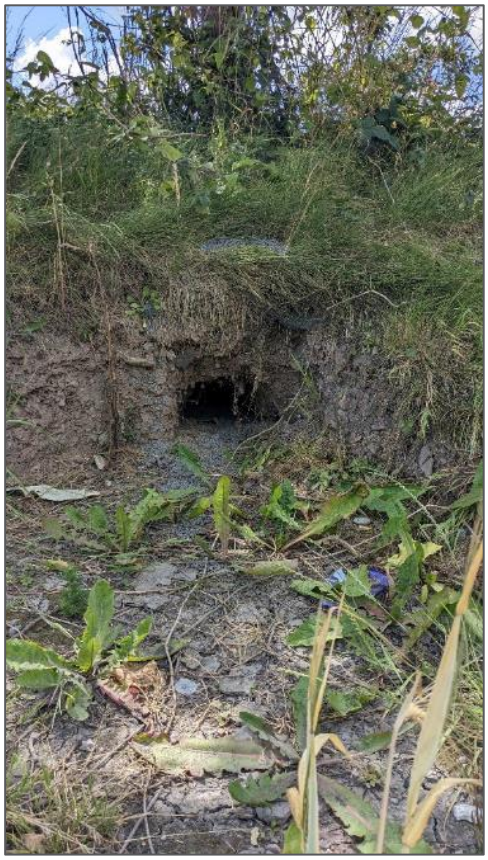

Plate 4-23 – Drainage channel with mammal tracks behind, recorded off the Dunkettle Roundabout at 51.906171, -8.397952

Plate 4-24 - Potential otter couch under tree.

Plate 4-25 – Dry weir identified with large quantity of debris including vegetation, litter, household items (Coordinates: 51.905920, -8.400197)

5. Connectivity to Natura 2000 sites

5.1. Zone of Influence

The "*zone of influence*" (ZoI) of a plan or project is the area over which ecological features may be subject to significant effects as a result of the proposed plan or project and associated activities. This is likely to extend beyond the plan or project boundary, e.g., where there are ecological or hydrological links. The ZoI will vary for different ecological features depending on their sensitivity to an environmental change (CIEEM, 2022).

A ZoI extending to a distance of 15km is recommended in the case of plans, as derived from UK guidance (Scott Wilson *et al*., 2006). In the case of projects, however, DEHLG (2010a) advises that the ZoI should be established on a case-by-case basis, with reference to key variables including the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects. EC (2021) also highlights the importance of the nature of the receiving environment and the sensitivities of the receptors in determining which Natura 2000 sites to include in the assessment. OPR (2021) recommends the use of the source-pathway-receptor model for identifying potential impacts.

Therefore, given the nature, scale, and location of the proposed works, the ZoI was established based on the potential environmental impacts, proximity, and connectivity to Natura 2000 sites, especially following hydrological pathways, and the sensitivities of the Natura 2000 sites connected to the proposed works, including the mobility of their qualifying interests and the ecological continuity within and between the sites concerned.

Due to the nature, scale and extent of the proposed works, sources of impacts include noise, human presence and movement of machinery and equipment. Thus, the zone of impact for the proposed works is considered to be 150m for mobile species such as otter, and receptors with hydrological connectivity to the proposed works. The only potential for downstream water quality impacts for the proposed works, which do not involve works within the estuary or watercourses in the vicinity of the proposed works, is from accidental pollution from run-off during the proposed works. he zone of impact in relation to disturbance to animals such as birds and other qualifying interests of Natura 2000 sites, from human presence and machinery is 500m from the proposed works. Cork Harbour SPA (004030) is located ca. 3m from the closest point of the proposed works boundary, at Dunkettle Roundabout (See Figure 5-2). Great Island Channel SAC (001058) is the closest SAC to the proposed works site, and it is located ca. 4.5km from the proposed works (See Figure 5-1). Great Island Channel overlaps with Cork Harbour SPA. No works will occur within the estuary or watercourses in the vicinity of the proposed works. However, there is potential for accidental pollution of the watercourse from run-off during the proposed works. Given that the closest SAC is the Great Island Channel SAC, which is located ca. 4.5km away, any pollution that accidentally enters the watercourse during the proposed works will be diluted and dispersed within the estuary prior to having negligible effects on this SAC. The zone of impact for accidental pollution from the proposed works is taken to be ca. 500m, therefore, this SAC is not considered further for potential impacts as a result of the proposed works. Given the location of Cork Harbour SPA to the proposed works, this SPA is located within the zone of impact for disturbance impacts, from the proposed works.

The Zone of Influence for the proposed works is taken to be areas with potential ecological connectivity to the zones of impact of the proposed works.

Based on the descriptions of the proposed works and the receiving natural environment the zones of impact of the proposed works were defined as: -

- For temporary disturbance to fauna, all areas within a precautionary buffer of 500m of each of the proposed work's locations, and

- Publicly available spatial data for river, transitional and coastal waterbodies (EPA, 2023) were used in conjunction with aerial imagery to identify pathways and zones of impact for disturbance and water quality impacts from the proposed works. These were then mapped in relation to Natura 2000 sites. In addition, the wider Zone of Influence described above was examined to identify any other Natura 2000 sites with potential ecological connections to these zones of impact.

