



O'Hanrahan Bridge Widening Project

.....
EIA Screening Report | March 2023
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O'Hanrahan Bridge Widening

EIA Screening Report

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1. INTRODUCTION

The purpose of this Environmental Impact Assessment (EIA) Screening Report is to inform the Competent Authority as to whether the proposed works to O'Hanrahan Bridge, hereafter referred to as the 'proposed development', is subject to the requirements of the EIA Directive (as amended) and, therefore, whether an Environmental Impact Assessment Report (EIAR) is required for same. The proposed development primarily comprises the widening of O'Hanrahan Bridge deck by 0.93m and widening the abutment/wingwalls at their interface with the existing quay wall on the south-east corner of the bridge to accommodate the on street footpath.

1.1 Terms of Reference

Roughan & O'Donovan Consulting Engineers (ROD) have been engaged by Kildare County Council to undertake the EIA Screening for the proposed development, in accordance with the relevant legislative provisions and with reference to the relevant guidance documents, as outlined in the following sections.

1.2 Disposition

The contents of this EIA Screening Report are set out as follows:

- Section 1 provides an introduction to the project, presents the results of the Screening for Mandatory EIA and sets out the methodology used for the Sub-threshold EIA Screening Assessment;
- Section 2 presents a description of the proposed development including the location of the proposed development and a description of the proposed construction methodology;
- Section 3 discusses the need for the proposed development in terms of existing planning and development policy;
- Section 4 presents a description of the receiving environment at the location of the proposed development;
- Section 5 sets out a list of standard mitigation measures which will be implemented during the construction of the proposed development;
- Section 6 presents the Sub-threshold EIA Screening Assessment; and,
- Section 7 presents the Screening Conclusion and Recommendation.

A separate Appropriate Assessment Screening Report has also been prepared by ROD on behalf of Kildare County Council for the proposed development [dated October 2022]. This EIA Screening Report draws on the findings of same.

1.3 Legislation

Directive 2011/92/EU, as amended by Directive 2014/52/EU (the EIA Directive), requires that all public and private projects that are likely to have significant effects on the environment shall be subject to an Environmental Impact Assessment (EIA) prior to the granting of development consent by the Competent Authority. The EIA Directive has been transposed into Irish law through the Planning and Development Acts 2000 (as amended) and the Planning and Development Regulations 2001 (as amended).

Annex I of the EIA Directive sets out the thresholds for mandatory EIA. By default, EIA is a statutory requirement for projects of a type listed in Annex I. For projects of a type listed in Annex II of the EIA Directive ('sub-threshold projects'), a Sub-threshold EIA Screening Assessment is required. As defined by the European Commission (2017,

p.10), the EIA Screening process “... *ascertains whether the Project's effects on the environment are expected to be significant, i.e. the Project is 'Screened' to determine whether an EIA is necessary*”.

Annexes I and II of the Directive have been transposed in Irish law through Parts 1 and 2 (respectively) of Schedule 5 of the Planning and Development Regulations 2001 (as amended).

1.4 Screening for Mandatory EIA

This first part of the EIA Screening exercise determines whether EIA is a statutory requirement for the proposed development under the discretionary provisions of the Planning and Development Act 2000 (as amended) ('the Act') and Schedule 5 of the Planning and Development Regulations 2001 (as amended) ('Schedule 5'). Section 172 of the Act provides the legislative basis for mandatory EIA.

The assessment found that the proposed development is not of a class or exceeds a threshold specified in Parts 1 or 2 of Schedule 5, and therefore **does not trigger a mandatory EIA** in this regard. It follows that **the proposed development is a sub-threshold development**.

1.5 Methodology for Sub-threshold EIA Screening Assessment

This EIA Screening Report has been developed in accordance with the relevant legislative provisions and with reference to the relevant guidance documents. Particular reference has been given to the following:

- Schedules 7 and 7A of the Planning and Development Regulations 2001 (as amended);
- *Environmental Impact Assessment (EIA): Guidance for Consent Authorities Regarding Sub-Threshold Development* (Department of Housing, Planning and Local Government (DoHPLG), 2003);
- *Environmental Impact Assessment of Projects: Guidance on Screening* (European Commission, 2017);
- *Guidelines for Planning Authorities and An Bord Pleanála on Carrying Out Environmental Impact Assessment* (DoHPLG, 2018); and
- *Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (Environmental Protection Agency (EPA), 2017).

As outlined in Schedule 7A of the Planning and Development Regulations, the following information regarding the proposed development and the receiving environment has been used as the basis for this EIA Screening Assessment (Table 1.1).

Table 1.1 Information to be provided by the Applicant or Developer for the purposes of screening sub-threshold development for EIA, in accordance with Schedule 7A of the Planning and Development Regulations 2001 (as amended)

1. A description of the proposed development, including in particular—
 - (a) a description of the physical characteristics of the whole proposed development and, where relevant, of demolition works, and
 - (b) a description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected.

2.	A description of the aspects of the environment likely to be significantly affected by the proposed development.
3.	A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment resulting from - (a) the expected residues and emissions and the production of waste, where relevant, and (b) the use of natural resources, in particular soil, land, water and biodiversity.
4.	The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7 [of the Planning and Development Regulations 2001 (as amended)].

1.5.1 Description of Effects

Table 1.2 presents the definitions of the types of environmental effects put forth in the *Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (EPA, 2017). These definitions are used as the basis for the description of environmental effects identified in this report. The consideration of effects also takes into account direct, indirect, secondary and cumulative effects, as appropriate.

Table 1.2 Definitions of effect types, as per EPA (2017)

Quality	
Positive	A change which improves the quality of the environment
Neutral	No effects, or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error
Negative	A change which reduces the quality of the environment
Significance	
Imperceptible	An effect capable of measurement but without significant consequences
Not Significant	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends
Significant	An effect which, by its character, magnitude, duration or intensity significantly alters a sensitive aspect of the environment
Very significant	An effect which, by its character, magnitude, duration or intensity significant alters most of a sensitive aspect of the environment
Profound	An effect which obliterates sensitive characteristics
Extent and Context	
Extent	Describe the size of the area, the number of sites, and the proportion of a population affected by an effect
Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions (is it the greatest, longest effect ever?)

Probability	
Likely	The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented
Unlikely	The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented
Duration and Frequency	
Momentary	Effects lasting from seconds to minutes
Brief	Effects last less than a day
Temporary	Effects lasting less than a year
Short-term	Effects lasting one to seven years
Medium-term	Effects lasting seven to fifteen years
Long-term	Effects lasting fifteen to sixty years
Permanent	Effects lasting over sixty years
Reversible	Effects that can be undone, e.g. through remediation or restoration
Frequency	Describe how often the effect will occur (i.e. once, rarely, occasionally, frequently, constantly; or hourly, daily, weekly, monthly, annually, etc.)

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Overview of the Proposed Development

O'Hanrahan Bridge is a 9-span post-tensioned concrete beam and reinforced concrete slab bridge over the River Barrow in New Ross town, County Wexford. The overall length of the bridge is 175m with an out-to-out width of 11.6m. The proposed works aim to widen the bridge deck by approx. 1m in order to accommodate an enhanced combined pedestrian and cycleway. The widening works are to take place on the southern side of the bridge through the replacement of the bridge deck. As a result, the instream piers will not be affected. The proposed development also includes widening the abutment/wingwalls at their interface with the existing quay wall on the south-east and south-west corner of the bridge.

In addition, the edge beam on the northern side of the bridge will be strengthened to accommodate upgrading of the existing parapet. The existing surfacing and footways will be removed to allow the provision of bridge deck waterproofing and joint replacements before the widened footways are constructed and carriageway surfacing reinstated. The works will involve a number of service diversions and upgrades in both footways.

Concrete repair works will also be undertaken on the existing O'Hanrahan bridge in areas where minor concrete defects are identified.

2.2 Location of Proposed Development

O'Hanrahan Bridge is located in the urban centre of New Ross, in Co. Wexford, where it carries the single carriageway R723 Regional Road over the River Barrow. The River Barrow system rises in the Slieve Bloom Mountains in Co. Laois and flows predominantly through undulating lowlands before entering the sea along the border of Co. Waterford and Co. Wexford. The river forms the boundary between County Wexford and County Kilkenny for the most part, the catchment includes a considerable amount of arable land, as well as pasture, woodland and large towns such as New Ross.

The bridge is located within the urban environment of New Ross town, with the adjacent land use mainly consisting of commercial and residential use. The setting is urban with the bridge site surrounded by a mix of historic buildings and structures, tourism sites and commercial properties on the eastern side; and residential, commercial, and industrial properties on the western side.

The N25 National Road previously travelled over O'Hanrahan Bridge as the main link between County Wexford and County Waterford until January 2020 when the New Ross Bypass was officially opened.

The primary function of the proposed development is to provide a shared pedestrian and cycleway from the New Ross quay front to Rosbercon Quay on the southern side of the bridge, that is accommodated along the widened section of O'Hanrahan Bridge.



Plate 2.1 Location of the proposed development



Plate 2.2 New Ross Quay with view to the north. In the foreground are the existing road, footpath and the existing flood defence wall at the south-east corner that is within the proposed development. In background is the O'Hanrahan Bridge. © Google Street View



Plate 2.3 O'Hanrahan Bridge with view to the north-west. In the foreground are the existing road of the bridge and the narrow footpaths along the sides that are proposed to be widened as part of the development. The existing parapets are proposed to be replaced. © Google Street View



Plate 2.4 New Ross Quay with views to the south. In the foreground are the existing road, parking spaces, existing flood defence wall and a public realm consisting of a small square with benches and flower beds. In the background is the O'Hanrahan Bridge and the Rosbercon Quay. © Google Street View



Plate 2.5 Rosbercon Quay with view to the east. The proposed development will provide a connection to the South – East Greenway that will be part of the existing road in the foreground. In the background is the O'Hanrahan Bridge. © Google Street View

2.3 Construction Methodology

2.3.1 Ground Investigations

A separate Ground Investigation (GI) works contract will be undertaken prior to the commencement of the main construction works. The proposed GI is focused on the

southeast and southwest quay wall to inform the design of the proposed sheet pile wall.

2.3.2 Main Construction Works

The following works are proposed to facilitate the new pedestrian and cycleway provisions:

Widening of the bridge deck (southern side)

- The existing footway and parapet will be removed and services diverted for the duration of the construction works;
- Protective measures will be put in place prior to construction to prevent debris falling into the river;
- The existing edge beam and a width of approx. 1.2m of the top of the deck slab will be broken out (all reinforcement remaining in place);
- Formwork will be erected and new reinforcement will be tied to existing exposed reinforcement;
- The concrete slab and new edge beam will be poured in-situ to complete the stitch to the existing slab;
- A new parapet, 1.4m high, will be installed (containment level N2); and
- Bridge deck waterproofing will be applied, services will be reinstated and the new footway will be constructed.

Widening of quay/wing walls (south-east corner)

- Sheet piles will be installed from the river via jack-up barge;
- The area between the existing quay wall and new sheet piles, will be infilled with structural fill consisting of granular 6N/P material;
- Formwork for the pile capping beam and the replacement flood defence wall will be erected and concrete poured in-situ;
- The existing flood defence wall will be demolished with stone cladding being taken down for reuse on the new wall; and
- The stone cladding will be installed on the new flood defence wall and the footway pavement will be constructed.

Widening of quay/wing walls (south-west corner)

- Temporary removal of existing rock armour using an excavator;
- Procurement of sheet piles and traffic management set up;
- Mobilisation of piling rig;
- Installation of sheet piles to required embedded depth;
- Back-filling behind newly installed sheet piles with compacted granular 6N/P fill and reinstatement of rock armour, monitoring for movement;
- Erect formwork for reinforced concrete capping beam and tie reinforcement steel;
- Following the installation of the sheet piled wall, scaffolding will be erected to facilitate the construction of the reinforced concrete capping beam (for new flood wall and parapet). The scaffolding will be cantilevered off of the sheet piled wall;
- Pour in-situ concrete for new capping beam and upstand wall to match existing flood defence wall ;

- Install new N2 parapet;
- Take down existing flood defence wall and existing parapet to below footpath level (reuse existing stonework where possible);
- Completion of footway pavement and erection of stone cladding to new flood defence wall; and
- Removal of traffic management.

Replacement of northern parapet

- The existing footway and parapet will be removed and existing services diverted for the duration of the construction works;
- Protective measures will be put in place prior to construction to prevent debris falling into the river;
- The existing edge beam will be broken out (all reinforcement remaining in place);
- Formwork to be erected and new reinforcement will be tied to existing exposed reinforcement;
- The new concrete edge beam will be poured in-situ to complete the stitch to the existing slab;
- A new parapet, 1.4m high, will be installed (containment level N2); and
- Bridge deck waterproofing will be applied, services will be reinstated and the new footway will be constructed.

Resurfacing and waterproofing of bridge deck

- To facilitate the waterproofing of the bridge deck, the existing road surface will be excavated to expose the top of the bridge deck;
- The deck surface will be prepared, cleaned and primed;
- Multiple layers of a waterproofing membrane will be applied to the surface;
- An adhesive coating will be applied to ensure the new material will stick;
- New (narrower) road surfacing material will be laid and rolled and footpaths will be reconstructed; and
- Road markings will be reapplied.

Installation of expansion joints

- Existing expansion joint will be excavated and removed from the bridge deck at both ends of the bridge; and
- A new expansion joint will be placed, attached and sealed with resin nosing mortar.

Temporary diversion of services

- The services located within each footpath will be temporarily diverted to enable the works underneath the footpaths;
- Waterproofing of the bridge deck will be completed during this time; and
- Services will be reinstated in their original locations within the footpaths once waterproofing has finished.

Concrete repairs

- Concrete repairs will be carried out where minor areas of defective concrete are identified;
- Defective concrete will be broken out by handheld drill/impact hammer or other specified method; and
- The exposed surfaces will be suitably primed and an approved, proprietary prebagged repair mortar/concrete will be placed by hand and allowed to dry.

2.3.3 Expected Programme

Table 2.1 Construction Programme

Construction Element	Approx. Duration of task (in weeks)
Mobilisation, compound set up	2 weeks
Widening of bridge deck (southern side)	Approx. 4 months
Works on southeast quay wall*	Approx. 2 months
Works on southwest quay wall**	Approx. 2 to 2.5 months
Replacement of northern parapet	Approx. 4 months
Concrete repairs to underside of bridge	4-6 weeks
Total Construction Phase	Approx. 9 months
Notes:	
* These works can be carried out in parallel with the main bridge works	
** These works can be carried out following completion of the southeast corner and in parallel with the main bridge widening works	

2.3.4 Estimated Quantities

The estimated quantities of materials are outlined below:

- Structural concrete: approx. 328 m³
- Reinforcement steel: approx. 66 t
- Fill material: approx. 250 m³
- Sheet piles: approx. 85 lin. m
- Road surfacing: approx. 145 m³
- Verge concrete: approx. 346 m³
- Temporary formwork for concrete: approx. 2,301 m²
- Masonry stonework for cladding: approx. 23 m³
- Bridge deck waterproofing: approx. 2,202 m²
- Steel / Aluminium parapets: approx. 406 m
- RC wall with handrail: 59 m
- Expansion joint: approx. 125 m
- Steel / aluminium lighting columns: approx. 16 no.

2.3.5 Construction Traffic Management Plan and sequence of works

A Construction Traffic Management Plan will be implemented by the Contractor. It is anticipated that construction stage of the development will be broken up into at least five phases to facilitate existing traffic. Wexford County Council will require the

Contractor to keep at least one lane open at all times and will operate a stop-go system to maintain connectivity across the bridge.

2.3.6 Temporary Construction Compound

A temporary construction compound will be set up and maintained by the successful Contractor. The construction compound and the associated temporary access road will be located within lands on the west side of the River Barrow, with access onto the R704 Regional Road as shown in Plate 2-6 below. The lands are in the ownership of Wexford County Council.

At the time of writing, these lands are currently used as a construction compound for the separately proposed South East Greenway project. If the construction phases of both projects overlap, arrangements will be made to ensure both projects can effectively use this construction compound.



Plate 2-6 Location of the Construction Compound

3. NEED FOR THE PROPOSED DEVELOPMENT

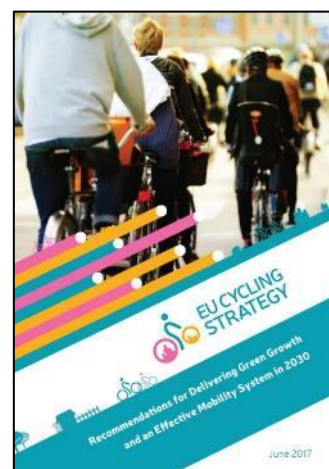
The need for the proposed development is supported by the objectives of a number of European, national, regional and local planning and development policies, including:

- EU Cycling Strategy (2017 – 2030)
- National Planning Framework to 2040
- National Development Plan 2021 – 2030
- National Investment Framework for Transport in Ireland (NIFTI)
- National Sustainable Mobility Policy
- Climate Action Plan, 2023
- National Cycle Policy Framework 2009 – 2020
- People, Place and Policy growing Tourism to 2025
- Southern Region Regional Spatial and Economic Strategy (S-RSES)
- The Southern and Eastern Regional Operational Programme, 2014 – 2020
- The South-East Economic Development Strategy (SEEDS), 2013 – 2023
- Wexford County Development Plan, 2022 – 2028
- Kilkenny City and County Development Plan 2021-2027
- County Wexford Tourism Strategy, 2019 – 2023
- New Ross Town and Environs Development Plan, 2011 - 2017

3.1 EU Cycling Strategy (2017 – 2030)

The EU Cycling Strategy constitutes the first consolidation of a systematic review of all EU policies related to cycling. It reviews the current scenario and trends in cycling in the EU and identifies the benefits offered by greater uptake of cycling. It subsequently sets out its vision for cycling in the EU to 2030 through its four overall policy objectives, as follows:

1. *“Cycling should be an equal partner in the mobility system. Users pay for the full external costs of motorised transport while the societal benefits of active mobility are fully taken into account in transport planning and investment decisions. In addition, it will show the path towards prioritising cycling over individual motorised transport.”*
2. *“Cycle use in the EU will increase by 50% in the decade from 2019/2020–2030. Its share in the transport modal split will be at least 12%, which means 0.48 cycle trips per person per day on average.”*
3. *“The rates of fatalities and seriously injured among cyclists (per kilometre cycled) will be halved in the decade 2019/2020–2030.”*
4. *“The EU should double its investments in cycle projects to EUR 3 billion during the Multiannual Financial Framework 2021–2027 (from EUR 1.5 billion in 2014–2020) and aim for another doubling to EUR 6 billion during the 2028–2034 period.”*



In order to achieve these objectives, the Strategy sets out a suite of recommended policy changes for EU, national, regional and local levels, including to “Develop and

maintain regional and local cycle route networks”, and to “Adopt a clear hierarchy of transport users in urban area, giving priority to safety, convenience and comfort needs of pedestrians, cyclists and public transport users”.

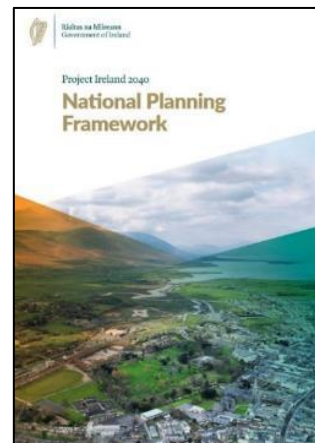
By providing enhanced cycling infrastructure along O'Hanrahan Bridge, to tie in with the existing and future cycle network in New Ross, the proposed development will contribute to the achievement of the policy objectives of the EU Cycling Strategy.

3.2 National Planning Framework to 2040

Project Ireland 2040 is the Government's overarching policy for spatial planning and development in Ireland to 2040. The *National Planning Framework to 2040* (NPF) presents a broad national-level policy to guide strategic planning and development across Ireland.

The NPF sets out ten National Strategic Outcomes (NSOs), “a shared set of goals for every community across the country” (p. 10). Among these are NSO No. 4, Sustainable Mobility, and NSO No. 7, Enhanced Amenity and Heritage. As stated in respect of Sustainable Mobility:

“Dublin and other cities and major urban areas are too heavily dependent on road and private, mainly car-based, transport, with the result that our roads are becoming more and more congested. The National Development Plan makes provision for investment in public transport and sustainable mobility solutions to progressively put in place a more sustainable alternative.” (p. 143)



The NPF aims to deliver this sustainable alternative by directing investment towards a number of public transport and transport infrastructure projects, including development of “a comprehensive network of safe cycling routes in metropolitan areas” (p. 143). The need for enhanced cycling and pedestrian infrastructure is further emphasised in National Policy Objective (NPO) No. 27, to “Ensure the integration of safe and convenient alternatives to car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments” (p. 82).

In respect of NSO No. 7, Enhanced Amenity and Heritage, it is stated that:

“This [NSO] will ensure that our cities, towns and villages are attractive and can offer a good quality of life. It will require investment in well-designed public realm, which includes public spaces, parks and streets, as well as recreational infrastructure” (p. 15).

By providing improved pedestrian and cycling infrastructure on O'Hanrahan Bridge, the proposed development is aligned with the principles and objectives of the National Planning Framework to 2040.

3.3 National Development Plan 2021 – 2030

The *National Development Plan* (NDP) sets out the Government's overarching investment strategy as part of *Project Ireland 2040*. One of the major focuses of the plan is improving the delivery of infrastructure projects. The NDP sets out ten National Strategic Outcomes (NSOs), among which are NSO No. 4, Sustainable Mobility, and NSO No. 7, Enhanced Amenity and Heritage. This NDP details a new National Active Travel Programme that will complement active travel investments in cities, towns, and villages, as described in NSO 3: Strengthened Rural Economies and Communities and NSO 4: Sustainable Mobility. The NDP will aim to provide significant additional walking and cycling infrastructure across the country by 2025. As part of that the NDP details the development of a new National Cycling Network Strategy by end-2022, which will: *"map existing cycling infrastructure in both urban and rural areas, including Greenways, and will serve to inform future planning and project delivery decisions in relation to walking and cycling infrastructure for the remainder of the decade"* (p.61).



As stated in respect of Active Travel, National Active Travel Programme:

"The Government is firmly committed to encouraging the use of walking, cycling and other active travel methods, and this has been signalled by the recent increase in the active travel budget. Whole-of- Government funding equivalent to 20% of the 2020 transport capital budget, or €360 million, has been committed annually for the period 2021-2025" (p.62).

The National Cycle Network Strategy is outlined in the NDP, with the goal of identifying areas where future investment may be focused in order to create a complete and integrated cycling network throughout Ireland. Given its national focus, this Strategy will: *"encompass both urban and rural areas, and will be a valuable resource in relation to active travel connectivity around Ireland"*.

The proposed development is aligned with the principles and objectives of the National Development Plan 2021-2030, by providing improved pedestrian and cycling infrastructure on O'Hanrahan Bridge and connection from the South East Greenway to New Ross and its tourist attractions in the future.

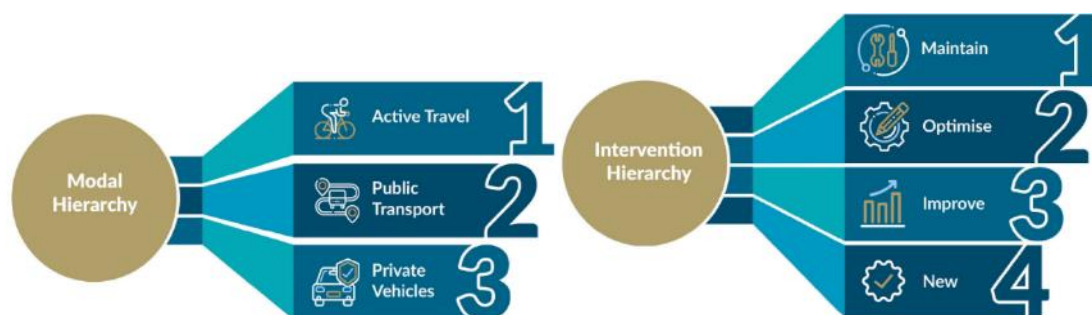
3.4 National Investment Framework for Transport in Ireland (NIFTI)

The Department of Transport in December 2021 adopted the National Investment Framework for Transport in Ireland (NIFTI), which seeks to prioritise future investment in the land transport network to support the delivery of the National Strategic Outcomes of the National Planning Framework (NPF).

To address the challenges, NIFTI establishes four investment priorities that future transport projects must align with to secure funding, namely:

- Decarbonisation;
- Protection and Renewal;
- Mobility of People and Goods in Urban Areas; and
- Enhanced Regional and Rural Connectivity.

In addition, NIFTI also contains a Modal Hierarchy, and Intervention Hierarchy as indicated below.



As per the Modal Hierarchy, developments which seeks to promote active travel are prioritised over public transport and private vehicles, while maintenance of existing assets is prioritised over optimising, improving or new construction in accordance with the Intervention Hierarchy.

Projects going forward will be required to demonstrate how the project impacts on the National Strategic Outcomes, including how the potential negative impacts will be mitigated and how the project aligns with one or more of the NIFTI priorities. NIFTI published 14 Background Papers which reproduce themes from the National Planning Framework to support its vision.

Background Paper 6: Protection and Renewal, aims to maintain physical infrastructure of the transport network in an adequate condition and estimates the level of investment required for the transport system from 2018 to 2040 which is approx. €630m each year for National Roads.

Background Paper 3: Climate Change highlights the need for change in our transport sector to achieve Ireland's emission reduction target, with a focus on raising the number of electric vehicles in use, using biofuels and compressed natural gas, the delivery of BusConnects and the expansion of cycling infrastructure.

The proposed development supports the objectives of NIFTI. The proposed development supports active travel by enhancing pedestrian and cyclist facilities on O'Hanrahan Bridge, an existing asset, whilst maintaining and optimising the existing structure.

3.5 National Sustainable Mobility Policy

The National Sustainable Mobility Policy (NSMP) was published in April 2022 as a replacement to the Smarter Travel – A Sustainable Transport Future, considering the significant changes in legislation during the intervening period.

The NSMP aligns with current policy, such as the NPF, NDP, Climate Action Plan 2021, Road Safety Strategy 2021-2030 and National Investment Framework for Transport in Ireland (NIFTI) and its vision is *“to connect people and places with sustainable mobility that is safe, green, accessible and efficient”*.

The policy is guided by three key principles which are underpinned by 10 high level goals, namely:

Safe and Green Mobility

- (1) Improve mobility safety.
- (2) Decarbonise public transport.
- (3) Expand availability of sustainable mobility in metropolitan areas.

- (4) Expand availability of sustainable mobility in regional and rural areas.
- (5) Encourage people to choose sustainable mobility over the private car.

