Mumbles Coastal Defence Scheme

Habitats Regulations Assessment (HRA) Screening Report (Final)

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Contract

This report describes work commissioned by Lee Selway on behalf of AMEY Consulting. Sarah Tyler and Jonathan Harrison of JBA Consulting carried out this work.

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Purpose

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Abbreviations

FBC	Full Business Case
HRA	Habitats Regulations Assessment
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
NGR	National Grid Reference
NRW	Natural Resources Wales
OBC	Outline Business Case
PEA	Preliminary Ecological Appraisal
SAC	Special Area of Conservation
SPA	Special Protection Area

1 Introduction

1.1 Background

JBA Consulting (JBA), Amey Consulting and LDA Design have been commissioned to update the Outline Business Case (OBC) and develop the Full Business Case (FBC) for the upgrade of the existing defences in Mumbles Bay, near Swansea, South Wales, on behalf of the City and County of Swansea Council. Amey is acting as Lead Consultant for the project. JBA is responsible for the detailed design of all works seaward of the primary seawall defence, up to and including this defence.

As the proposed works site is located within 5km of two Special Areas of Conservation (SAC) a Habitats Regulations Assessment (HRA) is required to be completed and consented to by Natural Resources Wales (NRW) before works can commence.

1.2 Requirement for this HRA Screening Report

Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora, known as the 'Habitats Directive' was adopted in 1992. The Directive promotes the maintenance of biodiversity by requiring Member States to take measures to maintain or restore certain natural habitats and wild species at a favourable conservation status, introducing robust protection for those habitats and species of European importance.

The Directive establishes the requirement for a European ecological network of protected sites by designating SACs for habitats listed on Annex I and for species listed on Annex II. These measures are also to be applied to SPAs classified under Article 4 of the Birds Directive. Together SACs and SPAs make up the Natura 2000 network.

The Directive is transposed into law in England and Wales through the Conservation of Habitats and Species Regulations 2017 (as amended). The Regulations require that a HRA is undertaken by a competent authority prior to the issue of any consent to consider whether a proposed project is likely to have a significant effect on a Natura 2000 site. Government guidance also requires that Ramsar sites (which support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance [Ramsar Convention]) are included within an HRA.

For all plans and projects, which are not wholly directly connected with, or necessary to, the conservation management of the site's qualifying features, a formal screening for any Likely Significant Effects (either alone or in combination with other plans or projects) on a European site(s) is required. This screening assessment is based on available ecological information on the designated site(s), other plans, projects and policies relevant to the area and details of the proposed works.

If the screening assessment concludes that the project may have a significant adverse effect on the conservation objectives of the site(s), or that such an effect cannot be ruled out (adopting a precautionary approach) an Appropriate Assessment must be carried out. An Appropriate Assessment involves an assessment of the potential effects of a project on the conservation objectives of the site(s). If significant adverse effects are identified, mitigation or avoidance measures can be applied.

If it cannot be concluded that the works will not adversely impact upon the integrity of the site(s), the project will not be able to proceed without further conditions and/or assessment.

1.3 Scope of Assessment

This report comprises a screening assessment of the proposed works at Mumbles and is based on an examination of Designated Site Synopsis, Standard Data Form and draft generic conservation objectives available from the NRW and Joint Nature Conservation Committee (JNCC) as well as other readily accessible internet resources concerning the

nature and wildlife value of the sites. The screening assessment also relies on information about the proposed works site collected as part of the Preliminary Ecological Appraisal (PEA) in September 2020 (JBA Consulting, 2020a).

The report takes the following format:

- Evidence gathering: Identifying European sites and any potentially affected qualifying features.
- Appraisal of hazards: Identifying potential hazards to qualifying features associated with the proposed project
- Screening: Deciding whether or not the development is likely to have a significant effect upon the interest features of the European sites.

2 Description of the Project

2.1 Site Location

Mumbles Bay is located near Swansea in South Wales. The project extends from Knab Rock slipway in the south east (National Grid Reference (NGR): SS 62394 87729) to beyond the Dairy Car Park in the north west (NGR: SS 61579 88472).

Figure 2-1 shows the location of the proposed work site in relation to the designated sites within 5km.