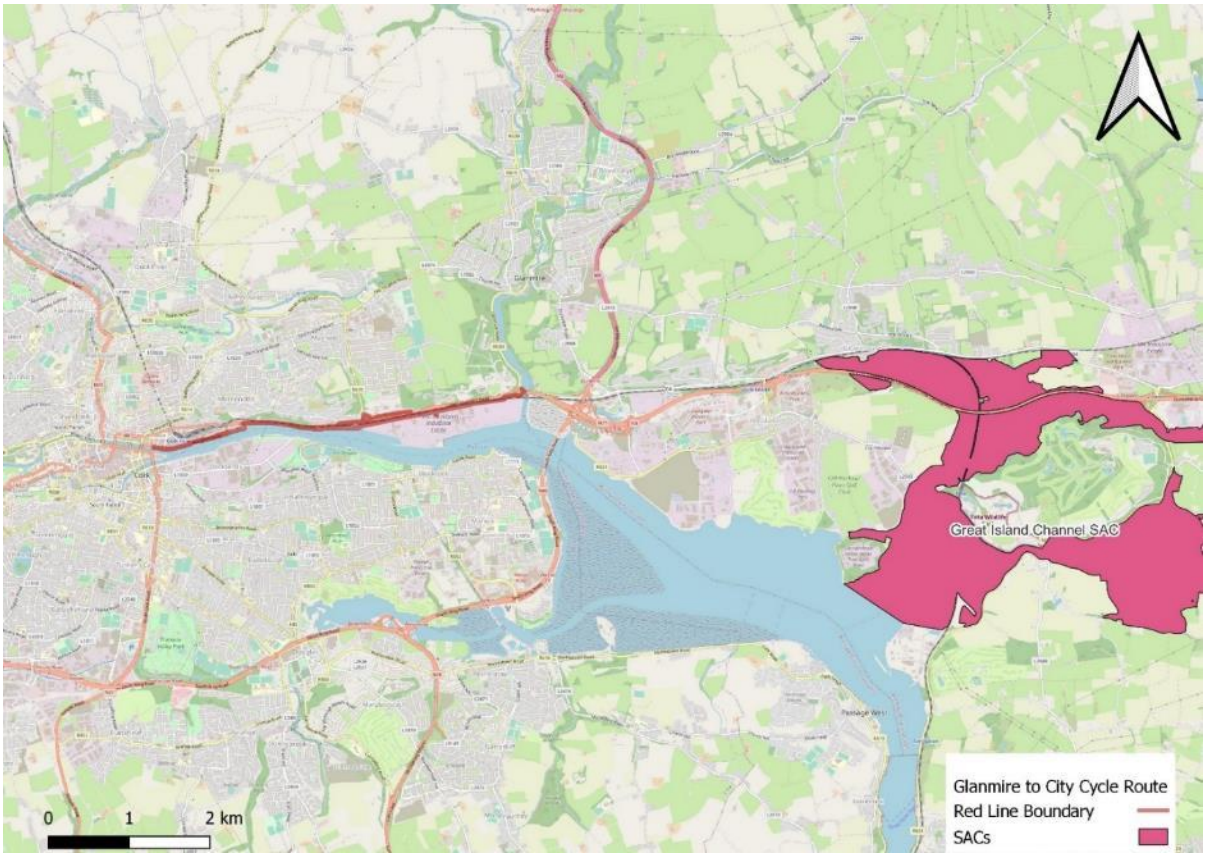

Figure 5-1 - Location of the proposed works in relation to Great Island Channel SAC (Source: OpenStreetMap and NPWS)

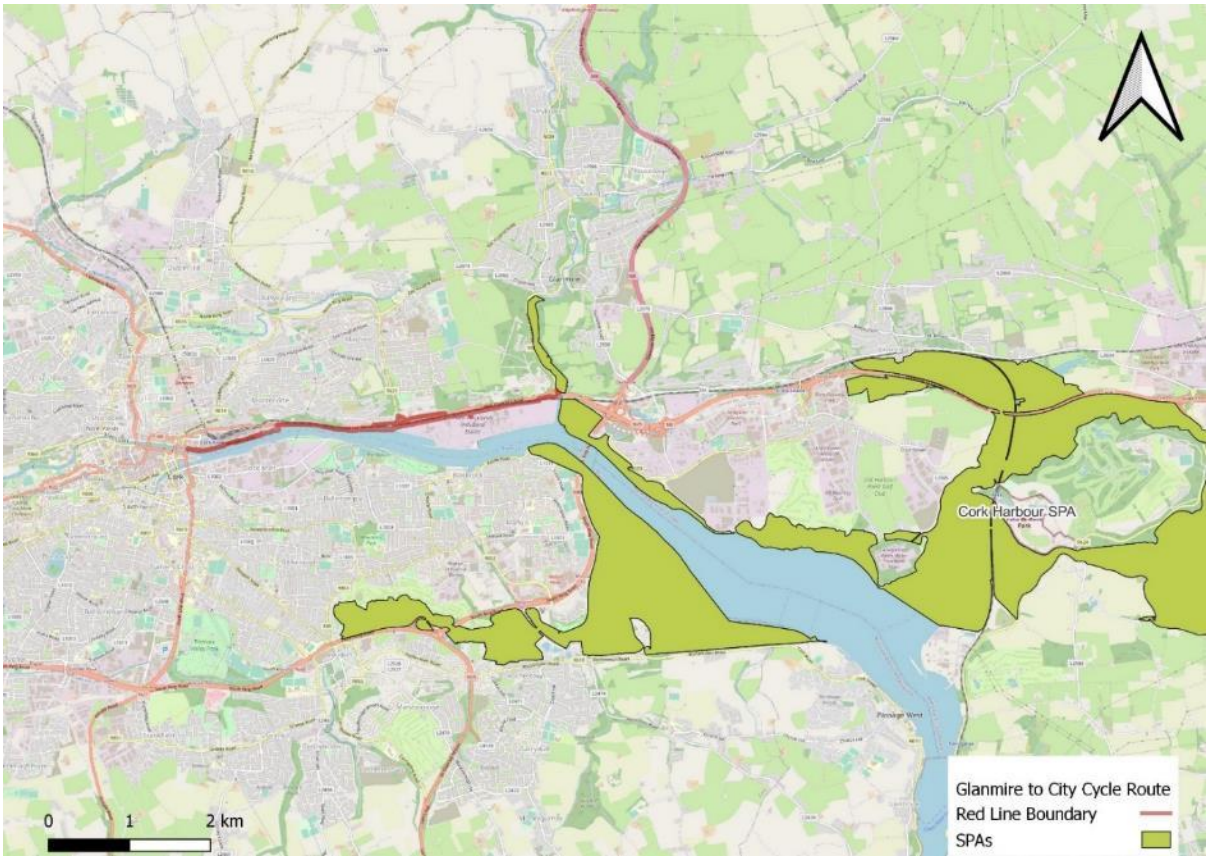

Figure 5-2 - Location of the proposed works in relation to Cork Harbour SPA (Source: OpenStreetMap and NPWS)