People Focused Mobility

- (6) Take a whole of journey approach to mobility, promoting inclusive access for all.
- (7) Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model.
- (8) Promote sustainable mobility through research and citizen engagement.

Better Integrated Mobility

- (9) Better integrate land use and transport planning at all levels.
- (10) Promote smart and integrated mobility through innovative technologies and development of appropriate regulation.

The O'Hanrahan Bridge Widening project supports goals 1, 3, 5, 7 and 9 of the NSMP by providing enhanced pedestrian and cyclist infrastructure over O'Hanrahan Bridge. The proposed works are likely to promote active travel in New Ross, whilst also providing a connection to the future Kilkenny (the South East) Greenway.

3.6 Climate Action Plan, 2023

The Climate Action Plan 2023 (CAP23) sets out a roadmap of specific actions in various sectors including road transport. This plan is the first to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021, which commits Ireland to a legally binding target of net-zero greenhouse gas emissions no later than 2050 and a reduction of 51 percent by 2030 (compared to 2018 levels) and is required to be reviewed and updated annually to ensure it is responsive. Under the Climate Act 2021, Ireland's national climate objective requires the State to pursue and achieve, by no later than the end of the year 2050, the transition to a climate-resilient, biodiversity rich, environmentally sustainable and climate-neutral economy.

In relation to the transport sector, a number of targets have been identified in CAP23 to reduce the emissions in relation to transport, namely:

- Increase daily active travel journeys by 50% by 2030
- Increase daily public transport journeys by 130% by 2030
- Reduce daily car journeys by 25% by 2030
- Shift 30% of all escort to education car journeys to sustainable modes
- Reduce total vehicle kms by 20%
- Reduce total car kms by 20%
- Reduce fuel usage by 50%

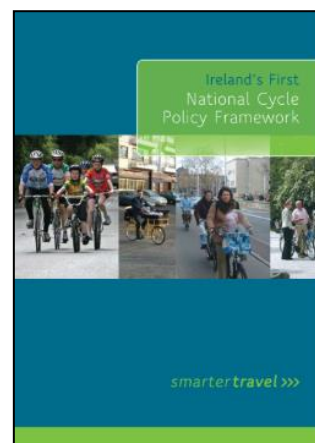
67 no. actions developed for the transport sector, including TR/23/29 "Advance roll-out of 1,000 km walking/cycling infrastructure".

By providing enhanced pedestrian and cycling infrastructure along O'Hanrahan Bridge, the proposed development will contribute to increasing the daily sustainable travel journeys set out in the Climate Action Plan. The proposed development will also create a linkage into New Ross from the future Kilkenny (the South East) Greenway promoting the use of sustainable modes of travel in New Ross and the environs.

3.7 National Cycle Policy Framework 2009 – 2020

The National Cycle Policy Framework (NCPF) builds on the vision for a sustainable transport future set out in the Government's overarching transport policy, *Smarter Travel – A Sustainable Transport Future*, as described above. The guiding vision of this policy document are that by 2020:

- (1) All cities, towns and villages will be bicycle friendly;
- (2) Cycling will be a normal mode of transportation, particularly for short trips;
- (3) Cycling will contribute to improved quality of life, quality of the public realm, a stronger economy and business environment, and an enhanced environment; and
- (4) 10% of all trips will be taken by bicycle.



It is pointed out that, since the 1980s, cycling has been in steep decline in Ireland. The 2006 national census found that less than 2% of adults cycle to work and that women were less likely to cycle than men. A number of factors contributing to low levels of cycling have been identified, including sprawling development (i.e. lengthy commutes) and inadequate provision of proper cycling infrastructure.

With a view to achieving the vision described above, the Framework sets out 19 objectives. Most pertinent to the proposed development are Objective 1, to “*Support the planning, development and design of towns and cities in a cycling and pedestrian friendly way*” and Objective 2, to “*Ensure that the urban road infrastructure (with the exception of motorways) is designed / retrofitted so as to be cyclist-friendly and that traffic management measures are also cyclist friendly*” (p. 9). A suite of corresponding policies are outlined, including Policy 2.9, ‘Urban Cycle Networks’, which states that “*We will develop cycle-networks as part of wider cyclist-friendly local traffic plans / traffic management plans in all urban areas*” (p. 20).

The proposed development is fully aligned with the objectives and policies of the National Cycle Policy Framework.

3.8 People, Place and Policy growing Tourism to 2025

During the 2002-2007 period, Ireland experienced a surge of tourism which sharply declined in 2008 due to the worldwide economic crisis. Since 2011, in response to the economic crisis the Government placed tourism at the centre of its economic recovery plan. The Government identified that ‘*the warmth and welcome of our people, complemented by the richness of beauty of our places, landscape and heritage*’ are the three focal aspects which will draw more tourism into Ireland.

The Government aspires to generate a €5 billion overseas tourism revenue in real terms (i.e. in 2014 prices) by 2025 or ‘*10 million overseas visitors per year by 2025, compared to 7.6million in 2014*’. The employment in the sector is desired to reach 250,000 by 2025. To reach this goal, the Plan supports a range of investments to enhance the visitor experience, including the ‘*development of greenways*.’



The O'Hanrahan Bridge walkway and cycleway extension will enable the exploration of Ireland's cultural heritage and landscapes along the route by also providing connection from the South-East Greenway to New Ross and its tourism attractions in the future.

3.9 Southern Region Regional Spatial and Economic Strategy (S-RSES)

The Regional Spatial and Economic Strategy for the Southern Region of Ireland (S-RSES) outlines how the policies and objectives from the National Planning Framework (NPF) and any other relevant Government policies and objectives will be implemented in the Southern Region. The S-RSES intends to reflect these policies and objectives through economic and spatial strategies targeted specifically at the Southern Region.

The provision of walking and cycling routes within urban centres and rural areas is targeted as they endorse a healthy lifestyle for the population and create an opportunity for attracting tourism to the area. Regional Policy Objectives (RPOs) within the Southern Region RSES have been identified to promote the development of walking and cycling routes as well as Blueways, Greenways and Peatways in the region. RPOs of the S-RSES support investment of greenway as follows:

- **RPO 53 Tourism** support developments in relation to the enhancement of tourism and leisure amenities including investment in walking and cycling infrastructure and includes the following objectives:
 - *“Sustainably develop walking and cycling trails opening greater accessibility to the marine and countryside environment by sustainable modes of and promote the sustainable designation and delivery of Greenway and Blueway Corridors”.*
 - *“Facilitate appropriate tourism development and in particular a National Greenways, Blueways and Peatways Strategy, prioritising sustainable projects that achieve maximum impact and connectivity at national and regional level”.*
- **RPO 125 Green infrastructure corridors** *“Transport infrastructure provides potential opportunities to act as green infrastructure corridors. It is an objective to support Local Authorities acting together with relevant national infrastructure providers to co-develop infrastructural management plans to enhance biodiversity”.*
- **RPO 201: National Trails, Walking Routes, Greenway and Blueway Corridors** *“It is an objective to support investment in the development of walking and cycling facilities, greenway and blueway corridors within the Region between our Region's settlements and potential for sustainable linkages to create interregional greenways. Proposals for investment in walking and cycling facilities, greenway and blueway corridors should be based on rigorous site/route selection studies and Local authorities should ensure that decision-making in relation to such developments is informed by an appropriate level of environmental assessment, including all necessary reports to assess the potential impact on designated European sites and on biodiversity outside of formal protections such that proposed development does not contribute to loss of biodiversity. Local authorities and other public agencies shall seek to promote and support access to rural areas including upland areas, forestry, coastal areas and the development of existing walking routes, pilgrim paths, mountain trails and nature trails in conjunction with other public bodies, representative agencies and community groups and shall identify and protect existing paths, walkways and rights of way”.*

- **RPO 174 Walking and Cycling** as shown in Plate 2.4 below. This RPO supports investment for developing walking and cycling infrastructure in the region.
- **RPO 46** relates to digital and physical infrastructure in rural areas and is supported by the proposed development as it will allow for a more '*enhanced transport connectivity including rural public transport services and greenway walking and pedestrian corridors between settlements*' which reduces the reliance of private cars over shorter journeys within the rural landscape.

The construction of the proposed development will support the listed regional policy objectives by promoting walking and cycling activities in the area. It will also provide better connectivity from the South East Greenway to New Ross which will further support the tourism sector.

3.10 The Southern and Eastern Regional Operational Programme, 2014 – 2020

The Southern and Eastern Regional Operational Programme 2014 – 2020 was prepared in co-operation with a wide range of partners and stakeholders as required under Article 5 of the Common Provisions Regulation and as detailed in the 'Code of Conduct on Partnership' which is intended to support and facilitate Member States and Managing Authorities in the implementation of the partnership principle.

The programme is composed of six investment priorities. Priority 5 is concerned with Sustainable Integrated Urban Development and has an allocated budget of €52 million with objectives to:

- Support low carbon sustainable, multimodal urban mobility in designated urban centres; and
- To revitalise, regenerate and improve the urban environment in the designated urban centres as part of integrated urban strategies.

The Designated Urban Centres Grant Scheme under Priority 5 has an objective to increase the number of integrated urban regeneration initiatives to improve the urban environment and revitalise urban areas including those in Wexford and Waterford. The proposed development supports the Programme as it will improve accessibility, promote sustainable mobility, and will regenerate the surrounding area.

3.11 The South East Economic Development Strategy (SEEDS), 2013 – 2023

This Strategy is an Action Plan for the south-east arising from the Joint Committee on Jobs Enterprise and Innovation, in response to the unemployment crisis in the region. The objective of the strategy is to identify the economic needs of the southeast, prioritising the urban centres, recognising disparities, addressing geographical inequalities and driving balanced regional development.

The aim is to focus on the Southeast's key strengths in tourism, developing a critical mass of expertise through improved educational attainment, delivery of a Technological University and strong research and development. The strategy aims to promote and develop eco-tourism in the region, including developing further walking or cycling trails, better promoting such attractions as New Ross's John F. Kennedy Arboretum.

3.12 Wexford County Development Plan, 2022 – 2028

The Wexford County Development Plan (CDP) 2022 – 2028 sets out a 6-year sustainable development plan for the region, detailing its intentions for future land

development including measures to improve the natural and physical environment of the county as well as provision of infrastructure.

To improve the county's economic competitiveness and quality of life, the Wexford CDP sets out a range of policies and objectives to address its transportation sector to *'provide an effective and sustainable transport system which is accessible to all'*. The Wexford CDP advocates for a modal shift from private car use to sustainable transport by promoting public transport as well as investing in walking and cycling infrastructure. Walking and cycling are low carbon modes of transportation and permits for independent travel within County Wexford. The following objectives have been outlined within the Wexford CDP:

Objective TS07 *'To plan for the appropriate development of all aspects of the transport network for all modes and to ensure that the design and investment decisions prioritise sustainable transport modes.'*

Objective TM14 aims to *"To support and develop our town and villages and rural heritage sites including our beaches for tourism purposes through the facilitation of links by public transport, greenways, blueways and associated infrastructure subject to compliance with the Habitats Directive and normal planning and environmental criteria"*.

The following development approaches have been set out in the development plan in relation to New Ross Town:

- *'Prepare a local transport plan that will inform zoning decisions, include the development of the town bus network improvements to cycling and walking infrastructure and rural transport services into the town and secure investment to deliver the plan.'*
- *'Protect and enhance amenities, heritage, green infrastructure and biodiversity in all new development.'*

The plan also aims to prepare a local transport plan that will inform zoning decisions, including the development of the town bus network, enhancements to cycling and pedestrian infrastructure and rural transportation services into the town, as well as securing funding to carry out the plan.

The proposed development will improve accessibility and promote sustainable mobility in the town of New Ross and will encourage active travel as opposed to travelling by private car over short distances.

3.13 Kilkeny City and County Development Plan 2021-2027

The Kilkeny City and County Development Plan (CCDP) 2021-2027 sets out a 6-year plan for the proper planning and sustainable development of the area. Sections of New Ross town on the western banks of the River Barrow are with the jurisdiction of Kilkeny County Council and as such, the policies and objectives contained in the Kilkeny CCDP are applicable to the proposed development.

The Kilkeny CCDP supports integration of land use transportation to reduce the overall demand for transport, or promote travel by alternative modes other than the car by supporting the development of a more efficient land use pattern. **Objective 12A** of the CCDP aims *'to plan for and progressively implement a sustainable, integrated and low carbon transport system by enhancing the existing transport infrastructure in terms*

of road, bus, rail, cycling and pedestrian facilities and interfacing different modes as the opportunity arises'.

With regards to modal share targets for the transport sector, the Kilkenny CCDP sets targets for modal shift to be achieved by 2040 which includes a 9% increase in walking from the 2016 baseline, a 13.8% increase in cycling, and a 12% increase in public transport usage. The Kilkenny CCDP also aims for car usage to be reduced by 20% by 2040 from the 2016 figures.

The Plan also supports the development of greenways and recognises that they are *"an important element of cycling infrastructure"*. **Objective 8J** of the Kilkenny CCDP aims to *"To complete the construction of the Kilkenny Greenway, connecting to New Ross to Waterford"*. The proposed development supports this Objective as it will create a linkage into New Ross from the future Kilkenny (the South East) Greenway promoting the use of sustainable modes of travel in New Ross and the environs.

3.14 County Wexford Tourism Strategy, 2019 – 2023

Tourism is vital sector of the Irish economy and plays a significant role in the local economy of county Wexford. 6000 jobs are supported by the tourism industry in the county and it contributes €207 million annually to local revenue. The growth rate of the tourism industry in Wexford has shown a positive dynamic but is significantly behind national growth rates from the industry. Wexford tourism has significant reliance on domestic visitors and does not perform as highly as neighbouring counties in attracting foreign tourism. In light of the untapped potential that the county holds, the Wexford County Council and other significant stakeholders from government and industry have generated a tourism strategy for the period 2019-2023. The main ambitions of the plan are to raise the quality of life for locals and the attractiveness of the county to visitors. This will be achieved through infrastructure creation, including cycling and walking trails, and improvement to extend the tourist season and bring together people and communities. The economy of the county will also be diversified. The statistical aim of the strategy is to improve tourism revenue by 18.7% and visitor numbers by 12%, this should lead to approximately 800 new jobs across the county.



The following strategic goal have been identified in the Plan:

'To strengthen, develop and elevate Wexford's range of compelling, unique and must do visitor experiences, creating real standout and competitive differentiation.'

Cycling has been identified as an area for growth as the trends for cycling worldwide show it growing in popularity as a method of transport and recreation. Wexford is well placed for the development of cycling and walking trails linking together major sights and amenities. Key infrastructure upgrades in relation to cycling will help to improve its popularity and accessibility by locals and tourists alike. The proposed development will connect to the South East Greenway following its completion in the future (wexfordcoco.ie).

3.15 New Ross Town and Environs Development Plan, 2011 – 2017

The New Ross Town and Environs Development Plan laid out the strategy for the area of the settlement for the period 2011-2017. The plan aims to promote balanced development with a balance of residential, economic, tourism and recreational

development. The plan aims to create a greener and more efficient urban area more suited for the challenges of a balanced urban settlement in 21st century Ireland. This is to be achieved with due consideration to the unique aspects of the local environment. The plan focuses on the development of the town in relation to the economy, environment, society, and urban form. One of the key aspects of the development plan is to shift the model form of transport from personal motorcar to walking and cycling.

The New Ross Town and Environs Development Plan sets out the following opportunities in relation to sustainable infrastructure:

- *Introduce an efficient transport system which offers a choice of transport modes, reducing congestion and car dependency in the town centre and developing a pedestrian and cycle friendly environment which will achieve a reduction in CO2 emissions;*
- *Facilitate consolidated growth and renewal while also protecting the rich and architectural and natural heritage of the town;*

Furthermore, some key objectives of the plan include:

- *'Build on existing strategic infrastructure, by seeking to develop good transport links with other urban centres in the southeast region and within the plan area.'*
- *'Encourage the development of primary tourist attractions and secondary support facilities (such as transport/accommodation) to enhance these attractions.'*
- *'Encourage a modal shift from private modes of transport to public transport, cycling and walking.'*
- *'Facilitate ease of movement, minimise car journeys and CO2 emissions and provide a pedestrian friendly environment.'*

The proposed development will potentially increase accessibility and promote sustainable mobility in New Ross, encouraging users to walk and cycle instead of driving short distances in a private mode of transport.

4. DESCRIPTION OF THE RECEIVING ENVIRONMENT

4.1 Population & Human Health

O'Hanrahan Bridge provides the main crossing of the River Barrow within New Ross town in County Wexford. The site of the proposed development is situated in an urban location, within the New Ross Urban and Rosbercon Urban Electoral Divisions (ED) (see Plate 4.1). The western boundary of the Rosbercon Urban ED also forms the county boundary between County Kilkenny to the west, and County Wexford to the east. This County Boundary then follows the route of the River Barrow to the north and south. According to Corine Land Cover map (2018)¹ the land use in the vicinity of the proposed development is predominantly urban, with industrial and commercial units south of the bridge along the banks of the River Barrow. There are also inland marshes around Marshmeadows and in north of the bridge in Rosbercon.

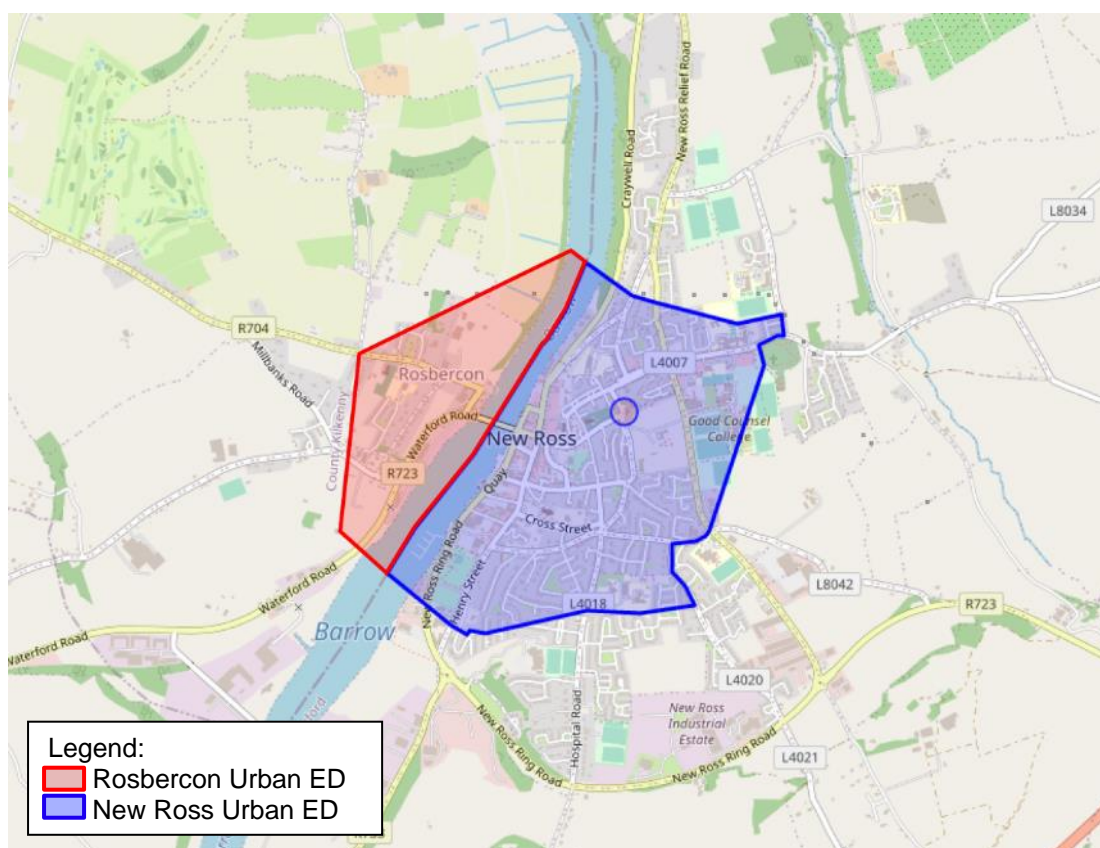


Plate 4.1 Location of proposed development in relation to New Ross Urban and Rosbercon Electoral Divisions (© OpenStreetMap)

The Town of New Ross is divided into two EDs – New Ross Urban ED and Rosbercon Urban ED. Central Statistics Office (CSO) Census 2016 results for both of the EDs indicate that the population age of New Ross is above the national average. The most recent Central Statistics Office (CSO) Census 2022 Preliminary results indicate that the population for County Wexford has increased by 9.2% from 2016-2022 from 149,722 to 163,527 (CSO, 2022).

¹ Corine Land Cover Maps <https://land.copernicus.eu/pan-european/corine-land-cover/clc2018> [28 October 2021]

Table 4.1 New Ross Urban Electoral Division – Key Statistics (CSO, 2016)

Population Count	3,768
% of owner-occupied homes	50.6%
Number of people who cycle to work, school or college	10 (0.52%)
Number of people who travel to work, school or college by foot	535 (27.6%)
Number of people who travel to work, school or college by bus	75 (3.8%)
Number of people who travel to work, school or college by car (car driver and passenger)	1061 (54.8%)

These statistics are broadly representative of the socio-economic context of the New Ross area. In New Ross Urban ED, the most common means of commuting to work is by car (54.8% of residents). This is slightly lower than the equivalent statistic for the New Ross Municipal District (MD) overall (42%) (CSO, 2017). The next highest means of commuting is by foot (Table 4.1), which is higher than the equivalent statistic for the general New Ross MD (8.5%) (CSO, 2017). By contrast, the use of bicycles for commuting is low among residents (Table 4.1).

According to the 2011 CSO data, the population within the New Ross Urban ED has decreased by 3.6% between 2011 and 2016 (CSO, 2017).

Information on the equivalent statistics for the Rosbercon Urban Electoral Division is shown in Table 4.2. According to the CSO census data, the population of Rosbercon Urban ED increased by 2.6% between 2011 and 2016. The most common means of commuting to work, school or college is by car, with travelling by foot being second most common. Similar to the New Ross Urban ED statistics (Table 4.1), the use of bicycles is low at 1%.

Table 4.2 Rosbercon Urban Electoral Division – Key Statistics (CSO, 2016)

Population	643
% of owner-occupied homes	29.8%
Number of people who cycle to work, school or college	4 (1%)
Number of people who travel to work, school or college by foot	96 (25.6%)
Number of people who travel to work, school or college by bus	10 (2.6%)
Number of people who travel to work, school or college by car (car driver and passenger)	227 (60.5%)

The historical significance of New Ross town provides tourism opportunities and locations for recreational activities. A memorial on the south quays presents a bronze statue of John F Kennedy following his visit to New Ross in 1963, as the birthplace of his grandfather. The Dunbrody Famine Ship is also located on the banks of the river in New Ross, which is a popular tourist attraction. The Port of New Ross is home to a number of river festivals and offers berths for boating enthusiasts travelling up the estuary. New Ross is also a well-suited location for import and export of goods to and from Ireland.

Seveso Site

There is an upper tier SEVESO site approximately 1.5km south from the site of the proposed development. The Seveso III Directive (2012/18/EC) addresses the

appropriate measures required to ensure a high level of protection against major accidents, which might result from industrial activities and sites. To ensure best practices and provide with greater protection, the directive states that the Health and Safety Authority is obliged to provide technical advice to the Council if the proposed development is in the vicinity of an existing Seveso site area. The consultation distance for Nitrofert Ltd, located in Raheen Port, New Ross, is 700m and the proposed development is not within the area of required consultation.

4.2 Biodiversity

The site of the proposed development is of considerable conservation value for the population and occurrence of habitats and populations of plant and animal species that are listed on Annexes I, II and IV of the EU Habitats Directive. The proposed site is located along the existing O'Hanrahan Bridge over the River Barrow, which corresponds with the Fossitt habitat classification category, 'Tidal rivers' (CW2) (Fossitt, 2000). The town of New Ross, which is adjacent to the development site, would be considered to correspond with classification categories 'Buildings and artificial surfaces' (BL3) and 'Sea walls, piers and jetties' (CC1) (Fossitt, 2000). The riverbank adjacent to the southwest corner of the bridge supports habitats that correspond with 'Lower salt marsh' (CM1), Dry meadows and grassy verges (GS2) and a Willow (*Salix spp.*) dominated Treeline (WL2). During low tide, 'Mud shores' (LS4) are exposed along both banks of the River Barrow at the location of the proposed development. A small area of 'Scattered trees and parkland' (WD5) is also present on either side of the western end of the bridge. It is likely that the proposed site supports important populations of protected species, including Twaite Shad (*Alosa fallax fallax*), Atlantic Salmon (*Salmo salar*), Lamprey *spp.*, European Eel (*Anguilla Anguilla*) and Otter (*Lutra lutra*). Bat species are also likely commute and forage along the river corridor. Himalayan Balsam (*Impatiens glandulifera*) and Common Cord-grass (*Spartina anglica*) are invasive species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477/2011). Himalayan Balsam can be found growing within the scrub on the western bank of the river and Common Cord-grass forms the saltmarsh habitat on the mudflats on the same bank.

A review of the 100m grid squares partially or wholly overlapping with the site of the proposed development on the National Biodiversity Data Centre map viewer app, conducted on the 24th of September 2021, identified just one record of protected species in / immediately adjacent to the site – European otter (Table 4.3).

Table 4.3 Protected species recorded in / immediately adjacent to the site of the proposed development on the NBDC database

Species	Date of Record	Dataset	Grid Square	Designations
Brown Long-eared Bat (<i>Plecotus auratus</i>)	12/09/2015	Atlas of Mammals in Ireland 2010-2015	S717276	Wildlife Act; Habitats Directive Annex IV
European Otter (<i>Lutra lutra</i>)	10/08/2017	Mammals of Ireland	S717277	Wildlife Act; Habitats Directive Annex II, Annex IV
European Otter (<i>Lutra lutra</i>)	04/05/2018	Mammals of Ireland	S718277	Wildlife Act; Habitats Directive Annex II, Annex IV

4.2.1 Designated Sites

The proposed site is located within an area of high nature value, in the New Ross area. The AA Screening Report for the proposed development defined the Likely Zone of Influence, the geographical extent over which significant ecological effects are likely to occur, as follows:

- The site of the proposed development, plus;
- The entire area within 500m of the site, plus;
- The entire extent of the transitional waters of the River Barrow and the River Nore upstream and downstream of the proposed development.

