



Shadow Habitat Regulations Assessment Report – Planning Application

Margam, National Grid Electricity
Transmission

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Shadow Habitat Regulations Assessment Report – Planning Application

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Shadow Habitat Regulations Assessment Report – Planning Application

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Contents

Executive Summary.....	1
1 Introduction	2
1.1 Overview	2
1.2 Site Location and Project Description	2
1.3 Requirement for Habitats Regulations Assessment	3
2 Methods.....	4
2.1 Overview	4
2.2 HRA Stages	4
2.3 Assessment Approach	5
3 Screening Assessment	7
3.1 Consideration of European Sites for Inclusion	7
3.2 Summary of European Sites.....	7
3.3 Conservation Objectives, Factors Affecting Site Integrity and Conservation Status	9
4 Screening of Likely Significant Effects	11
4.1 Overview	11
4.2 Excluded Threats/ Pressures.....	11
5 Conclusion.....	13
6 Figures	14

Figures

Figure 1 Site Location Plan	14
Figure 2 European Sites	15

Tables

Table 3-1: Summary of European Sites	8
Table 3-2: Conservation Objectives, Factors Affecting Site Integrity and Conservation Status of European Sites	9
Table 4-1: Rationale for Threats/ Pressures Excluded from Screening	11



Executive Summary

Stantec UK Limited was commissioned by National Grid Electricity Transmission (NGET) to produce a shadow Habitat Regulations Assessment (sHRA) to support the proposed substation extension works at Margam, Neath Port Talbot. The project involves extending the existing substation, including the erection of a gas insulated switchgear hall (GIS hall), demolition of existing buildings, and various ecological improvements (hereafter referred to as the 'Project').

The sHRA identified four European sites within approximately 10 km of the centre of the Project site:

- Kenfig/Cynffig Special Area of Conservation (SAC),
- Glaswelltiroedd Cefn Cribwr/Cefn Cribwr Grasslands SAC,
- Crymlyn Bog/Cors Crymlyn SAC, and
- Crymlyn Bog Ramsar.

The screening stage of the sHRA found no likely significant effects arising from the Project alone or in combination with other plans or projects. This conclusion was based on the absence of direct pathways for pollution or other impacts on the identified European sites. As such, no likely significant effects on the integrity of the qualifying features of the identified European sites are anticipated during construction or operation of the Project, either alone or in combination with other plans or projects.

Disclaimer

This Executive Summary contains an overview of the key findings and conclusions. However, no reliance should be placed on any part of the executive summary until the whole of the report has been read.



1 Introduction

1.1 Overview

- 1.1.1 Stantec UK Limited (Stantec) was commissioned by National Grid Electricity Transmission (NGET) to produce a shadow Habitats Regulations Assessment (sHRA) of the proposed substation extension to be undertaken on area of land owned by NGET at Margam, Neath Port Talbot; hereafter referred to as 'the Project'

1.2 Site Location and Project Description

- 1.2.1 The Project, proposing the delivery of an extension to the existing Margam Substation, sits within the NGET land at approximate central grid reference SS 78581 86365. The existing NGET land comprises an existing substation and area of wetland complex to the east of the Tata Steel Works and Network Rail railway line. The NGET land lies to the south of the Tata Steel Sports and Social Club (golf course), to the west of woodland and to the north of the BOC Ltd. works area and fields owned by BOC Ltd. Beyond the immediate Site surroundings, the M4 corridor lies to the east, Swansea Bay lies to the west, Eglwys Nunydd Reservoir to the south and Margam town to the north.
- 1.2.2 The full description of the Project is as follows:
- 1.2.3 "Planning application for the approval of full planning permission for the extension of the Margam 275kV substation including the erection of a gas insulated switchgear hall (GIS hall) and the demolition of the existing control and amenities buildings to enable the erection of a new amenities building. Works to include earthworks, surface water management and drainage infrastructure, lighting, CCTV, boundary treatment, car parking, ecological improvements including a wildlife tower and gabion baskets, improved internal access roads, a backup diesel generator and hardstanding, storage buildings, water storage tank, diesel generator, flood defence wall including flood gates, together with appropriate landscaping and other associated engineering operations". The Project boundary is shown in **Figure 1** and encompasses the area required for delivery of the Project, including the area beyond the proposed built development footprint which is proposed for habitat creation and management for the purposes of achieving a net benefit for biodiversity through the Project.
- 1.2.4 In parallel with, and in advance of the Project, NGET are bringing forward enabling works and temporary works in accordance with the Schedule 2, Town and Country Planning (General Permitted Development) Order 1995 (as amended) ("Permitted Development Works"). These Permitted Development Works are taking place within the land owned by NGET and also extend into land owned by BOC Ltd, to the south of the NGET land and within land to the west, owned by Tata Steel. The Permitted Development Works include activities within the footprint of the Project. As the footprint of the Permitted Development Works overlaps with the Project and the premise of the Permitted Development Works is that the Site would be restored following completion to the condition it was in prior to the works, this sHRA considers the impact of the Project assuming a "future baseline" of the Site restored to its condition prior to the commencement of the Permitted Development Works. The timeline of the two elements mean that the reality is that the Project works will proceed (subject to planning) prior to the completion of the Permitted Development works. However, taking the "pre-works" (i.e. Pre-Permitted Development Works) site baseline as the baseline for assessment aligns with good practice guidance (CIEEM, 2024).
- 1.2.5 This sHRA addresses the consideration of the direct and indirect ecological effects associated with the Project, considering the impacts of the permanent works being proposed through the planning application only.
- 1.2.6 Note that NGET are also mindful of the ecological effects of the Permitted Development Works, which are progressing in accordance with Schedule 2, Town and Country Planning (General Permitted Development) Order 1995 (as amended), the company's own



