Kinmel Bay Coastal Defence Improvement Scheme

Environmental Statement Addendum
Non-Technical Summary
Final

October 2024

Prepared for:

Jones Bros Ruthin (Civil Engineering) Co Ltd

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Contract

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Abbreviations

CEMP	Construction Environmental Management Plan
EIA	Environmental Impact Assessment
ES	Environmental Statement
IEMA	Institute of Environmental Management and Assessment
LPA	Local Planning Authority
MHWS	Mean High Water Spring
NPPF	National Planning Policy Framework
NRW	Natural Resources Wales
NTS	Non-Technical Summary
PM	Project Manager
PPV	Peak Parcel Velocity
SAC	Special Area of Conservation
SI	Site Investigation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

1 Introduction

1.1 Context of this Non-Technical Summary

Conwy County Borough Council ('the Applicant') applied for a marine licence to Natural Resources Wales (NRW) for the proposed construction and maintenance of a series of coastal defences at Kinmel Bay below Mean High Water Spring (MHWS). The application was submitted on the 24th November 2022 and was submitted alongside an Environmental Statement (ES) (referred to as 'the submitted ES') prepared in line with the Marine Works (EIA) Regulations 2007.

A marine licence was given 15th March 2023 by NRW. Following further discussions with the contractor, and design changes, there have been two key changes to the works below MHWS. This ES addendum (the 'ES addendum') has been prepared to present and re-assess the environmental impacts of the proposed scheme following these changes. This ES addendum should be read in alongside the submitted ES.

1.2 Purpose of the Environmental Statement

The purpose of this ES addendum is to present an assessment of any new or different significant effects that are likely to result from the proposed scheme design changes.

This ES addendum only considers changes in legislation, baseline conditions or potential effects since the submitted ES was prepared; if no change is listed then the conditions and the potential effects are the same as those presented in the submitted ES.

1.3 Structure of this ES

The structure of this ES addendum is outlined below:

- Section 2: presents an overview of the changes since last submission of the submitted ES.
- Section 3: presents an update to Environmental Statements chapter 1-3 as required (Introduction, Description of proposed scheme, and Environmental Impact Assessment Methodology).
- Section 4: presents an updated assessment of Ecology and Biodiversity to reflect the proposed changes.
- Section 5: presents an updated assessment of Noise and Vibration to reflect the proposed changes.
- Section 6: presents updated conclusions.

2 Description of the Proposed Scheme changes

2.1 Introduction

This chapter of the ES addendum presents a description of the proposed scheme changes since the submission of the original ES in November 2022.

Since the submission of the application, there has been two key changes following involvement of a contractor and the planning application process. These changes are as follows:

- Within the original submission, two access points (AP8 and AP9) were proposed at Towyn Revetment. However, these have been replaced for one beach access point (AP10) situated in the centre of the revetment.
- The original construction methodology proposed for the beach accesses involved a vibration-free piling methodology. However, following contractor involvement it became clear this was not possible. Therefore, traditional vibro hammer pilling will be used for this access point.

Across the rest of the scheme, pilling will no longer be undertaken for any of the other beach access points (AP3-7). This has not been re-assessed as part of this ES addendum.

2.2 Scope and methodology of the ES Addendum

This section outlines the scope and methodology used in this ES addendum. This ES Addendum should be read with the submitted ES. The general assessment method and topic-specific methods, relevant legislation, policy and guidance, key assumptions and limitations set out in the submitted ES Volume I, Chapters 4-15 submitted with the Application remain unchanged, unless specifically stated in this ES Addendum.

An initial assessment of whether there would be any new or materially different likely significant effects on the environment arising as a result of the proposed scheme changes has been undertaken based on the assumptions set out above, with reference to the previous assessment presented within the submitted ES (Volume I and Volume II).

The results of this scoping exercise is provided in Table 2-1.

Updates to technical chapters of the submitted ES, where these are required, are presented in the relevant sections of this ES Addendum. Updates to appendices of the submitted ES, where these are required, along with additional information are provided within Volume II of this ES Addendum.