One European protected site and one national designated site occur within this zone and, as such, are considered susceptible to significant ecological effects. They are as follows:

European (Natura 2000) Sites:

- River Barrow and River Nore SAC [002162]
- River Nore SPA [004233]

National Sites:

- Barrow River Estuary pNHA [000698]

These sites, their ecological features and sensitivities are outlined in the following sections. The AA Screening assessment for the proposed development has determined that there are potential pathways for impacts from the proposed development to the river Barrow and River Nore SAC, and the River Nore SPA. There are also pathways for impacts on the Barrow River Estuary pNHA. The Qualifying Interests (QIs) – the protected habitats and species for whose protection they have been designated – are listed below. Please refer to the AA Screening Report for the proposed development for a more detailed description of these sites.

River Barrow and River Nore SAC [002162]

The proposed development site is located within the River Barrow and River Nore SAC. The Qualifying Interests (QIs) for which the site has been designated are as follows:

- [1130] Estuaries
- [1140] Mudflats and sandflats not covered by seawater at low tide
- [1170] Reefs
- [1310] *Salicornia* and other annuals colonising mud and sand
- [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- [1410] Mediterranean salt meadows (*Juncetalia maritimi*)
- [3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation
- [4030] European dry heaths
- [6430] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- [7220] *Petrifying springs with tufa formation (*Cratoneurion*)
- [91A0] Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

- [91E0] *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- [1016] Desmoulin's Whorl Snail (*Vertigo moulinsiana*)
- [1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)
- [1092] White-clawed Crayfish (*Austropotamobius pallipes*)
- [1095] Sea Lamprey (*Petromyzon marinus*)
- [1096] Brook Lamprey (*Lampetra planeri*)
- [1099] River Lamprey (*Lampetra fluviatilis*)
- [1103] Twaite Shad (*Alosa fallax*)
- [1106] Atlantic Salmon (*Salmo salar*)
- [1355] European Otter (*Lutra lutra*)
- [1421] Killarney Fern (*Trichomanes speciosum*)
- [1990] Nore Freshwater Pearl Mussel (*Margaritifera durrovensis*)

The site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Overall, the site is of considerable conservation significance for the occurrence of good examples of habitats and of populations of plant and animal species that are listed on Annexes I and II to the Habitats Directive. Furthermore, it is of high conservation value for the populations of bird species that use it. The occurrence of several plant species listed in *Ireland Red List No. 10: Vascular Plants* (Wyse Jackson et al., 2016), including three rare plants in the salt meadows and the population of the hard water form of the Freshwater Pearl Mussel, which is limited to a 10 km stretch of the Nore, add further interest to this site.

Land use at the site consists mainly of agricultural activities, mostly intensive and principally grazing and silage production. Slurry is spread over much of the area. Arable crops are also grown. Many of the woodlands along the rivers belong to old estates and support many non-native species. Fishing is a main tourist attraction along stretches of the main rivers and their tributaries and there are a number of angling clubs, some with a number of beats. Both commercial and leisure fishing takes place on the rivers. There is net fishing and a mussel bed in the estuary. Other recreational activities such as boating, golfing and walking, particularly along the Barrow towpath, are also popular. There is a golf course on the banks of the River Nore at Mount Juliet and sports pitches at Inistioge and Thomastown. There are active and disused sand and gravel pits throughout the site. Several industrial developments, which discharge into the river, border the site. New Ross is an important shipping port and shipping to and from Waterford and Belview ports also passes through the estuary.

The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, over-grazing in the woodland areas, and invasion by non-native species, e.g. Cherry Laurel and Rhododendron. Water quality remains vulnerable. Good quality water is necessary to maintain the populations of Annex II species and is dependent on controlling fertilisation of the grasslands, particularly along the River Nore. It also requires that sewage be properly treated before discharge. Drainage activities in the catchment can lead to flash floods which can damage the many Annex II species present. Capital and maintenance dredging within the lower reaches of the system

pose a threat to migrating fish species such as Lamprey and Shad. Land reclamation also poses a threat to the salt meadows and the protected species therein.

River Nore SPA [004233]

The River Nore SPA is a long, linear site that includes the following river sections: the River Nore from the bridge at Townparks, (north-west of Borris in Ossory) to Coolnamuck (approximately 3km south of Inistioge) in Co. Kilkenny; the Delour River from its junction with the River Nore to Derrynaseera bridge (west of Castletown) in Co. Laois; the Erkina River from its junction with the River Nore at Durrow Mills to Boston Bridge in Co. Laois; a 1.5km stretch of the River Goul upstream of its junction with the Erkina River; the Kings River from its junction with the River Nore to a bridge at Mill Island, Co. Kilkenny. The site includes the river channel and marginal vegetation.

The QIs for which the site has been designated include:

[A229] Kingfisher (*Alcedo atthis*)

The River Nore SPA is of high ornithological importance as it supports a nationally important population of Kingfisher, a species that is listed on Annex I of the E.U. Birds Directive.

This site is particularly sensitive to natural system modifications such as landfill, land reclamation and drying out, general transportation and service corridors such as port areas.

Proposed Natural Heritage Areas (pNHAs)

The site of the proposed development is situated within the Barrow River Estuary pNHA [000698]. The site synopsis for this site had not yet been developed. Therefore, it is assumed that the ecology of the site is roughly described by the list of Qualifying Interest of the River Barrow and River Nore SAC, with which this site overlaps.

4.3 Soils and Geology

The receiving environment at the location of O'Hanrahan Bridge comprises Made Ground on the landside elements including the roadbed, New Ross quayfront and the quayfront at Rosbercon. The historical ground investigation records in the area, obtained via Geological Survey of Ireland's Geotechnical Viewer, show that the Made Ground is underlain by up to 20m thick soft alluvial silts/clay with frequent peat laminae, followed by relatively thin layer of gravel overlying bedrock. The riverbed follows the same alluvial composition, but without Made Ground. Moving away from the river towards east and west, the alluvium quickly gives place to glacial till derived from Paleozoic shales, again covered by Made Ground from built-up environment.

New Ross town (and the site of the proposed development) is underlain by Ballylane Formation from approximately the centre of the river to the north and west, and by Oaklands Formation from the centre of the river to the east and south (GSI, 2020). The geology of New Ross comprises predominantly slate and minor greywacke of Lower Palaeozoic era, dating from the Ordovician period. Within the area of New Ross Town, to the east of O'Hanrahan Bridge, the soils and subsoils can be described as urban and classified as 'made'.

The New Ross Town and Environs Development Plan 2011-2017 (extended) identifies the following existing problems relating to geology and soil:

'Existing environmental problems relating to soil include the building upon and thereby sealing off of soil, with pollution and contamination of soil as a result of likely surface and ground water pollution. Flood risk can negatively impact on soil through increased run-off and siltation in alluvial areas. Eroded soil washed into rivers during heavy rainfall causes an increase in nutrients which can lead to eutrophication of rivers and lakes. Flooding can also have a positive impact on soils bringing nutrients and silt which good soils are composed of.'

EPA Maps identify presence of alluvial soils at Marshmeadows, approximately 890m south of the bridge crossing and along the River Barrow, which suggests recurring flooding activity around those areas. As mentioned above, alluvial ground is also found under Made Ground along the entire riverbank.

4.4 Hydrology and Hydrogeology

The site of the proposed development is located in New Ross town, with O'Hanrahan Bridge carrying the regional road over the River Barrow, which is the second longest river in Ireland and has a catchment of approximately 2,983km². Additionally, the River Barrow which is tidal at this location, forms part of two transitional waterbodies within the site, the Barrow Nore Estuary Upper is located north of O'Hanrahan Bridge and New Ross Port, includes waters south of the bridge. The water quality for the Barrow Nore Estuary Upper was found to be Potentially Eutrophic in the 2018-22 reporting period, while the water quality of New Ross Port was found to be Intermediate for the same period.²

The Barrow at the subject site is both within the Barrow Catchment (east bank) and the Nore Catchment (west bank) under the Water Framework Directive. At the proposed development location, the waterbody has been classified as a 'At Risk' waterbody and a heavily modified waterbody (EPA, 2018). It is classified as having Moderate Ecological Potential (EPA, 2018).

In terms of groundwater, the areas within proximity to New Ross are classified as good status. The site of the proposed development is in an area which is considered to be at low risk of groundwater contamination (EPA, 2018).

The GSI rates aquifers in Ireland by their productivity and the vulnerability to pollution. The aquifer underlying subject area is Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones as per the GSI. There is rock at the surface or karst rock present on the portion of the plan with the overall groundwater vulnerability labelled as extreme (Plate 4.2).

² EPA Maps <https://gis.epa.ie/EPAMaps/?s=> [27th October 2021]

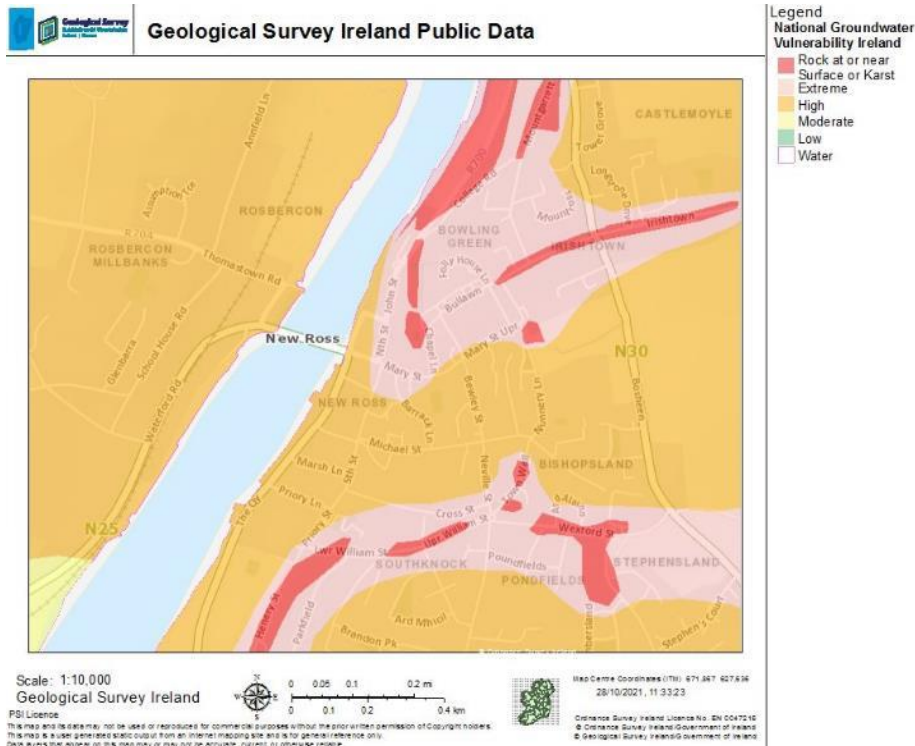


Plate 4.2 Groundwater Vulnerability in the vicinity of the proposed development

New Ross Town is indicated as liable to flood from the River Barrow, as seen in the OPW flood map (Plate 4.2). Recurring flood areas, identified as historically vulnerable to flooding by OPW Flood Maps, include: The Quay, Bridge Street, Rosbercon and Marshmeadows. Flood walls have been installed along the southern quays, as identified in Plates 4.3 and 4.4.



Plate 4.3 Showing the existing flood walls on the New Ross quays

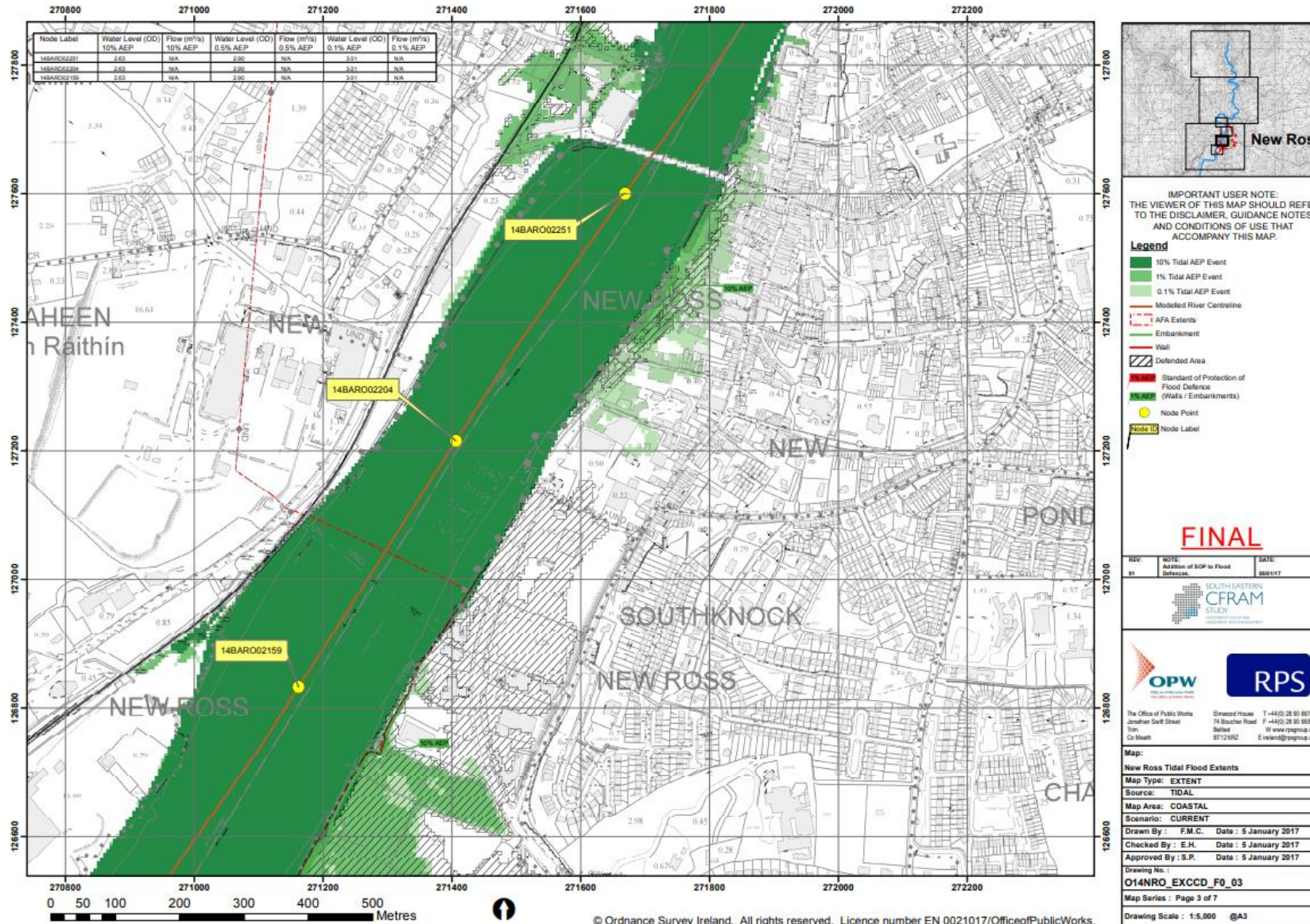


Plate 4.4 Flood zone map of New Ross (floodinfo.ie)

4.5 Air Quality and Climate

A desktop review of available baseline air quality data has been undertaken.

The coal industry is unrestricted in New Ross Town and Environs, and there is currently no smokeless ordinance in place. Smoking fuels and transportation fumes have a negative impact on PM₁₀/PM_{2.5}. Due to a high number of people traveling to work and rising traffic levels on the N25/N30, traffic congestion has been an issue in the town centre. High volumes of traffic produce noise and pollution and was identified as creating an unpleasant sensory experience for pedestrians and residents of the town (New Ross Town and Environs Development Plan, 2017). The New Ross Bypass was officially opened in January 2020 which has diverted through traffic travelling, between Wexford and Waterford, out of New Ross town.

In terms of NO₂, PM₁₀ and PM_{2.5} air quality monitoring programmes have been undertaken in recent years by the EPA. The most recent annual report on air quality, “Air Quality Monitoring Report 2020” (EPA 2021a), details the range and scope of monitoring undertaken throughout Ireland. As part of the implementation of the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002), four air quality zones have been defined in Ireland for air quality management and assessment purposes (EPA, 2022). Zone A is defined as Dublin and its environs, Zone B is defined as Cork City, Zone C is defined as 23 urban areas with a population greater than 15,000 and Zone D is defined as the remainder of the country. The area within which the Proposed Scheme is located is classed as Zone D.

In 2020 the EPA reported (EPA 2021a) that Ireland was compliant with EU legal air quality limits at all locations, however this was largely due to the reduction in traffic due to Covid-19 restrictions. The EPA report details the effect that the Covid-19 restrictions had on stations, which included reductions of up to 50% at some monitoring stations which have traffic as a dominant source. The report also notes that CSO figures show that while traffic volumes are still slightly below 2019 levels, they have significantly increased since 2020 levels. 2020 concentrations are therefore predicted to be an exceptional year and not consistent with long-term trends. For this reason they have not been included in the baseline section.

NO₂ monitoring was carried out at two rural Zone D locations over the period 2015 - 2019, Emo and Kilkitt and the urban site of Castlebar (EPA, 2021a). Over the 2015 – 2019 period annual mean concentrations ranged from 2 – 5 µg/m³ for the rural sites and 7 – 10 µg/m³ for the urban sites (Table 4.4). Hence, long-term average concentrations measured at all locations were significantly lower than the annual average limit value of 40 µg/m³. The hourly limit value of 200 µg/m³ was not exceeded in any year albeit 18 exceedances are permitted per year. The average results over the last five years at the urban Zone D location of Castlebar suggest an upper average of no more than 8 µg/m³ as a background concentration. Based on the above information a conservative estimate of the background NO₂ concentration in the region of the proposed development is 9 µg/m³.

Table 4.4 Trends in Zone D Air Quality – Nitrogen Dioxide (NO₂)

Station	Averaging Period ^{Notes 1, 2}	Year				
		2015	2016	2017	2018	2019
Castlebar	Annual Mean NO ₂ (µg/m ³)	8	9	7	8	8
	99.8 th %ile 1-hr NO ₂ (µg/m ³)	-	65.6	59.8	60.2	58.9

Station	Averaging Period ^{Notes 1, 2}	Year				
		2015	2016	2017	2018	2019
Kilkitt	Annual Mean NO ₂ (µg/m ³)	2	3	2	3	5
	99.8 th %ile 1-hr NO ₂ (µg/m ³)	-	26.1	17.0	22.3	42.3
Emo	Annual Mean NO ₂ (µg/m ³)	3	4	3	3	4
	99.8 th %ile 1-hr NO ₂ (µg/m ³)	-	35.5	27.5	41.6	27.8

Long-term PM₁₀ monitoring was carried out at the Zone D locations of Castlebar, Kilkitt and Claremorris over the period 2015 – 2019 (EPA, 2021a). Annual mean concentrations range from 11 – 16 µg/m³ for the urban site and 7 – 9 µg/m³ for the rural site at Kilkitt (Table 4.5). Hence, long-term average PM₁₀ concentrations measured at these locations were significantly lower than the annual average limit value of 40 µg/m³. The 90.4th percentile of 24-hour values was well below the limit value of 50 µg/m³ reaching at most 23.8 µg/m³ in Castlebar. A new indicative monitoring station was set up in New Ross in 2018, this is located at Ard Mhicil, New Ross, approximately 630m southeast from the site. As this data is indicative it is not included in the EPA annual report of monitoring data. Data for the long-term urban site suggests an upper average annual mean of no more than 13 µg/m³ as a background value. Based on the above data a conservative estimate of the current background PM₁₀ concentration in the region of the proposed development is 16 µg/m³.

Table 4.5 Trends in Zone D Air Quality – PM10

Station	Averaging Period ^{Notes 1, 2}	Year				
		2015	2016	2017	2018	2019
Castlebar	Annual Mean PM ₁₀ (µg/m ³)	13	12	11	11	16
	90 th %ile 24-hr PM ₁₀ (µg/m ³)	22.2	20.0	19.1	19.9	23.8
Kilkitt	Annual Mean PM ₁₀ (µg/m ³)	9	8	8	9	7
	90 th %ile 24-hr PM ₁₀ (µg/m ³)	17.7	15.0	14.0	15.3	13.2
Claremorris	Annual Mean PM ₁₀ (µg/m ³)	10	10	11	12	11
	90 th %ile 24-hr PM ₁₀ (µg/m ³)	16.5	17.4	17.3	19.9	19.7

Note 1 Annual average limit value - 40 µg/m³ (EU Council Directive 2008/50/EC & S.I. No. 180 of 2011).

Note 2 Daily limit value - 50 µg/m³ measured as a 90.4th percentile (EU Council Directive 2008/50/EC & S.I. No. 180 of 2011).

The results of PM_{2.5} monitoring at Claremorris over the period 2015 – 2019 ranged from 4 – 6 µg/m³ (EPA, 2021a), with an average PM_{2.5}/PM₁₀ ratio between 0.4 – 0.6. Long-term average PM_{2.5} concentrations measured at this location were significantly lower than the annual average limit value of 25 µg/m³. Based on this information, a ratio of 0.7 was used to generate a background PM_{2.5} concentration of 11.2 µg/m³.

In summary, existing baseline levels of NO₂, PM₁₀ and PM_{2.5} based on extensive long-term data from the EPA are well below ambient air quality limit values in the vicinity of the proposed development.

Anthropogenic emissions of greenhouse gases in Ireland included in the EU 2020 strategy are outlined in the most recent review by the EPA which details provisional emissions up to 2020 (EPA 2021b). The data published in 2021 states that Ireland has exceeded its 2020 annual limit set under the EU's Effort Sharing Decision (ESD),

406/2009/EC1 by an estimated 6.73 Mt. For 2020, total national greenhouse gas emissions are 57.7million tonnes carbon dioxide equivalent (Mt CO₂eq) with 44.38 MtCO₂eq of emissions associated with the ESD sectors for which compliance with the EU targets must be met. Agriculture is the largest contributor in 2020 at 37.1% of the total, with the transport sector accounting for 17.8% of emissions of CO₂.

GHG emissions for 2020 are estimated to be 3.6% lower than those recorded in 2019. Emission reductions have been recorded in 6 of the last 10 years. However, compliance with the annual EU targets has not been met for five years in a row. Emissions from 2016 – 2020 exceeded the annual EU targets by 0.29 MtCO₂eq, 2.94 MtCO₂eq, 5.57 MtCO₂eq, 6.85 MtCO₂eq and 6.73 MtCO₂eq respectively. Agriculture is consistently the largest contributor to emissions with emissions from the transport and energy sectors being the second and third largest contributors respectively in recent years.

The EPA 2020 GHG Emissions Projections Report for 2020 – 2040 (EPA, 2021c) notes that there is a long-term projected decrease in greenhouse gas emissions as a result of inclusion of new climate mitigation policies and measures that formed part of the National Development Plan (NDP) which was published in 2018 and the Climate Action Plan published in 2019. Implementation of these are classed as a “With Additional Measures scenario” for future scenarios. A change from generating electricity using coal and peat to wind power and diesel vehicle engines to electric vehicle engines are envisaged under this scenario. While emissions are projected to decrease in these areas, emissions from agriculture are projected to grow steadily due to an increase in animal numbers. However, over the period 2013 to 2020 Ireland is projected to cumulatively exceed its compliance obligations with the EU’s Effort Sharing Decision (Decision No. 406/2009/EC) 2020 targets by approximately 12.2 MtCO₂eq under the “With Existing Measures” scenario and under the “With Additional Measures” scenario (EPA, 2021c). The projections indicate that Ireland can meet its non-ETS EU targets over the period 2021 – 2030 assuming full implementation of the 2019 Climate Action Plan and the use of the flexibilities available.

After the publication of the 2021 Climate Act in July 2021 and the 2021 CAP, carbon budgets and sectoral ceilings for the built environment sector will be adopted in the coming months and will be outlined in the 2022 CAP which will allow a comparison with the net CO₂ project GHG emissions.

4.6 Noise and Vibration

The noise environment in the location of the proposed development is relatively high due to the urban location and the dominance of road traffic. The TII Round 3 Noise mapping illustrated in Plate 4.5 below indicates that traffic noise levels (L_{DEN}³) at the site of the proposed development range from 60 – 69 dB, while the equivalent night-time range (L_{NIGHT}) is 50 – 64 dB (EPA, 2020a). It is noted that this modelling was carried out while O’Hanrahan Bridge formed part of the National Road Network prior to the New Ross Bypass being operational, therefore it is anticipated that these levels may have reduced due to the reduction in traffic through New Ross town. Noise levels in adjacent buildings may be expected to be lower than those illustrated below also.

³ The annual average sound pressure level

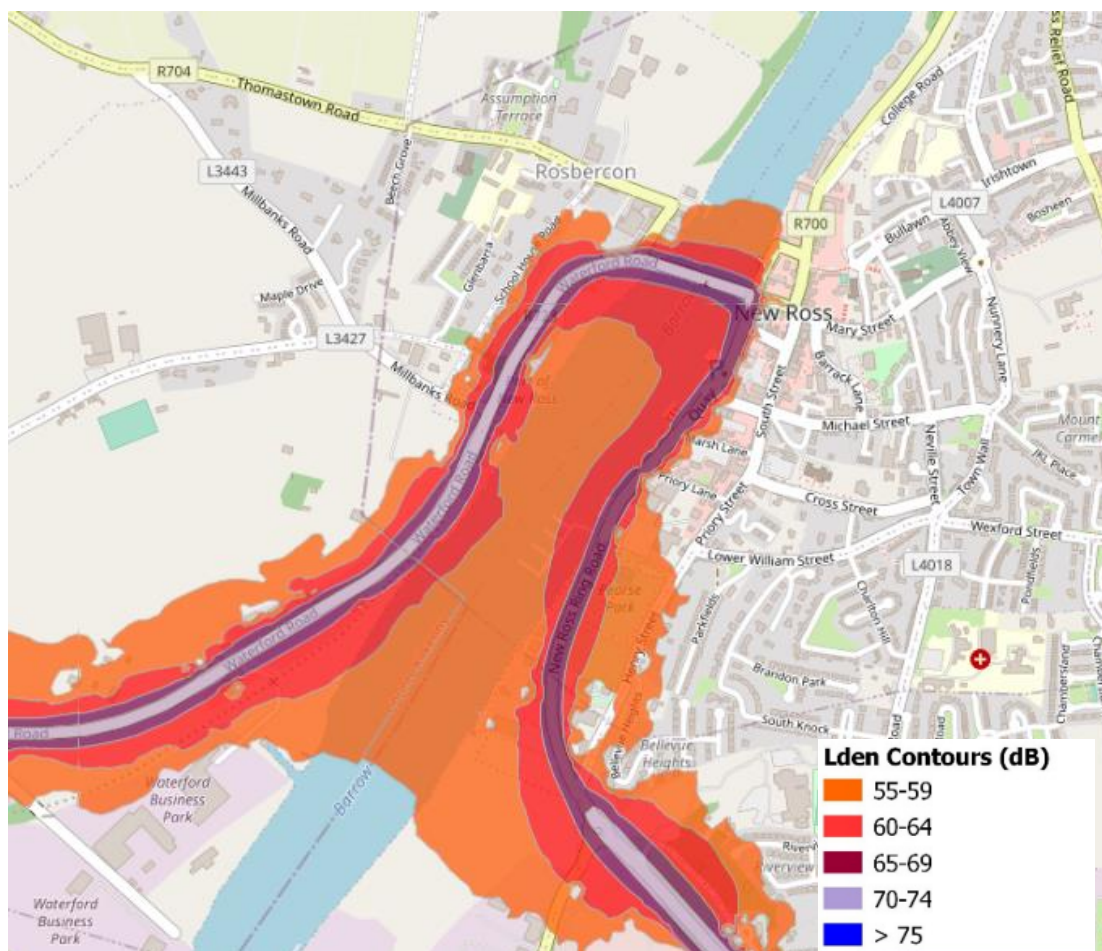


Plate 4.5 Noise Round 3 Road – Lden – National Roads

There are no statutory limits on environmental noise exposure levels (outside of the workplace) in Ireland. However, the World Health Organisation has published guidelines values for community noise levels in specific environments, the most relevant of which are set out in Table 4.6. A natural environment (where background noise is birds, trees and wind) is associated with a typical L_{DEN} value of 40dB and L_{NIGHT} value of 30dB. ‘High environmental noise levels’ are defined in the Seventh Environmental Action Plan of the European Environment Agency as noise levels for L_{DEN} above 55 dB and for L_{NIGHT} above 50 dB. The WHO has established a night-time outdoor noise guideline limit of 40 dB.