environmental and ecological standards, and Ofgem's Annual Environmental Reporting requirements.

1.3 Requirement for Habitats Regulations Assessment

- 1.2.1. Under the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations)¹, a HRA is required for all plans and projects which may have 'likely significant effects' on European sites and are not directly connected with or necessary to the management of the European site. These include:
- Special Areas of Conservation (SACs) designated under European Council Directive 92/43/EEC(a) on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive); and,
 - Special Protection Areas (SPAs) designated under the European Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive).
- 1.2.2. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019² introduced a number of changes to the 2017 Regulations following Brexit. Most of these changes involved transferring functions from the European Commission to the appropriate authorities in England and Wales. The 2019 changes included the creation of a "National Site Network" within the UK territory comprising those sites formerly included in the Natura 2000 network. The National Site Network includes existing SACs and SPAs; these sites are also still referred to as "European sites" in government guidance.
- 1.2.3. In accordance with Paragraphs 6.4.29 and 6.4.30 of Planning Policy Wales³, potential SPAs and possible SACs, listed or proposed Ramsar, are provided the same protection as SACs and SPAs, and are therefore also considered in this report accordingly, where appropriate. Together, these are all hereafter referred to as 'European sites'.
- 1.2.4. Regulation 63 of the Habitats Regulations requires a competent authority to make an 'appropriate assessment' of the implications of the plan or project for that site in view of its conservation objectives, before deciding to undertake or give consent for a plan or project which (a) is likely to have a significant effect on a European site (either alone or in-combination with other plans or project), and (b) is not directly connected with or necessary to the management of that site. In light of the conclusions of the assessment, the 'competent authority' may proceed with or consent to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site. Neath Port Talbot County Council are in this instance the 'competent authority' under the responsibilities of the 2019 Regulations for the planning application.

¹ The Conservation of Habitats and Species Regulations. (2017). The Conservation of Habitats and Species Regulations 2017 (as amended). UK Statutory Instruments. [Online] Available at: <https://www.legislation.gov.uk/ukksi/2017/1012/contents>

² The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations. (2019). The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. UK Statutory Instruments. [Online] Available at: <https://www.legislation.gov.uk/ukdsi/2019/9780111179512/contents/data.html>

³ Department for Communities and Local Government. (2023). National Planning Policy Framework. Department for Communities and Local Government. [Online] Available at: https://assets.publishing.service.gov.uk/media/669a25e9a3c2a28abb50d2b4/NPPF_December_2023.pdf



2 Methods

2.1 Overview

- 2.1.1. This document has been prepared based on the methodology for HRA set out in 'The HRA Handbook'⁴. The HRA Handbook provides a regularly updated source of guidance on the understanding and interpretation of the Habitats Regulations and consistency in applying the requirements of the legislation. It is considered that this is the best practice methodology currently available for HRA. The HRA Handbook sets out a four-stage approach to HRA (as illustrated in **Plate 2.1** below) and emphasises the iterative nature of the process.

