Carmarthenshire County Council

Machynys Hotel

Habitats Regulations Assessment

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1 Introduction

Ove Arup and Partners Limited (Arup) has been commissioned by Carmarthenshire County Council (CCC), the Applicant, to prepare and submit an outline planning application for a new 140-bed hotel on land to the west of Nicklaus Avenue, Machynys, Llanelli, Carmarthenshire (approximate National Grid Reference: SS 51187 98306), hereafter referred to as 'the Project'. The site location is shown on Figure 001.

The scope included the production of a Habitats Regulations Assessment (HRA) of the Project, on behalf of CCC.

1.1 Purpose of this Document

This document has been prepared by Arup on behalf of CCC, to provide information to inform an HRA for the Project in compliance with the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended); hereafter referred to as the 'Habitats Regulations'. The formal assessment required by the Habitat Regulations will be undertaken by Planning Department of CCC in the process of determining the applications in their role as Competent Authority.

This draft document is also to be submitted to Natural Resources Wales (NRW) as the statutory advisor for designated nature conservation sites to formally request their views on the assessment, and specifically whether they can concur with the conclusions.

1.2 Requirements of the Habitats Regulations

The Habitats Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna provides legal protection for habitats and species of European importance. The Directive is transposed into UK law by the Conservation of Habitats and Species Regulations 2017 as amended (hereafter referred to as the 'Habitats Regulations').

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.

All plans and projects should identify any likely significant effects early in the plan/project making process and then either alter the plan/project to avoid them or introduce mitigation measures to the point where no adverse effects remain. The 'Competent Authority' shall agree to the plan or project only after having

ascertained that it will not adversely affect the integrity of the site concerned, and if appropriate having obtained the opinion of the general public.

The assessment of a project under the Habitats Regulations can be split into several sections as shown in Appendix A. Where there is a Likely Significant Effect (LSE), (or uncertainty prevails and such an effect cannot be discounted) and the plan or project is not connected with or necessary to the management of the site then the competent authority must make an 'appropriate assessment' of the implications for that site in view of its conservation objectives.

In the light of the conclusions of the assessment, the competent authority may agree to the plan or project only after having ascertained that the project will not, alone or in-combination with other plans and projects, adversely affect the integrity of the European site. The only exceptions are where there are no alternatives and there are imperative reasons of overriding public interest, in which case compensatory measures must be adopted if the plan or project is to proceed.

1.2.1 Consideration of Mitigation

With regards to recent case law (Coillte vs People Over Wind[1]) the inclusion of mitigation during HRA Stage 1: Screening is no longer considered appropriate. Mitigation, as considered by the Centre Européen de Coopération Juridique (CECJ) in regard to the case law, is interpreted to mean measures that are intended to avoid or reduce the harmful effects of the envisaged project on the site concerned.

Consequently, any project where a likely significant effect on a European Site cannot be ruled out and where avoidance and mitigation are applicable will need to progress to Stage 2: Appropriate Assessment.

1.3 Structure of this Report

This report uses the following structure:

- Section 2 provides information on the proposed works (the 'proposed development') and a brief description of the development;
- Section 3 provides information on the data and methodology used in the assessment;
- Section 4 details the European Sites that are considered within the assessment including the environmental baseline;
- Section 5 provides a screening assessment for the potential pathways for effects;
- Section 6 provides the Appropriate Assessment of the potential effects on the designated sites;
- Section 7 details any proposals for monitoring; and

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

- Section 8 provides the conclusion.

2 Project Description

2.1 Site Description

The proposed development site is located approximately 2.8km to the south of Llanelli town centre and overlooking the Burry Inlet and the Millennium Coastal Path to the south and west.

The site is bounded by the B4304 coastal link road to the north, the access road to the Machynys Golf Club to the east, the golf course to the south and an area of undeveloped scrubland to the west. The northern boundary has a number of landscaped bunds which form a visual screen between the site and the link road.

The development area covers part of the site occupied by the former Machynys brickworks in the early part of the 20th Century. Various water bodies on the site were created by the extraction of clay for the brickworks but which have now been filled in.

Subject to ongoing discussions with the local authority highways department and Golf and Country Club, access to the hotel may be provided via the private access road serving the existing Golf Club, or from the B4304. A new dedicated emergency and service vehicle access road to the west of the site could ensure that the hotel can be serviced discretely, keeping staff and service vehicles separate from guest vehicles if required. The service road and building levels will be set above minimum levels recommended in a Flood Consequences Assessment to reduce the risk of flooding and to ensure safe access for emergency vehicles at all times.

2.2 Description of the Proposed Works

Outline planning permission is sought for the construction of a new 140-bed hotel with associated car parking, access roads, landscape and infrastructure works, including the importation of material for infilling of land to raise level for the development.

The proposed hotel would be up to 15 metres (m) in height, and the overall area of new hotel floorspace would not exceed 10,000 square metres (sqm).

This application follows a previous planning application which was granted (subject to conditions) on 10th May 2013 by Carmarthenshire County Council but has since expired.

The proposals form part of a long-term development plan for the Machynys Peninsular which have included the construction of a new golf course and country club and high-quality housing.

The proposed illustrative site layout is shown in Appendix B.

2.3 Physical Land-take of the Scheme

The proposed Site covers a total site area of approximately 3.76 hectares, none of which is within any European sites.

3 Guidance and Methodology

This section sets out the guidance and evidence base used in assessing the potential effects of the Project.