Table 2-1: Scoping of environmental assessments for proposed scheme changes

Submitted ES chapter	Scoping decision	Rationale	Submitted ES Appendix	Scoping decision	Rationale
Chapter 1-3	In	Changes in proposed scheme design, as detailed above.	Appendix H - Outline CEMP	Out	Full CEMP to be updated in line with mitigation measures proposed.
Chapter 4: Ecology	In	Updates to assessment required to reflect change in proposed scheme design and construction methodology.	Appendix B.1 - Legislative and Planning Context	Out	No change
			Appendix B.2-B.4 - Phase 1 Habitat Maps	Out	No change
			Appendix B.5 - Species mix for grassland enhancement	Out	No change

Submitted ES chapter	Scoping decision	Rationale	Submitted ES Appendix	Scoping decision	Rationale
Chapter 4: Ecology			Appendix B.6 - Habitat Regulations Assessment	Out	Previous bird surveys did not record significant bird features of the Special Protection Area (SPA) in this area of the works. Therefore, given the amount of intertidal habitat available it is considered that in the unlikely event that disturbance occurs, birds have the ability to move and therefore there will be no significant impact to bird species listed as qualifying features of the SPA as part of the proposed works. Changes in construction methods will not impact this assessment.
Chapter 5: Landscape and Visual	Out	It is not anticipated that any of the changes to the proposed scheme will change the residual effects reported.	Appendix C.1 - C.14	Out	No change
Chapter 6: Coastal processes	Out	It is not anticipated that any of the changes to the proposed scheme will change the residual effects reported.	Appendix D.1 - Tidal Diamond data	Out	Tidal diamond data presented will not be impacted by proposed changes.

Submitted ES chapter	Scoping decision	Rationale	Submitted ES Appendix	Scoping decision	Rationale
Chapter 7: Hydrology and Hydrogeology	Out	It is not anticipated that any of the changes to the proposed scheme will change the residual effects reported.	Appendix E.1 - Water Framework Directive	Out	No change
			Appendix E.2 - Flood Consequences Assessment	Out	No further modelling required as a result of the proposed scheme changes.
Chapter 8: Cultural Heritage	Out	It is not anticipated that any of the changes to the proposed scheme will change the residual effects reported.	Appendix F.1 - Historic Desk-Based Assessment	Out	No changes
Chapter 9: Contaminated Land	Out	It is not anticipated that any of the changes to the proposed scheme will change the residual effects reported.	Appendix G.1 - Phase 1 Contaminated Land Desk Study	Out	No change
Chapter 10: Socio-economic	Out	It is not anticipated that any of the changes to the proposed scheme will change the residual effects reported.	N/A	N/A	N/A
Chapter 11: Traffic and Transportation	Out	It is not anticipated that any of the changes to the proposed scheme will change the residual effects reported.	N/A	N/A	N/A
Chapter 12: Noise and Vibration	In	Updated impact assessment to reflect changes to proposed scheme design and construction methodology.	N/A	N/A	N/A

Submitted ES chapter	Scoping decision	Rationale	Submitted ES Appendix	Scoping decision	Rationale
Change 13: Other Construction Related Effects	Out	It is not anticipated that any of the changes to the proposed scheme will change the residual effects reported.	N/A	N/A	N/A
Chapter 14: Cumulative and In-Combination	Out	It is not anticipated that any of the changes to the proposed scheme will change the residual effects reported	N/A	N/A	N/A
Chapter 14: Conclusions	Out	Updated summary of likely significant effects, mitigation measures and residual effects to reflect updated assessments.	N/A	N/A	N/A

3 Changes to the submitted Environmental Statement

3.1 Introduction

This chapter of the ES addendum describes the changes to Chapters 1-3 of the submitted ES, which result from changes to the proposed scheme.

3.1.1 Changes to Chapters 1-3 of the submitted ES

3.1.2 Chapter 1 - Introduction

There are no changes to Chapter 1: Introduction.

3.1.3 Chapter 2 - The Proposed Scheme

As part of the original application, two access points were proposed in front of Golden Sands Holiday Park. Following further ground investigations and design discussions, two access points (AP8 and AP9) were replaced for a single central access point (AP10), as show on Figure 3-1 below. Originally, both access points in front of the Holiday Park required pilling, and the submitted ES suggested a press-in piling method which minimises noise and vibration created.

However, the press-in pilling method requires a large crane to set up the piling rig to lift and position the sheet piles. It was considered too disruptive to the community and close by caravan park to set up a crane in this area.