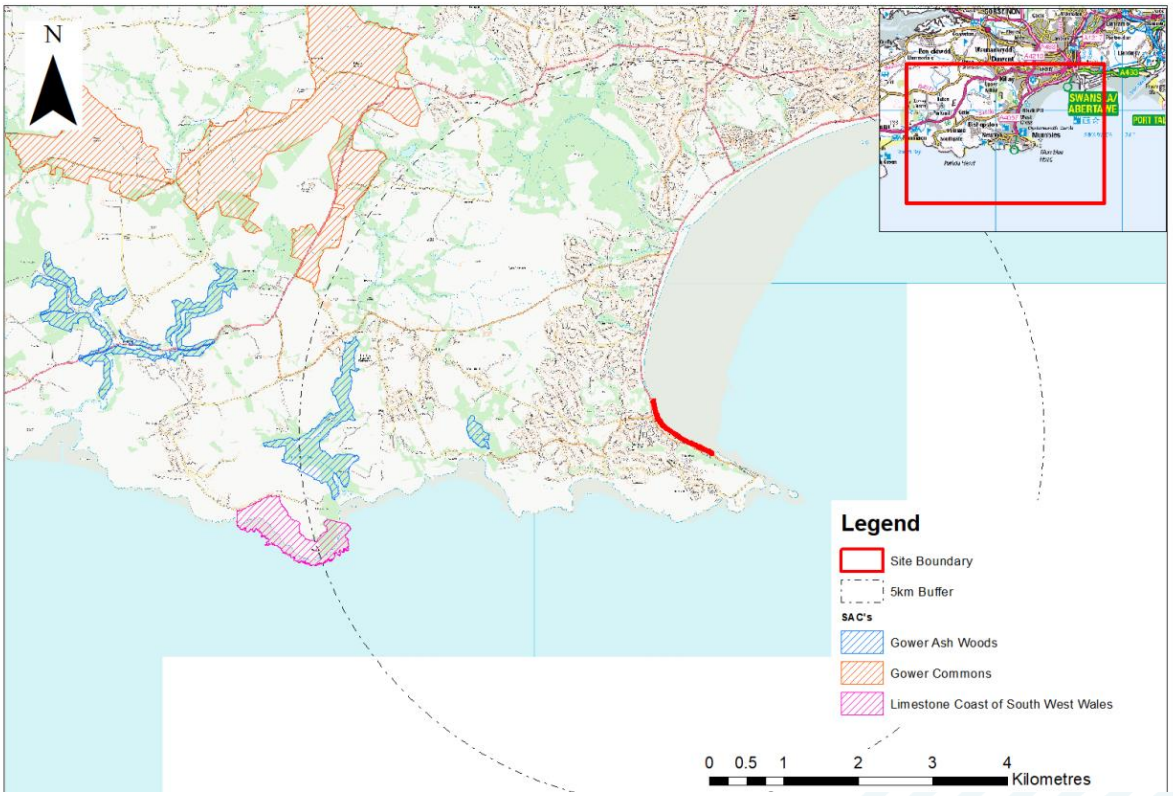

Figure 2-1 Site Location in Relation to Designated Sites

2.2 Baseline Conditions

The existing primary coastal defence comprises a sloped concrete revetment in the southeast for a length of approximately 500m and a vertical sea wall in the northwest for a length of approximately 700m. The primary defence is approximately 1.2km long in total. Secondary defences are also present along the frontage, generally in the form of a set-back masonry wall, although to the northwest a grassed embankment behind the promenade acts as the secondary defence.

Habitats present in the area of the proposed works include amenity grassland, broadleaved trees, intertidal habitats, buildings and areas of hardstanding.

2.3 Proposed Works

Full details of the design standards and criteria can be found in the associated Design Input Statement (JBA Consulting, 2020b), the relevant details of the proposed works have been replicated here.

The OBC concluded that the preferred solution to manage the flood risk and achieve the scheme objectives would be to:

- Widen the promenade to approximately 6m by replacing the 80m length of existing sea wall;
- Repoint and patch repairs to the remaining 500m length of sea wall;
- Encase the existing concrete revetment with a new rock armour revetment;
- Construct a new parapet wall along the full length of both defences with a raised crest level;
- Raise land locally to maintain visibility along the length of the promenade; and
- Place rock armour at the toe of all defences to reduce the risk of erosion of the foreshore.

Detailed designs are still being developed as part of the FBC for the scheme, and therefore further information on the construction methodology is not available at this stage.

3 Habitat Regulations Assessment (HRA)- Screening

This assessment identifies and considers the likely adverse effects of the proposed works, either individually or in combination with other plans and projects, upon a designated site and considers whether these impacts are likely to be significant. It comprises a series of tables that identify the designated sites of relevance to this assessment (Table 3.2 and Table 3.3) the potential hazards associated with the proposed works (Section 3.3); and the likelihood that these hazards would cause a significant adverse effect on a site (Table 3.4).

The Conservation of Habitats and Species Regulations 2017 (as amended) implement Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive) into national legislation. In brief the regulations "provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites".

Due to the presence of two SACs in the surrounding area an assessment is required under these regulations.

3.1 HRA Assessment Methodology

Habitats Regulation Assessment is an assessment of the potential effects of a proposed project on a designated site(s) (alone and/or in combination with other plans and projects). The Habitats Regulations promotes a hierarchy of avoidance, mitigation and compensatory measures. First, the project should aim to avoid any significant adverse effects by identifying potential measures to prevent these effects. Where adverse effects remain, mitigation measures should be applied to a point where these effects are no longer significant. If sufficient mitigation measures cannot be applied, the project should not be taken forward in its current form. In such a scenario, the project may require an assessment to identify alternative solutions that deliver the project in a form that avoids any significant adverse effects.