3.1 Guidance and Policy

This document been informed by the following guidance and policy documents:

- Planning Policy Wales - Technical Advice Note (TAN) 5: Nature Conservation and Planning[2];
- The Planning Series: 16 – Habitats Regulations Assessment. National Assembly for Wales 2017[3];
- Assessment of plans and projects significantly affecting Natura 2000 sites, European Commission 2001[4];
- Managing Natura 2000 sites, European Commission 2000[5]; and
- The Habitats Regulations Assessment Handbook, November 2020 edition, UK: DTA Publications Limited[6].

These documents and publications are intended to improve understanding of how projects are regulated under the Habitats Directive. Cautions and advisories related to changes in case law since publication of certain guidance documents have been taken into account.

3.2 Desk Study Information

In addition to the guidance noted above, the following websites were used to gather information on the European Protected Sites:

- Natural Resources Wales (NRW) website[7];
- MAGIC (Multi-Agency Geographic Information for the Countryside) website[8]: and
- Joint Nature Conservation Committee (JNCC)[9].

[2] Welsh Government. (2009). Planning Policy Wales - Technical Advice Note 5: Nature Conservation and Planning. Cardiff: Welsh Government.
[3] Research Briefing: The Planning Series: 16 – Habitats Regulations Assessment. December 2017. National Assembly for Wales.
[4] Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. (2001) European Commission.
[5] Managing Natura 2000 sites. The provisions of Article 6 of the 'Habitats' Directive 92/43/CEE. (2000). European Commission.
[6] Tyldesley & Chapman, 2017. The Habitats Regulations Assessment Handbook, January 2017 Edition, UK: DTA Publications Limited.
[7] http://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/find-protected-areas-of-land-and-seas/designated-sites/?lang=en
[8] https://magic.defra.gov.uk/
[9] https://jncc.gov.uk/our-work/special-areas-of-conservation-overview/

The Core Management Plans for European Sites, and Regulation 35 information[10] containing advice on European Sites were also obtained and have been used to inform this assessment.

These documents provide the main elements of NRW's management plan for European Sites along with the Conservation Objectives for the qualifying features. The qualifying features will be considered to be in Favourable Conservation Status only when the conservation objectives are being met. These objectives therefore provide an indication of the type of effects which could affect the features of European Site. An effect which could affect the ability of a site or feature meet its objective could be considered to be an adverse effect on the integrity of the European Site concerned.

3.3 Habitats Regulations Assessment Methodology

3.3.1 Identifying sites

A European Site is a terrestrial or marine area which is protected under the following European and International Legislation: the Habitats Directive (92/43/EEC), the Birds Directive (09/147/EC) and the Ramsar Convention[11].

The following lists the types of European Sites that require consideration in accordance with UK and Welsh Government guidelines:

- Special Areas of Conservation (SAC);
- Special Protection Areas (SPA);
- Candidate Special Areas of Conservation (cSAC);
- Potential Special Protection Areas (pSPA);
- Ramsar Sites; and
- Proposed Ramsar Sites.

To understand the potential implications for European Sites from the Project, it is necessary to identify those sites that are located close to the Project or are linked by pathways such as hydrological connections.

All European sites and European Marine Sites within 10km of the proposed works were identified using Geographic Information System data from datasets downloaded from the Joint Nature Conservation Committee (JNCC), Multi-Agency Geographic Information for the Countryside (MAGIC) and Natural Resources Wales (NRW). In addition, European sites with a direct hydrological connection with the location of the proposed works were also identified and included within the screening assessment.

[10] https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land-and-seas/find-protected-areas-of-land-and-sea/?lang=en
[11] Ramsar sites are internationally important wetlands, designated under the Convention on Wetlands of International Importance especially as Waterfowl Habitat. Ramsar (Iran), 2 February 1971. UN Treaty Series No. 14583. As amended by the Paris Protocol, 3 December 1982, and Regina Amendments, 28 May 1987.

3.3.2 Understanding qualifying interests and conservation objectives

For each of the European Sites identified, the qualifying features were established and the conservation objectives for each feature were obtained. Information was also sought to understand the potential vulnerability of the features to any potential effects that might arise from the project.

3.3.3 Identification of the potential effects of the project

Any potential pathways for effect on European Sites resulting from the project were identified prior to consideration of best practice procedures (for example, Guidelines for Pollution Prevention[12] and Construction Industry Research and Information Association (CIRIA) guidance[13]) or the integration of any mitigation measures.

3.3.4 Identification of plans or projects considered for in-combination effects

An 'in-combination' assessment is required where the project may have an effect on a European site, but on its own the effects would not be significant. The potential effects of the project should be considered in-combination with other plans or projects that similarly may have an effect, but where on their own those effects would not be significant. The combined effects may therefore become significant.

Details of other plans and projects which are currently proposed or consented within the vicinity of the European Sites identified were obtained to inform the in-combination assessment of the proposed project.

3.3.5 Consideration of the significance of potential effects

The significance of potential effects was assessed in the absence of avoidance or other mitigation measures. The assessment has been made with awareness of the conservation objectives for the features of the European Sites, although as stated in the relevant guidance the assessment of the project against the conservation objectives is not required until the Appropriate Assessment stage of the HRA process.

In the assessment of the significance of effects, professional judgement was applied using the following criteria, as often insufficient information about the elements and interests is available:

- The vulnerability/sensitivity of the receiving environment/features of interest;
- When the risk of effects is likely to occur (e.g. construction and/or operation);

[12] http://www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/guidance-for-pollution-prevention-gpps-full-list/
[13] CIRIA C741 'Environmental Good Practice On Site'; Fourth Edition (2015).

- The likely geographical extent of the effects; and
- Likelihood of significant effects (e.g. those above negligible in magnitude) occurring based on previous experience with similar elements, where available.