Table 4.6 WHO guideline values for community noise LA_{eq} = limit for continuous noise; LA_{max} = limit for single sound events

Environment	Critical health effect(s)	LA_{eq} (dB)	LA_{max} (dB)
Inside dwellings at night-time and evening	Annoyance; speech intelligibility	50	-
Inside bedrooms at night-time	Sleep disturbance	30	45
Balconies and other outdoor living areas associated with dwellings during the daytime	Annoyance	50	-
Industrial, commercial, shopping and traffic areas, indoors and outdoors	Hearing impairment	70	110

Environment	Critical health effect(s)	LA _{eq} (dB)	LA _{max} (dB)
Impulse sounds from toys, fireworks and firearms	Hearing impairment – adults	-	140
	Hearing impairment – children		120

Table 4.7 Summary of WHO Guidelines (2018)

Noise Source	L _{den} (dB) ¹	L _{night} (dB) ¹	Recommendation strength ²
Road Traffic	<53	<45	Strong
Railway	<54	<44	Strong
Aircraft	<45	<40	Strong
Wind turbine	<45	No Recommendation ³	Conditional
Leisure	Reducing the yearly average from all leisure noise sources combined to 70 dB LA _{eq, 24h} ¹		Conditional
<p><i>1 Lden is the day, evening and night sound level. It is the average sound level over a 24-hour period, determined from the Lday (LAeq, 12hr 7am-7pm), Levening (LAeq, 4hr 7pm-11pm) and Lnight (LAeq, 8hr 11pm-7am), with a 5 dB penalty added to the Levening and a 10 dB penalty added to the Lnight. The LAeq, 24hr is the average sound level over a 24-hour period.</i></p> <p><i>2 Recommendations are rated as either strong or conditional. A strong recommendation "...is based on the confidence that the desirable effects of adherence to the recommendation outweigh the undesirable consequences. The quality of evidence for a net benefit – combined with information about the values, preferences and resources – inform this recommendation..." For conditional recommendations, "...There is less certainty of its efficacy owing to lower quality of evidence of a net benefit, opposing values and preferences of individuals and populations affected or the high resource implications of the recommendation, meaning there may be circumstances or settings in which it will not apply".</i></p> <p><i>3 The quality of evidence of night-time noise exposure to wind turbine noise is too low to allow recommendations.</i></p>			

4.7 Landscape & Visual Amenity

The town of New Ross is situated along the River Barrow, Ireland's second-longest river. The Landscape Character Assessment for Wexford (WLCA) is contained in the Wexford County Development Plan 2013-2019 (as extended) and defines four landscape types in the county. The location of the proposed development is characterised as a 'Lowland' Character Area while the River Barrow Corridor is identified as providing a highly scenic landscape within this character area.

The site adjoins New Ross's town centre, on the eastern bank of the Barrow, which has its origins in the 6th Century. The medieval street pattern and historic buildings also provide a sense of place and contribute to the town's historic landscape. The land to the north and east of the town are considered to be landscapes of Moderate Sensitivity. There are no protected views within the vicinity of the proposed development, while the nearest Co. Wexford 'Landscapes of Greater Sensitivity' to the site is located over 2km away.

The New Ross Town and Environs Development Plan 2011-2017 (as extended) identifies the River Barrow as a potentially vulnerable landscape as it is a prominent aspect of the natural environment that draws the eye. As well as being subject to several wildlife designations, including a SAC and pNHA, the river also serves an industrial purpose in the form of New Ross Port and is also a valuable recreational resource (e.g. New Ross Marina). The Development Plan does not include any protected vistas, although the proposed New Ross Architectural Conservation Area

(ACA) comes within 20m of the site, and which contains dozens of protected structures. In addition, there are no tree protection orders in the vicinity.

The adjacent land uses are a mix of residential, recreational and commercial in nature and therefore sensitive visual receptors are located within the vicinity of the proposed development. Within approx. 300m south of the site along the east banks, tourist/visitor attractions are located on the south quays, which afford views across the river from the existing boardwalk.

4.8 Cultural Heritage

4.8.1 Site Location Archaeological and Historical Overview

The SMR detail compiled by the Archaeological Survey of Ireland and contained on the Historic Environment Viewer provides an accurate summary relating to the development of New Ross as follows:

“St. Abban is said to have founded an early church at Ros Mhic Treoin (WX029-013012-) but the town was founded by William Marshall probably some time before c. 1200 when the first of many bridges was built. The town grew rapidly and became the port for the Marshall lands in south Leinster, which consisted of most of the counties of Wexford and Kilkenny with large portions of neighbouring territories. The building of the walls c. 1265 is described in a poem (Hore 1900, vol. 1, 58 60), but this probably involved just the digging of the fosse. According to a charter of 1374, it appears that the town was still unwallled (Hore 1900. vol. 1, 202 4). Murage was collected down to 1830, but the most intense period was 1374-1420 (Thomas 1992, vol. 2, 176).

New Ross was a great commercial rival of the Royal city of Waterford, and the customs returns of 1277-80 shows that it was the busiest port in Ireland (Orpen 1911, 10). However, by the middle of the 15th century it was so much in decline that in 1469 it was sacked by the Kavanaghs. The town was held by the Confederate Catholics in 1642, who destroyed the bridge, but the town was captured by the Earl of Ormond for the King soon afterwards. However, in 1649 the town surrendered without a fight to Cromwell who dismantled the fortifications.

The town is situated on a steep slope which runs down to the River Barrow/Nore on its W side. The walls (WX029-013005-) enclosed c. 105 acres running from the river at the N, up Goat Lane to the Maiden Gate, along the back of properties to the W of Haughton Place, along Nunnery Lane to a mural tower and on to the junction with Neville St. It changed direction here and ran W down the N side of William St. where there is a portion of surviving wall. It crossed the junction with Priory St., and continued towards the river where another tower has been identified (Scully 2010). Rosbercon was an independent borough on the Kilkenny side of the River Barrow/Nore and was probably unwallled. There were gates at North St., the Maiden's Gate to the Irishtown, which still partly survives, Three Bullet Gate at Neville St. and William St., and the Priory or South Gate. Bunnion Gate, at the top of Mary St., is probably a late addition. A wall was provided on the riverside in the 16th or 17th century with may gates onto the quays. The river has been spanned by at least five bridges (WX029-013071-) since the 13th century, from which it derived its name – Ros Pontis villa nova (The new town of the bridge of Ros). There have also been lengthy periods when reliance was placed in ferries.

Within the town five church sites are known: St Mary's (WX029-013002-) with considerable remains, St Michael's (WX029-013010-), St Saviour's chapel (WX029-013011-) and the Franciscan (WX029-013008-) and Augustinian (WX029-013009-) friaries. In Rosbercon there was the Dominican friary (WX029-013007-) and the parish church (WX029-013001-). Outside the town is the site of

St Stephen's Church (WX029-013006-) and the site of a monastery, possibly a leper hospital (WX029-015----) in the Maudlins. Trinity hospital (WX029-013074-) was established in the 16th century. (Hore 1900, vol. 1, 42 396; Bradley and King 1990, 99-146)."

The history of the bridging of the Barrow in New Ross can be summarised as follows:

- The original crossing at New Ross comprised a ford at the lowest point on the River Barrow.
- Around 1200, Marshall commissioned the building of a bridge - Pons Novus, villa Willelmi Marescalli (the new bridge of William Marshal's town).
- Marshall's bridge was replaced around 1313 by the second bridge which was built by Aylmer de Valence who had inherited New Ross and other portions of Marshal's Irish estates.
- Aylmer's bridge was rebuilt during the reign of King Henry IV in the early fifteenth century.
- In 1643 during the Nine Years War, the Catholic Confederate forces burned the bridge following their defeat at the Battle of Ballinvegga near New Ross.
- Cromwell's forces built a pontoon bridge to cross the Barrow in 1649.
- Lemeul Cox designed another wooden bridge, 508 feet long and 40 feet wide at New Ross in 1794 at a cost of £8,000. It collapsed during extremely icy conditions in 1867.
- The next bridge at New Ross was a Samuel Roberts designed iron construction, opened in 1869 at a cost of £37,000. The abutments for this bridge can still be seen beside the boatclub on the Rosbercon side and at the end of Bridge Street on the New Ross side. A portion of the bridge parapet, bearing the crest of New Ross and the dedication of the bridge, was salvaged and installed in a landscaped area close to the western end of O'Hanrahan Bridge.
- The reinforced concrete O'Hanrahan bridge (designed by Cork-based engineers O'Connell Harley O'Dwyer, with McCarthy/Hyder) was the sixth bridge built across the Barrow, downstream from its predecessors. This bridge was opened in 1967 and cost £380,000 to build. It was named in honour of New Ross-born writer Michael O'Hanrahan who participated in the Easter Rising as a member of the Jacob's Factory garrison and was executed at Kilmainham Gaol on May 4th, 1916.

4.8.2 Recorded Archaeological Sites and Monuments

The medieval Town Walls (WX029-013005-) of New Ross are considered to be a National Monument under the National Policy on Town Defences 2008. Within 50m of the proposed development, a total of 4 additional sites or monuments are recorded as shown in Table 4.8.

Table 4.8 Recorded Archaeological Sites within 50m radius of the proposed

Reference	Designation	Site Type	Townland	Easting	Northing	Approx. Distance
WX029-013071-	RMP; SMR	Bridge	New Ross	671084	627580	100m
WX029-013014-	RMP; SMR	Excavation, miscellaneous	New Ross	671081	627795	73m

Reference	Designation	Site Type	Townland	Easting	Northing	Approx. Distance
WX029-013----	SMR; RMP	Historic Town	Rosbercon, Irish town, New Ross	671049	627549	0m
WX029-013005-	National Monument	Town defences	New Ross	671065	628065	15m
WX029-013007-	Religious house – Dominican friars	RMP	High	Rosbercon	671509 627802	96m

4.8.3 Previous Archaeological Investigations

Records of previous archaeological investigations within 50m of the proposed development area are shown in Table 4.9 below.

Table 4.9 Previous Archaeological Investigations within 50m of the proposed development area

DIER Ref.	Excavation Licence No.	Director	Location	Coordinates	Summary
2003:2032	03E0541	Emmet Stafford	The Quay, New Ross	671651 627707	Post-medieval reclamation layers and structures
95E0086	1995:277, 1997:601	Sarah McCutcheon, ADS Ltd	New Ross Main Drainage Scheme, The Quay, South St, Conduit Lane, Back Lane, New Ross	671796, 627627	Medieval town walls and town ditch, as well as medieval burials in Rosbercon. Reclamation layers and brick-built conduit. Post-medieval and medieval ceramics recovered.
1997:601	95E086ext.	Sarah McCutcheon	The Quay, New Ross	671651 627707	Reclamation layers; brick-built conduit; post-medieval pottery; medieval pottery at 0.88m below PGL.
2002:1926	02E1307	Emmet Stafford	North Quay, New Ross	671165 627707	Line of medieval Town Walls; No archaeological significance.
2003:2025	03E0489	Daniel Noonan	North Quay, New Ross	671777 627706	Line of medieval Town Walls; post-medieval corn store walls; infill layers; medieval pottery (mid-late 13 th century from 1m below PGL); seventeenth-century stone-lined drain at 1.074m OD)

DIER Ref.	Excavation Licence No.	Director	Location	Coordinates	Summary
2001:1313	01E0006	Maurice F. Hurley	The Quay, New Ross	671802 627665	Reclamation layers including coal slack and possible ballast; no archaeological significance.
2004:1818	04E0240	Mary O'Donnell	The Quay, New Ross	671751 627561	Post-medieval reclamation layers; no archaeological significance
1995:277	95E0086	Sarah McCutcheon	The Quay, New Ross	671735 627550	West & south line of medieval Town Walls; medieval town ditch at south-east side of town; burials in Rosbercon.

4.8.4 Shipwreck Inventory

The National Monuments Service (NMS) Wreck Viewer at www.archaeology.ie was accessed to see if the remains of any shipwrecks or logboats are recorded in the immediate vicinity of O'Hanrahan Bridge. This service maps c. 20% of the wrecks recorded in the waters of Ireland, and whilst several wrecks are recorded downstream from the bridge, none are identified around the bridge itself. The Wreck Inventory Database records several wrecks in the vicinity of New Ross, none of which can specifically located/pinpointed to the immediate area around O'Hanrahan Bridge.

Table 4.10 Selected wreck listed around New Ross from the Wreck Inventory of Ireland Database

Detail		Description
OBJECTID:	17929	Wooden wreck identified during a geophysical survey of the River Barrow as part of a route selection survey for the New Ross by-pass. Wreck lies on the west side of the navigation channel approximately 200m north of Pink Point. The wreck lies NE-SW on the riverbed listing in its starboard side and is fairly intact apart from some damage at the bow end (NE end). It measures approximately 27m long and 8.8m wide and lies in about 0.8m (stern end) of water at low tide. The wreck lies on a slope with the bow lying in a riverbed scour at a depth of approximately 8m. Loose timbers lie scattered in and around the wreck and seom of the vessel's beam timbers are clearly visible in the multibeam images.
Name:	Unknown	
Wreck No.	W18542	
DD_Latitude	52.35885	
DD_Longitude	-6.99583	
Source of Coordinates	Smyth 2016	
Date of Loss	Unknown	
Record Source	Smyth, B. 2016. Multibeam Survey (11/05/2016) River Barrow, New Ross Bypass, project.	
Date of Loss (Year Only)	N/A	
Place of Loss:	(Co. Kilkenny) River Barrow, approximately 200m north of Pink Point on the west side of the navigation channel.	

Table 4.11 Selected wreck listed around New Ross from the Wreck Inventory of Ireland Database

Detail		Description
OBJECTID:	17928	A small circular mound (8m in diameter) of flag stones was identified during a geophysical survey of the River Barrow carried out in advance of dredging works taking place. A dive survey of the flagstones did not identify any wooden components of a wreck. A wreck with a cargo of flag stones lies 35m to the south of the flagstone mound and may form part of this wreck or may be part of a separate wreck. Underwater Archaeogeophysical Investigation of the River Barrow from New Ross to the Barrow Bridge. In Boland, D. 1999, Geophysical Survey of the Proposed Dredging and Reclamation Sites in the River Barrow at New Ross.
Name:	Unknown	
Wreck No.	W18541	
DD_Latitude	52.3666	
DD_Longitude	-6.99017	
Source of Coordinates	NMS	
Date of Loss	N/A	
Record Source	Quinn, R. & Breen, C. 1999.	
Date of Loss (Year Only)	N/A	
Place of Loss:	(Co. Kilkenny) River Barrow, Lucy Rock.	

Table 4.12 Selected wreck listed around New Ross from the Wreck Inventory of Ireland Database

Detail		Description
OBJECTID:	13580	PLEASE NOTE that this is a false origin used for the purposes of this viewer only. Lloyd's List 9271, Monday, 27th November 1843.
Name:	Norval	
Wreck No.	W14107	
DD_Latitude	0	
DD_Longitude	0	
Source of Coordinates	N/A	
Date of Loss	1843	
Record Source	N/A	
Date of Loss (Year Only)		
Place of Loss:	Barrow River, near New Ross	

Table 4.13 Selected wreck listed around New Ross from the Wreck Inventory of Ireland Database

Detail		Description
OBJECTID:	13921	PLEASE NOTE that this is a false origin used for the purposes of this viewer only. Lloyd's List, No. 23, 157, Sat. 16th Dec. 1911, 11 c.23.
Name:	John Bull	
Wreck No.	W14456	
DD_Latitude	0	
DD_Longitude	0	

Detail		Description
Source of Coordinates	N/A	
Date of Loss	N/A	
Record Source	NMS	
Date of Loss (Year Only)	1911	
Place of Loss:	Mead's Quay, New Ross, 3M down the river	

4.8.5 Recorded/Listed Architectural Heritage

There are 16 structures listed on the Record of Protected Structures for New Ross⁴ and 25 structures listed in the National Inventory of Architectural Heritage within 50m of the proposed scheme (Table 5). There is one Architectural Conservation Area recorded immediately adjacent to the proposed development area, this is recorded as 'Architectural Conservation Area 4 (No's. 1 & 2)' in the Wexford Development Plan (Vol 6. Architectural Conservation Areas⁵) and is shown in Table 4.14 and Plate 4.6 below.

Table 4.14 Recorded/Listed Architectural Heritage within study area

RPS	NIAH Reg.No.	Name	Original Type	NIAH Rating	Easting	Northing
No	15605034	The Bakehouse	house	Regional	671845	627682
NR0186	15605035	Hanrahan	house	Regional	671840	627678
NR0187	15605036	Moloney	house	Regional	671842	627670
NR0188	15605037	Lil's	house	Regional	671843	627666
NR0095	15605038	1798 Monument (New Ross)	monument	Regional	671841	627656
NR0089	15605039	Mr. H. Menswear/Hanrahan	house	Regional	671831	627665
NR0094	15605040	P. Nolan or Patrick Nolan	house	Regional	671820	627669
No	15605041	FBD Insurance (New Ross)	house	Regional	671815	627671
No	15605047	Kalonil Sports	house	Regional	671811	627645
NR0091	15605048	James Byrne	house	Regional	671822	627643
No	15605004	P.J. Roche	store/warehouse	Regional	671809	627708
No	15605005	P.J. Roche	store/warehouse	Regional	671803	627721
NR0096	15605049	New Ross Town Hall	store/warehouse	Regional	671842	627636
NR0123	15605050	J. Hogan	house	Regional	671843	627626
NR0121	15605051	Serendipity	house	Regional	671843	627614
No	15605052	Doran's	house	Regional	671829	627603

⁴ Available at: <https://consult.wexfordcoco.ie/sites/default/files/Volume%205%20Record%20of%20Protected%20Structures.pdf> [accessed on 07/03/2022]

⁵ Available at: <https://consult.wexfordcoco.ie/sites/default/files/Volume%206%20Architectural%20Conservation%20Areas.pdf> [accessed on 07/03/2022]

RPS	NIAH Reg.No.	Name	Original Type	NIAH Rating	Easting	Northing
NR0163	15605053	The Cloth Hall or P. Walsh	house	Regional	671830	627581
NR0205	15605230	Hanrahan	house	Regional	671810	627567
NR0008	15605231	Brook	house	Regional	671822	627584
NR0142	15605232	Simon W. Kennedy and Company	house	Regional	671807	627597
NR0206	15605233	James P. Coghlan and Company/Martin G. Lawlor	house	Regional	671800	627597
NR0207	15605237	The Dunbrody Inn	house	Regional	671761	627578
No	15605270	Paddy Power	house	Regional	671826	627641
No	15605271	Emerald	house	Regional	671831	627639
No	15605272	Sheridan Insurances	house	Regional	671832	627589

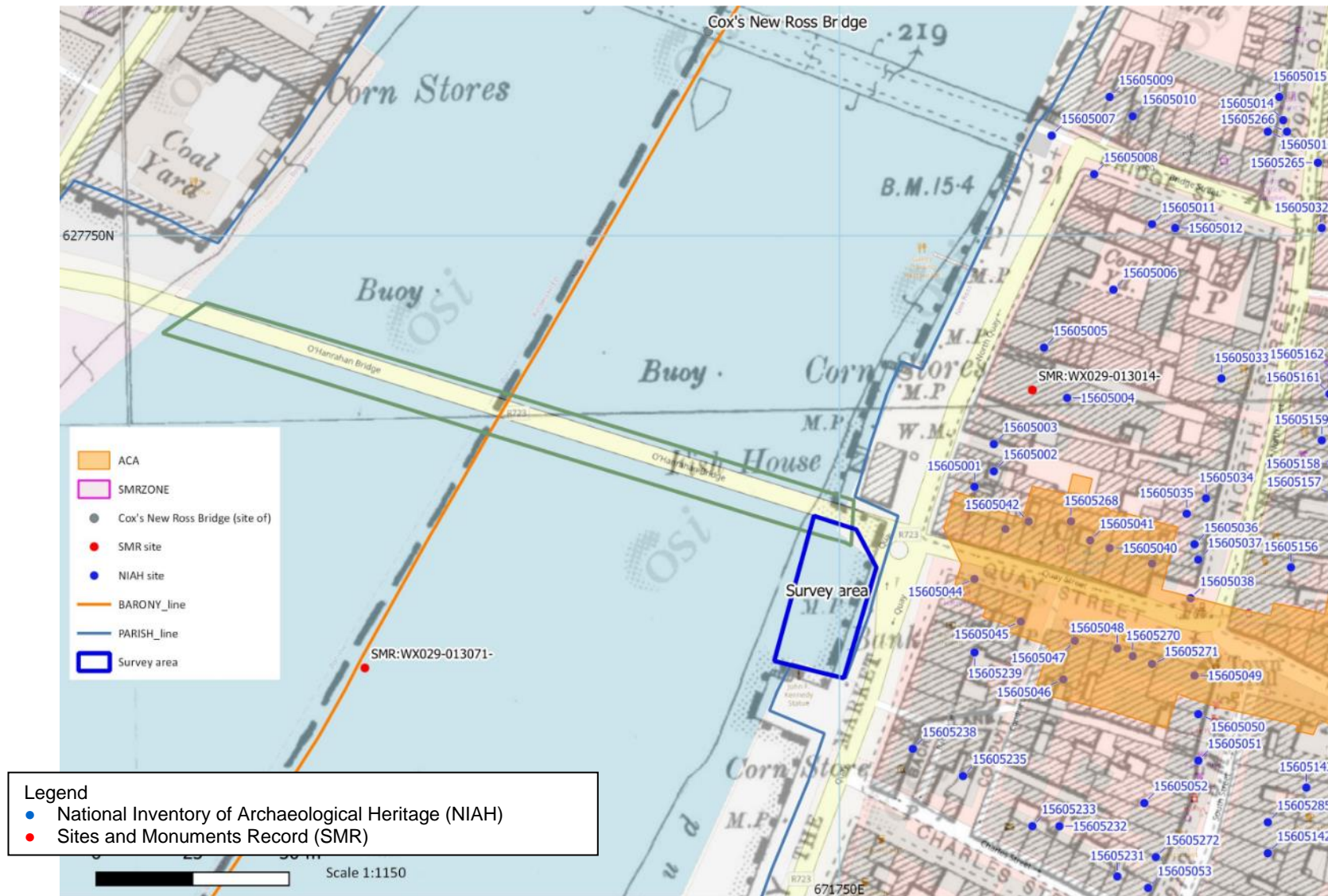


Plate 4.6 Cultural Heritage Assets on annotated OSM Standard background mapping (© OpenStreetMap contributors, CC-BY-SA), overlaid on the 25-inch (1921-2) OS map extract.

4.9 Material Assets and Land

The land within the proposed development site boundary is within the ownership of Wexford County Council, therefore the acquisition of land is not required.

The temporary and permanent footprint of the proposed development is located within areas of the foreshore. Wexford County Council hold a foreshore license for the current extents of O'Hanrahan Bridge. An application for Foreshore Lease consent will be made by Kildare County Council on behalf of of Wexford County Council to the Marine Planning and Foreshore Section of the Department of Housing, Local Government and Heritage for the temporary and permanent works area not included in the current foreshore license.

The construction compound and the associated temporary access road is located within lands on the west side of the River Barrow, with access onto the R704 Regional Road. The lands are in the ownership of Wexford County Council The lands will be reinstated upon completion of the construction phase.

5. STANDARD MITIGATION MEASURES

The following standard mitigation measures will be included in the design to avoid, reduce or prevent likely negative impacts:

The design of the proposed development will be developed in accordance with the advice of a suitably qualified and competent landscape and visual specialist / Landscape Architect.