5.2. Identification of Sites

5.2.1. Disturbance to habitats

As mentioned, Cork Harbour SPA is located ca. 3m from the proposed works, at the closest point at Dunkettle Roundabout. The habitats present within the zone of impact for disturbance could include 'Wetlands [A999]. This habitat is a qualifying interest of Cork Harbour SPA.

5.2.2. Hydrological impacts

Water Quality

No works will be carried out in the watercourse adjacent to the proposed works. Existing drainage infrastructure will be maintained for the entire route with the possible inclusion of SuDs measure. As mentioned, the only possibility of hydrological impacts is from accidental pollution, from works in close proximity to the water. However, the zone of impact from accidental pollution is taken to be 500m. Further, given the distance from the proposed works which will be carried out proximate to the watercourse, to Cork Harbour SPA, the scale and duration of the proposed works, there will be no impact on water quality for this SPA as a result of the proposed works.

As mentioned, the Great Island Channel SAC is located ca. 4.5km from the proposed works, at the nearest point, there will be no hydrological impact from accidental pollution as a result of the proposed works on this SAC.

5.2.3. Disturbance to fauna

Otter

Signs of Otter (*Lutra lutra*) were recorded during the site survey at Section 4 within the area of the proposed works. Therefore, there is potential for indirect disturbances to otter that may forage or commute along the watercourse, due to the presence of personnel along the river stretch. However, otter are not a qualifying interest of the nearby Natura 2000 sites; Cork Harbour SPA or the Great Island Channel SAC.

As standard, no works are permitted within a 150m buffer around otter holts (NRA, 2008[1]).

With respect to otters, the TII Guidance states the following: -

- *No works should be undertaken within 150m of any holts at which breeding females or cubs are present. Following consultation with NPWS, works closer to such breeding holts may take place - provided appropriate mitigation measures are in place, e.g., screening and/or restricted working hours on site.*

- *No wheeled or tracked vehicles (of any kind) should be used within 20m of active, but non-breeding, otter holts. Light work, such as digging by hand or scrub clearance should also not take place within 15m of such holts, except under licence.*

Birds

Cork Harbour SPA is located ca. 3m to the proposed works at the closest point., Dunkettle Roundabout (See Figure 5-3 below). Cork Harbour SPA is designated for a number of bird species as detailed in Table 5-1 below. As mentioned above, the zone of impact from the proposed works for bird species is 500m. Given the distance from the proposed works to Cork Harbour SPA, this site is considered further below.

[1] NRA (2008). Guidelines for the Treatment of Otter prior to the Construction of National Road Schemes. https://www.tii.ie/tii-library/environment/construction-guidelines/Guidelines-for-the-Treatment-of-Otters-prior-to-the-Construction-of-National-Road-Schemes.pdf

Figure 5-3 - Location of the proposed works in relation to Cork Harbour SPA (Source: OpenStreetMaps and NPWS)

5.2.4. Invasive alien species

The introduction or spread of any aquatic or riparian invasive alien species could negatively affect the nearby watercourses. Invasive species listed under the EC (Birds and Natural Habitats) Regulations 2011, as amended, were recorded in different locations along the proposed works site, as detailed in Sections 4.1 and 4.2. However, given that no works will be carried out within the watercourse, the likelihood of the spread of aquatic invasive species is minimal.

Further, standard biosecurity measures will be followed during the proposed works for the areas where terrestrial invasive species have been identified.

As mentioned in Section 4.2.2, vegetation marked for removal is a big Japanese knotweed (*Fallopia japonica*) infestation. This species is a Third Schedule Invasive Plant Species and therefore, an Invasive Species management plan is required for the removal.

5.2.5. Indirect effects

In the wider Zone of Influence, as mentioned, the Great Island Channel SAC is located ca. 4.5km from the proposed works at the closes point. The qualifying interests of this SAC are Mudflats and sandflats not covered by seawater at low tide [1140] and Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]. Given the scale of the proposed works, the distance from the proposed works to this SAC and the lack of dependency of the qualifying interests of this SAC on the proposed works area, this SAC is not considered further.

There are no other Natura 2000 sites in the vicinity of the proposed works. There is no ecological or hydrological connection from the proposed works to any other Natura 2000 sites.

Dunkettle Shore pNHA (site code: 001082) is located partially within the proposed works boundary at Dunkettle roundabout. Glanmire Wood pNHA (site code: 001054) is located ca. 406m to the north of the proposed works at Dunkettle Roundabout. The Douglas River Estuary pNHA (site code: 001046) is located across the estuary from the proposed works ca. 547m to the south.

Summary

Based on the above examination of the Zone of Influence, the following Natura 2000 sites have been selected for inclusion in the screening assessment: -

- Cork Harbour SPA (004030)

The Qualifying Interests for which the above Natura 2000 site is designated, can be found listed in Table 5-1.