Where there was not enough information about the risk of qualifying interest being present, or of the risk of effects, the assessment used the precautionary principle to inform the judgement. This principle means that the conservation objectives should prevail where there is uncertainty or that harmful effects will be assumed in the absence of evidence to the contrary.

3.4 Limitations

Information provided by third parties, including publicly available information and databases, is considered correct at the time of publication. Due to the dynamic nature of the environment, conditions may change in the period between the preparation of this report, and the construction and operation of the project.

The HRA has been undertaken in as detailed a way as possible, using available data sources. However, the conclusions drawn from this are necessarily limited by the age, type, coverage and availability of data. Any uncertainties and the limitations of the assessment process are acknowledged and highlighted.

Recommendations for mitigation measures to address the potential adverse effects on the European Site's integrity identified by this report are also based on the information available at the time of the assessment.

4 Baseline Information

4.1 Identification of European Sites

The Multi-Agency Geographic Information for the Countryside (MAGIC) website[14] was reviewed for information on internationally designated sites of nature conservation importance within 10km.

The European Sites identified within 10km of the proposed works are as follows (distances and direction are measured as a straight line from the Project location to the European Site):

- Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd SAC: approximately 426m south west of the site;
- Burry Inlet SPA: approximately 426m south west;
- Burry Inlet Ramsar: approximately 426m south west;
- Gower Commons / Tiroedd Comin Gwyr SAC: approximately 5.1km south;
- Carmarthen Bay Dunes / Twyni Bae Caerfyrddin SAC: approximately 5.8km west;
- Bristol Channel Approaches / Dynesfeydd Mor Hafren SAC: approximately 6.6km west;
- Gower Ash Woods / Coedydd Ynn Gwyr SAC: approximately 8km south; and
- Carmarthen Bay / Bae Caerfyrddin SPA: approximately 8.8km west.

Figure 002 shows the location of the project in relation to European Sites within 10km of the project.

The features for which these Sites are designated are summarised in Table 1.

[14] www.magic.gov.uk [Accessed: 06/10/2020]

Table 1 Qualifying Features of the European Sites identified within 10km

Site	Qualifying Features	Importance	Vulnerability
Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd SAC (426m south west)	Sandbanks which are slightly covered by sea water all the time	Considered to be one of the best areas in the United Kingdom.	Variation in nutrient levels in the water column. Variation in contaminant levels and sediments derived from human activity in the water column. Aggregate dredging from Helwick Bank. Commercial fishing. Contamination of potential prey species and disturbance by human activity for Species Features.
	Estuaries	Considered to be one of the best areas in the United Kingdom.	
	Mudflats and sandflats not covered by seawater at low tide	Considered to be one of the best areas in the United Kingdom.	
	Large shallow inlets and bays	Considered to be one of the best areas in the United Kingdom.	
	Salicornia and other annuals colonising mud and sand	Considered to be one of the best areas in the United Kingdom.	
	Atlantic saltmeadows *Glauco-Puccinellietalia maritimae*	Considered to be one of the best areas in the United Kingdom.	
	Sea lamprey *Petromyzon marinus*	Considered to support a significant presence.	
	River lamprey *Lampetra fluviatilis*	Considered to support a significant presence.	
	Allis shad *Alosa alosa*	Considered to support a significant presence.	
	Twaite shad *Alosa fallax*	Considered to be one of the best areas in the United Kingdom.	
	Otter *Lutra lutra*	Considered to support a significant presence.	
Burry Inlet SPA (426m south west)	This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:		Resource competition with fisheries and loss of foraging area.
	Over winter: Oystercatcher *Haematopus ostralegus*	13,590 individuals (1.6% of the population; 5 year peak mean 1991/92-1995/96)	
	Over winter: Northern Pintail *Anas acuta*	1,772 individuals (3% of the population (North-western Europe); 5 year peak mean 1991/92-1995/96)	

Site	Qualifying Features	Importance	Vulnerability
	The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl.		
	Over winter: Assemblage qualification: A wetland of international importance.	Over winter, the area regularly supports 34,962 individual waterfowl (5 year peak mean 30/06/1999) including: shelduck *Tadorna tadorna*, wigeon *Anas penelope*, teal *A. crecca*, pintail, shoveler *A. clypeata*, oystercatcher, grey plover *Pluvialis squatarola*, red knot *Calidris canutus*, dunlin *C. alpina alpina*, curlew *Numenius arquata*, common redshank *Tringa totanus*.	
Burry Inlet Ramsar (426m south west)	*The site qualifies under Ramsar Criterion 5 – assemblages of international importance.*		Sea-level rise and/or changes in the frequency of storms, natural sediment transition as a result of the natural breach of the old 'training wall' and channel realignment causes changing patterns of sediment deposition and erosion. Erosion of *Salicornia* zone is occurring. Commercial exploitation of shellfish, e.g. cockle *Cerastoderma edulis* and mussel *Mytilus edulis*, which birds feed upon.
	Species with peak counts in winter	41655 waterfowl (5 year peak mean 1998/99 - 2002/03)	
	The site qualifies under Ramsar Criterion 6 – species / populations occurring at levels of international importance.		
	Species with peak counts in spring / autumn:		
	Common redshank	857 individuals, representing an average of 0.7% of the GB population (5 year peak mean 1998/9-2002/3)	
	Species with peak counts in winter:		
	Northern pintail	2687 individuals, representing an average of 4.4% of the population (5 year peak mean 1998/9-2002/3)	
	Oystercatcher	14861 individuals, representing an average of 1.4% of the population (5 year peak mean 1998/9-2002/3)	
	Red knot	3618 individuals, representing an average of 1.2% of the GB population (5 year peak mean 1998/9-2002/3)	