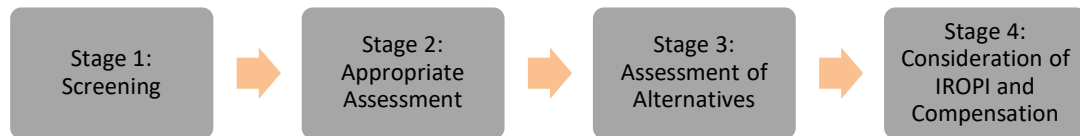


Plate 2-1: Process of HRA

2.2 HRA Stages

Stage 1: Screening

- 2.2.1. The screening stage involves the determination of the European sites which could potentially be affected by the project and their determining interests; and whether the development could result in a 'likely significant effect', either alone or in-combination with other plans and projects.
- 2.2.2. HRA case law (the 'Dilly Lane' case, 2008) determined that mitigation measures that were 'incorporated into the project' or which 'formed part of the project' could be taken into account at the screening 'likely significant effect' test stage of HRA (as long as they were effective). The ruling judge accepted that certain facets of a project, which are intended to avoid or reduce negative impacts on a European site (i.e. mitigation), can still be regarded as 'incorporated into the project' if they are promoted that way by the developer.
- 2.2.3. However, a court ruling (Coillte vs People Over Wind⁵) concluded that mitigation measures intended to avoid or reduce impacts on a European site could not be regarded as part of 'the project' and thus should not be taken into account at the screening stage of HRA when judging whether 'likely significant effects' on the integrity of a European site could occur.
- 2.2.4. In the light of the most recent ruling, it is now generally accepted that any measures inherently part of the scheme design which are not specifically incorporated into the scheme for ecological reasons, but nonetheless reduce ecological effects, can be considered at the screening stage. Measures which have been specifically added to the project for the purpose of avoiding or reducing its harmful effects on a European site (described as 'mitigation' in this report) should not be considered at the screening stage and an appropriate assessment is

⁴ Tyldesley, D. and Chapman, C. (2013) The Habitats Regulations Assessment Handbook. Nov 2019 edition. UK, DTA Publications Ltd <https://www.dtapublications.co.uk/>

⁵ People over Wind, Case C323/17 European Court of Justice, 12th April 2018.

required. This approach is supported by articles in the Habitats Regulations Assessment Journal⁶.

- 2.2.5. In the event that likely significant effects are identified at the screening stage, on the basis of objective information and in the absence of mitigation / avoidance measures, the competent authority should proceed to the next stage of assessment (stage 2: appropriate assessment).

Stage 2: Appropriate Assessment

- 2.2.6. The appropriate assessment stage is an assessment of whether the potential likely significant effects identified through screening would result in an adverse effect on the integrity of the qualifying features of the European site concerned is undertaken. At this stage, the consideration of mitigation measures to address the likely significant effects is undertaken. The precautionary principle should be applied, with the focus being on objectively demonstrating, with supporting evidence, that there will be no adverse effects on the integrity of the qualifying features of the European site. Where this is not possible, adverse effects must be assumed.
- 2.2.7. Only where the competent authority considers that the project will not adversely affect the integrity of the European site and/ or appropriate mitigation measures can be put in place, can planning permission be granted.
- 2.2.8. Where it is not possible to identify appropriate mitigation measures to address the identified effects, or uncertainty remains, consideration of stage 3 (assessment of alternatives) and stage 4 (consideration of 'imperative reasons of overriding public interest' (IROPI)) is required.

Stage 3: Assessment of Alternatives

- 2.2.9. The assessment of alternatives stage should identify and assess alternatives to the proposed development that have been considered. Alternative solutions could include, for example, a project of a different scale, a different location, and an option of not having the project at all (the 'do nothing' approach).

Stage 4: Consideration of IROPI and Compensatory Measures

- 2.2.10. Where it can be demonstrated that there are no alternative solutions to the project, that would have a lesser effect or avoid an adverse effect on the integrity of the European site, the project may still be carried out if the competent authority is satisfied that the scheme must be carried out for IROPI. If adverse effects on the European site cannot be mitigated for, compensatory measures must be confirmed, in addition to confirmation of IROPI.