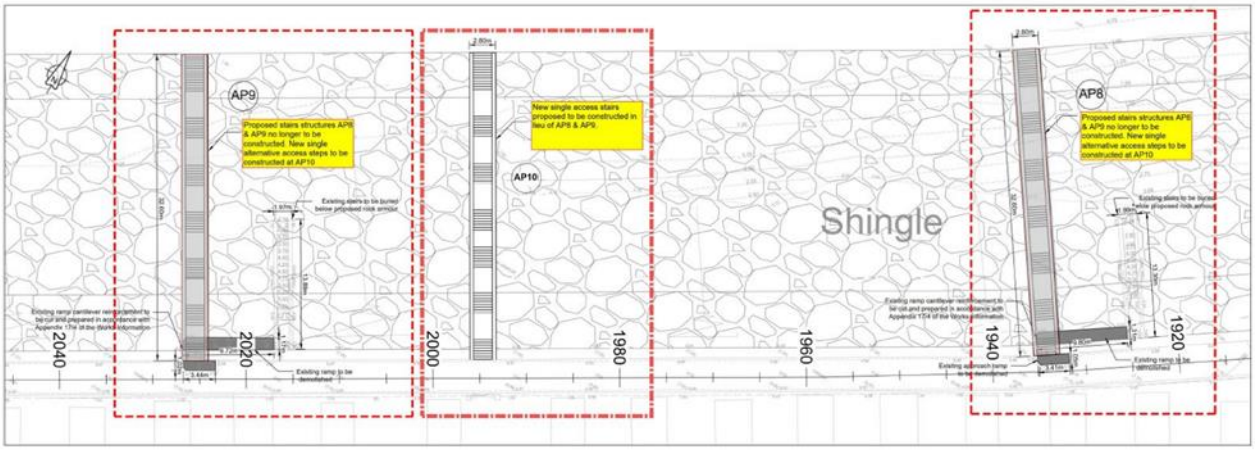


Figure 3-1: Location of new access point in relation to original proposals.

As this new access point (AP10) is located below the Mean High Water Spring, a temporary sheet pile cofferdam is required to provide safe and undisturbed access for construction of the access steps. The cofferdam will involve installing sheet piles around the proposed steps to create a dry working area. This will allow the construction works and material

deliveries to be done during normal working hours. Without the dry working area, the works would be constrained by the tide resulting in out of hours working.

The temporary sheet piling cofferdam is yet to be fully designed, however, it is expected to be approximately 25m long and 5m wide. The sheet piles will be approximately 12m, with a maximum pile embedment of 9m into the ground.