Table 5-1 – Cork Harbour SPA Qualifying Interests

Site code	Site Name	Qualifying Interests	Connectivity
004030	Cork Harbour SPA	**Habitats** Wetland and Waterbirds [A999] **Species** Little Grebe (*Tachybaptus ruficollis*) [A004] Great Crested Grebe (*Podiceps cristatus*) [A005] Cormorant (*Phalacrocorax carbo*) [A017] Grey Heron (*Ardea cinerea*) [A028] Shelduck (*Tadorna tadorna*) [A048] Wigeon (*Anas penelope*) [A050] Teal (*Anas crecca*) [A052] Pintail (*Anas acuta*) [A054] Shoveler (*Anas clypeata*) [A056] Red-breasted Merganser (*Mergus serrator*) [A069] Oystercatcher (*Haematopus ostralegus*) [A130] Golden Plover (*Pluvialis apricaria*) [A140] Grey Plover (*Pluvialis squatarola*) [A141] Lapwing (*Vanellus vanellus*) [A142] Dunlin (*Calidris alpina*) [A149] Black-tailed Godwit (*Limosa limosa*) [A156] Bar-tailed Godwit (*Limosa lapponica*) [A157]	The proposed works are located ca. 3m from this SPA at the closest point (Dunkettle Roundabout).

Site code	Site Name	Qualifying Interests	Connectivity
		Curlew (*Numenius arquata*) [A160] Redshank (*Tringa totanus*) [A162] Black-headed Gull (*Chroicocephalus ridibundus)* [A179] Common Gull (*Larus canus*) [A182] Lesser Black-backed Gull (*Larus fuscus*) [A183] Common Tern (*Sterna hirundo*) [A193]	

5.3. Brief Description of Natura 2000 Sites

5.3.1. Cork Harbour SPA (004030)

A synopsis of the SPA, as detailed in NPWS (2015), is as follows[2]: -

> "*Cork Harbour is a large, sheltered bay system, with several river estuaries - principally those of the Rivers Lee, Douglas, Owenboy and Owennacurra. The SPA site comprises most of the main intertidal areas of Cork Harbour, including all of the North Channel, the Douglas River Estuary, inner Lough Mahon, Monkstown Creek, Lough Beg, the Owenboy River Estuary, Whitegate Bay, Ringabella Creek and the Rostellan and Poulnabibe inlets.*
>
> *Owing to the sheltered conditions, the intertidal flats are often muddy in character. These muds support a range of macro-invertebrates, notably Macoma balthica, Scrobicularia plana, Hydrobia ulvae, Nepthys hombergi, Nereis diversicolor and Corophium volutator. Green algae species occur on the flats, especially Ulva spp. Cordgrass (Spartina spp.) has colonised the intertidal flats in places, especially where good shelter exists, such as at Rossleague and Belvelly in the North Channel. Salt marshes are scattered through the site and these provide high tide roosts for the birds. Some shallow bay water is included in the site. Rostellan Lake is a small brackish lake that is used by swans throughout the winter. The site also includes some marginal wet grassland areas used by feeding and roosting birds.*
>
> *The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Little Grebe, Great Crested Grebe, Cormorant, Grey Heron, Shelduck, Wigeon, Teal, Mallard, Pintail, Shoveler, Redbreasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Greenshank, Blackheaded Gull, Common Gull, Lesser Black-backed Gull and Common Tern. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds*."

5.3.2. Qualifying Interests

Cork Harbour SPA is designated for the following habitats and species -

- Little Grebe (*Tachybaptus ruficollis*) [A004]
- Great Crested Grebe (*Podiceps cristatus*) [A005]
- Cormorant (*Phalacrocorax carbo*) [A017]
- Grey Heron (*Ardea cinerea*) [A028]
- Shelduck (*Tadorna tadorna*) [A048]
- Wigeon (*Anas penelope*) [A050]
- Teal (*Anas crecca*) [A052]
- Pintail *(Anas acuta*) [A054]
- Shoveler (*Anas clypeata*) [A056]
- Red-breasted Merganser (*Mergus serrator*) [A069]
- Oystercatcher (*Haematopus ostralegus*) [A130]

[2] https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004030.pdf

- Golden Plover (*Pluvialis apricaria*) [A140]
- Grey Plover (*Pluvialis squatarola*) [A141]
- Lapwing (*Vanellus vanellus*) [A142]
- Dunlin (*Calidris alpina*) [A149]
- Black-tailed Godwit (*Limosa limosa*) [A156]
- Bar-tailed Godwit (*Limosa lapponica*) [A157]
- Curlew (*Numenius arquata*) [A160]
- Redshank (*Tringa totanus*) [A162]
- Black-headed Gull (*Chroicocephalus ridibundus*) [A179]
- Common Gull (*Larus canus*) [A182]
- Lesser Black-backed Gull (*Larus fuscus*) [A183]
- Common Tern (*Sterna hirundo*) [A193]
- Wetland and Waterbirds [A999]

Given the close proximity of the proposed works to this SPA, all of the bird species qualifying interests of the SPA are within the ZoI of the proposed project which is discussed further in Table 5-3.

5.3.3. Conservation Objectives

The conservation objectives for the qualifying interests of Cork Harbour SPA are as follows: -

- To maintain the favourable conservation condition of all bird species which are qualifying interests in Cork Harbour SPA
- To maintain the favourable conservation condition of the wetland habitat in Cork Harbour SPA as a resource for the regularly occurring migratory waterbirds that utilise it.

Table 5-3 details the identification of qualifying interests of the SPA that are within the ZoI of the proposed works.

5.3.4. Threats and Pressures

The threats, pressures, and activities with impacts on the SPA are listed below in Table 5-2 below, as detailed by the European Environment Agency[3].

Table 5-2 - Threats, Pressures, and activities with impacts on Cork Harbour SPA.