2.3 Assessment Approach

- 2.3.1. Given the above methodology, **Section 3** follows the stepwise process outlined for HRA screening. Firstly, European sites are identified (along with their 'interest features,' 'conservation objectives' and 'factors affecting site integrity'), following which a screening conclusion is provided.
- 2.3.2. The approach for the in-combination assessment is such that where no impact pathways are identified and / or there is no appreciable effect resulting from the project, then there is no

⁶ Tyldesley, D. and Chapman, C. (various dates) The Habitats Regulations Assessment Journal, DTA Publications Ltd <https://www.dtapublications.co.uk/>



mechanism by which perceivable in-combination effects with other projects or plans could occur.

- 2.3.3. Where impact pathways or appreciable effects are identified, the potential for likely significant effects in-combination with other plans and projects is considered. Conclusions are then drawn as to whether likely significant effects are anticipated.
- 2.3.4. Where likely significant effects cannot be ruled out, further assessment (stage 2: appropriate assessment) to determine whether there would be an adverse effect on the integrity of the European site concerned, is undertaken.



3 Screening Assessment

3.1 Consideration of European Sites for Inclusion

- 3.1.1 There is no clear guidance on which European sites should be taken into consideration in the HRA for a plan or project. Where a site is located within the catchment of a European site designated on account of the aquatic habitats it supports, an increased 'Zone of Influence' may be required to account for hydrological connectivity at a catchment scale. Where a European site includes mobile species as qualifying interests, it is necessary to consider potential likely significant effects that could occur in areas used by these species outside the boundary of the European site. As such, areas of land outside a European site, which contribute to the status of its qualifying interests and conservation objectives, may also require consideration. Furthermore, the potential for distant effects of a project to have an "in-combination" effect with other plans and project on the interest features of a European site should also be considered.
- 3.1.2 For the purpose of this HRA, a 'Zone of Influence' of 10 km from the centre of the Project site has been used.

3.2 Summary of European Sites

- 3.2.1 The European sites, located within approximately 10 km of the centre of the Project site (this includes all European sites identified within the Preliminary Ecological Appraisal⁷ for the Site, two of which falls just beyond 10km) are provided in **Table 3-1** including their distance from the Project site, qualifying features and associated Sites of Special Scientific Interest (SSSIs). The European site's locations are shown in **Figure 2**.

⁷ Stantec (2024) Preliminary Ecological Appraisal Report, Margam, National Grid.



Shadow Habitat Regulations Assessment Report – Planning Application

Table 3-1: Summary of European Sites

European Site	Location from the Project site	Qualifying Features	Closest Associated SSSI
Kenfig/ Cynffig SAC	Located 3.0 km south of the centre of the Project site	<p>Annex I habitats that are a primary reason for designation include:</p> <ul style="list-style-type: none"> • 2130 Fixed coastal dunes with herbaceous vegetation *Priority feature • 2170 Dunes with <i>Salix repens</i> ssp. <i>Argentea</i> (<i>Salicion arenariae</i>) • 2190 Humid dune slacks • 3140 Hard oligo mesotrophic waters with benthic vegetation of <i>Chara</i> spp. <p>Annex I habitats present as a qualifying feature:</p> <ul style="list-style-type: none"> • 1330 Atlantic salt meadows (Glauco- Puccinellietalia maritimae) <p>Annex II species that a primary reason for designation include:</p> <ul style="list-style-type: none"> • 1395 Petalwort <i>Petalophyllum ralfsii</i> • 1903 Fen orchid <i>Liparis loeselii</i> 	Kenfig SSSI
Glaswelltiroedd Cefn Cribwr / Cefn Cribwr Grasslands SAC	Collection of sites located south east, with the closest located 7.0 km from the centre of the Project site.	<p>Annex I habitats that are a primary reason for designation include:</p> <ul style="list-style-type: none"> • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae). <p>Annex II species that a primary reason for designation include:</p> <ul style="list-style-type: none"> • 1065 Marsh fritillary butterfly <i>Euphydryas</i> (Eurodryas, Hypodryas) <i>aurinia</i> 	Penycastell, Cefn Cribwr SSSI
Crymlyn Bog / Cors Crymlyn SAC	Located 10.3 km northwest of the centre of the Project site.	<p>Annex I habitats that a primary reason for designation include:</p> <ul style="list-style-type: none"> • 7410 Transition mires and quaking bogs • 7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> *Priority feature <p>Annex I habitats present as a qualifying feature:</p> <ul style="list-style-type: none"> • 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) *Priority feature 	Pant-y-Sais SSSI
Crymlyn Bog Ramsar	Located 10.3 km northwest of the centre of the Project site.	<p>Largest example of valley floodplain topogenous mire in South Wales, and one of the largest surviving fens in the west of Britain. Very few other sites are known to support a comparable complexity and diversity of vegetation. Habitats Directive Annex I include:</p> <ul style="list-style-type: none"> • H7140 Transition mires and quaking bogs • H7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> • H91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> <p>Supports a substantial population of the nationally-rare slender cotton-grass <i>Eriophorum gracile</i>, and a rich invertebrate fauna including many rare and highly localised species.</p> <p>Supports 199 vascular plant species including 17 regionally uncommon and one nationally rare.</p>	Pant-y-Sais SSSI