Site	Qualifying Features	Importance	Vulnerability
Gower Commons SAC (5.1km south)	Northern Atlantic wet heaths with *Erica tetralix*	Considered to be one of the best areas in the United Kingdom.	Unauthorised burning, off-road vehicles and scrub encroachment.
	European dry heaths	Considered to be one of the best areas in the United Kingdom.	
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinia caeruleae*)	Considered to be one of the best areas in the United Kingdom.	
	Southern damselfly *Coenagrion mercurial*	Considered to be one of the best areas in the United Kingdom.	
	Marsh fritillary butterfly *Euphydryas* (*Eurodryas, Hypodryas*) *aurinia*	Considered to be one of the best areas in the United Kingdom.	
Carmarthen Bay Dunes SAC (5.8km west)	Embryonic shifting dunes	Considered to be rare as its total extent in the United Kingdom is estimated to be less than 1,000 hectares. Considered to be one of the best areas in the United Kingdom.	Substantial areas of open dunes are threatened by sea buckthorn *Hippophae* sp. encroachment, while the damp slacks are similarly under pressure from creeping willow *Salix repens*; these threats are detrimental to species of early successional stages such as fen orchid *Liparis loeselii* and petalwort *Petalophyllum ralfsii*.
	Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”)	Considered to be one of the best areas in the United Kingdom.	
	Fixed dunes with herbaceous vegetation (“grey dunes”)	Considered to be one of the best areas in the United Kingdom.	
	Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*)	Considered to be rare as its total extent in the United Kingdom is estimated to be less than 1000 hectares. Considered to be one of the best areas in the United Kingdom.	
	Humid dune slacks	Considered to be one of the best areas in the United Kingdom.	
	Narrow-mouthed whorl snail (*Vertigo angustior*)	Considered to be one of the best areas in the United Kingdom.	

Site	Qualifying Features	Importance	Vulnerability
	Petalwort (*Petalophyllum ralfsii*)	Considered to be one of the best areas in the United Kingdom.	
	Fen orchid (*Liparis loeselii*)	One of only three known outstanding localities in the United Kingdom. Known from 15 or fewer 10 x 10 km squares in the United Kingdom.	
Bristol Channel Approaches / Dynesfeydd Mor Hafren SAC (6.6km west)	Harbour porpoise *Phocoena phocoena*	Considered to support a significant presence.	Commercial fisheries; by-catch of harbour porpoise and reduction in prey resource. Discharge/run-off from landfill, terrestrial/offshore industries. Anthropogenic underwater sound (e.g. drilling, dredging, pile driving, military activity). Shipping, recreational boating and tidal energy installations.
Gower Ash Woodlands SAC (8km south east)	*Tilio-Acerion* forests of slopes, screes and ravines	Considered to be one of the best areas in the United Kingdom.	Overgrazing, fly-tipping and spread on non-native species.
	Alluvial forests with alder *Alnus glutinosa* and ash *Fraxinus excelsior*	Considered to be one of the best areas in the United Kingdom.	
	This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:		

Site	Qualifying Features	Importance	Vulnerability
Carmarthen Bay / Bae Caerfyrddin SPA (8.8km west)	Over winter: common scoter *Melanitta nigra*	1% of the population (16,946 individuals) 5 year peak mean 1997/98 – 2001/02	Dock, marinas and shipping, including dredging; Civil engineering, including sea defences and land claim; Waste disposal, including effluent disposal, sludge dumping, dredge spoil dispersal, and urban, industrial and agricultural run-off; Exploitation of living resources from trawling, dredging, netting, and collection of prey items for scoter; Cultivation of living resources, including aquaculture; Exploitation of non-living resources including water abstraction, aggregate extraction, renewable energy generation; recreation uses, e.g. overfishing; and Science research, e.g. monitoring.

4.2 Ecological Surveys

4.2.1 Extended Phase 1 Habitat Survey

The Extended Phase 1 Habitat Survey followed the methodology set out in the JNCC's Handbook for Phase 1 Habitat Surveys[15]. A total of 12 JNCC habitat types were identified within the site boundary, as shown on Figure 003:

- Mixed Plantation Woodland (A1.3.2)
- Dense Scrub (A2.1)
- Scattered Scrub (A2.2)
- Scattered Broadleaved Trees (A3.1)
- Semi-improved Neutral Grassland (B2.2)
- Marshy Grassland (B5)
- Tall Ruderal (C3.1)
- Amenity Grassland (J1.2)
- Introduced Shrub (J1.4)
- Dry Ditch (J2.6)
- Bare Ground (J4)
- Other habitat - Tarmac Surface (J5)

4.2.2 Bird Surveys

No specific bird surveys were undertaken. However, the site was noted to be heavily disturbed by humans and dogs which reduces its suitability for wintering bird species that may be associated with the European Sites. No incidental observations of waders using the site were recorded during the supporting ecological surveys.

4.2.3 Otter Surveys

During the riparian mammal surveys undertaken in 2020, it was considered likely that otter were active adjacent to the site, with evidence of otter (comprising old spraints and potential pathways) recorded around the golf course ponds, however, no suitable breeding habitats were identified. Potential feeding signs (cockle shells) were identified in waterbody 1 on site. No signs of otter were found along waterbody 3. No otters were recorded during the camera trap survey.

[15] JNCC (2016). Handbook for Phase 1 habitat Survey: technique for environmental audit.

4.3 Identification of Other Plans and Projects

In December 2020, a search was made for other plans and projects which may contribute to an in-combination effect with the Project. Planning applications submitted within the last year for sites within 500m of the proposed works were searched using the Local Planning Authority's (CCC) website[16].