Rank	Threats and pressures (code)	Threats and pressures (type)	Inside/outside/both
Medium	G01.06	skiing, off-piste	Inside
Medium	A08	Fertilisation	Outside
High	F01	Marine and Freshwater Aquaculture	Inside
Medium	D03.02	Shipping lanes	Inside

[3] https://eunis.eea.europa.eu/sites/IE0004030

Rank	Threats and pressures (code)	Threats and pressures (type)	Inside/outside/both
Low	E01.03	dispersed habitation	Outside
High	D03.01	port areas	Outside
High	E01	Urbanised areas, human habitation	Outside
High	D01.02	roads, motorways	Outside
Medium	G01.01	nautical sports	Inside
Medium	G01.02	walking, horseriding and non-motorised vehicles	Inside
Medium	F02.03	Leisure fishing	Inside
High	E02	Industrial or commercial areas	Outside

Table 5-3 - Qualifying Interests of Cork Harbour SPA within the ZoI of the proposed works.

Qualifying Interest	Comment	Within ZoI
Little Grebe (*Tachybaptus ruficollis*) [A004] Great Crested Grebe (*Podiceps cristatus*) [A005] Cormorant (*Phalacrocorax carbo*) [A017] Grey Heron (*Ardea cinerea*) [A028] Shelduck (*Tadorna tadorna*) [A048] Wigeon (*Anas penelope*) [A050] Teal (*Anas crecca*) [A052] Pintail (*Anas acuta*) [A054] Shoveler (*Anas clypeata*) [A056] Red-breasted Merganser (*Mergus serrator*) [A069] Oystercatcher *(Haematopus ostralegus*) [A130] Golden Plover (*Pluvialis apricaria*) [A140] Grey Plover (*Pluvialis squatarola*) [A141] Lapwing *(Vanellus vanellus*) [A142] Dunlin (*Calidris alpina*) [A149] Black-tailed Godwit (*Limosa limosa*) [A156] Bar-tailed Godwit (*Limosa lapponica*) [A157] Curlew (*Numenius arquata*) [A160] Redshank (*Tringa totanus*) [A162] Black-headed Gull *(Chroicocephalus ridibundus*) [A179] Common Gull (*Larus canus*) [A182] Lesser Black-backed Gull (*Larus fuscus*) [A183] Common Tern (*Sterna hirundo*) [A193]	These species are qualifying interests of Cork Harbour SPA, which is located ca. 3m from the proposed works, at the nearest point. Given that machinery and human presence will be used in close proximity to this SPA during the proposed works these species are considered to be within the ZoI of the proposed works.	**Yes**
Wetland and Waterbirds [A999]	This habitat is located within Cork Harbour SPA ca. 3m from the proposed work, at the closest point.	**Yes**

5.4. Likelihood of Significant Effects on Natura 2000 sites

5.4.1. Identification of Potential Impacts

The available information on Natura 2000 sites was reviewed to establish whether or not the proposed works are likely to have a significant effect on the conservation objectives of the sites concerned. The likelihood of impacts on the qualifying interests of the European sites identified in this report is based on information collated from the desk study, site visits and other available existing information.

The likelihood of impacts occurring are established in light of the nature, extent and scale of the proposed works, the location of the works with respect to Natura 2000 sites and their qualifying interests, and the conservation objectives of the European sites.

This screening report has been prepared following the source-pathway-receptor model. The potential impacts are summarised into the following categories for screening purposes.

- Direct impacts refer to habitat loss or fragmentation arising from land-take, or direct disturbance or mortality of species. Direct impacts can be as a result of a change in land use or management, such as the removal of agricultural practices that prevent scrub encroachment, or activities associated with construction.

- Indirect impacts refer to those which can arise through remote connectivity, for example by means of a watercourse, via groundwater, via air (e.g., dust) or via other emissions from a project site (e.g., noise and light). Indirect and secondary impacts do not have a straight-line route between cause and effect. It is potentially more challenging to ensure that all the possible indirect impacts of the project – in combination with other plans and projects - have been established. These can arise, for example, when a development alters the hydrology of a catchment area, which in turn affects the movement of groundwater to a site and the qualifying interests that rely on the maintenance of water levels. Deterioration in water quality can occur as an indirect consequence of development, which in turn changes the aquatic environment and reduces its capacity to support certain plants and animals. The introduction of invasive species can also be defined as an indirect impact. Disturbance to fauna can arise directly through the loss of habitat (e.g., displacement of roosting bats) or indirectly through noise, vibration and increased activity associated with construction and operation.

5.4.2. Assessment of Significance of Effects

As described in Section 1.2, the proposed works for the non-structural areas involve work along the existing quays, this will be a scarifying of the concrete with an application of a bond coat and then approximately 125mm of blacktop laid on top. Works along existing grasses areas, footpaths and verges, the existing material will be excavated to a depth of 200mm and replaced with 100mm of Clause 804 or 808 depending on site conditions and 100mm blacktop on top of this.

No works will be carried out within the watercourse which runs alongside the proposed greenway at points. The majority of the works for the proposed greenway will be minor in scale and extent and will involve works along an already existing pathway, including the erection of a safety barrier.

The works which are greater in scale and extent are the proposed works for the Dry Dock Bridge, Railway Bridge and Tivoli Ramp (Detailed in Section 1.2). As mentioned, the concrete and steel used for the substructures for the Dry Dock Bridge and the Railway Bridge, will be fabricated off site before being transported and lifted into position. The Dry Dock Bridge and Railway Bridge will require wet concrete on site for foundation/piling for the supports for each. However, the proposed works will be back from the water edge and will be off short duration and will move along the length of the proposed greenway during the duration of the proposed works. For Tivoli Ramp, the ramp will comprise precast prestressed concrete beams fabricated off site and lifted into position with the deck formed by insitu concrete construction. However, Tivoli Ramp is located ca. 2.1km from Cork Harbour SPA and this area within the proposed works, is not a suitable ex situ habitat for the qualifying interest bird species of this SPA.