3.3 Conservation Objectives, Factors Affecting Site Integrity and Conservation Status

3.3.1 A summary of the relevant Conservation Objective for each of the identified European sites, along with a summary of factors affecting the integrity and associated conservation status of the designating features the condition are provided in **Table 3-2**.

Table 3-2: Conservation Objectives, Factors Affecting Site Integrity and Conservation Status of European Sites

European Site	Relevant Conservation Objectives ⁸	Factors Affecting Site Integrity ⁹	Conservation Status ¹⁰
Kenfig/ Cynffig SAC	<p>Primary goal - allow natural coastal and dune-forming processes to continue, while maintaining existing habitats by management of factors within human control.</p> <p>Around 57% of the site is sand dunes, ranging from shifting dunes to stable communities. The extent of sparsely vegetated open dune slacks or wet hollows should be maintained or increased. The condition of these habitats depends on water quality, nutrient levels, and management practices.</p> <p>Although salt marshes cover less than 2% of the site, they are ecologically significant and should be preserved or expanded. Rare and nationally important plant species like petalwort and fen orchid, as well as various rare invertebrates and fungi, must be protected. The site also supports diverse intertidal communities which should remain undisturbed, with sustainable populations maintained by maritime influences and tidal movement.</p> <p>Management of the site should promote the natural diversity of the sand dune and salt marsh habitats. Due to the nature of the site this will involve clearance of scrub, as natural seral progression would otherwise result in the dune system becoming dominated by scrub and woodland.</p> <p>Kenfig Pool, a nutrient-poor lake with clear water and rare stonewort species, is a key feature. Its ecological integrity depends on maintaining low nutrient levels and preventing intensive land-use impacts.</p>	<p>Identified threats and pressures and activities from outside the site:</p> <ul style="list-style-type: none"> Fishing and harvesting aquatic resources Outdoor sports and leisure activities, recreational activities Air pollution, air-borne pollutants Pollution to surface waters (limnic & terrestrial, marine & brackish) Soil pollution and solid waste (excluding discharges) Invasive non-native species Problematic native species Other ecosystem modifications Abiotic (slow) natural processes Biocenotic evolution, succession Changes in abiotic conditions 	<ul style="list-style-type: none"> Fixed coastal dunes with herbaceous vegetation – unfavourable declining Dunes with <i>Salix repens</i> ssp. <i>Argentea</i> and 2190 Humid dune slacks – unfavourable declining Hard oligo mesotrophic waters with benthic vegetation of <i>Chara</i> spp. – unfavourable recovering Atlantic salt meadows - favourable Petalwort– unfavourable declining Fen orchid – unfavourable declining
Glaswelltiroed d Cefn Cribwr / Cefn Cribwr Grasslands SAC	<p>Molinia meadows in favourable conservation status with the following:</p> <ul style="list-style-type: none"> Habitat to cover 50-55% of the site. Remaining area to be semi-natural habitat or permanent pasture. Presence of the following species will be common: purple moor-grass <i>Molinia caerulea</i>, meadow thistle <i>Cirsium dissectum</i>, various <i>Carex</i> 	<p>Identified threats and pressures and activities from outside the site:</p> <ul style="list-style-type: none"> Air pollution, air-borne pollutants Invasive non-native species 	<ul style="list-style-type: none"> Molinia meadows on calcareous, peaty or clayey-silt-laden soils - unfavourable