Major projects which have been committed to and may have a significant effect on the same European sites relevant to the Project were searched for using the CCC website[17].

The relevant projects identified are detailed below:

1. Llanelli Waterside Joint Venture between the Welsh Government and Carmarthenshire County Council is a flagship partnership delivering an ambitious regeneration strategy for the Llanelli coast. This includes the Wellness and Life Science Village (planning application reference S/36948), demolition of an old factory building within North Dock and a subsequent outline planning application for housing, and infrastructure and transport to make the area more accessible and to strengthen the link between the Millennium Coastal Path and town centre.
2. The Machynys Central Housing Application (planning application reference S/26783) which includes land immediately west and is for a combination of residential units and an EcoPark. At the time of writing this application has yet to be determined;
3. Minor projects within the 500m search area; predominantly alterations to existing buildings and local landscaping.

[16] https://www.carmarthenshire.gov.wales/home/council-services/planning/search-for-a-planning-application/map-of-planning-applications/#.X9fVQUB2uUl Accessed 14th December 2020.
[17] https://www.llanelli-waterside.wales/ Accessed 15th December 2020.

5 Screening Assessment

5.1 Screening of European Sites

The eight European Sites identified in Section 4 have been included in the assessment to determine the pathways for potential effects from the proposed Project:

- Carmarthen Bay and Estuaries SAC;
- Burry Inlet SPA;
- Burry Inlet Ramsar;
- Gower Commons SAC;
- Carmarthen Bay Dunes SAC;
- Bristol Channel Approaches SAC;
- Gower Ash Woods SAC; and
- Carmarthen Bay SPA.

5.2 Potential Effects of the Proposed Works

The following pathways for effect have been identified between the proposed works and features of the European Sites during construction of the development:

- Habitat loss or degradation, e.g. from physical damage, impacts from changes in air/water quality, or changes in surface water run-off from active construction areas;
- Habitat severance, e.g. from construction, physical restrictions to species movements;
- Disturbance/displacement of fauna, e.g. from visual impact, noise, lighting; and
- Species mortality/injury.

The following pathways for effect have been identified between the proposed works and features of the European Sites during operation of the development:

- Habitat loss or degradation, e.g. from physical damage, impacts from changes in water quality, or changes in surface water run-off caused by increased use of the site during operation;
- Habitat severance, e.g. from operation, physical restrictions to species movements; and
- Disturbance/displacement to fauna (e.g. visual impact, noise, lighting and potential mortality/injury of individuals) during operation.

5.3 Summary of Effects

Table 2 summarises the potential effects from the proposed works on the features of the European Sites from construction and operation.

Table 2: Potential Pathways for Effect

Site	Feature	Habitat loss/ disturbance during construction	Habitat loss/ disturbance during operation	Habitat severance during construction	Habitat severance during operation	Disturbance during construction	Disturbance during operation	Species mortality/ injury during construction
Carmarthen Bay and Estuaries SAC	Sandbanks which are slightly covered by sea water all the time	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	N/A
	Estuaries	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	N/A
	Mudflats and sandflats not covered by seawater at low tide	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	N/A
	Large shallow inlets and bays	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	N/A
	Salicornia and other annuals colonising mud and sand	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	N/A
	Atlantic salt meadows	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	N/A

Site	Feature	Habitat loss/ disturbance during construction	Habitat loss/ disturbance during operation	Habitat severance during construction	Habitat severance during operation	Disturbance during construction	Disturbance during operation	Species mortality/ injury during construction
	Sea lamprey	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	River lamprey	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Allis shad	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Twaite shad	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Otter	No pathway for effect	No pathway for effect	Pathway for effect - indirect effect through disturbance	Pathway for effect - indirect effect through disturbance	Pathway for effect	Pathway for effect	Pathway for effect
Burry Inlet SPA	Over wintering population of oystercatcher	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect

Site	Feature	Habitat loss/ disturbance during construction	Habitat loss/ disturbance during operation	Habitat severance during construction	Habitat severance during operation	Disturbance during construction	Disturbance during operation	Species mortality/ injury during construction
	Over wintering population of northern pintail	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Over wintering bird assemblage	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
Burry Inlet Ramsar	Over wintering assemblage of waterfowl	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Passage migrant population of common redshank	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Over wintering population of northern pintail	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Over wintering population of oystercatcher	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Over wintering population of red knot	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect

Site	Feature	Habitat loss/ disturbance during construction	Habitat loss/ disturbance during operation	Habitat severance during construction	Habitat severance during operation	Disturbance during construction	Disturbance during operation	Species mortality/ injury during construction
Bristol Channel Approaches SAC	Harbour porpoise *Phocoena phocoena*	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
Carmarthen Bay Dunes SAC	Embryonic shifting dunes	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Fixed dunes with herbaceous vegetation ("grey dunes")	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*)	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Humid dune slacks	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect

Site	Feature	Habitat loss/ disturbance during construction	Habitat loss/ disturbance during operation	Habitat severance during construction	Habitat severance during operation	Disturbance during construction	Disturbance during operation	Species mortality/ injury during construction
	Narrow-mouthed whorl snail	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Petalwort	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Fen orchid	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
Gower Commons SAC	Northern Atlantic wet heaths with *Erica tetralix*	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	European dry heaths	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinia caeruleae*)	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Southern damselfly	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect

Site	Feature	Habitat loss/ disturbance during construction	Habitat loss/ disturbance during operation	Habitat severance during construction	Habitat severance during operation	Disturbance during construction	Disturbance during operation	Species mortality/ injury during construction
	Marsh fritillary butterfly	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
Gower Ash Woodlands SAC (8km south east)	*Tilio-Acerion* forests of slopes, screes and ravines	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
	Alluvial forests with alder *Alnus glutinosa* and ash *Fraxinus excelsior*	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect
Carmarthen Bay / Bae Caerfyrddin SPA (8.6km west)	Over wintering population of common scoter	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect	No pathway for effect

5.4 Justification for Screening Out European Sites

5.4.1 Burry Inlet SPA and Ramsar site

The Burry Inlet SPA and Ramsar site are located approximately 426m from the proposed site at its closest point. The SPA and Ramsar site are designated for supporting over-wintering bird species including pintail, oystercatcher, redshank and red knot. No direct or indirect effects on the European Site features have been identified.