The significance of effects on Cork Harbour SPA are evaluated in view of the relevant conservation objectives in Table 5-4 below.

Table 5-4 - Evaluation of effects on Cork Harbour SPA (LSE-likely significant effect)

Conservation objective	Habitat/ Species	Description of effects	LSE
To maintain the favourable conservation condition of the wetland habitat in Cork Harbour SPA as a resource for the regularly occurring migratory waterbirds that utilise it.	Wetlands	The attributes of this conservation objective relate to habitat area and hectares. Given the nature and scale of the proposed works, as described in Section 1.2, there will be no significant effect on the attributes of this conservation objective.	No
To maintain the favourable conservation condition of bird species in Cork Harbour SPA	Little Grebe Great Crested Grebe Cormorant Grey Heron Shelduck Wigeon Teal Pintail Shoveler Red-breasted Oystercatcher Golden Plover Grey Plover Lapwing Dunlin Black-tailed Godwit Bar-tailed Curlew Redshank Black-headed Gull Common Gull Lesser Black-backed Gull	The attributes of the conservation objectives for these bird species relate to: Population trend and distribution. Given that the majority of the works for the proposed greenway will be minor in scale and extent and will involve works along an already existing pathway, including the erection of a safety barrier. There will, therefore, be no likely significant impact on the attributes of these conservation objectives for any of these bird species. The works which are greater in scale and extent are the proposed works for the Dry Dock Bridge, Railway Bridge and Tivoli Ramp (Detailed in Section 1.2). As mentioned, the concrete and steel used for the substructures for the Dry Dock Bridge and the Railway Bridge, will be fabricated off site before being transported and lifted into position. Further, The Dry Dock Bridge and Railway Bridge will require wet concrete on site for foundation/piling for the supports for each. However, the proposed works will be back from the water edge and the proposed works will be off short duration. The proposed works will be off short duration and will move along the length of the proposed greenway during the duration of the proposed works. For Tivoli Ramp, the ramp will comprise precast prestressed concrete beams fabricated off site and lifted into position with the deck formed by in situ concrete construction. However, Tivoli Ramp is located ca. 2.1km from Cork Harbour SPA and this area within the proposed works, is not a suitable ex situ habitat for the qualifying interest bird species of this SPA. Further the cranes used for placing the substructures in place will only be on site for a brief duration, as the substructures are small. Therefore, there will be no likely significant impacts on these species as a result of the proposed works.	No
To maintain the favourable conservation condition of Common Tern in Cork Harbour SPA	Common Tern	The attributes for this conservation objective vary from the other qualifying interest bird species. These attributes include - Breeding population abundance: apparently occupied nests (AONs), Productivity rate: fledged young per breeding pair, Distribution: breeding colonies, Prey biomass available, Barriers to connectivity, Disturbance at the breeding site, Population trend. Similarly, to above, the majority of the works for the proposed greenway will be minor in scale and extent and will involve works along an already existing pathway, including the erection of a safety barrier. There will, therefore, be no impact on the attributes of these conservation objectives for any of these bird species. The works which are greater in scale and extent are the proposed works for the Dry Dock Bridge, Railway Bridge and Tivoli Ramp (Detailed in Section 1.2). As mentioned, the concrete and steel used for the substructures for the Dry Dock Bridge and the Railway Bridge, will be fabricated off site before being transported and lifted into position. Further, The Dry Dock Bridge and Railway Bridge will	No

Conservation objective	Habitat/ Species	Description of effects	LSE
		require wet concrete on site for foundation/piling for the supports for each. However, the proposed works will be back from the water edge and the proposed works will be off short duration.The proposed works will be off short duration and will move along the length of the proposed greenway during the duration of the proposed works. For Tivoli Ramp, the ramp will comprise precast prestressed concrete beams fabricated off site and lifted into position with the deck formed by in situ concrete construction. However, Tivoli Ramp is located ca. 2.1km from Cork Harbour SPA and this area within the proposed works, is not a suitable ex situ habitat for the qualifying interest bird species of this SPA. Further the cranes used for placing the substructures in place will only be on site for a brief duration, as the substructures are small. Therefore, there will be no significant effect on these species as a result of the proposed works.	

6. Potential In-Combination Effects

6.1. Requirement for Assessment

The requirement for an AA arising out of Article 6(3) of the Habitats Directive covers plans and projects that, "*either individually or in combination with other plans or projects*", are likely to have a significant effect on one or more Natura 2000 sites. This means that an AA is required for any plan or project that, in combination with other plans or projects, would adversely affect the integrity of one or more Natura 2000 sites, irrespective of the presence or absence of such effects from that plan or project on its own. Therefore, regardless of the significance of the effects of the plan or project individually, the potential for adverse effects in combination with other plans and projects must be considered in all cases.

6.2. Approach and Methodology

The objective of this requirement is to capture adverse effects potentially arising from the cumulation or other interaction of non-significant effects from multiple plans and projects. In identifying the plans and projects to be included in this assessment, it is important to define an appropriate geographical scope and timescale over which potential in-combination effects are to be considered and the sources of information to be consulted, as described below. It is also important to consider the nature of the interactions between effects, which may be additive, antagonistic, synergistic, or complex.

6.2.1. Geographical Scope

In defining the geographical scope for identifying potential in-combination effects, it is important to remember that effects are evaluated in view of the conservation objectives of the Natura 2000 site(s) concerned. As such, two or more effects relating to the same conservation objective for a given Natura 2000 site would combine even if their geographical extents did not overlap. For example, the loss of a small area of an Annex I habitat type listed as a qualifying interest of a Natura 2000 site would combine with the loss of an entirely unconnected area of the same habitat type from a remote part of the same site to produce an in-combination effect, the significance of which would need to be evaluated in view of the relevant conservation objective. On that basis, the scope of the assessment of in-combination effects extends to all plans and projects affecting the same conservation objectives as the plan or project under consideration, irrespective of whether those effects are significant or not.