⁸ From Core Management Plan

⁹ From Natura 2000 Standard Data Form or Information Sheet on Ramsar Wetlands

¹⁰ From Core Management Plan



Shadow Habitat Regulations Assessment Report – Planning Application

European Site	Relevant Conservation Objectives ⁸	Factors Affecting Site Integrity ⁹	Conservation Status ¹⁰
	<p>species, devil's bit scabious <i>Succisa pratensis</i>, carnation sedge <i>Carex panicea</i>, saw wort <i>Serratula tinctoria</i> and tormentil <i>Potentilla erecta</i>.</p> <ul style="list-style-type: none"> • Cross-leaved heath <i>Erica tetralix</i> and common heather <i>Calluna vulgaris</i> common in some areas. • Rushes, agricultural species, and scrub species largely absent. <p>Marsh fritillary butterfly in favourable conservation status with the following:</p> <ul style="list-style-type: none"> • Sustainable metapopulations. • Long-term viability despite population fluctuations. • Optimal habitat conditions to support metapopulation. • At least 40ha within SAC to be marshy grassland suitable for marsh fritillary, with devil's bit scabious, well sheltered by hedgerows and mature trees with low scrub cover. 	<ul style="list-style-type: none"> • Human induced changes in hydraulic conditions • Other ecosystem modifications • Biocenotic evolution, succession 	<ul style="list-style-type: none"> • Marsh fritillary butterfly - unfavourable
Crymlyn Bog / Cors Crymlyn SAC	<p>Lowland fen will be the predominant habitat, covering approximately 80%. A range of fen communities will be represented, including the habitat types 'calcareous fens with <i>Cladium mariscus</i> and species of the Caricion davallianae' (at least 56 ha) and 'transition mires and quaking bogs' (at least 21 ha).</p> <p>Effective habitat management (such as grazing and vegetation cutting and scrub control) will be carried out to maintain the lowland fen vegetation in favourable condition.</p>	<p>Identified threats and pressures and activities from outside the site:</p> <ul style="list-style-type: none"> • Pollution to surface waters (limnic & terrestrial, marine & brackish) • Pollution to groundwater (point sources and diffuse sources) 	<ul style="list-style-type: none"> • Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion davallianae – unfavourable: declining • Transition mires and quaking bogs – unfavourable: declining
Crymlyn Bog Ramsar	<p>Wider protection measures will safeguard water levels, water quality and atmospheric pollution impacts at the site.</p> <p>Wet woodland will occupy approximately 10%, including the habitat 'alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>'. This woodland will continue to develop a natural wet woodland species composition and structure, through natural dynamic processes. A strong population of marsh fern <i>Thelypteris palustris</i> will also be present.</p> <p>The fen vegetation at Crymlyn Bog SAC will support a suite of uncommon plant species, including a large and sustainable population of slender cottongrass <i>Eriophorum gracile</i>.</p> <p>The range of fen and associated open water habitats will also support a suite of uncommon invertebrates. In particular a viable populations of the rare fen raft spider <i>Dolomedes plantarius</i> and hornet robberfly <i>Asilus crabroniformis</i>.</p>	Eutrophication	<ul style="list-style-type: none"> • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> – unfavourable: recovering



4 Screening of Likely Significant Effects

4.1 Overview

- 4.1.1 As identified within **Section 1**, the objective of this report is to provide detail with respect to likely significant effects on European sites arising as a result of the Project alone, or in-combination with other projects or plans.

4.2 Excluded Threats/ Pressures

- 4.2.1 Threats/ pressures to the identified European sites, are outlined in Section 3. None of these threats/pressures to the identified European sites are considered relevant to the Project. The rationale for excluding those threats / pressures that could not reasonably be attributed to the Project from further consideration in this HRA is presented in Table 4-1.