- Archaeological monitoring of trial pits/slit trenches on the eastern side of the bridge will be undertaken by a suitably qualified, competent archaeologist as part of the Site Investigation works. The borehole logs for any such SI works undertaken will also be made available to the monitoring archaeologist in order that the relevant detail can be included in the archaeological monitoring report for the project.
- A full, measured archaeological survey and a record of the current setting will be carried out in relation to the section of quay wall to be impacted upon by the proposed walkway at the eastern side of the bridge prior to the commencement of works.
- The design of the affected parapets will be made to match the existing environment including the provision of stone cladding where relevant.
- Archaeological monitoring will be carried out by a suitably qualified, competent archaeologist during ground disturbances (i.e. excavation and demolition works) at both sides of and in the river channel. Any buried archaeological features encountered will be recorded.
- All excavated material removed from the riverbed, banks and from the land to be impacted during construction works will be spread and searched for archaeological objects and metal detected (under licence) to assess the artefact-bearing potential of the deposits. All/any finds will be similarly recorded and treated appropriately in accordance with current guidelines and standards and sufficient archaeological personnel shall be in place to allow for all aspects of the archaeological monitoring works.
- Should potential archaeology be identified during the works, then the construction works shall be suspended in that location and the NMS, the TII-assigned Project Archaeologist, Project Engineer and Contractor shall be notified. Minor or isolated features/deposits shall be fully excavated and recorded by the archaeological team during the course of their archaeological monitoring, subject to the agreement of the NMS, TII-assigned Project Archaeologist and Project Engineer. Further archaeological works may also be required, that depending on recommendations from NMS may include further archaeological assessment, test-excavations, avoidance/preservation *in situ*, or full excavation. In order to establish the date nature and significance of archaeological features/deposits, bulk samples of soil/sediment/mortar should be obtained, as appropriate.
- During the construction of the proposed development, the successful Contractor(s) will ensure that silt trap nets are used to prevent any falling debris from entering the watercourse.
- The successful Contractor(s) will develop a Traffic Management Plan, addressing traffic management measures in relation to all road-users, including pedestrians and cyclists, for the duration of the proposed construction phase.
- The successful Contractor(s) will implement measures to ensure that no significant negative impacts occur as a result of the excavation and / or

mismanagement of contaminated land and / or asbestos, including but not limited to:

- The Contractor(s) shall ensure that excavated materials are tested for contaminants, including asbestos.
- The Contractor(s) shall ensure that all materials excavated during the construction phase are managed and disposed (as required) in accordance with all relevant waste management legislation. Excess topsoil, inert soil, and all hazardous soil waste will be removed off-site to an appropriately EPA-licensed facility by a licensed contractor. Non-hazardous waste exceeding inert Waste Acceptance Criteria (WAC) will be sent to an appropriately EPA-licensed non-hazardous landfill for disposal / recovery.
- The Contractor(s) shall ensure that construction personnel will wear appropriate Personal Protective Equipment (PPE) and carry out any other necessary protective measures when handling hazardous waste.
- The Contractor(s) shall ensure that all hazardous waste residuals will be stored within temporary bunded storage areas prior to removal off-site.
- A licence will be obtained from the EPA under the Waste Management Act 1996 for any proposed soil remediation measures, as required.
- The successful Contractor(s) will develop and implement a Construction Management Plan. This Plan will include information on construction traffic routes, hours of operation, control of noise and other environmental effects.
- The successful Contractor(s) will adhere to binding working hours during the construction phase. Without the prior approval of Kildare County Council, no works will be permitted outside of standard working hours (as set out below) or on Sundays or Bank Holidays (BH).

Standard working hours:

Monday – Thursday: 08:00 – 19:00 hrs

Friday: 08:00 – 17:00 hrs

Saturday: 09:00 – 16:00 hrs

- The successful Contractor(s) will implement industry best practice pollution prevention measures during construction, including CIRIA Guideline Document C532, '*Control of Water Pollution from Construction Sites*'.
- In order to prevent emission of pollutants to the River Barrow during the construction of the proposed development, the successful Contractor(s) will ensure that any arisings from the associated boring / drilling works (e.g. stone / cement dust, sediments, drilling lubricants / coolants) are collected, stored (where necessary) and disposed of according to the relevant legislation, and are not allowed to enter the river.
- The successful Contractor(s) will implement industry best practice noise control measures during construction, including British Standard (BS) 5228-1:2009+A1:2014, '*Code of Practice for Noise and Vibration Control on Construction and Open Sites – Noise*' and the NRA (2004) *Guidelines for the Treatment of Noise and Vibration in National Road Schemes* to ensure that, in accordance with the latter, a daytime continuous noise limit of 70 dB and instantaneous noise limit of 80 dB are not exceeded as a result of the works at the façade of any building in the area.
- The successful Contractor(s) will use site hoarding, as required, to minimise or eliminate public nuisance as a result of emissions of noise and / or dust from demolition and excavation works.

6. SUB-THRESHOLD EIA SCREENING ASSESSMENT

For projects that fall below a class or threshold specified in Schedule 5, it is the decision of the Competent Authority to determine if completion of an EIA is required. This is determined by examining if the sub-threshold development is likely to result in significant environmental effects. The criteria set out in Schedule 7 of the Planning and Development Regulations 2001 (as amended) (Table 4.1) form the basis of the examination of likely significant effects on the environment.

Table 6.1 Criteria for determining whether development listed in Part 2 of Schedule 5 should be subject to an EIA (as per Schedule 7 of the Planning and Development Regulations 2001 (as amended))

<p>1. <i>Characteristics of the proposed development</i> The characteristics of the proposed development, in particular –</p> <ul style="list-style-type: none"> (a) The size and design of the whole of the proposed development, (b) Cumulation with other existing development and / or development the subject of a consent for proposed development for the purposes of Section 172 (1A) (b) of the Act and / or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, (c) The nature of any associated demolition works. (d) The use of natural resources, in particular land, soil, water and biodiversity, (e) The production of waste. (f) Pollution and nuisances, (g) The risk of major accidents, and / or disasters which are relevant to the project concerned, including those cause by climate change, in accordance with scientific knowledge, and (h) The risks to human health (for example, due to water contamination or air pollution).
<p>2. <i>Location of proposed development</i> The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to –</p> <ul style="list-style-type: none"> (a) The existing and approved land use, (b) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground, (c) The absorption capacity of the natural environment, paying particular attention to the following areas: <ul style="list-style-type: none"> i. Wetlands, riparian areas, river mouths; ii. Coastal zones and the marine environment; iii. Mountain and forest areas; iv. Nature reserves and parks; v. Areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and; vi. Areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure; vii. Densely populated areas; viii. Landscapes and sites of historical, cultural or archaeological significance.
<p>3. <i>Types and characteristics of potential impacts</i> The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the</p>

factors specified in paragraph (b) (i) (I) to (V) of the definition of 'environmental impact assessment report' in Section 171A of the Act, taking into account –

- (a) The magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected),
- (b) The nature of the impact,
- (c) The transboundary nature of the impact,
- (d) The intensity and complexity of the impact,
- (e) The probability of the impact,
- (f) The expected onset, duration, frequency and reversibility of the impact,
- (g) The cumulation of the impact with the impact of other existing and / or development the subject of a consent for proposed development for the purposes of section 172 (1A) (b) of the Act and / or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and
- (h) The possibility of effectively reducing the impact.

6.1 Assessment of Aspects of the Environment and Significance of Impacts

Having regard to the location and characteristics of the proposed development, an assessment of the likely significant effects of the proposed development on the environmental media considered in EIA is presented in Table 6.2.

Table 6.2 Assessment of characteristics and likely significance of impact on EIA environmental receptors

EIA Environmental Receptor	Screening Assessment	Screened In / Out?
Population and Human Health	<p><u>Construction Phase</u></p> <p><i>Human Health</i></p> <p>The proposed development is not expected to result in any significant negative human health effects during the construction phase. There will be some works during the construction stage that may give rise to minor nuisance, due to dust, noise and visual impacts. These effects will likely be localised, temporary and not significant to Population and Human Health.</p> <p><i>Journey Characteristics</i></p> <p>There will be some temporary disruptions and / or delays for private traffic and public transport, and likely slight effects on traffic, however a traffic management plan will be put in place by the contractor to mitigate impacts and access will be maintained for road users throughout the construction phase. As a result, significant effects will not occur.</p> <p><i>Community Severance</i></p> <p>Community severance is likely to occur during the construction phase between the Rosbercon Urban ED and New Ross Urban ED as a result of required temporary road closures to facilitate the works. However, traffic access will still be maintained throughout the proposed works through the implementation of a traffic management plan by the contractor and therefore no significant effects are expected to occur.</p> <p><i>Amenity</i></p> <p>Access to the bridge will be restricted while construction works are ongoing. Pedestrian access will be facilitated along one side of the bridge at all times during the construction through the implementation of the traffic management plan. This effect will result in temporary, moderate, negative impacts on pedestrians and car users.</p> <p><u>Operational Phase</u></p> <p><i>Human Health</i></p> <p>During the operational phase, the proposed development is predicted to result in positive human health effects. Through the provision of improved walkway and cycleway facilities along a bridge dominated by vehicular traffic, connecting the limited cycling infrastructure along the quays with a continuous two-way cycle track, the proposed development will also improve safety for cyclists travelling through the site. This has the potential to result in a long-term moderate positive effect on safety of pedestrians and cyclists as well as connectivity between Rosbercon and New Ross Town. The proposed development will also provide connectivity to the Waterford to New Ross greenway which may result in long-term positive effects on human health.</p> <p><i>Journey Characteristics</i></p> <p>The proposed development may encourage commuters to make a change from private modes of transport to walking or cycling short distances, by providing enhanced pedestrian and cycling infrastructure along the bridge. A lack of cycle</p>	Out

EIA Environmental Receptor	Screening Assessment	Screened In / Out?
	<p>facilities along the quays and across O'Hanrahan Bridge may be contributing to this low uptake at present within New Ross town. The proposed development is likely to have a long-term, significant, positive impact on the commuting choice and human health.</p> <p><i>Community Severance</i></p> <p>No community severance is expected to occur as a result of the proposed development. The provision of an enhanced public realm in the area will result in long-term moderate positive effects by providing a continuous cycle track and walkway which will provide connectivity in the centre of New Ross and will encourage greater social interaction amongst local residents and workers.</p> <p><i>Amenity</i></p> <p>There will be positive effects in the amenity value due to the proposed walkway and cycleway, which is predicted to promote and connect tourism attractions and increase in recreational activities in the area.</p> <p>No likely significant negative effects are predicted.</p>	
Biodiversity	<p><u>Construction Phase</u></p> <p><i>Habitat Loss</i></p> <p>The proposed development provides for the loss of c. 22 m² of intertidal mudflats and estuary habitats on the eastern bank of the River Barrow, south of O'Hanrahan Bridge. A further 10 m² of intertidal mudflats and 60 m² of estuary habitat will be lost on the western bank of the River Barrow, south of O'Hanrahan Bridge. The total loss of the intertidal mudflat and estuary habitats as a result of the proposed development will be 32 m² and 82m² respectively. These habitats are listed on Annex I to the Habitats Directive (92/43/EEC), namely 'Mudflats and sandflats not covered by seawater at low tide' (1140) and 'Estuaries' (1130), and the area that would be lost is within the River Barrow and River Nore SAC. These habitats are listed as Qualifying Interests of the SAC and are also important for the achievement of the conservation objectives for Twaite Shad and other Qualifying Interests of the SAC.</p> <p>A small area of hard intertidal substrate (i.e. the existing quay wall) and its associated biological communities will be permanently lost. However, this habitat will be replaced by another hard intertidal surface.</p> <p>Considering the above, habitat loss resulting from the proposed development is likely to have a permanent slight to moderate negative effect on biodiversity.</p> <p><i>Disturbance</i></p> <p>The use of barges or vessels and sheet piling poses a risk of hydroacoustic impacts on fauna in the River Barrow, most notably Twaite Shad, which is particularly sensitive to hydroacoustic impacts given that it is a hearing-specialist species, and that juveniles are likely to be present in the estuary at all times of the year.</p>	Out

EIA Environmental Receptor	Screening Assessment	Screened In / Out?
	<p>Artificial lighting poses a risk of negative impacts on biodiversity, particularly Otter, bats and fish, by fragmentation of commuting/foraging corridors, disruption of circadian rhythms and increased risk of predation. Over a prolonged period, such impacts can lead to reduced reproductive success/recruitment.</p> <p>Nevertheless, mitigation measures will be incorporated in order to limit the duration and intensity of piling events to ensure that noise levels do not surpass the threshold at which injury may occur on hearing-specialist species or to prevent creation of a barrier preventing migration. Additionally, mitigation measures will be incorporated to reduce light spill onto the River Barrow.</p> <p>Considering the above, disturbance caused by the proposed development is likely to have a temporary slight to moderate negative effect on biodiversity.</p> <p><u>Water Quality</u></p> <p>Due to the use of barges and other construction machinery on and in close proximity to the River Barrow, there is a risk of pollution during construction. This could be in the form of spilled fuel, oil, concrete or grout or the disturbance of contaminated ground.</p> <p>Given the naturally high sediment load in the River Barrow at this location, sedimentation is not considered to pose a significant risk. However, the synergistic effects of the naturally occurring sediment with any pollutants must be considered. Any pollution incident could have significant negative impacts on aquatic and shoreline life depending on the severity of the pollution. Pollution can also have indirect negative impacts on water-dependent terrestrial habitats and species that are hydrologically connected to the source of the pollution.</p> <p>Nevertheless, best practice measures for the prevention of pollution during construction activities near water will be adopted and further mitigation measures will be incorporated in order to minimise the risk of a pollution event occurring and to reduce the severity of a pollution event if it was to occur.</p> <p>Considering the above, any water quality impacts that may arise from the proposed development are not expected to exceed a temporary imperceptible negative effect on biodiversity.</p> <p><u>Invasive Alien Species</u></p> <p>Construction activities pose a risk of the spread of invasive non-native species to, from or within the vicinity of the works. Species of particular concern in this case is Chinese Mitten Crab (<i>Eriocheir sinensis</i>) and Asian Clam (<i>Corbicula fluminea</i>) which could be spread within the Suir-Barrow-Nore Estuary by barges and other vessels associated with the construction of the proposed development. Furthermore, Himalayan Balsam (<i>Impatiens glandulifera</i>) is present on the bank of the River Barrow c. 60m to the southwest of the bridge.</p> <p>In addition to this, as the proposed development will require the use of a barge for construction work, there is a chance that alien crayfish species or plague spores (<i>Aphanomyces astaci</i>) could be transported to the river on this vessel if it has been previously used within an infected watercourse.</p>	

EIA Environmental Receptor	Screening Assessment	Screened In / Out?
	<p>Nevertheless, mitigation measures will be incorporated to ensure that the proposed development will not interact with the Himalayan Balsam found growing on site or result in furthering their spread. Additionally, any equipment that will be used in or adjacent to the water will be eradicated of invasive species before they are introduced into the river.</p> <p>Considering the above, the proposed development will not give rise to any negative effects on biodiversity through the spread of invasive alien species.</p> <p><u>Design and Operational Phase</u></p> <p><i><u>Zonation and Habitat Heterogeneity</u></i></p> <p>The loss of upper intertidal mudflat and c. 82 m length of hard upper intertidal and splash zone habitat constitutes a potential reduction in habitat heterogeneity/zonation and, consequently, species diversity.</p> <p>Considering the above, the loss of habitat heterogeneity as a result of the proposed development is likely to have a temporary slight negative effect on biodiversity.</p> <p><i><u>Hydraulic Impacts</u></i></p> <p>The presence of the sheet piled wall will lead to some change in flow patterns and erosion, transport, and deposition of sediment in the vicinity of the proposed development. These impacts could affect intertidal mudflats and other habitats remote from the proposed development. Nevertheless, the texture of the proposed eco-cladding is much rougher than a sheet pile wall and therefore will reduce any predicted increased rates of erosion immediately adjacent to the new wall.</p> <p>Considering the above, hydraulic impacts arising from the proposed development are likely to have a permanent imperceptible negative effect on biodiversity.</p> <p>No likely significant effects are predicted</p>	
Soils and Geology	<p><u>Construction Phase</u></p> <p>There will be minor excavations during the construction phase, which will include excavation of existing road surface and an expansion joint. Sheet piles will be installed into the riverbed and the area between the existing quay walls and the sheet piles will be infilled with structural fill, which can cause non-significant negative effects on Soils and Geology. However, the construction of the proposed development will be carried out in accordance with environmentally sensitive construction methods, and best practice measures in relation to contaminated land, asbestos, pollution prevention and disposal of waste material will be implemented during the construction phase.</p> <p>On this basis, significant negative effects in relation to land and soil are considered unlikely.</p> <p><u>Operational Phase</u></p> <p>No increased risk to Soils and Geology is expected during the operational phase.</p> <p>No likely significant effects are predicted.</p>	Out

EIA Environmental Receptor	Screening Assessment	Screened In / Out?
Hydrology and Hydrogeology	<p><u>Construction Phase</u> During the construction phase of the proposed development, there will be a risk of pollution to groundwater or surface water as a result of accidental spillage or discharge of hydrocarbons from plant / equipment, construction chemicals, or sediment from construction works (e.g. concrete or contaminated land), among other potential pollutants. However, due to the small scale of the proposed works, implementation of best practice pollution prevention measures as outlined in Section 5 during the construction phase and the high dilution factor of receiving water bodies, it is considered unlikely that any significant negative effects of this nature will occur. There will be in-river works however the works will be limited to the south-east corner and are unlikely to affect the hydrology of the river.</p> <p><u>Operational Phase</u> It is not anticipated that the proposed development will result in any significant effects on the River Barrow during the operational phase. The new sheet piled wall at the south-eastern and south-western corner of the bridge will realign the quay wall, however this is not likely to have significant impacts on the hydromorphology of the River Barrow. The flood defence wall will be realigned to accommodate the cycling and pedestrian walkway and will be reinstated so as not to affect the existing flood protection in New Ross town.</p> <p>No likely significant negative effects are predicted.</p>	Out
Air Quality and Climate	<p><u>Construction Phase</u> There will be potential for a temporary slight impact on air quality due to emissions caused from the associated construction vehicles and machinery required during the construction phase. Implementation of standard pollution prevention and standard mitigation measures (as set out in Section 5) during the construction phase will prevent / reduce the emission of dust / particulates to ensure that significant negative impacts do not occur.</p> <p>Greenhouse gas emissions will be generated by vehicles and plant used during the construction phase. However, considering the small scale of the proposed development, these emissions will not result in significant effects.</p> <p><u>Operational Phase</u> No negative effects due to dust emissions are expected during the operational phase. The proposed development will promote the use of walking and cycling as zero carbon alternatives to greenhouse gas emitting modes of transport and will contribute to the connectivity and expansion of walking and cycling routes along the quays in the centre of New Ross town. The proposed development will have beneficial impacts on air in terms of reducing CO₂ emissions by encouraging a shift from travel by car to cycling and walking when possible and therefore may result in long-term, positive effects on Air Quality and Climate.</p> <p>No likely significant negative effects are predicted.</p>	Out

EIA Environmental Receptor	Screening Assessment	Screened In / Out?
Noise and Vibration	<p><u>Construction Phase</u> There are a number of residential and commercial properties in the near area of the proposed development that may be subjected to increased noise and vibration during the construction period. The use of handheld drill / impact hammer and machinery used for excavation and sheet piling is likely to result in temporary, moderate to significant impacts on sensitive noise receptors during the construction phase. Some annoyance may result from noise or vibration generated during the construction of the proposed development, however, the effects will be temporary, localised, and limited to standard working hours. The construction of the proposed works will comply with the standard mitigation measures as set out in Section 5. No structurally damaging levels of noise or vibration are expected to occur.</p> <p><u>Operational Phase</u> The proposed development is unlikely to cause an increase in noise or vibration during the operational stage, as the proposed development comprises a walkway and cycleway and will not increase vehicular traffic volumes.</p> <p>No likely significant negative effects are predicted.</p>	Out
Landscape and Visual Amenity	<p><u>Construction Phase</u> There is likely be temporary slight negative effects on the landscape and visual amenity of New Ross town centre due to the movement of construction machinery during the construction phase, however there are no protected views within the vicinity and no significant long-term effects are predicted to occur.</p> <p><u>Operational Phase</u> The design of the proposed development, including the replacement parapets will be cognisant of the existing design along the bridge. The improved cross section will also enhance the streetscape crossing the O'Hanrahan Bridge improving the amenity value and safety of pedestrians and cyclists. The proposed development will connect with the South East Greenway in the future, promote walking and cycling and will contribute to better connectivity in the centre of New Ross town. This may also promote tourism and may result in a significant positive effect on the landscape and visual amenity of the town. The stone cladding will be taken down from the existing wall and it will be reused on the replacement parapet, therefore there will be no negative effect on the visual character of the quay.</p> <p>No likely significant negative effects are predicted.</p>	Out
Cultural Heritage (including Archaeological and Architectural Heritage)	<p><u>Construction Phase</u> Archaeological Heritage: The proposed development area falls within the Zone of Archaeological Potential (WX029-013----) for the medieval town of New Ross and is in proximity to the Religious house of the Dominican friars (WX029-013007). It is downstream from and adjacent to the site of a series of timber bridges (WX029-013071-), the site of the earliest (fourteenth century) example having been identified in previous excavations in this general area. There is potential for additional features, finds and deposits relating to the bridging of the River Barrow to be preserved within the intertidal muds in the proposed development area, as well as for the remains of structures such as quays, slipways, weirs,</p>	Out

EIA Environmental Receptor	Screening Assessment	Screened In / Out?
	<p>reclamation deposits and potential wrecks to survive. Although the existence of any such remains is as yet unknown, there is still potential for the discovery of such remains within the proposed development area.</p> <p>Built Heritage: The proposed development site lies immediately adjacent to an Architectural Conservation Area. While not a designated architectural heritage asset, the quay walls are of cultural heritage value. The proposed development allows for the existing quay wall will be enclosed behind a new sheet piled wall and parapet. Mitigation measures to record the existing wall will be undertaken prior to the commencement of works to mitigate any impact on the wall as a potential cultural heritage asset. Hence, it is considered that the proposed widening of O'Hanrahan Bridge will not have a likely significant effect on any designated built heritage elements in the proposed development area.</p> <p>Operational Phase No significant effects are likely to occur on any cultural heritage sites during the operational phase. No likely significant negative effects are predicted.</p>	
Material Assets and Land	<p>Construction Phase The site of the proposed development is situated on lands under the ownership of WCC. The services in the footpaths will be diverted during the construction phase, which may result in brief interruptions, however, services will be reinstated prior to the completion of the footpaths.</p> <p>The temporary and permanent footprint of the proposed development is located within areas of the foreshore. Wexford County Council hold a foreshore license for the current extents of O'Hanrahan Bridge. An application for Foreshore Lease consent will be made by Kildare County Council on behalf of of Wexford County Council to the Marine Planning and Foreshore Section of the Department of Housing, Local Government and Heritage for the temporary and permanent works area not included in the current foreshore license.</p> <p>The construction compound and the associated temporary access road is located within lands on the west side of the River Barrow, with access onto the R704 Regional Road. The lands are in the ownership of Wexford County Council.</p> <p>The potential impact on landownership is temporary, with lands being reinstated upon completion of the construction phase.</p> <p>Access will be maintained for all properties in the area of the proposed development site.</p> <p>Operational Phase No material assets or land will be impacted as a result of the operational phase as the lands in question are in the ownership of Wexford County Council. No likely significant effects are predicted.</p>	Out

EIA Environmental Receptor	Screening Assessment	Screened In / Out?
Accidents and Disasters	<p><u>Construction Phase</u></p> <p>During the construction phase, there is a possibility of risk of unplanned events, such as traffic accidents, collapse or equipment failure on site, which will be taken into consideration during the construction of the proposed development. Traffic management and safety measures will be implemented, and the associated risk of an unplanned accident is considered to be as low as reasonably practical.</p> <p>There is one upper tier SEVESO site located approximately 1.5km from the proposed development. The Seveso-III-Directive (2012/18/EU) aims at preventing accidents involving dangerous substances and limiting the consequences in the case that such accidents occur. The required consultation distance for SEVESO Site Nitrofert Ltd is 700m, therefore as the proposed development site is located outside the consultation distance, no further action is required.</p> <p><u>Operational Phase</u></p> <p>The proposed development has the potential to improve the safety of road users and therefore reduce the risk of traffic accidents by providing an improved walkway and cycling track along the bridge for any pedestrians and cyclists.</p> <p>The operational stage of the development is not anticipated to result in increased risk of major accidents and/or disasters.</p> <p>No likely significant negative effects are predicted.</p>	Out
Interactions	<p><u>Construction Phase</u></p> <p>Interactions during the construction phase will occur between Population and Human Health, Air Quality and Climate and Noise and Vibration. The predicted negative effects will be temporary and standard control measures will be implemented to reduce nuisances and visual obstructions. No likely significant environmental effects are expected to occur.</p> <p>Interactions will also occur between Hydrology and Hydrogeology and Biodiversity. The possible negative effects can be significant in the chance of spillage of pollutants, such as wet concrete or fuel into the river, which could result in loss of communities and harm of the aquatic life in the River Barrow and River Nore SAC. Standard mitigation measures outlined in Section 5 of this report will mitigate any significant impacts.</p> <p><u>Operational Phase</u></p> <p>The key interactions occur between Population and Human Health and Landscape and Visual Amenity. The proposed development is predicted to result in likely significant positive effects on the health and visual amenity by presenting a modern and safe walkway and cycling track and encouraging people to switch from private to sustainable modes of transport.</p> <p>No likely significant negative effects are predicted.</p>	Out

6.2 Cumulative Impacts

This section presents a preliminary consideration of likely significant impacts which may be expected to arise as a result of the combined effects of the proposed O'Hanrahan Bridge development and other, proposed or existing developments and plans. A review of plans and projects was undertaken in the vicinity of the proposed development. The sources of information included:

- EIA Portal;
- Wexford County council Planning Search;
- Draft Wexford County Development Plan 2021-2027;
- New Ross Town and Environs Development Plan 2011-2017 (extended).