In this case, given the nature of the proposed works as detailed in 1.2, the localised extents of its impacts and sensitivities of the Natura 2000 sites in the ZoI, it was deemed most appropriate to include areas in close proximity to the proposed works and the zones of impact within the geographical scope for identifying potential in-combination effects.

6.2.2. Timescale

The timescale over which potential in-combination effects were considered in this case covered plans and projects from 5 years ago (i.e., 2018) to the present and all reasonably foreseeable future plans and projects, i.e., published draft plans and project which are already in the planning system or have received planning permission. Ongoing agricultural, industrial, and other activities were also considered.

6.2.3. Sources of Information

The following sources of information were consulted to gather information on other plans and projects:

- Cork City Council online planning enquiry system
- *MyPlan.ie Map Viewer*[4]
- EIA Portal (DHLGH, 2022)
- Cork City Development Plan 2022-2028

[4] https://viewer.myplan.ie/

6.3. Cork City Council Planning Applications

A search of Cork City Council Planning Applications was undertaken for applications submitted within the last 5 years in the vicinity of the proposed works (last reviewed 11/09/2023). Relevant projects are listed in Section 6.4 below. In summary, taking account the timing, location, nature, and scale of the projects, it is considered that there will not be any adverse effects on Cork Harbour SPA arising from the proposed works on - in combination with any planning application (Last 5 years Cork City Council Planning). As previously mentioned, there will be no adverse effects on any other Natura 2000 sites as a result of the proposed works on any of the other bridges undergoing remedial works.

The current Cork City Development Plan 2022-2028 sets out nine Strategic Objectives (SO's) to guide the future development of Cork City. -

1. **SO 1: Compact Liveable Growth** - Deliver compact growth that achieves a sustainable 15-minute city of scale providing integrated communities and walkable neighbourhoods, dockland and brownfield regeneration, infill development and strategic greenfield expansion adjacent to existing city.

2. **SO 2: Delivering Homes and Communities** - Provide densities that create liveable, integrated communities by using a mix of house types, tenures and sizes linked to active and public transport. Provide amenities, services and community and cultural uses to enable inclusive, diverse and culturally rich neighbourhoods.

3. **SO 3: Transport and Mobility -** Integrate land-use and transportation planning to increase active travel (walking and cycling) and public transport usage. Enable the key transport projects in the Cork Metropolitan Area Transport Strategy (CMATS) delivering multi-modal usage and smart mobility, accessible for all.

4. **SO 4: Climate and Environment** - Transition to a low-carbon, climate-resilient and environmentally sustainable future. Implement climate mitigation and adaptation measures that reduce our carbon footprint including sustainable energy consumption, sustainable transport, circular economy, green construction and flood risk mitigate and adaptation.

5. **SO 5: Green & Blue Infrastructure, Open Space and Biodiversity** - Manage and enhance green and blue infrastructure, to protect and promote biodiversity, ecology and habitat connectivity, protect natural areas, enhance landscape character and maritime heritage, and manage access to green and blue spaces that provide recreation, amenity and natural areas.

6. **SO 6: Economy and Employment** - Be a national and regional economic driver delivering strong, resilient, diverse and innovative economic growth. Focus new employment in strategic areas across the city. Enhance Cork's role as a city of learning, using knowledge and talent as a key enabler for city and economic growth. Transition to an environmentally sustainable carbon neutral economy. Continue the development of a network of well-serviced, well-connected, sustainable neighbourhoods which have a range of facilities, a choice of tenure and universally designed adaptable house types, promote social inclusion and integration of all minority communities.

7. **SO 7: Heritage, Arts and Culture-** Protect and enhance the unique character and built fabric of the city its neighbourhoods, urban towns and settlements by caring for Protected Structures, archaeological monuments and heritage, Architectural Conservation Areas and intangible heritage. Identify, protect, enhance and grow Corks unique cultural heritage and expression in an authentic and meaningful way. Ensure Cork's heritage, culture and arts are celebrated and developed to create an attractive, vibrant and inclusive place to live, work, study and visit.

8. **SO 8: Environmental Infrastructure** - Ensure efficient and sustainable use of water services, enhance water quality and resource management. Manage waste generation and treatment and support the principles of the circular economy. Improve air quality and promote pro-active management of noise. Enable the sustain able delivery of digital infrastructure, renewable energy and environmental improvements.

9. **SO 9: Placemaking and Managing Development** - Develop a compact liveable city based on attractive, diverse and accessible urban spaces and places. Focus on enhancing walkable neighbourhoods that

promote healthy living, wellbeing and active lifestyles, where placemaking is at the heart. Follow a design-led approach with innovative architecture, landscape and urban design that respects the character of the city and neighbourhood.

6.4. Assessment of Potential In-Combination Effects

Plans

The policy objectives in the Cork City Development Plan 2022-2028, as outlined above, contribute to mitigating the negative effects of development on Cork Harbour SPA and other Natura 2000 sites, and provide for the enhanced resilience of these sites through the development of green infrastructure/ecological networks. Therefore, there will be no adverse effects from the proposed works in combination with this plan, which will itself mitigate any in-combination effects arising from other projects.

Projects

Projects identified on the EIA Portal within the geographical scope of this assessment included: -

- Flood Relief Scheme for Glanmire/Sallybrook, Cork involving the construction of direct flood defences and conveyance improvement measures along the Glashaboy River and its tributaries in Glanmire, County Cork.