Table 4-1: Rationale for Threats/ Pressures Excluded from Screening

European Site	Threat/ Pressure	Justification for Exclusion
Kenfig/ Cynffig SAC	Fishing and harvesting aquatic resources	The Project does not include fishing or harvesting aquatic resources.
	Outdoor sports and leisure activities, recreational activities	The Project will not cause an increase in recreational activities in the area.
	Air pollution, air-borne pollutants	The Project is a small-scale development resulting in a <i>de minimus</i> change in journeys, which will not reach the 1000AADT threshold on roads within 200 m of the protected habitats and subsequently will not result in air quality impacts on the relevant designated area.
	Pollution to surface waters (limnic & terrestrial, marine & brackish)	There are no direct pathways (hydrological or otherwise) for pollution to surface waters.
	Soil pollution and solid waste (excluding discharges)	There are no direct pathways (hydrological or otherwise) for soil pollution and solid waste.
	Invasive non-native species and Problematic native species	There are no direct pathways (hydrological or otherwise) for non-native species to be spread.
	Other ecosystem modifications	There are no direct pathways (hydrological or otherwise) that could result in ecosystem modification of the designated site.
	Abiotic (slow) natural processes	There are no direct pathways (hydrological or otherwise) that would alter the abiotic natural processes on the designated site.
	Biocenotic evolution, succession	The Project will not impact coastal processes
	Changes in abiotic conditions	The Project does not involve proposals which would result in a direct or indirect changes to the abiotic conditions of the relevant designated area.
Glaswelltiroedd Cefn Cribwr / Cefn Cribwr Grasslands SAC	Air pollution, air-borne pollutants	The Project is a small-scale development resulting in a <i>de minimus</i> change in journeys, which will not reach the 1000AADT threshold on roads within 200 m of the protected habitats and subsequently will not result in air quality impacts on the relevant designated area
	Invasive non-native species	There are no direct pathways (hydrological or otherwise) for non-native species to be spread.

Shadow Habitat Regulations Assessment Report – Planning Application

European Site	Threat/ Pressure	Justification for Exclusion
	Human induced changes in hydraulic conditions	The Project is not located within the same catchment. Therefore, there are no pathways (hydraulic or otherwise) that could result in effects on hydraulic conditions.
	Other ecosystem modifications	There are no direct pathways (hydrological or otherwise) that could result in ecosystem modification of the designated site.
	Biocenotic evolution, succession	There are no direct pathways (hydrological or otherwise) that could result in a change in biocenotic evolution.
Crymlyn Bog / Cors Crymlyn SAC	Pollution to surface waters (limnic & terrestrial, marine & brackish)	The Project is not located within the same catchment such that there are no pathways for pollution to surface waters.
	Pollution to groundwater (point sources and diffuse sources)	The Project is not located within the same catchment such that there are no pathways for pollution to groundwater.
Crymlyn Bog Ramsar	Eutrophication	The Project is not located within the same catchment such that there are no pathways for pollution.