Table 6.3 Cumulative Impact Assessment

Plan or Project	Outline of Development	In -combination Effect(s)
Wexford County Development Plan (2022-2028)	<p>The Plan's objectives are as follows:</p> <ul style="list-style-type: none"> • Objective TS07 'To plan for the appropriate development of all aspects of the transport network for all modes and to ensure that the design and investment decisions prioritise sustainable transport modes.' • Objective TM14 aims to "To support and develop our town and villages and rural heritage sites including our beaches for tourism purposes through the facilitation of links by public transport, greenways, blueways and associated infrastructure subject to compliance with the Habitats Directive and normal planning and environmental criteria". 	Likely positive cumulative impacts
New Ross Town and Environs Development Plan (as extended)	<p>The Plan's objectives are as follows:</p> <ul style="list-style-type: none"> • <i>Develop a pedestrian and cycle friendly environment which will achieve a reduction in CO2 emissions.</i> • <i>Encourage a modal shift from private modes of transport to public transport, cycling and walking.</i> 	Likely positive cumulative impacts
<p>South East Greenway, New Ross to Waterford (Planning Refs: 19928)</p> <p>Distance: 0m from the proposed development.</p>	<p>The South East Greenway is being jointly developed by Kilkenny County Council, Wexford County Council and Waterford City and County Council. The greenway will run for 24km from the Quays in Waterford to the banks of River Barrow in New Ross, ending in Rosbercon. The development is currently under construction and is projected to be completed in Autumn 2023.</p> <p>The construction phase for the South East Greenway has commenced. The site for the construction compound for the South East Greenway project and the proposed development is at the same location. If the construction phases of both projects overlap, arrangements will be made to ensure both</p>	Should the construction phases of these developments overlap or occur sequentially, there is potential for impacts on traffic due to the increase of HGVs on the road network. Due to the scale and nature of both projects, and the implementation of the Construction Traffic Management Plan (CTMP), it is not likely that there will be any significant cumulative effects in combination with the

Plan or Project	Outline of Development	In -combination Effect(s)
	projects can effectively use this construction compound.	proposed development during construction. Both projects will provide sustainable travel facilities in New Ross town. Positive direct, indirect, cumulative effects are predicted to arise from the combination of this project with the proposed development during operation phase.
<p>2019 Shielbaggan OETC, Ramsgrange, New Ross, Co. Wexford, Y34 FK03 Application No.: 20191427 Status: Permission Granted Located approx.: 160m north west of the Project, on the Rosbercon bank</p>	<p>The proposed development will involve demolition of existing boat club and construction of a new 2 storey boat club (70 sq. m.). The boat club will comprise boat storage, changing rooms, plant room, kitchen and ancillary accommodation. Additionally, the proposed development includes parking and alterations to existing road junction, as well as a 28m diameter roundabout adjacent to the building.</p>	<p>There are no significant cumulative effects predicted to arise from the combination of this development with the Project.</p>
<p>2019 Application No.: 20190473 Status: Permission Granted Located approx.: 35m west from the Project</p>	<p>The proposed development includes the erection of a five-storey development comprising 97 apartments and ancillary accommodation in 4 blocks, shop units, takeaway restaurant, an office and a 125-space car park. The floor area of the new development is 28 sq. m.</p>	<p>There are no significant cumulative effects predicted to arise from the combination of this development with the Project.</p>
<p>2020 Construction of a Berthing Facility The Quay, New Ross Application No.: LAC2003 Status: Decision Pending Located approx.: 300m south of the Project</p>	<p>Permission for a new berth with the following specifications: four 508 x 16mm steel tubular piles 30m long driven into the river bed each to secure an 18m-long pre-fabricated pontoon, 4m wide with 800mm freeboard, four 10t mooring bollards, GRP mesh decking and 200 x 200mm rubber 'D' fendering. The pontoon is proposed to be connected to the quayside by a 25-32m long and 1.5m wide galvanised steel gangway. The preferred location is the eastern bank of the river and three such locations are considered: Town Quay, Between Town Quay and Dunbrody, and Graves Jetty.</p>	<p>There is a possible risk of pollution and/or contamination of the River Barrow during both the construction and operational phases. The plan is subject to its own AA and mitigation measures have been set out in the report. Therefore, significant cumulative effects are not likely.</p>
<p>2021 Marshmeadows, New Ross Rural Application No.: 20201608 Status: Permission Granted</p>	<p>The site of the proposed development is approximately 0.8ha in size and is currently used as a storage area. The development proposes construction of a building (1581 sq. m.) containing a CVRT Test Facility (1233 sq. m.) and two storey Administration block (348 sq. m.). Constructions would also include widening of the site entrance, new boundary</p>	<p>The proposed development was subject to its own AA Screening. Therefore, significant cumulative effects are not likely.</p>

Plan or Project	Outline of Development	In -combination Effect(s)
<p>Located approx.: 2km south from the Project</p>	<p>treatments and planting, service yard and parking. Additionally, new drainage works are proposed to be installed, including an underground attenuation tank, an oil interceptor along with associated site works. Surface water will discharge to an existing drain on the south of the suite which discharges into the River Barrow main channel.</p>	
<p>2020 Green Biofuels Ireland Ltd. Application No.: 20200124 Status: Permission Granted Located approx.: 1.7km south of the Project</p>	<p>The proposed development comprises the installation of a LNG tank and ancillary equipment within an existing tank farm, of approx. 25 tonnes of capacity. The machinery used during installation will be small scale and all associated works will be minor in nature.</p>	<p>The proposed development is located in an existing facility which has an extensive and functional surface water management and control system in place. There are no significant effects predicted to arise from the combination of this development with the Project.</p>
<p>2016 N25/R733 Oaklands Roundabout, New Ross Application No: LAC1608 Status: Permission Granted Located approx.: 1.1km south from the Project</p>	<p>The proposed development comprises changing the main features of the existing N25/R733 priority junction to a roundabout, widening of the footpaths, provision of ancillary works including road drainage, public lighting, road marking and signage. The layout of the development included a combined footpath and cycling facilities, which facilitate the provision of the proposed cycling and pedestrian network.</p>	<p>Positive cumulative impacts are likely to occur. The development will connect to the Project with the network of footpaths and cycleway.</p>

No likely significant negative cumulative effects identified.

7. SCREENING CONCLUSION AND RECOMMENDATION

This EIA Screening Report has determined that the proposed development does not exceed the thresholds that trigger the mandatory requirement for EIA and subsequently the proposed development is deemed to be a sub-threshold development. This sub-threshold development has been assessed in accordance with Schedule 7 of the Planning and Development Regulations 2001 (as amended). Having regard to this assessment with regard in particular to:

- (1) Characteristics of the proposed development;
- (2) Location of the proposed development;
- (3) Characteristics of potential impacts; and
- (4) The possibility of effectively reducing the impacts in the construction and operation of the proposed development (particularly relating to traffic, emissions (noise and air), surface water runoff and management of construction and demolition waste).

This EIA Screening found that the proposed development is not likely to result in significant negative environmental effects.

It is therefore recommended to Kildare County Council that the proposed development would not be likely to have significant effects on the environment by virtue of its characteristics, location, size or potential impacts and does not require an Environmental Impact Assessment Report to be undertaken.

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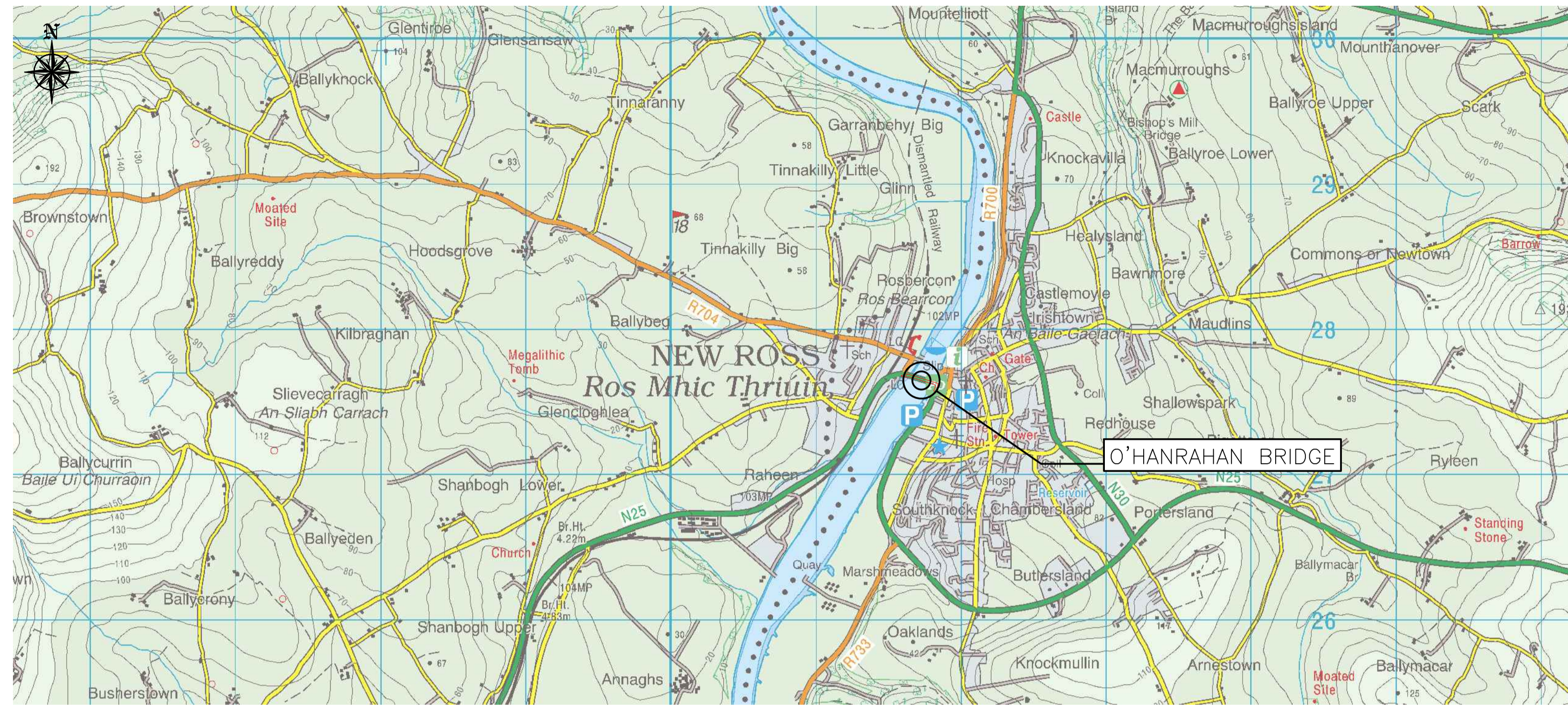
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APPENDIX A

DEVELOPMENT DRAWINGS



SITE LOCATION PLAN

A1 SCALE 1:25,000
A3 SCALE 1:50,000

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM AT MALIN HEAD.
3. ALL CO-ORDINATES ARE TO IRISH TRANSVERSE MERCATOR.
4. EXTENT OF SITE AREA PROVIDED BY THE EMPLOYER EXCLUDES AREA WHICH MAY BE TEMPORARY OCCUPIED SUBJECT TO TRAFFIC SAFETY AND MANAGEMENT AND DIVERSIONS.
5. THE CONTRACTOR IS REQUIRED TO PROVIDE ACCESS THROUGH THE EXTENT OF SITE AND AREA PROVIDED BY THE EMPLOYER IN ACCORDANCE WITH THE SPECIFICATION.
6. THE EXISTING POSITION AND LEVEL OF SERVICES SHOWN TO BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE PROTECTION TO EXISTING SERVICES

LEGEND:

— DEVELOPMENT BOUNDARY



SITE LAYOUT

A1 SCALE 1:400
A3 SCALE 1:800

Comhairle Contae
Loch Garman
Wexford
County Council



KILDARE
nro
NATIONAL ROADS OFFICE

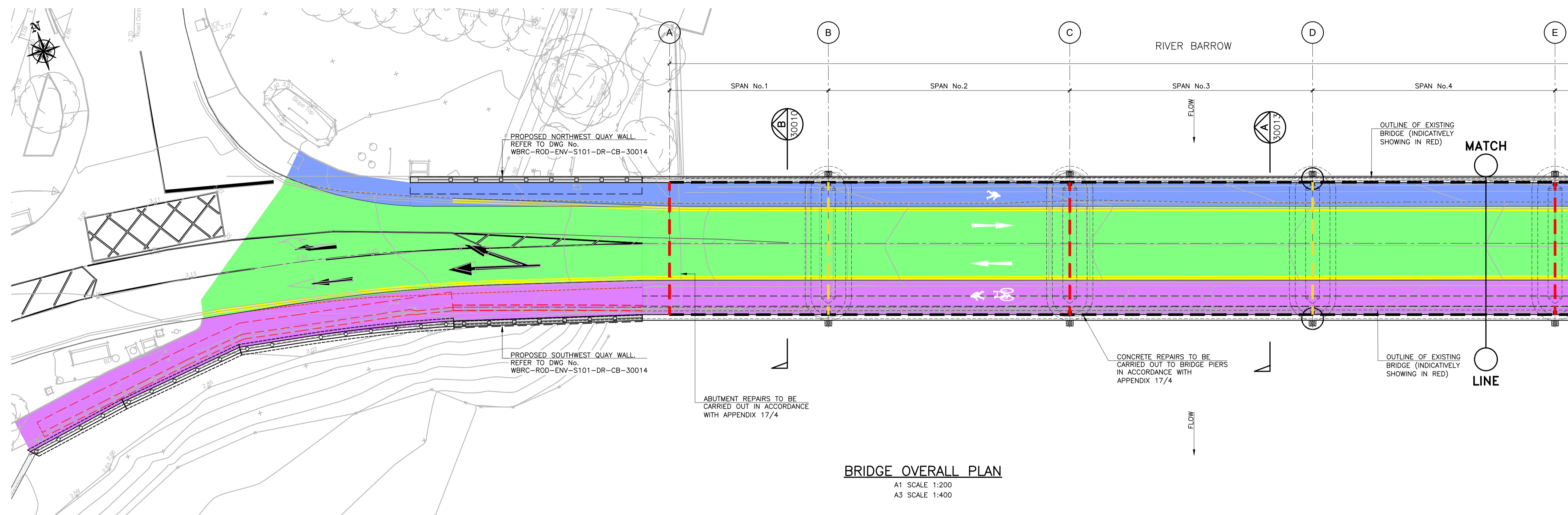
No.	Revision	Date	By	Chkd	App'd

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Drawn	Designed	Checked	Approved	Suitability Code - Description
ZZX	CH	MR	JK	S4 - Stage Approval

Project Stage	Preliminary						
Project Title	O'Hanrahan Bridge Widening Project						
Drawing Title	Location Plan of Proposed Development						
Drawing Number	Project	Originator	Volume	Location	Type	Role	Number
Scale (A1)	WBRC	ROD	ENV	S101	DR	CB	30001
As Shown	Date:	MAY 2022	Job No:	21.143	Rev:	P0	

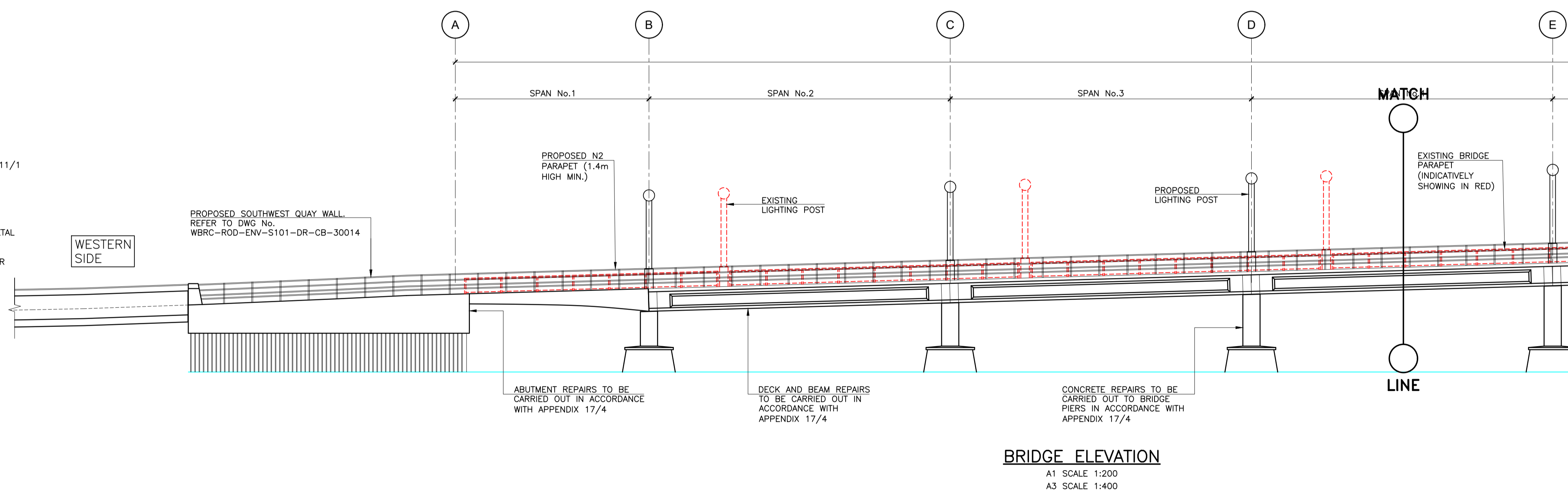


NOTES:

- ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE NOTED.
- ALL LEVELS ARE IN METRES TO ORDNANCE DATUM MALIN HEAD.
- ALL CO-ORDINATES ARE IN METRES TO IRISH TRANSVERSE MERCATOR (ITM).
- WHERE EXISTING BOUNDARY WALLS AND FENCES ARE TO BE TAKEN DOWN TO ALLOW CONSTRUCTION OF PERMANENT WORKS TEMPORARY FENCING TO BE PROVIDED TO PREVENT UNAUTHORIZED ACCESS TO SITE AREA AND PRIVATE LANDS.
- THE CONTRACTOR IS REQUIRED TO PROVIDE ACCESS THROUGH THE EXTENT OF SITE IN ACCORDANCE WITH THE SPECIFICATION.
- THE CONTRACTOR SHALL LIAISE WITH THE RELEVANT SERVICE PROVIDERS TO AGREE AND IMPLEMENT PROTECTION MEASURES AND DIVERSIONS.
- WHERE EXISTING LIGHTING AND SIGNAGE IS TO BE TAKEN DOWN TO ALLOW CONSTRUCTION OF THE PERMANENT WORKS EQUIVALENT TEMPORARY LIGHTING AND SIGNAGE TO BE PROVIDED FOR THE DURATION OF THE WORKS UNTIL PERMANENT LIGHTING AND SIGNAGE IS REINSTATED OR IN PLACE.
- GAPS IN PARAPET EDGE BEAMS EITHER SIDE OF MOVEMENT JOINTS TO BE REFILLED AND RESEALED IN ACCORDANCE WITH APPENDIX 23/2.
- ALL FINISHES ON DRAWINGS ARE AS PER TII CORE SPECIFICATION.
- ALL BURIED SURFACES NOT RECEIVING BRIDGEDECK WATERPROOFING TO BE WATERPROOFED WITH 2 LAYERS OF EPOXY RESIN WATERPROOFING.
- ALL EXPOSED ARRISSES OF STRUCTURAL CONCRETE SHALL BE FINISHED WITH A 25 x 25mm CHAMFER UNLESS NOTED OTHERWISE.
- REFER TO APPENDIX 17/1 FOR CONCRETE MIXES.
- EXPOSED CONCRETE TO BE IMPREGNATED WITH HYDROPHOBIC PORELINER IN ACCORDANCE WITH THE SPECIFICATION.
- CONCRETE CLASS TO BE C40/50 (MIX 1).
- CONCRETE BLINDING TO BE MIX. ST1.
- COLD MILLING TO BE PROVIDED OVER EXTENT OF NEW PAVEMENT WORKS.
- ALL SURFACES OF THE PRECAST CONCRETE UNITS THAT INTERFACE WITH IN-SITU CONCRETE SHALL BE PREPARED IN ACCORDANCE WITH CLAUSE 1710.8 (v) (a) OF THE TII SPW TO ENSURE THAT THE SURFACE FINISH IS CONSIDERED "ROUGH".

LEGEND:

- PROPOSED SURFACING. REFER TO APPENDIX 7/1
- PROPOSED FOOTPATH. REFER TO APPENDIX 11/1
- PROPOSED FOOTPATH/CYCLEWAY. REFER TO APPENDIX 11/1
- EXISTING STRUCTURE
- DENOTES PROPOSED TYPE 1 BURIED JOINT UNDER CONTINUOUS SURFACING. REFER TO APPENDIX 23/1
- DENOTES PROPOSED TYPE 6 ELASTOMERIC JOINT IN METAL RUNNERS. REFER TO APPENDIX 23/1
- DENOTES EXTENT OF PROPOSED WATERPROOFING. REFER TO APPENDIX 20/1
- F- DENOTES CLASS OF FORMED CONCRETE FINISH
- U- DENOTES CLASS OF UNFORMED CONCRETE FINISH



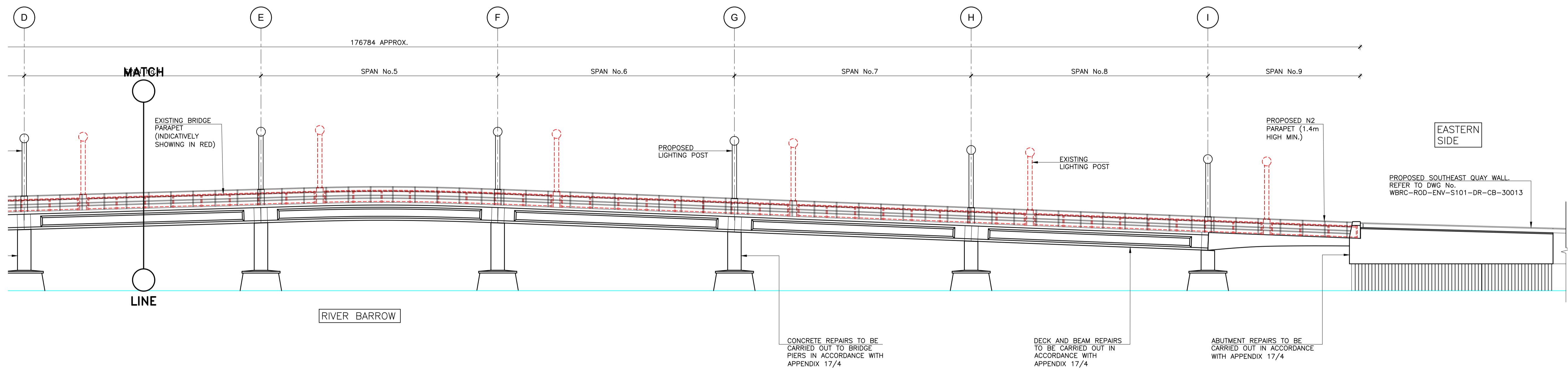
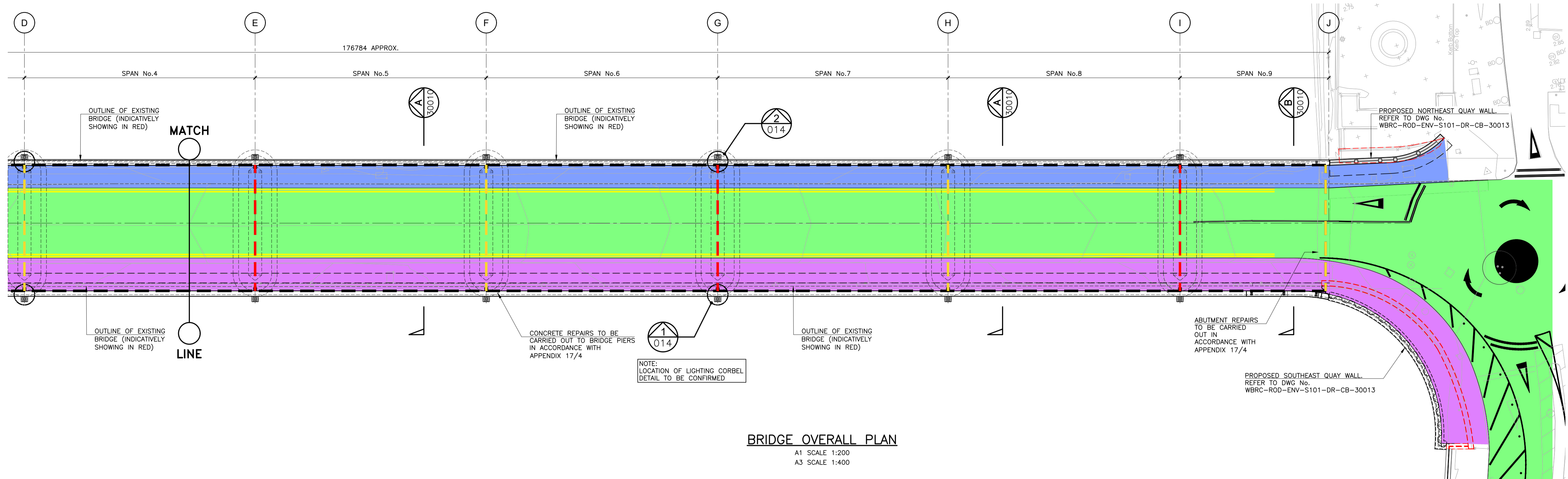
No.	Revision	Date	By	Chkd	App'd



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Drawn	Designed	Checked	Approved	Suitability Code - Description
ZZX	CH	MR	JK	S4 - Stage Approval

Project Stage	Preliminary				
Project Title	O'Hanrahan Bridge Widening Project				
Drawing Title	Proposed O'Hanrahan Bridge Plan & Elevation Sheet 01 of 02				
Drawing Number	Project	Originator	Volume	Location	Type Role Number
Scale (A1)	WBRC - ROD - ENV - S101 - DR - CB - 30007				
As Shown	Date: MAY 2022	Job No: 21.143	Rev: P0		



NOTES:
 1. REFER TO DRAWING WBRC-ROD-SBR-S101-DR-CB-30011 FOR GENERAL NOTES.



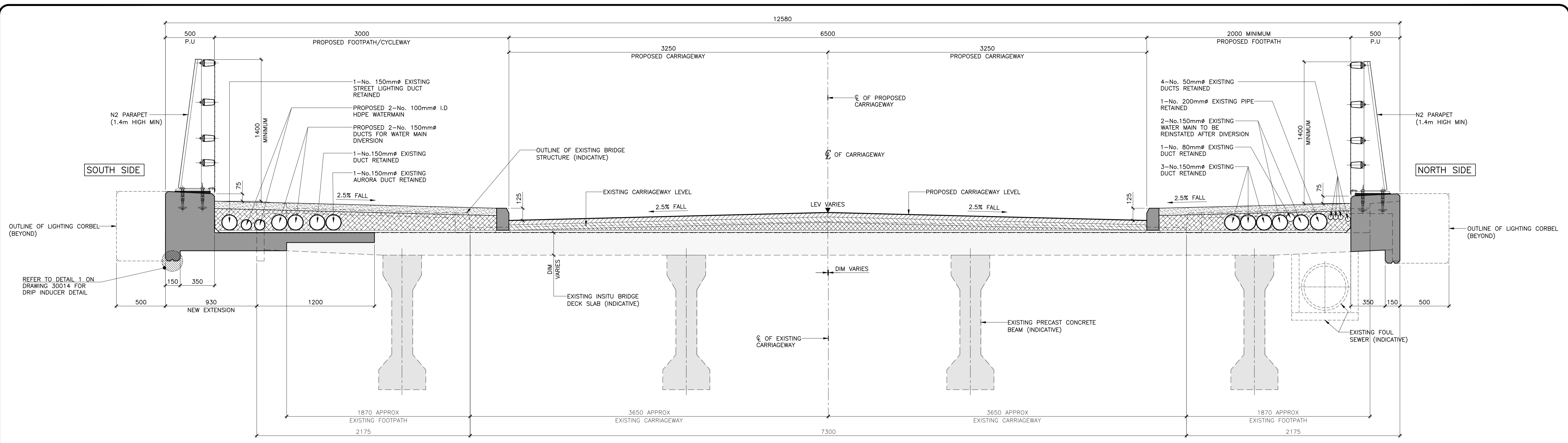
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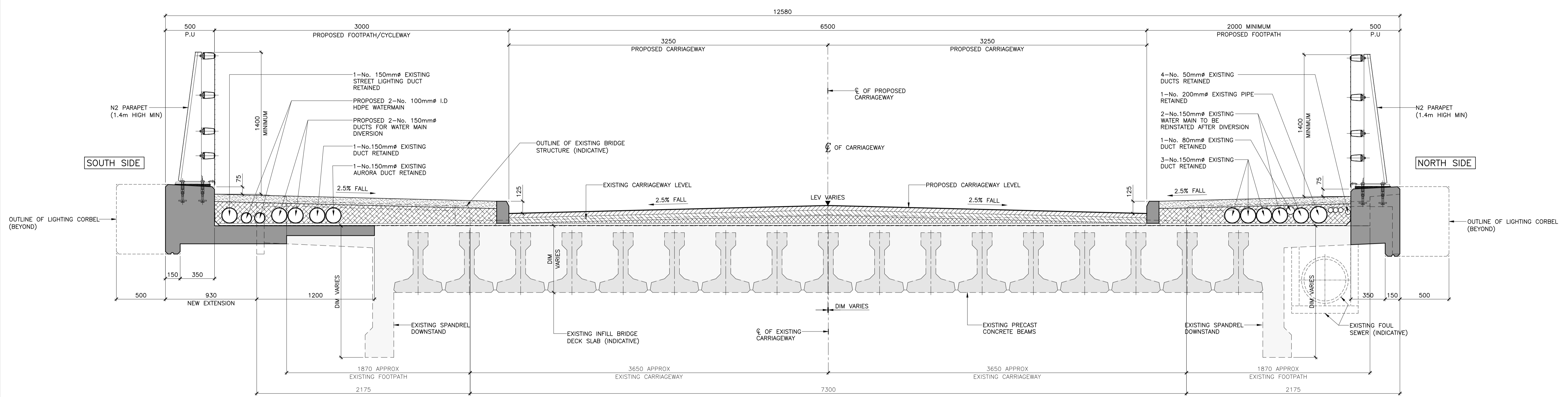
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Drawn	Designed	Checked	Approved	Suitability Code - Description
ZZX	CH	MR	JK	S4 - Stage Approval

Project Stage	Preliminary				
Project Title	O'Hanrahan Bridge Widening Project				
Drawing Title	Proposed O'Hanrahan Bridge Plan & Elevation Sheet 02 of 02				
Drawing Number	WBRC	-	ROD	-	ENV - S101 - DR - CB - 30008
Scale (A1)	As Shown	Date:	MAY 2022	Job No:	21.143
				Rev:	P0



SECTION A
 A1 SCALE 1:20
 A3 SCALE 1:40
 30012



SECTION B
 A1 SCALE 1:20
 A3 SCALE 1:40
 30012

- NOTES:
1. ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. ALL LEVELS ARE IN METRES TO ORDNANCE DATUM MALIN HEAD.
 3. ALL CO-ORDINATES ARE IN METRES TO IRISH TRANSVERSE MERCATOR (ITM).