No hydrological linkage is present between the site and the Burry Inlet SPA and Ramsar Site; as such there is no pathway for negative effects on the water quality of the designated site, or as a result of increases in flow during construction or operation.

Construction activities have the potential to disturb birds where these take place within 300m of foraging or resting places used by waterfowl species. Visual disturbance effects are typically restricted to 300m from the source, whilst acoustic disturbance is typically restricted to within 80m of the source[18]. Due to spatial separation, intervening topography / vegetation and frequent disturbance from dog walkers, no disturbance effects on the wintering bird features or assemblage are anticipated.

As such, no mitigation required to avoid or reduce impacts on the Burry Inlet SPA/Ramsar site during construction or operation of the proposed development, and this European Site is not considered further; no effect is concluded.

5.4.2 Gower Commons SAC

The Gower Commons SAC is located approximately 5.1km from the proposed site at its closest point. The SAC is designated for the Annex I habitats and invertebrates which it supports.

There is no direct link between the site and the Gower Commons SAC, as such there is no direct pathway for negative effects on the water quality of the designated site, or as a result of increases in flow during construction or operation. In addition, the surveys have found no evidence of marsh fritillary using the site; therefore, no likely significant effect is predicted.

Potential effects on the SAC are therefore limited to air quality effects due to increased vehicle movements, dust and emissions relating to the hotel operations. However, due to the distance/spatial separation of the SAC from the proposed works it is considered that any changes in air quality would not result in any effects to qualifying habitats or species of the Gower Commons SAC; therefore, no likely significant effect is predicted.

As such, there is no mitigation considered to be necessary to avoid or reduce impacts on the Gower Commons SAC during construction or operation of the

[18] Cascade. (2010). Bird Disturbance from Flood and Coastal Risk Management Construction Activities: Report to Environment Agency

proposed development, and this European Site is not considered further; no effect is concluded.

5.4.3 Gower Ash Woods SAC

The Gower Ash Woods SAC is located approximately 8km from the proposed site at its closest point. The SAC is designated for the Annex I habitats.

There is no direct link between the site and the Gower Ash Woods SAC, as such there is no direct pathway for negative effects on the water quality of the designated site, or as a result of increases in flow during construction or operation.

Potential effects on the SAC are therefore limited to air quality effects due to increased vehicle movements, dust and emissions relating to the hotel operations. However, due to the distance/spatial separation of the SAC from the proposed works it is considered that any changes in air quality would not result in any effects to qualifying habitats of the Gower Ash Woods SAC; therefore, no likely significant effect is predicted.

As such, there is no mitigation considered to be necessary to avoid or reduce impacts on the Gower Ash Woods SAC during construction or operation of the proposed development, and this European Site is not considered further; no effect is concluded.

5.4.4 Carmarthen Bay Dunes SAC

The Carmarthen Bay Dunes SAC is located approximately 5.8km from the proposed site at its closest point. The SAC is designated for its Annex I habitats and species which it supports.

There is no direct link between the site and the Carmarthen Bay Dunes SAC, as such there is no direct pathway for negative effects on the water quality of the designated site, or as a result of increases in flow during construction or operation.

Potential effects on the SAC are therefore limited to air quality effects due to increased vehicle movements, dust and emissions relating to the hotel operations. However, due to the distance/spatial separation of the SAC from the proposed works it is considered that any changes in air quality would not result in any effects to qualifying habitats or species of the Carmarthen Bay Dunes SAC; therefore, no likely significant effect is predicted.

As such, there is no mitigation considered to be necessary to avoid or reduce impacts on the Carmarthen Bay Dunes SAC during construction or operation of the proposed development, and this European Site is not considered further; no effect is concluded.

5.4.5 Bristol Channel Approaches SAC

The Bristol Channel Approaches SAC is located approximately 6.6km from the proposed site at its closest point. The SAC is designated for the Annex II species harbour porpoise.

There is no direct hydrological connection between the site and the Bristol Channel Approaches SAC, as such there is no direct pathway for negative effects on the water quality of the designated site, or as a result of increases in flow during construction or operation. Due to the inland nature of the site, no disturbance effects would occur through any percussive construction activities.

As such, there is no mitigation considered to be necessary to avoid or reduce impacts on the Bristol Channel Approaches SAC during construction or operation of the proposed development, and this European Site is not considered further; no effect is concluded.

5.4.6 Carmarthen Bay SPA

The Carmarthen Bay SPA is located approximately 8.8km from the proposed site at its closest point. The SPA is designated for overwintering common scoter. The common scoter is a small diving seaduck, an offshore / coastal species that do not utilise inland habitats for foraging or roosting and would not be associated with the proposed site. Although inland lakes may be used for breeding, in the UK this is typically restricted to sea lochs in Scotland. Presence in Carmarthenshire Bay is typically winter foraging at sea.

There is no direct hydrological connection between the site and the Carmarthen Bay SPA, as such there is no direct pathway for negative effects on the water quality of the designated site, or as a result of increases in flow during construction or operation.