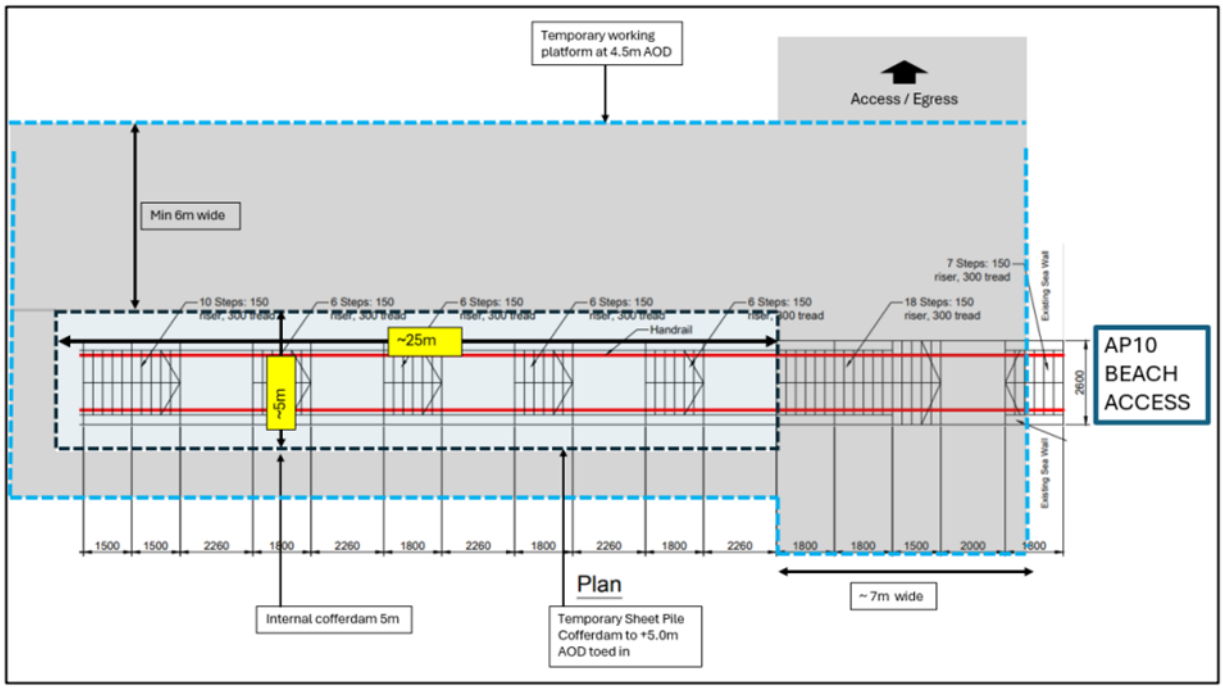


Figure 3-2: Plan view of proposed cofferdam layout.

The coordinates of the proposed temporary sheet piling cofferdam at AP10 are shown in Table 3-1.

Table 3-1: Coordinate locations of the proposed temporary sheet pilling cofferdam.

Latitude	Longitude
53° 18' 34.790129" N	3° 32' 6.807444" W
53° 18' 33.720776" N	3° 32' 5.669979" W
53° 18' 33.964177" N	3° 32' 4.983553" W
53° 18' 35.058054" N	3° 32' 6.131783" W

The temporary sheet piles will be installed with a large, tracked rig using a vibration hammer. The rig will be able to access the working areas along the upper areas of the foreshore without any disruption to the local community and adjacent caravan park. The installation of the sheet piles will be undertaken from above MHWS on a high level temporary working platform adjacent to the existing sea wall.

The installation of the temporary sheet piles is expected to take 2 weeks, the removal is expected to take 1 week. If the project programme allows, lower than average tides will be

targeted for installation and removal periods to benefit from the increased distance from the tide. We expect that the piles will be in place for approximately 16 weeks.

With the exception of the changes described above, all other details of the proposed scheme design are included in the Environmental Statement submitted in November 2022.

3.1.4 Chapter 3 - Environmental Impact Assessment Methodology

There are no changes to Chapter 3 - Environmental Impact Assessment Methodology.

3.2 Ecology

An updated assessment to address the potential impacts and significant effects of the changes to the proposed scheme on ecology has been undertaken for the proposed design changes. The findings of this updated assessment are summarised below.

3.2.1 Construction phase

It is not considered that the proposed changes will have long term impacts on the intertidal habitats close to the sea wall, any small areas destroyed during works will return very quickly due to the amount of similar habitat in the area. This slight negative impact is in line with the previous assessment carried out.

The increased noise disturbance from the use of traditional pilling methods has the potential to disturb some marine mammal and fish species. Without mitigation this could have significant impacts on these species.

There is low potential for impacts to seals due to their small numbers in this area, resulting in a slight negative impact.

Small numbers of bird have been recorded in this area of the foreshore, but due to the numbers it is not expected that the noise disturbance will have a significant impact.

3.2.2 Mitigation measures

Due to the potential for noise and vibration to travel through the water column if the piling is undertaken in the wet, it is proposed that all piling be undertaken in the dry. Additionally, if any seals are observed in the area of works, all works should stop until it has moved away from the area.

3.2.3 Residual effects

If the mitigation measures outlined in the section above are put in place no significant residual impacts are anticipated in line with the original assessment.

3.3 Noise and Vibration

An updated assessment to address the potential impacts and significant effects of the changes to the proposed scheme on noise and vibration has been undertaken for the proposed design changes. The findings of this updated assessment are summarised below.

3.3.1 Construction phase

Overall, the re-assessment found that there is a slight increase in noise for residential receptors located at Golden Sands Holiday Park. This was recorded as a moderate adverse impact. However, the revised levels are not significantly different to those assessed as part of the original scheme.

The re-assessment in term of vibration impacts associated with the original scheme found moderate adverse impact for residential receptors located at Golden Sands Holiday Park. This was slightly higher than previously recorded in the original assessment.

3.3.2 Mitigation measures

In relation to vibration impacts, advance notice of these activities provided to the affected areas, is recommended to minimise disturbance. The timing of the works will be undertaken during the winter to avoid peak season for the Holiday Park.