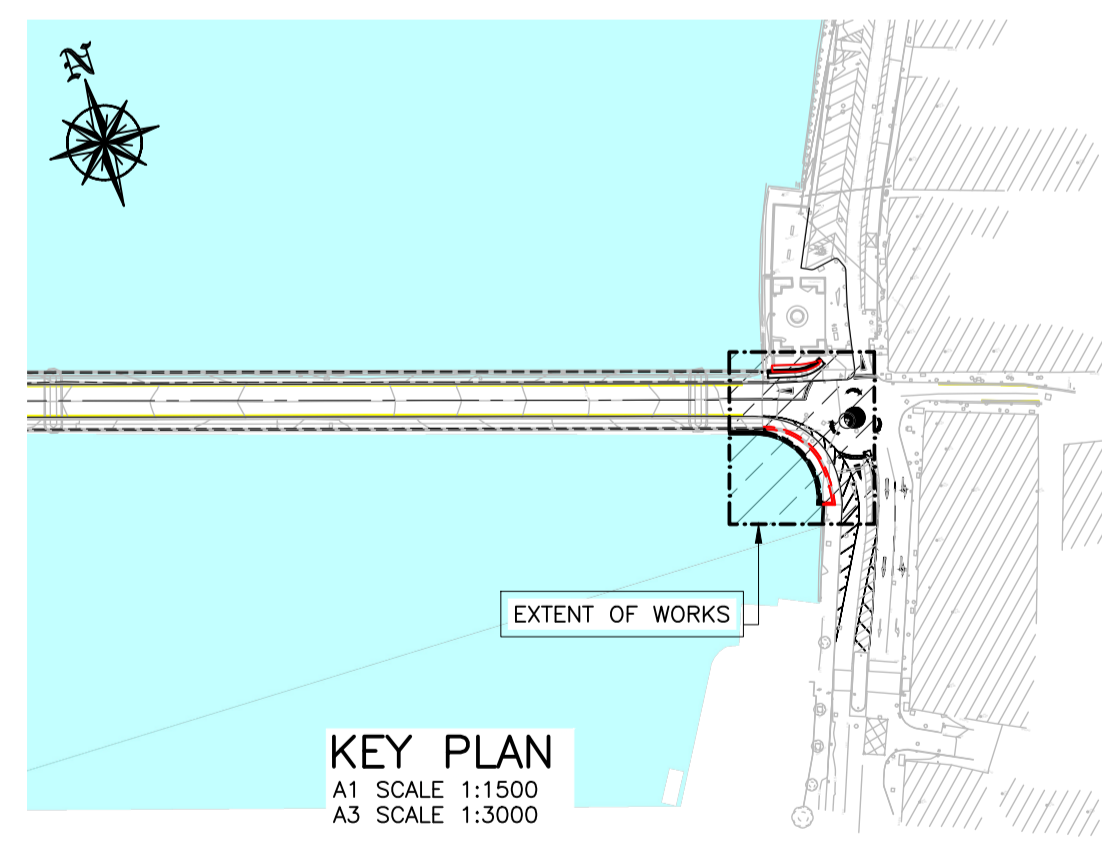
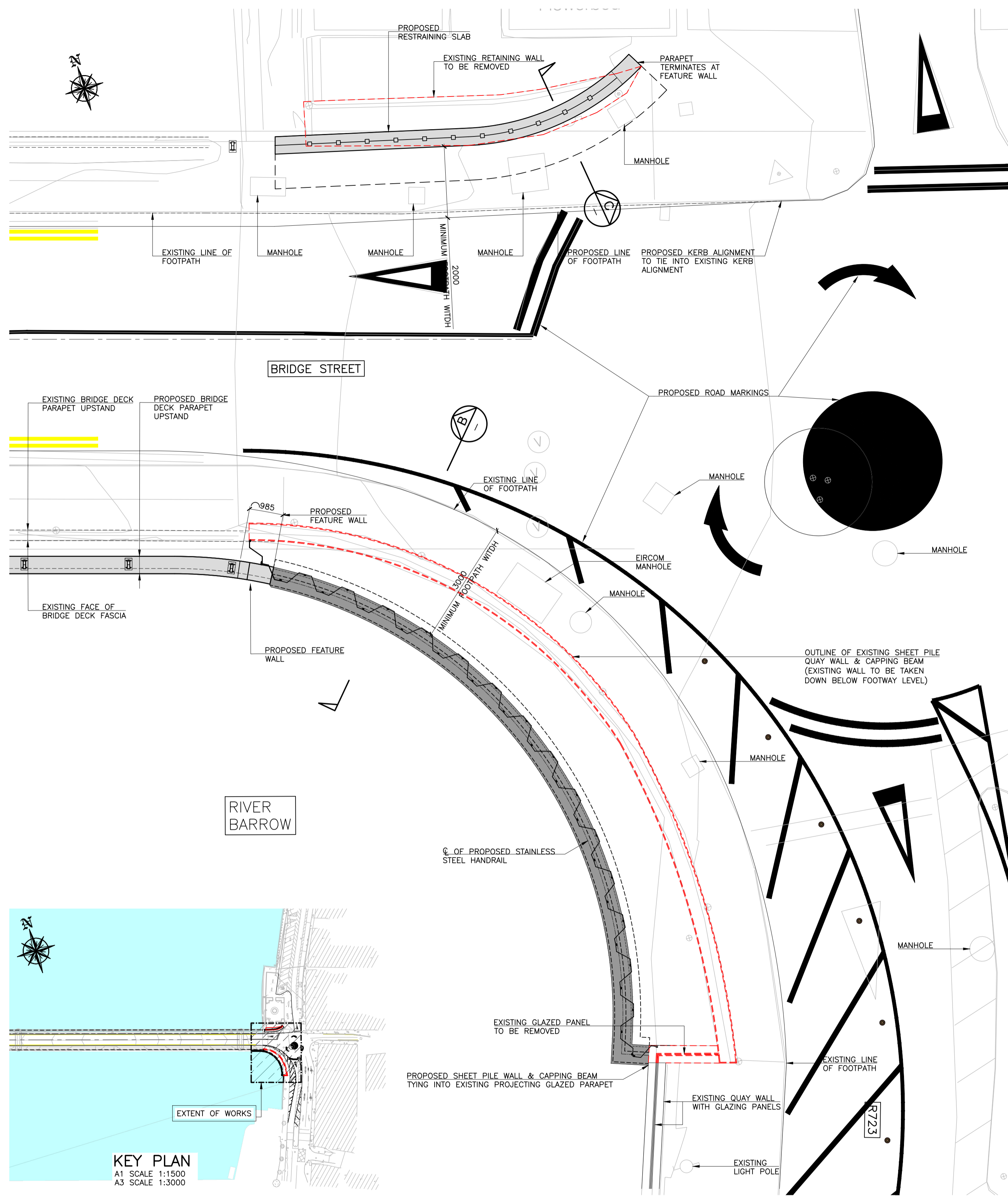
No.	Revision	Date	By	Chkd	App'd



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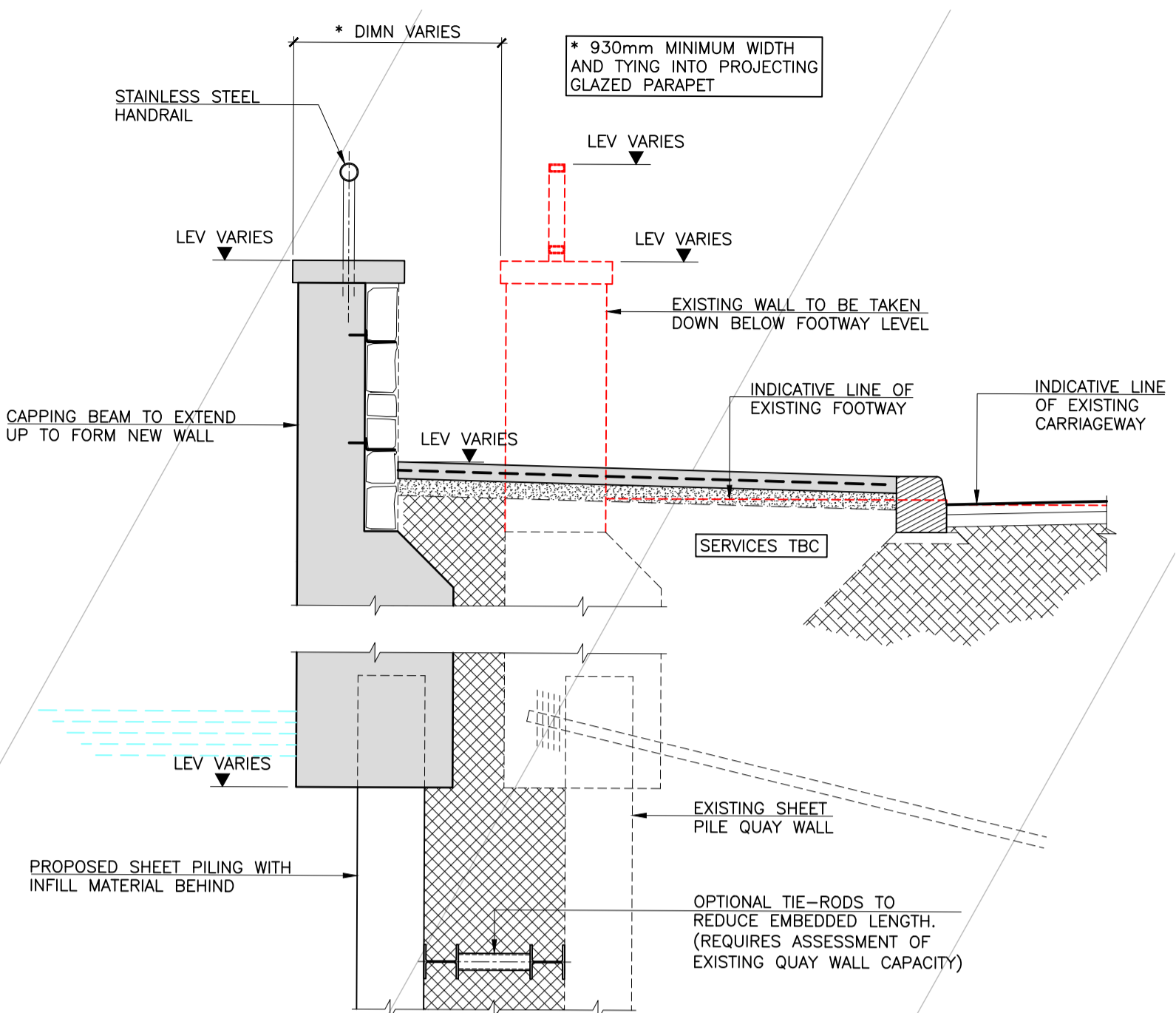
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OB	CH	MR	JK	S4 - Stage Approval

Project Stage							Preliminary						
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Drawing Title							Proposed O'Hanrahan Bridge Deck Cross Sections						
Project Number	Originator	Volume	Location	Type	Role	Number	Project Number	Originator	Volume	Location	Type	Role	Number
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Scale (A1)	As Shown	Date:	MAY 2022	Job No:	21.143	Rev:	P0	Date:	MAY 2022	Job No:	21.143	Rev:	P0

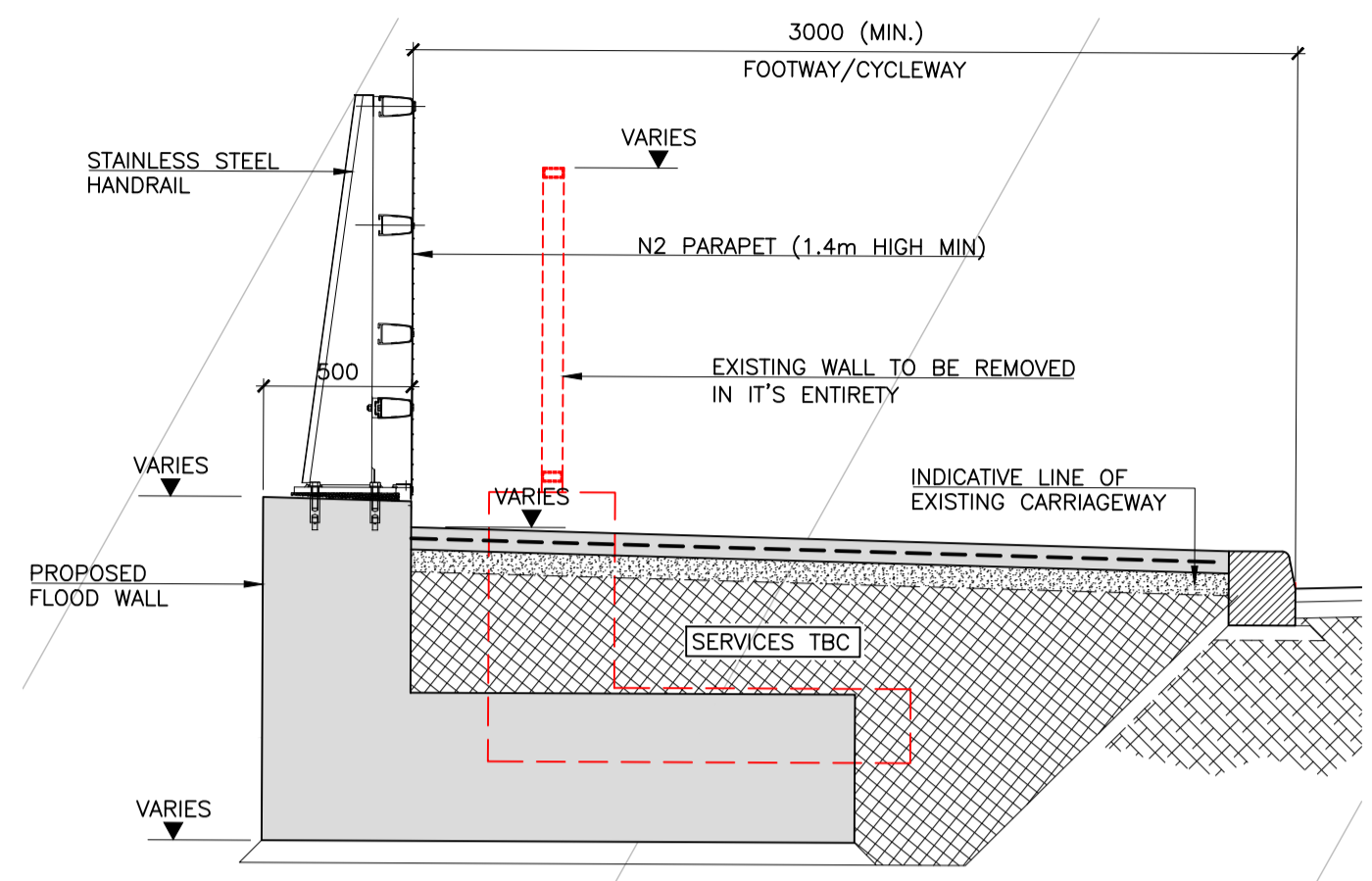


PART PLAN – BRIDGE WIDENING & REMEDIAL WORKS TO EASTERN QUAY WALLS
 A1 SCALE 1:75
 A3 SCALE 1:150

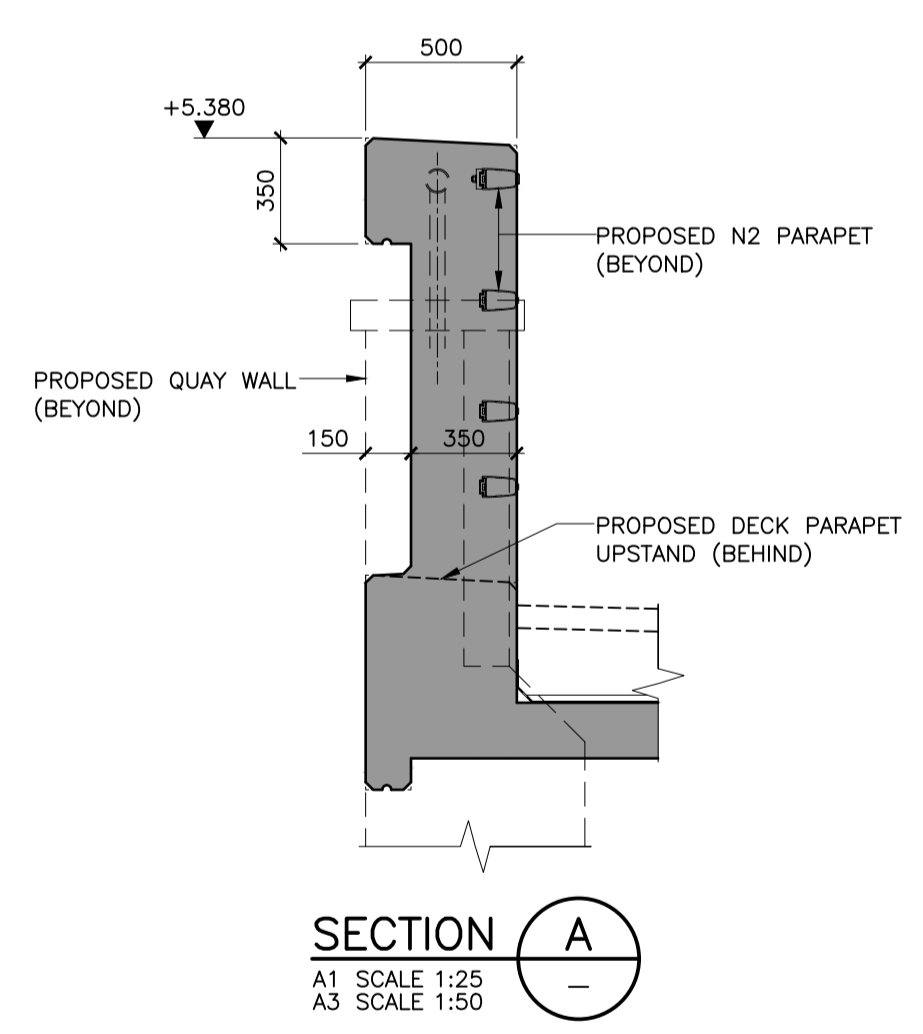
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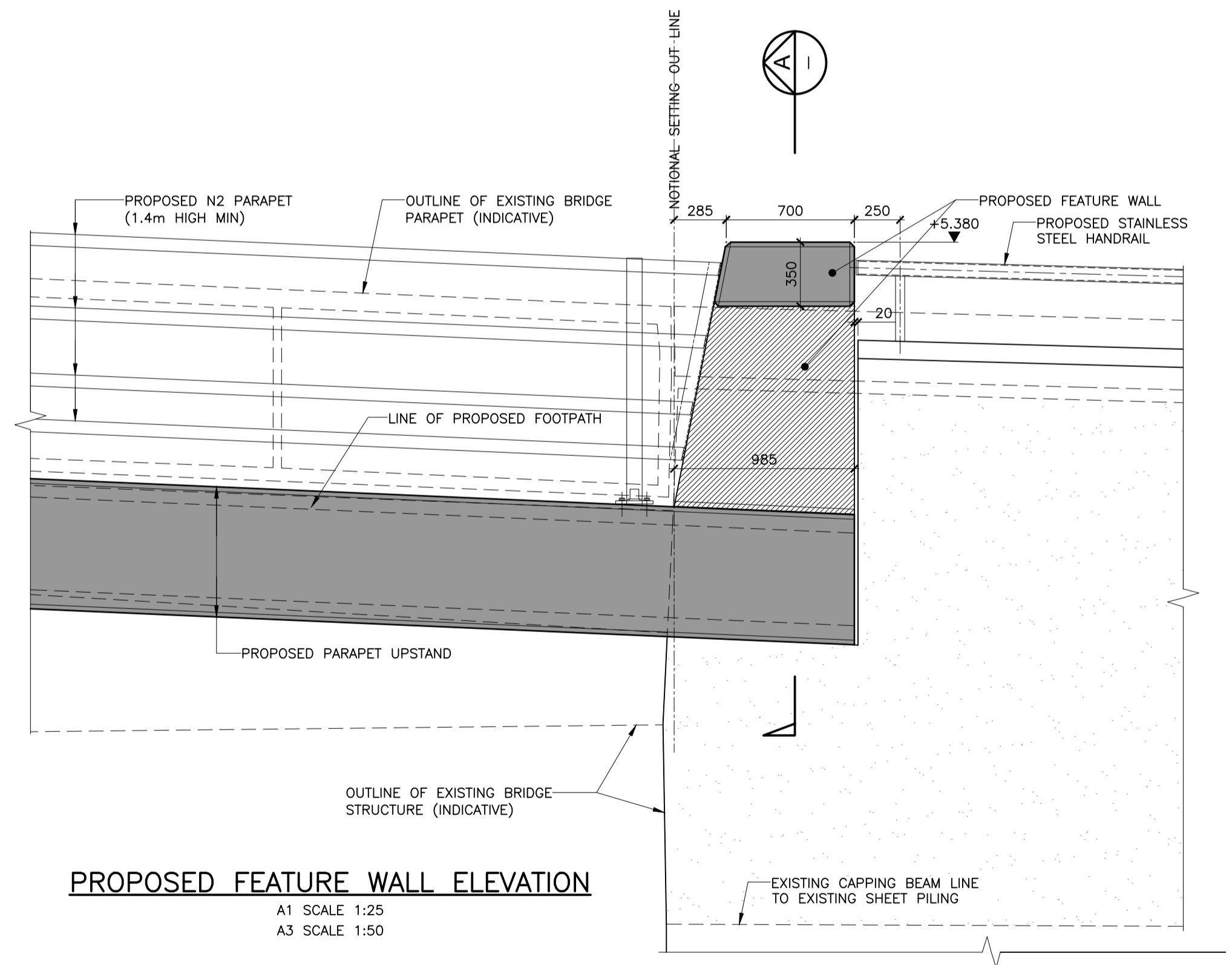
**SECTION B
 (TYPICAL SOUTHEAST QUAY WALL CROSS SECTION)**
 A1 SCALE 1:25
 A3 SCALE 1:50