As such, there is no mitigation considered to be necessary to avoid or reduce impacts on the Carmarthen Bay SPA during construction or operation of the proposed development, and this European Site is not considered further; no effect is concluded.

5.5 Consideration of the effects and significance

The Carmarthen Bay and Estuaries SAC has been screened into the assessment due to the potential presence of commuting otters from the SAC population. For the purposes of this assessment it is concluded that in the absence of mitigation (as confirmed by Coillte vs People against Wind judgement[19]) where pathways for effects are present, these are considered to have the potential to cause significant effects and therefore a Stage 2: Appropriate Assessment is required for these sites.

Burry Inlet SPA/Ramsar site, Carmarthen Bay Dunes SAC, Gower Commons SAC, Gower Ash Woods SAC, the Bristol Channel Approaches SAC and Carmarthen Bay SAC have all been screened out of this assessment due to spatial separation, nature of the proposed works and the absence of pathways for effect.

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

6 Appropriate Assessment

6.1 Carmarthen Bays and Estuaries SAC

6.1.1 Habitat Features

Spatial separation (c.500m) precludes the likelihood of effects on the marine habitat features of the SAC; Atlantic saltmarsh, the nearest sensitive habitat is c.600m southwest of the proposed works. No direct effects will occur to marine habitats, no hydrological linkage is present from the site that may provide a pathway for effect and the nature of the works are not likely to contribute indirect effects, e.g. air quality impacts.

6.1.1.1 Conservation Objectives

The habitat features of this site are potentially vulnerable to the effects of water quality changes and air emissions during construction and operation.

The conservation objectives for the habitat features state that the habitat features will be considered to be in favourable conservation status when the following are met:

The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing;

The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. Important elements include:

- geology;
- sedimentology;
- geomorphology;
- hydrography and meteorology;
- water and sediment chemistry; and
- biological interactions.

Contaminant levels in the water column and sediments derived from human activity to be:

- at or below existing statutory guideline concentrations;
- below levels that would potentially result in increase in contaminant concentrations within sediments or biota;
- below levels potentially detrimental to the long-term maintenance of the feature species populations, their abundance or range.

The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded. Important elements include:

- species richness;
- population structure and dynamics;
- physiological heath;
- reproductive capacity;
- recruitment;
- mobility; and
- range.

6.1.1.2 Air Quality Effects

As the planning application is for outline consent, detailed information regarding construction methods are not available, so worst-case assumptions have been made based on available design drawings. It should be noted that no demolition is required to enable the proposed development.

A negligible increase in nitrogen oxide concentrations are predicted as a result of the development due to increases in traffic volume. The risk of impacts on ecological receptors, including the features of the SAC, is considered to be low as any effects would be very localised and restricted to a 50m radius. The closest sensitive habitat, Atlantic saltmarsh, is located 600m southwest and is beyond the predicted radius for potential effect.

It is reasonable to assume that the predicted negligible change in deposition is not sufficient to affect the ability of the site to meet its conservation objectives, in particular the deposition will not result in contaminant levels in the water column and sediments being above levels:

- that would potentially result in increase in contaminant concentrations within sediments or biota; or
- potentially detrimental to the long-term maintenance of the feature species populations, their abundance or range.

Air quality effects are therefore screened out of the appropriate assessment.

6.1.1.3 Water Quality Effects

During construction, sediment will be generated from a number of activities which may include excavation, additional vehicle movements, material and earth stock piling and through vegetation clearance, such as tree removal.

The proposed development will be set away from any waterbodies, with an attenuation pond and landscaping area separating the physical development from the surrounding semi-natural habitat. A Sustainable Drainage System (SuDS) will be implemented on Site that would manage any diffuse pollution during operation.

No hydrological linkage is present between the Site and the SAC. As such, no pathway to cause levels of water-borne pollutants detrimental to the marine

habitats has been identified. Water quality effects are therefore screened out of the appropriate assessment.

6.1.2 Fish Species

6.1.2.1 Conservation Objectives

The conservation objectives for the fish species and otter features state that the features will be considered to be in favourable conservation status when the following are met:

- The population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include:
  - population size
  - structure, production
  - condition of the species within the site.
- As part of this objective it should be noted that;
  - contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression.
- The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. As part of this objective it should be noted that:
  - Their range within the SAC and adjacent inter-connected areas is not constrained or hindered.
  - There are appropriate and sufficient food resources within the SAC and beyond.
  - The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing.
- The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include:
  - distribution
  - extent
  - structure
  - function and quality of habitat
  - prey availability and quality.
- As part of this objective it should be noted that;
  - The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
  - The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.

- Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
- Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.
- For otter there are sufficient sources within the SAC and beyond of high-quality freshwater for drinking and bathing.

6.1.2.2 Water Quality Effects

No hydrological linkage is present between the Site and the SAC. As such, no pathway to cause levels of water-borne pollutants detrimental to the fish present. Water quality effects are therefore screened out of the appropriate assessment.

6.1.3 Otter Population

No otter holts or lay ups were identified, foraging potential is low and the site is assumed to be restricted to use by commuting otter due to existing disturbance. The conservation objectives for otter are shown in Section 6.1.2.1 above.

6.1.3.1 Water Quality Effects

No hydrological linkage is present between the Site and the SAC. As such, no pathway to cause levels of water-borne pollutants detrimental to any otter or food resources present within the SAC boundary. The SAC provides sufficient alternative foraging and commuting habitat, in addition to the New Dafen River to the north and the Machynys Ponds Site of Special Scientific Interest (SSSI), ponds within the Machynys Peninsula Golf and Country Club, Millennium Coastal Park and the National Wetland Centre Wales to the south and east.