5 Conclusion

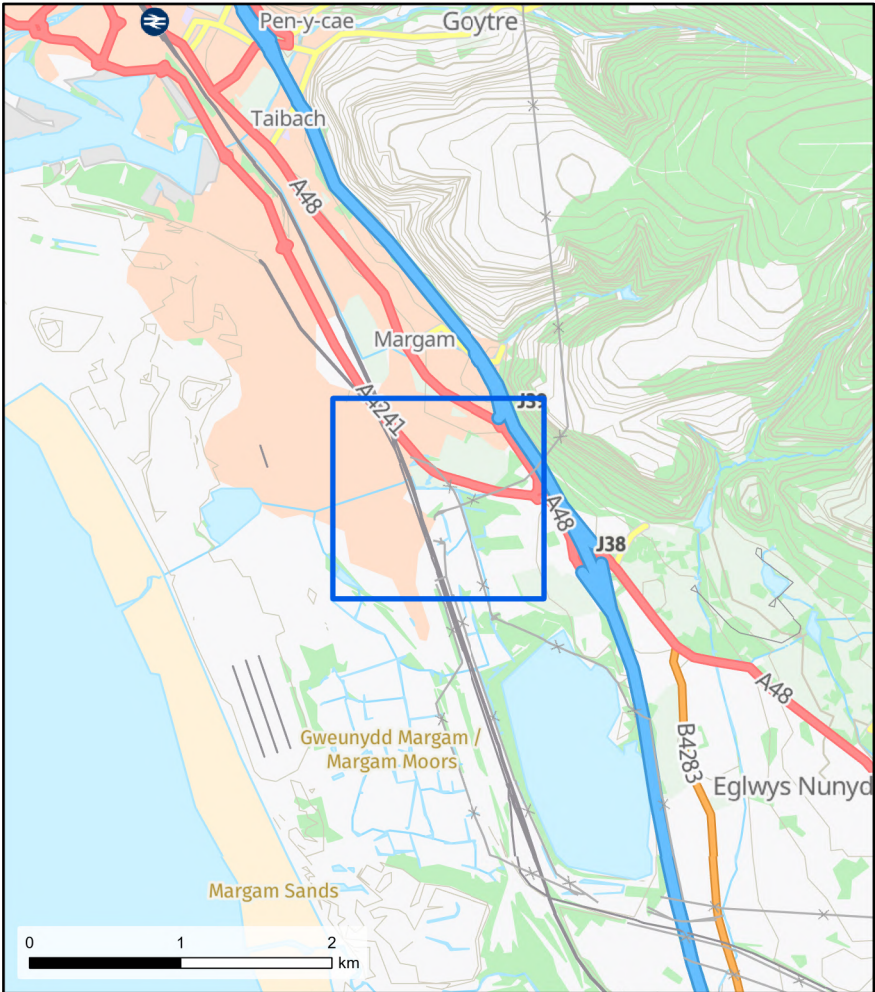
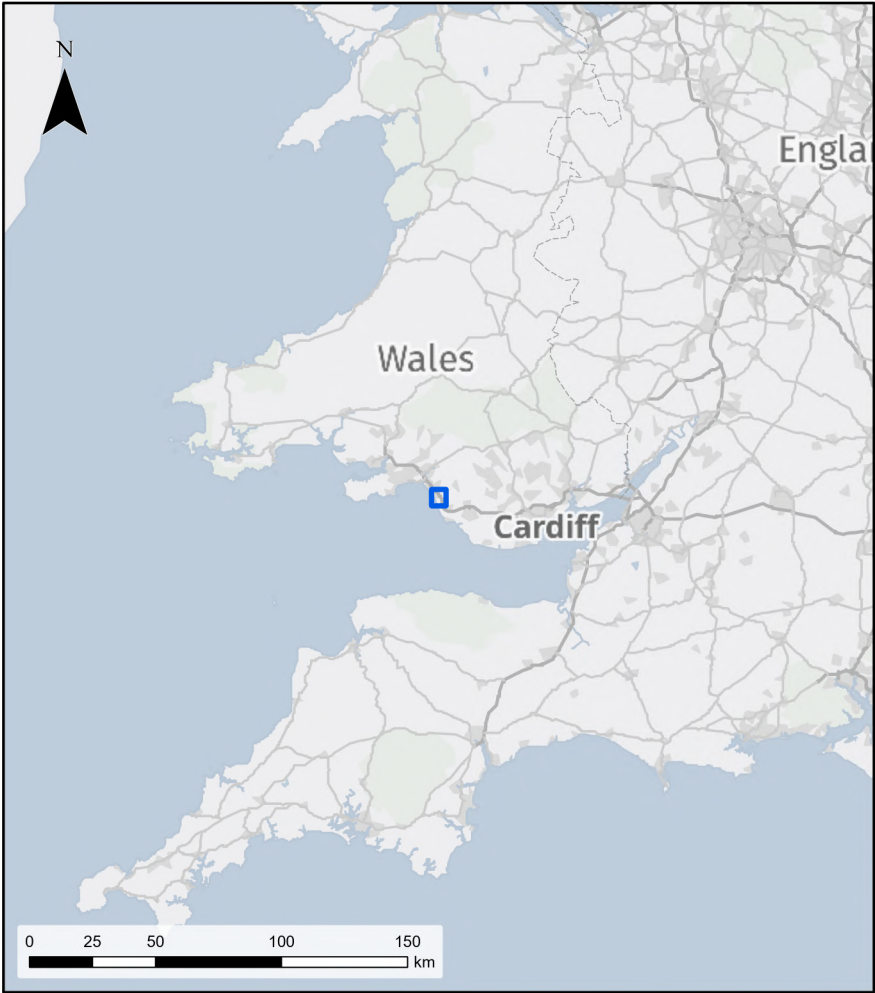
- 5.1.1 As no threats / pressures to the identified European sites are considered relevant to the Project, the Project can therefore have no in-combination effects with other plans or projects. As such, no likely significant effects on the integrity of the qualifying features of Kenfig/ Cynffig SAC, Glaswelltiroedd Cefn Cribwr / Cefn Cribwr Grasslands SAC, Crymlyn Bog / Cors Crymlyn SAC or Crymlyn Bog Ramsar are anticipated during construction or operation as a result of the Project, either alone or in combination with other plans or projects.



6 Figures

Figure 1 Site Location Plan





Shadow Habitat Regulations Assessment Report – Planning Application

Figure 2 European Sites