**SECTION C
 (TYPICAL NORTHEAST QUAY WALL CROSS SECTION)**
 (NORTHWEST WALL SIMILAR)
 A1 SCALE 1:25
 A3 SCALE 1:50



SECTION A
 A1 SCALE 1:25
 A3 SCALE 1:50



PROPOSED FEATURE WALL ELEVATION
 A1 SCALE 1:25
 A3 SCALE 1:50



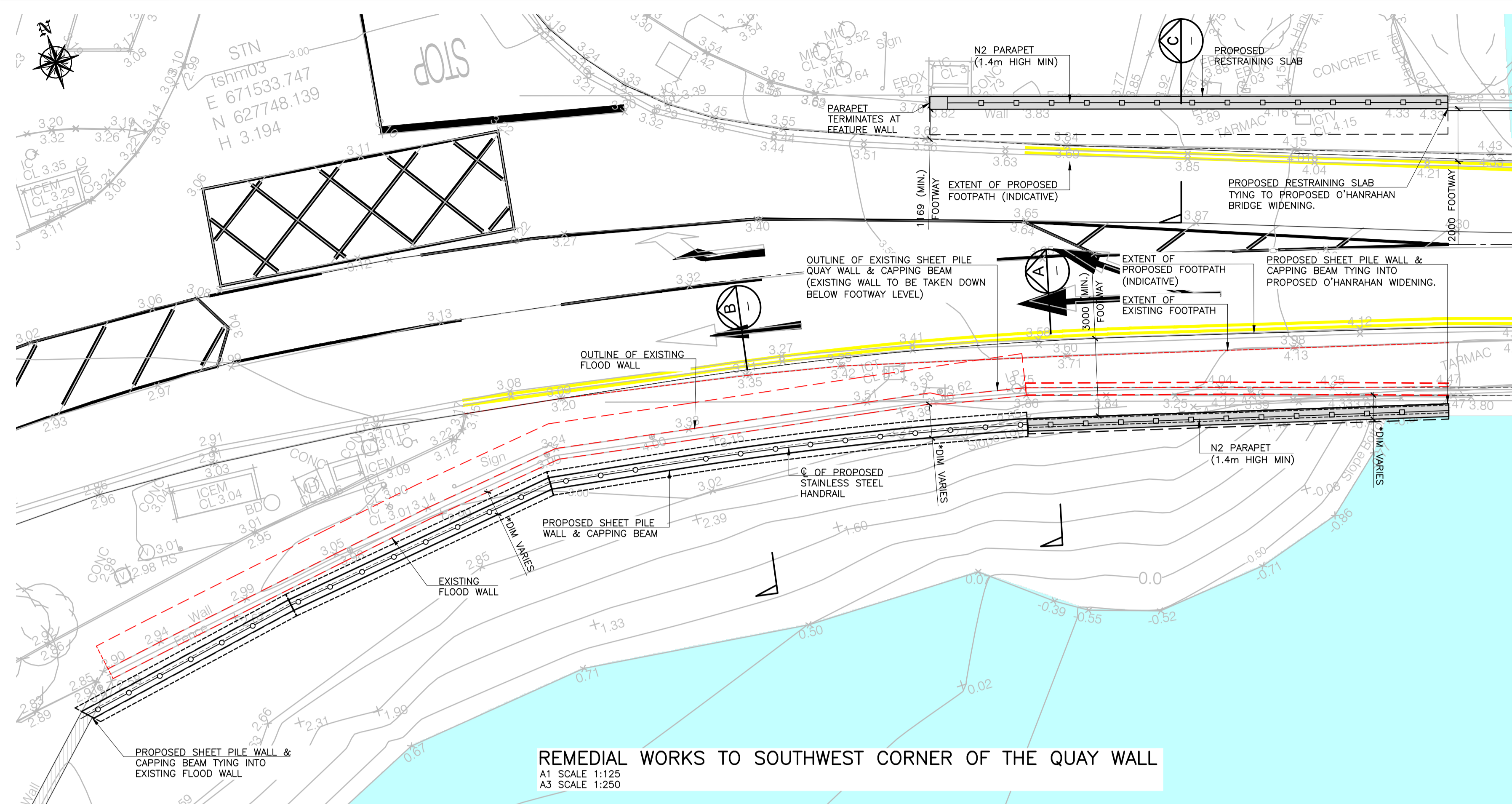
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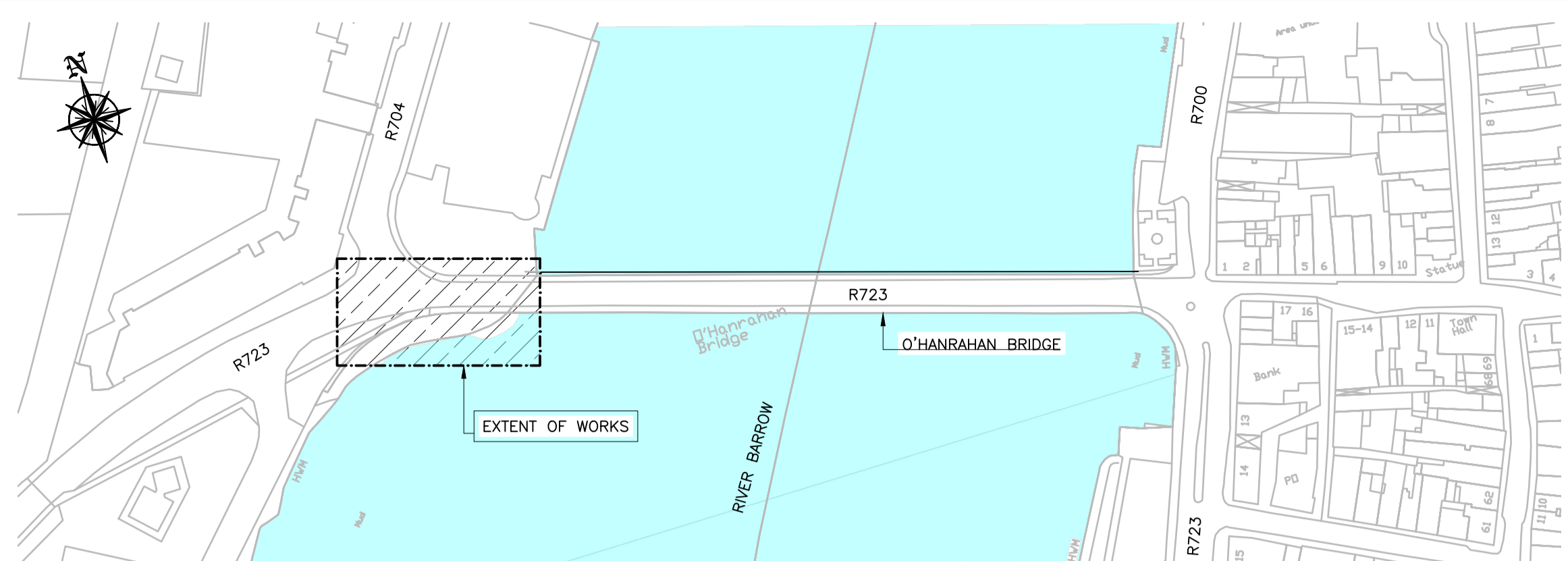
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OB	CH	MR	JK	S4 - Stage Approval

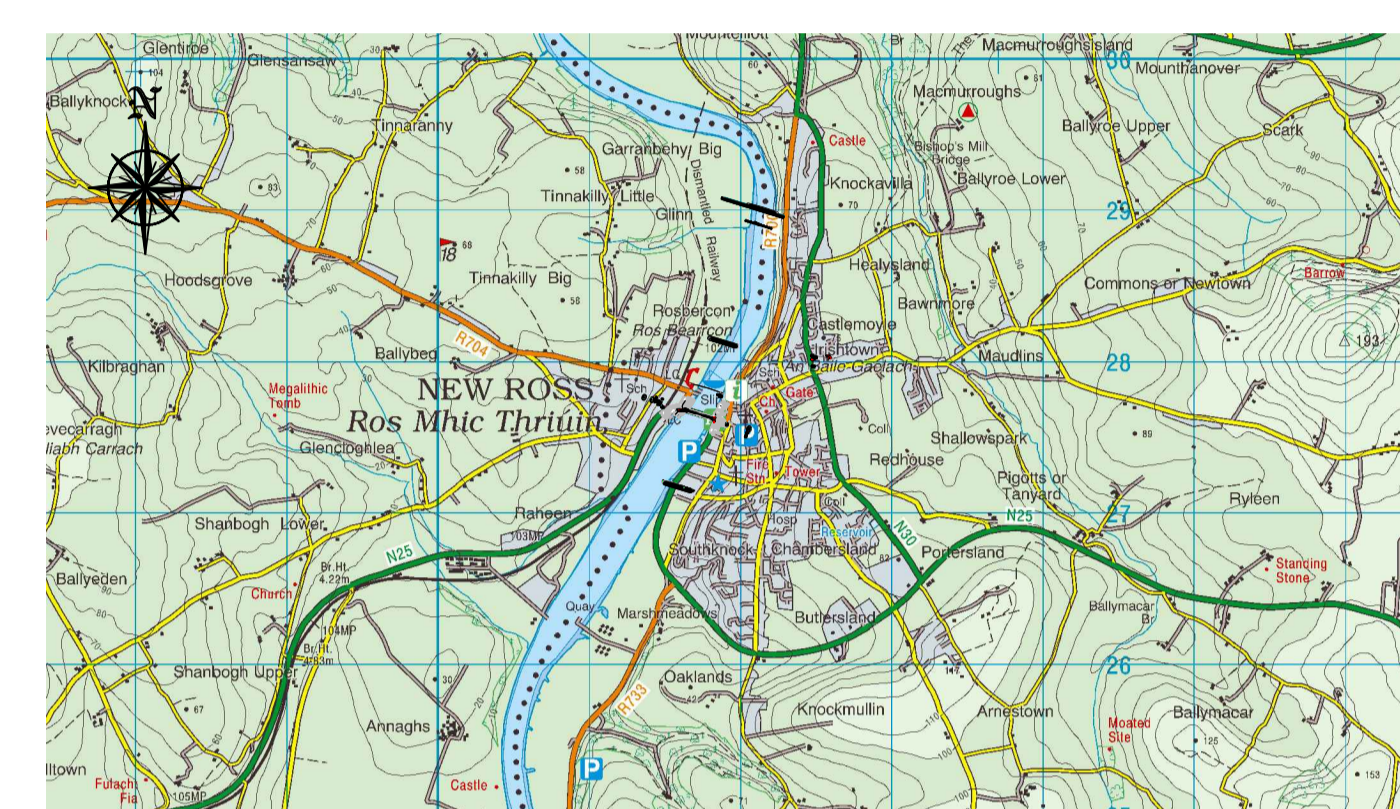
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Drawing Title	Remedial Works to Eastern Approach Quay Wall					
Drawing Number	WBRC	ROD	SBR	S101	DR	CB - 30013
Scale (A1)	As Shown	Date:	Oct' 2021	Job No:	21.143	Rev: P0



REMEDIAL WORKS TO SOUTHWEST CORNER OF THE QUAY WALL
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 A3 SCALE 1:250



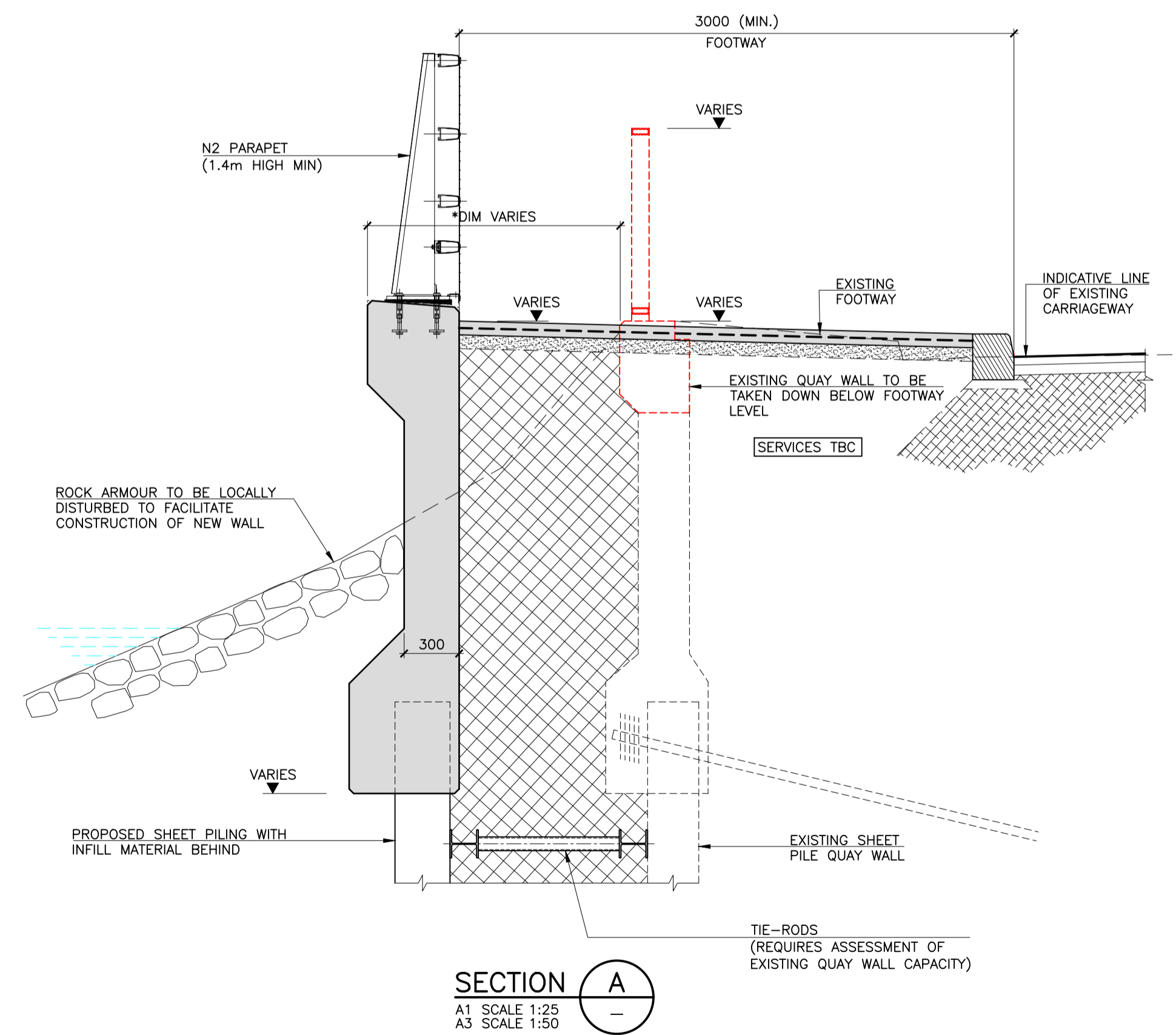
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 A1 SCALE 1:1500
 A3 SCALE 1:3000



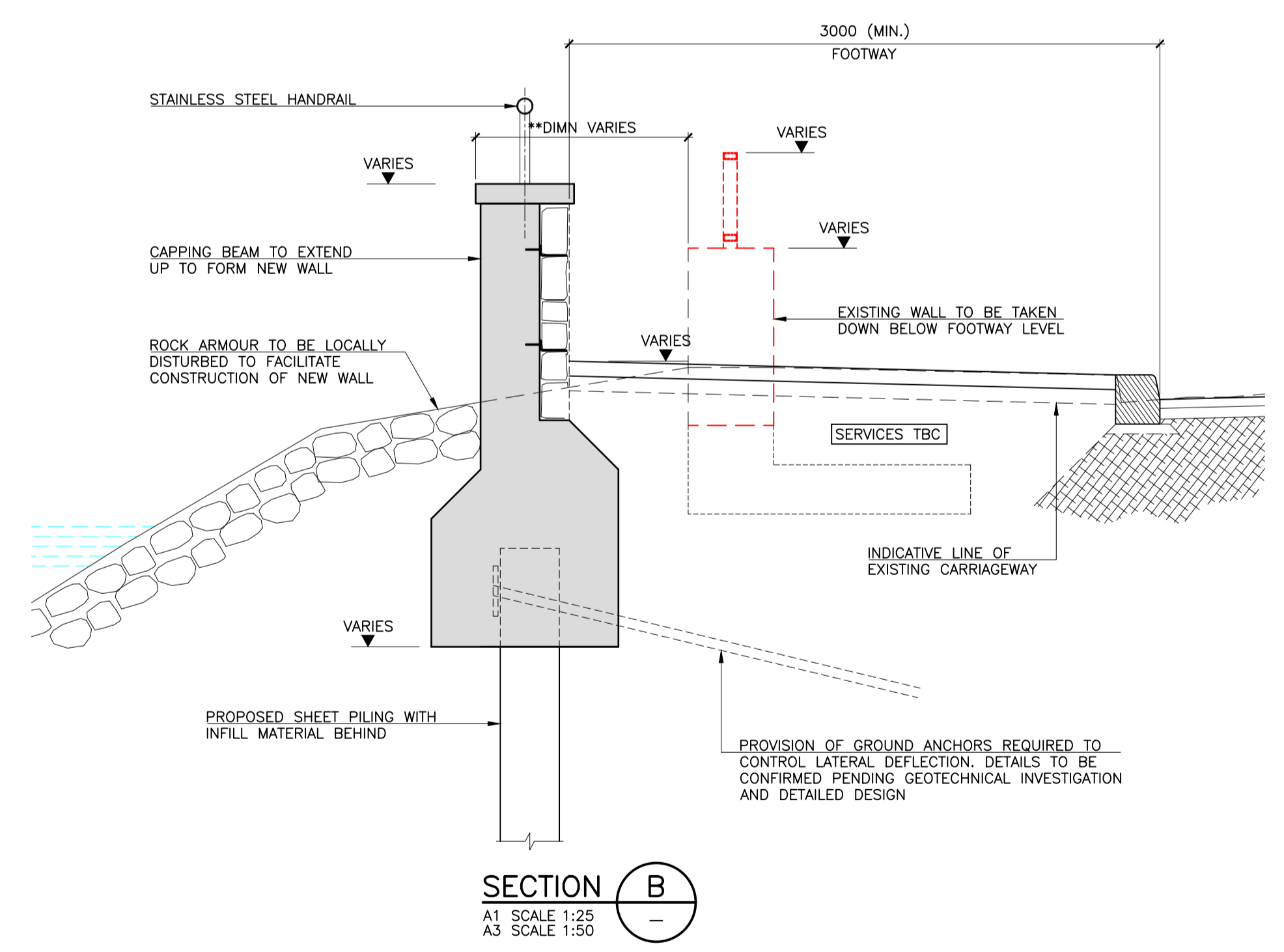
SITE LOCATION
 A1 SCALE 1:50000
 A3 SCALE 1:100000

NOTES:

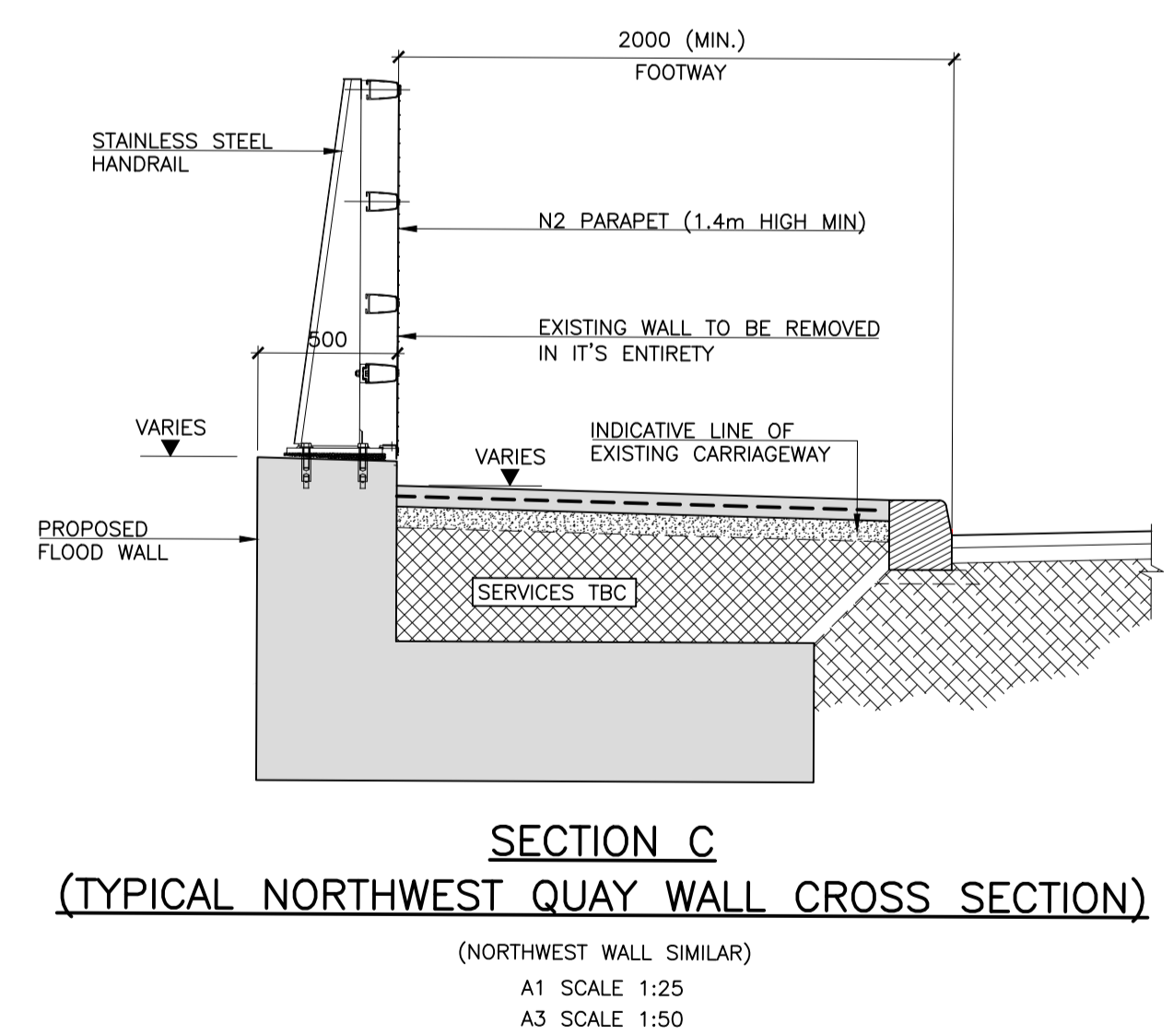
1. ALL DIMENSIONS IN MILLIMETRES, UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN METRES TO ORDNANCE DATUM MALIN HEAD.
3. ALL CO-ORDINATES ARE IN METRES TO IRISH TRANSVERSE MERCATOR (ITM).



SECTION A
 A1 SCALE 1:25
 A3 SCALE 1:50



SECTION B
 A1 SCALE 1:25
 A3 SCALE 1:50



SECTION C
 (TYPICAL NORTHWEST QUAY WALL CROSS SECTION)
 (NORTHWEST WALL SIMILAR)
 A1 SCALE 1:25
 A3 SCALE 1:50



No.	Revision	Date	By	Chkd	App'd



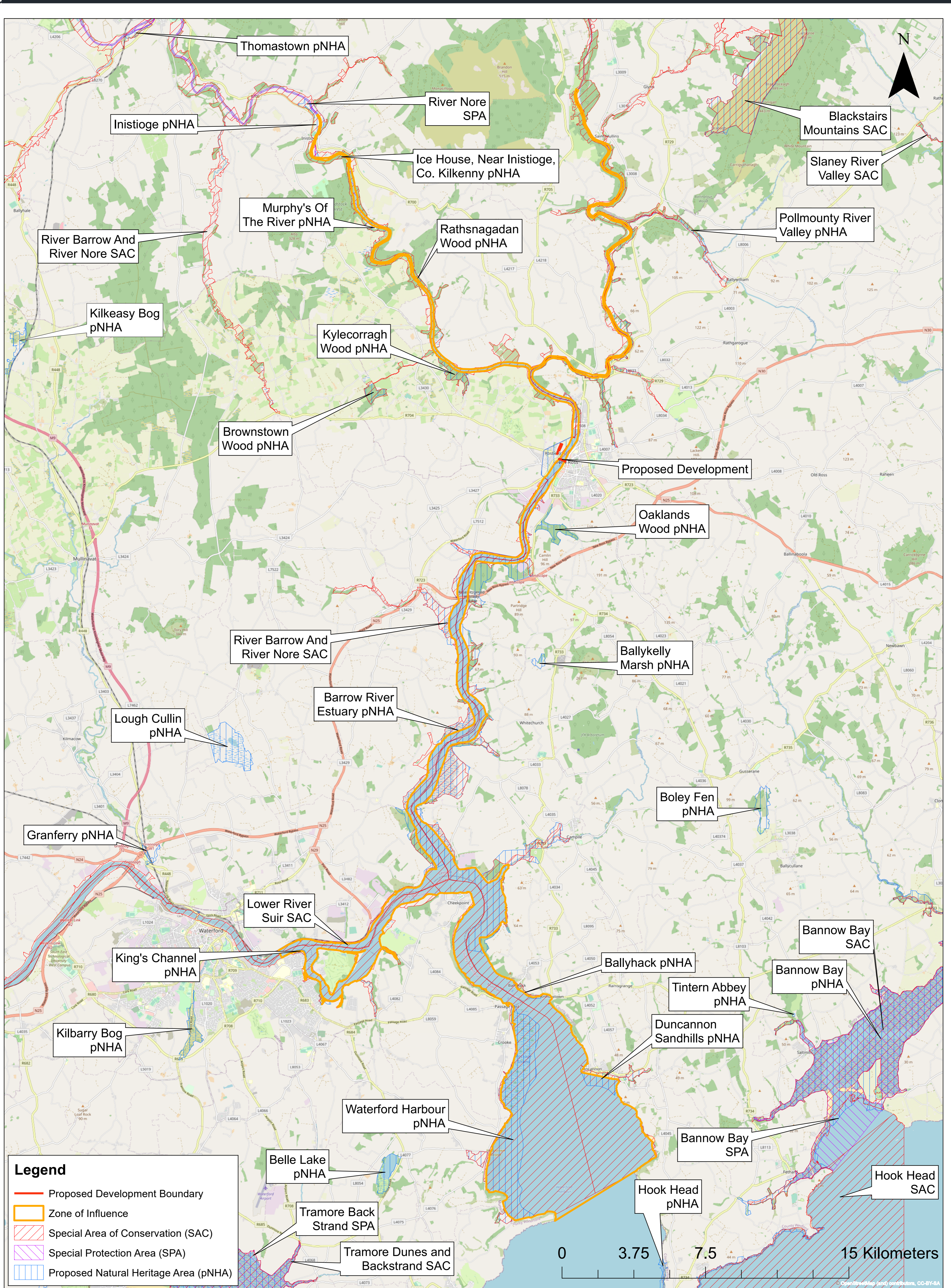
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Drawn	Designed	Checked	Approved	Suitability Code - Description
DS	CH	MR	JK	S4 - Stage Approval

Project Stage	Preliminary				
Project Title	O'Hanrahan Bridge Widening Project				
Drawing Title	Remedial Works to Southwest Corner of the Quay Wall				
Drawing Number	Project	Originator	Volume	Location	Type Role Number
Scale (A1)	WBRS	ROD	ENV	S101	DR - CB - 30014
As Shown	Date:	June 2022	Job No:	21.143	Rev: P0

APPENDIX B

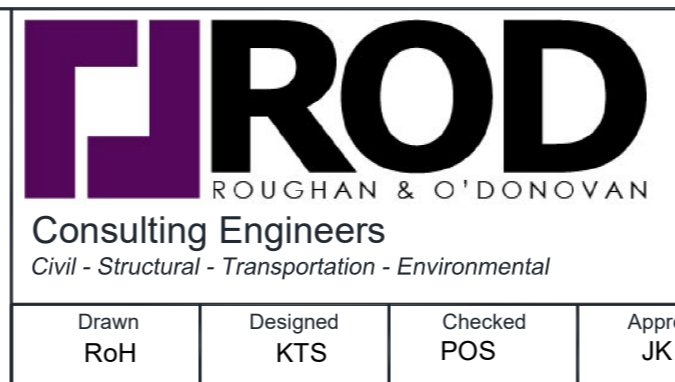
DESIGNATED SITES



Legend

- Proposed Development Boundary
- Zone of Influence
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Proposed Natural Heritage Area (pNHA)

Project Stage Preliminary



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Project Title							O'Hanrahan Bridge Widening Project							
Drawing Title							Zone of Influence							
Drawing Number	Project	Originator	Volume	Location	Type	Role	Number	Project	Originator	Volume	Location	Type	Role	Number
Scale (A1)	WBRC	ROD	ENV	S101	DR	CB	30022	1:50,000@A1						
Date:							October 2022							
Job No:							21.143							
Rev:							P0							

DO NOT SCALE USE FIGURED DIMENSIONS ONLY