Where significant adverse effects remain, compensatory measures may be required. However, the application of such measures will only be permitted if no alternative solutions exist and the project is required for imperative reasons of overriding public interest (the 'IROPI' test).

There are four stages to the Habitats Regulations Assessment process as outlined in Table 3.1

Table 3.1 The HRA Process

HRA stage	Description
Stage 1: Screening	This process identifies the likely significant effects upon a designated site of a project or plan, either alone or in combination with other projects or plans and determines whether these impacts are likely to be significant. If no adverse impact is determined, the project or plan can proceed. If an adverse impact is identified, stage 2 is commenced.
Stage 2: Appropriate Assessment	Stage 2 is subsequent to the identification of likely significant effects upon a European site in stage 1. This assessment determines whether a project or plan would have an adverse impact on the integrity of a site, either alone or in combination with other projects or plans. This assessment is confined to the effects on the internationally important habitats and species for which the site is designated (i.e. the interest features of the site). If no adverse impact is determined, the project or plan can proceed. If an adverse impact is identified, stage 3 is commenced.
Stage 3: Assessment where no alternatives and	Where a plan or project has been found to have adverse impacts on the integrity of a designated site, potential avoidance/mitigation measures or alternative

adverse impacts remain	options should be identified. If suitable avoidance/mitigation or alternative options are identified, that result in there being no adverse impacts from the project or plan on designated sites, the project or plan can proceed. If no suitable avoidance/mitigation or alternative options are identified, as a rule the project or plan should not proceed. However, in exceptional circumstances, if there is an 'imperative reason of overriding public interest' for the implementation of the project or plan, consideration can be given to proceeding in the absence of alternative solutions. In these cases, compensatory measures will have to be put in place to offset any negative impacts.
Stage 4: Compensatory measures	Stage 4 comprises an assessment of the compensatory measures where, in light of an assessment of imperative reasons of overriding public interest, it is deemed that the project should proceed.

This study comprises Stage 1 of the process, namely a screening assessment to identify any likely significant effects of the project on internationally designated sites.

3.2 Designated Sites Requiring Assessment

There are two SACs within 5km of the proposed works site, the details of the qualifying features and conservation objectives for each are given below. Gower Ash Woods SAC is located approximately 2.3km to the west and the Limestone Coast of South West Wales SAC is approximately 4.5km to the south west of the proposed works location.

3.2.1 Qualifying Features

Table 3.2 below details the qualifying features of the designated sites.

Table 3.2 Qualifying Features of Designated Sites

Designated site	Complete list of qualifying features
Gower Ash Woods / Coedydd Ynn Gwyr SAC	Annex I habitats that are a primary reason for selection of this site: 9180 *Tilio-Acerion* forests of slopes, screes and ravines Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)
Limestone Coast of South West Wales / Arfordir Calchfaen De Orllewin Cymru SAC	Annex I habitats that are a primary reason for selection of this site: 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 2130 Fixed coastal dunes with herbaceous vegetation "grey dunes" Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: 4030 European dry heaths 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) 8310 Caves not open to the public 8330 Submerged or partially submerged sea caves Annex II species that are a primary reason for selection of this site: 1304 Greater Horseshoe Bat *Rhinolophus ferrumequinum* 1654 Early Gentian *Gentianella anglica* Annex II species present as a qualifying feature, but not a primary

	reason for site selection: 1395 Petalwort *Petalophyllum ralfsii*

3.2.2 Conservation Objectives

Table 3.3 below details the conservation objectives for the two SACs.

Table 3.3 Conservation Objectives of Designated Sites

Designated site	Conservation objectives
Gower Ash Woods / Coedydd Ynn Gwyr SAC And Limestone Coast of South West Wales / Arfordir Calchfaen De Orllewin Cymru SAC	The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when: •Its natural range and areas it covers within that range are stable or increasing, and • The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and • The conservation status of its typical species is favourable. The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' when: • population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and • the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and • There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

3.3 Potential Hazards to Designated Sites

The proposed project as detailed in Section 2, was assessed to identify the potential hazards it might present to the qualifying features of the two SACs. The following potential hazards have been identified from this assessment:

- Competition from non-native species
- Disturbance
- Habitat loss
- Habitat/community simplification
- Physical damage

3.4 Assessment of Likely Significant Effects

Table 3.4 details the assessment of likely significant effects for the proposed works at Mumbles Bay.