- Permission for development at Kent (Cheannt) Station, Lower Glanmire Road, Cork City, County Cork, T23E6TD. The proposed upgrade works, at Kent Station, comprises extension and alterations to the existing station, across approximately 13,725.8m2. The proposed development works to the Protected Structure of Kent Station to facilitate the through running of commuter services comprise: (A) Doubled sided 220m long , 6m wide extension to existing Platform 5 to create an extended platform 5 and new platform 6. (B) A Y-shaped, steel canopy (on the extended platform), c.3.5m in height and c.6m wide. (C) A new 113m long retaining wall structure, between 0.5m-2.1m in height, with a 1m handrail atop, between the existing mainline and the adjoining depot sidings. (D) The removal of 945m and reinstatement of approximately 1,110m of track. (E) Reinstatement of the disused eastern access subway to the existing station subway from Platform 5, via the construction of a new staircase. (F) Extension of existing stormwater (SW) network. (G) Removal of redundant signal cabin adjacent to existing track 6 and demolition of c.30m of existing platform 5. (H) Installation of lighting and platform furniture. (I) All associated enabling and ancillary works including site investigations and temporary c. 800m2 construction compound. A Natura Impact Statement (NIS) has been completed for the proposed development and will be submitted to the planning authority with the application.

- The Proposed Development involves the construction of a 5m wide pedestrian and cycle crossing from Little Island train station and the L3004 Glounthaune Road to the Eastgate Business Park and surrounds.The crossing length is approximately 460m in total.

- Permission for a Strategic Housing Development at the Former Ford Distribution Site, Centre Park Road, Cork, comprising demolition of existing structures and construction of a mixed-use development including apartments, commercial and community facilities at a Former Food Distribution Site, Centre Park Road, County Cork.

- The demolition of existing structures and the construction of a strategic housing development of 823 no. apartments in 6 no. buildings ranging in height from part-1 to part-35 no. storeys over lower ground floor level at Former Tedcastles Yard, Centre Park Road and the Marina, County Cork.

- Proposal for a Large-Scale Residential Development will consist of the demolition of the existing on-site buildings and structures and site clearance and the construction of 1325 no. residential units including apartments and duplexes in 10 no. buildings at Goulding's Site Centre Park Road and Monahan Road, Cork City.

- 3.1426 Ha at Kennedy Quay & Marina Walk, South Docks, Cork City. Mixed Use- residential, office, entertainment, food & beverage, cinema, retail and public open space including Odlums Building (RPS ref. PS856) and rehabilitation hospital, all over double basement, County Cork.

- A Strategic Housing Development of 201no. Build to Rent apartments in a building that ranges in height from 8 to 11 to 24 storeys over ground floor, ancillary resident & communal facilities; cafe; private rented office; public bar/restaurant; basement, Albert Quay, Cork City.

- Refurbishment of the existing buildings on site including the Custom House and Bonded Warehouses, construction of a 34-storey tower c.140m over the Revenue Building, a distillery, remedial works to quay walls, and the provision of a new public realm in County Cork.

- Flood Relief Scheme for Blackpool, Cork involving the construction of direct flood defences and conveyance improvement measures along a stretch of the River Bride and its tributaries in Blackpool, Cork.

- Morrison's Island Flood Relief Scheme, Cork comprising '*upgrades along Morrison's Quay and Fr Matthew Quay between Parliament Bridge and Parnell Bridge, including upgraded streetscape incorporating a wide riverside promenade, a much-improved setting for Holy Trinity Church, a plaza at the eastern end of the South Mall and a redesigned Trinity Bridge' as well as 'Provision of integrated flood gates at Trinity Bridge (north and south) and Parnell Plaza'* (CCC, 2024).

- The demolition of 10 no. existing agricultural buildings/sheds and log cabin residential structure and the construction of a residential development of 140 no. apartment units, resident amenity facilities, crèche, and all ancillary site development works, Bessborough, Ballinure, Blackrock, County Cork.

- Facilities, café, crèche, and all ancillary site development works, Bessborough, Ballinure, Blackrock, County Cork.

- The development will consist of the construction of 489 no. apartments, creche and offices in 5 no. buildings ranging in height from part-1 to part-8 no. storeys over lower ground and semi-basement podium levels, Jacobs Island, Ballinure, Mahon, County Cork.

- Construction of a new single-storey extension for the surface treatment (anodising) of aluminium sections, underground services and associated site works at Wallingstown, Little Island, County Cork.

- Glanmire to City Cycle Route (Phase 1) - Provision of segregated footpaths on both sides of the roadway along the entire length of the scheme (1.4km). Minimum footpath widths of 1.80m, Dunkettle, County Cork.

Given the nature of most of these projects and their remoteness from Cork Harbour SPA, they are unlikely to have any effect on these sites and, therefore, have no potential to give rise to any in-combination effects. Taken together, given the nature, scale and geographical spread of these projects, they are not likely to give rise to significant effects in combination with the proposed works.

The Dunkettle Interchange Improvement Scheme is currently under construction to the east of the proposed Cycle Route. Prior to planning permission an NIS was prepared to assess the potential impacts of the improvement scheme. The NIS idientified potential impacts on Natura 2000 sites and set out mitigation measures to reduce or negate these impacts so that the project would have no significant impact on any Natura 2000 site. Construction of the improvement scheme has been mostly completed and as such there will be no construction overlap with this project and the proposed cycle route. As such this project is not expected to give rise to significant effects in combination with the proposed works.

6.5. Conclusion of Potential In-Combination Effects

As detailed in the preceding sections, it can be concluded that, based on the nature of the proposed works and the brief duration of both the works themselves and any impacts arising from them, they will not give rise to likely significant effects on the Great Island Channel SAC, the Cork Harbour SPA or any other Natura 2000 site, in combination with other plans or projects.

7. Conclusion

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 the Great Island Channel SAC, the 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.

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