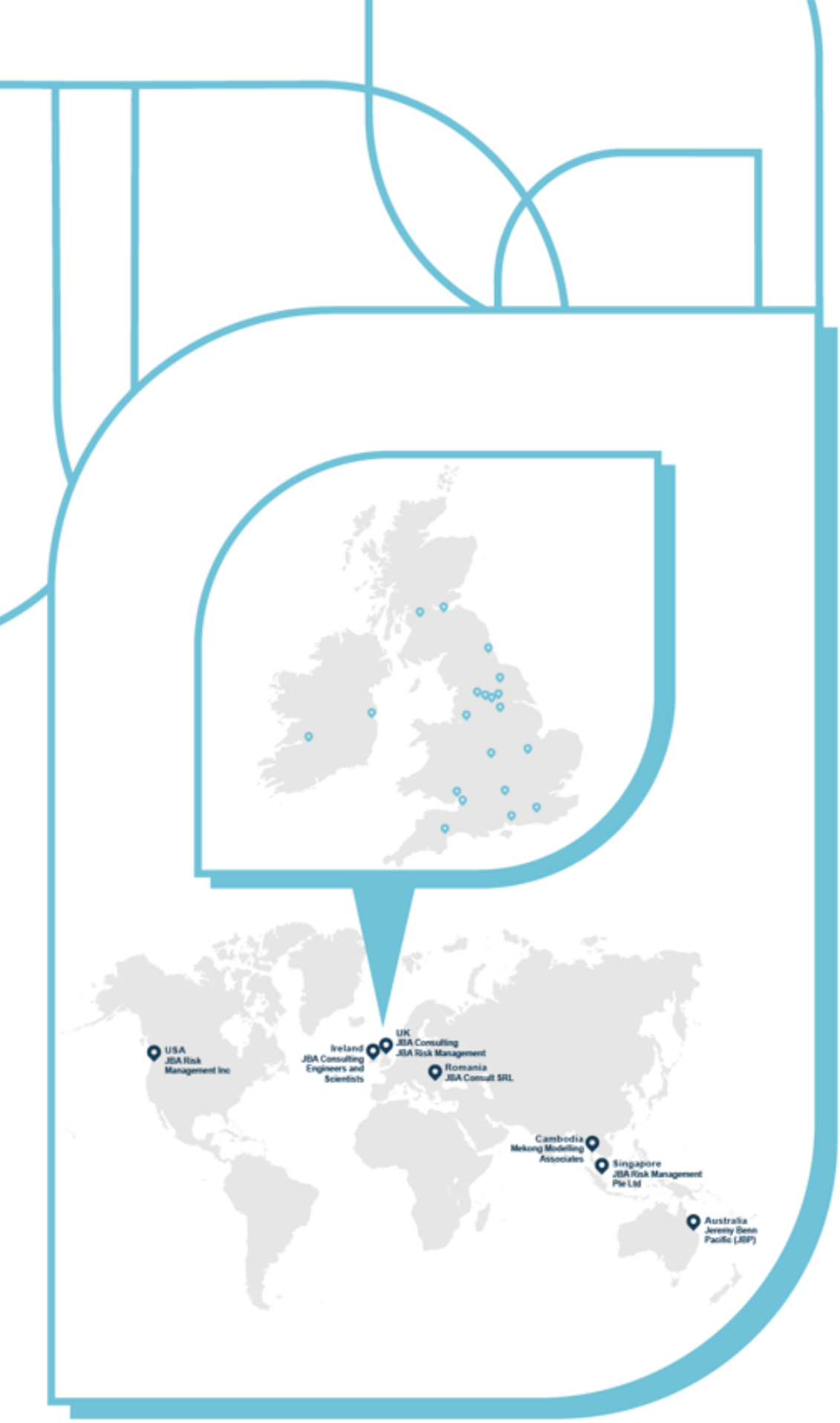
3.3.3 Residual effects

The reassessment found minor adverse residual effects for residential receptors identified at Golden Sands Holiday Park in relation to construction noise, and moderate adverse in relation to construction vibration.

3.4 Conclusion

The ES Addendum presents the findings of the EIA assessment undertaken for the proposed scheme changes and includes an assessment of the potential environmental impacts and effects of the proposed scheme changes during construction and operation.

The likely significant residual environmental effects of the proposed scheme design changes have been identified following implementation of the embedded mitigation or impact avoidance measures for the proposed scheme. Overall, due to the short-term nature of the works it is not anticipated to have significant effects on receptors identified.



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