Table 3.4 HRA Stage 1 Screening Table

Qualifying feature	Risk (pressure)	Likely significant effect alone	Yes or No	Likely significant effect in-combination	Yes or No
Gower Ash Woods / Coedydd Ynn Gwyr SAC					
9180 *Tilio-Acerion* forests of slopes, screes and ravines 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*	Habitat loss Habitat/ community simplification Physical damage Competition from non-native species	The proposed works are located over 2km away from the SAC and no habitats designated in the SAC are present within the proposed works site. The distance from the proposed works minimises the risk of any spread of non-native species and it is considered highly unlikely that there would be any effects on the SAC from this pressure. Therefore, there is no potential for the works to cause habitat loss, community simplification or physical damage to the habitats in the SAC, and any potential for competition from non-native species is not considered significant. **No likely significant effect.**	No	No potential for effects in combination with other PPPs have been identified.	No
Limestone Coast of South West Wales / Arfordir Calchfaen De Orllewin Cymru SAC					
1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 2130 Fixed coastal dunes with herbaceous vegetation "grey dunes"	Habitat loss Habitat/ community simplification Physical damage	The proposed works are located approximately 4.5km from the SAC and no habitats designated in the SAC are present within the proposed works site. The distance from the proposed works minimises the risk of any	No	No potential for effects in combination with other PPPs have been identified.	No

4030 European dry heaths 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) 8310 Caves not open to the public 8330 Submerged or partially submerged sea caves 1304 Greater Horseshoe Bat *Rhinolophus ferrumequinum* 1654 Early Gentian *Gentianella anglica* 1395 Petalwort *Petalophyllum ralfsii*	Competition from non-native species	spread of non-native species and it is considered highly unlikely that there would be any effects on the SAC from this pressure. Therefore, there is no potential for the works to cause habitat loss, community simplification or physical damage to the habitats in the SAC, and any potential for competition from non-native species is not considered significant. **No likely significant effect.**			
1304 Greater Horseshoe Bat *Rhinolophus ferrumequinum*	Disturbance	The proposed works are located approximately 4.5km from the SAC, Greater Horseshoe Bats may travel this far to forage and commute around the wider landscape and may be using the area of the proposed works for these purposes. However, the proposed works do not include any overnight working and therefore any light and noise disturbance in the area will remain at usual levels. **No likely significant effect.**	No	No potential for effects in combination with other PPPs have been identified.	No

3.5 Potential in-combination Effects

It is necessary to consider the potential of cumulative effects from this project in combination with other projects that would be likely to have a significant effect on the Gower Ash Woods / Coedydd Ynn Gwyr SAC and the Limestone Coast of South West Wales / Arfordir Calchfaen De Orllewin Cymru SAC.

The Swansea Council planning portal was searched on 29th April 2021 for and planning application for project which could act in-combination with the proposed coastal defence works at Mumbles Bay to cause likely significant effects to the Gower Ash Woods SAC and the Limestone Coast of South Wales SAC. This search identified one planning application of a significant scale in the local area which involves the comprehensive redevelopment of land at Mumbles Head and foreshore. The original planning application was granted in 2018 and an application lodged in 2020 (reference number 2020/2640/DOC) seeks to discharge the conditions of the application. This planning application did not include a HRA assessment. However, given that this HRA screening report has concluded no likely significant effects of the coastal defence works on any designated sites there is no potential for in-combination effects with the foreshore re-development.

There is one National Infrastructure Planning project in the vicinity of the proposed coastal defence works, this is the Swansea Bay Tidal Lagoon. Consent for this project was granted in 2015 and it is understood that works are ongoing. A HRA Appropriate Assessment was completed for the project which concluded that with mitigation measures in place there would be no adverse effect on the integrity of any designated sites (Department of Energy and Climate Change, 2015).

No potential in-combination effects have been identified from the Swansea Local Development Plan (Swansea Council, 2010).

No other projects or plans have been identified which could cause in combination effects with the proposed coastal defence works.

4 Screening Statement and Conclusions

The coastal defence works at Mumbles Bay, Swansea do not have the potential to result in significant adverse effects to any of the qualifying features of either the Gower Ash Woods / Coedydd Ynn Gwyr SAC or the Limestone Coast of South West Wales / Arfordir Calchfaen De Orllewin Cymru SAC.

No potential in-combination effects from other plans or projects have been identified.

This HRA screening report concludes no likely significant effects on designated sites as a result of the proposed coastal defence works. Therefore, no further consideration for HRA purposes is necessary.

References

Department of Energy and Climate Change (2015) *Record Of The Habitats Regulations Assessment Undertaken Under Regulation 61 Of The Conservation Of Habitats And Species Regulations 2010 (As Amended) & Assessment Of The Project Under Article 4.7 Derogation For The Water Framework Directive.* [online] Available at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010049/EN010049-003136-Tidal%20Lagoon%20(Swansea%20Bay)%20HRA%20and%20%20WFD%20assessment.pdf [Accessed 30/04/2021]

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