The foraging potential of the Site is limited; however commuting otter are likely to pass through the site. As such, a potential pollution incident could affect commuting otter during construction or operation.

Best practice mitigation measures to manage the risk of any pollution incident are required and will be integrated into the Outline Construction Environmental Management Plan (CEMP) and will include compliance with current Guidelines for Pollution Prevention (GPP)[20], particularly GPP5: Works and Maintenance in or Near Water, and CIRIA[21] best practice.

6.1.3.2 Disturbance and Entrapment

The conservation objectives for the European Site require that disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

The construction of the proposed development has the potential to cause disturbance to any commuting otters. However, it is suspected that the majority of

[20] http://www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/guidance-for-pollution-prevention-gpps-full-list/
[21] CIRIA C741 'Environmental Good Practice on Site'; Fourth Edition (2015).

use of the site is during the hours of darkness when existing disturbance from dog walking is lower. There is also the possibility that commuting otters could become trapped in open excavations.

Since otter are a generally nocturnal species no construction is to continue after daylight hours where practicable; nocturnal / crepuscular activity is deemed to be between one hour before sunset and one hour after sunrise. If lighting is required outside of daylight hours, it is to be minimised and directed away from areas of adjacent semi-natural habitat. Excavations are to be covered at night-time or a means of escape provided (such as a plank of wood) to prevent the accidental entrapment of commuting otter.

6.1.3.3 Mitigation Measures Summary

A pre-construction survey will be undertaken, no more than three months prior to the commencement of construction works, by a suitably qualified ecologist to determine the status of otter within 100m of the proposed development.

Any retained habitats that may be used by otter (such as waterbodies, trees and woodland) will be securely fenced off with appropriate temporary fencing (e.g. chestnut paling on scaffold supports or 'Heras' fencing) at the start of construction work to prevent access and incidental damage by site vehicles, equipment and personnel.

Landscaping comprising native trees around the periphery of the site, and along the waterbodies will provide and enhance ecological connectivity within the site, and with the wider area, particularly for mobile species such as otter.

An Ecological Management Plan will be agreed prior to any clearance or construction activities commencing on site. The plan will detail the results of otter surveys, and mitigation measures, which are required across the site to protect and enhance key habitats, as well as individual otter. This will be submitted as part of the discharge of conditions following detailed design.

The following measures will be implemented prior to or during construction through detailed design and adherence to the final CEMP (assumed to be submitted as part of the discharge of conditions):

- Any task lighting or security lighting, which may be required on site during the winter months, is to be designed in consultation with the ecologist to ensure that there is no disturbance to habitats within the site, which are likely to support crepuscular or nocturnal species including otter. Where practicable, daytime working hours will be adopted for any construction works to commence no sooner than one hour after sunrise and finish no later than one hour before dusk.
- Any traffic plans produced will ensure that vehicle traffic is restricted to agreed low limits.
- Excavations are to be covered at night-time or a means of escape provided (such as a plank of wood) to prevent the accidental entrapment of commuting for otter.

- All tools, food, litter and construction materials and packaging that may constitute a hazard to otter will be removed daily from the site.
- To avoid operational phase disturbance issues, the detailed design for the project will consider enhancing retained marginal habitats for otter and include habitat design interventions for wildlife, including otter. As reported in the EcIA for the project these will include:
    - The creation of a new pond on site with associated planting;
    - The creation of a new reen on site that connects to the existing ditch to the south of the site and acts as a "green corridor," connecting the site to adjacent retained habitats within the golf course;
    - The retention of the existing ditches to the south of the site;
    - The inclusion of soft landscaping of all areas of the site that are not associated with the building or access roads.

6.1.3.4 Residual Assessment

With the inclusion of the mitigation measures outlined above it is concluded that the proposed development is unlikely to give rise to an adverse effect on the integrity of the Carmarthen Bay and Estuaries SAC. In the absence of resting places or areas of high otter activity within the application site it can be concluded that the Project, incorporating the identified mitigation, is unlikely to give rise to any effect on the population of otters from this SAC.

Consequently, with the inclusion of the above mitigation, it is considered reasonable to conclude that the proposed works would have no effect on otter.

6.2 In-Combination Assessment

There are a number of applications for development in the local area. The majority of these involve minor redevelopment works or extensions to existing sites. The small-scale residential proposals are not considered likely to result in in-combination effects due to the minor nature of the proposed works.

The Llanelli Wellness and Life Science Village prepared a Statement to Inform Appropriate Assessment, which identified a number of pathways for potential effects on both the Carmarthenshire Bay and Estuaries SAC and the Burry Inlet SPA/Ramsar sites. Potentially significant effects were identified in terms of the effects of air and water emissions, and the effects of disturbance of species features such as otter and wintering birds. The Appropriate Assessment considered these effects in relation to the Conservation Objectives for the features of the European Sites and identified a number of mitigation measures. These measures along with the proposed monitoring are considered sufficient to ensure that the construction and operation of the proposed development does not give rise to any adverse effects on the integrity of the European sites.

Likewise, an HRA exercise was undertaken for the Machynys Central Housing Application that concluded negative effects on the nearby European Sites would

not occur and included widely accepted and uncontroversial measures such as pollution prevention control.

As a result, there are not expected to be any significant adverse impacts on the European sites, and it is not considered likely that there would be any in-combination effects from this or any other projects.

7 Proposals for Monitoring

7.1 Pre-Construction Monitoring

Monitoring in the form of pre-construction surveys will be undertaken to provide up to date information on the presence of SAC qualifying feature, in this case otters.

An otter survey would be undertaken within three months of the construction start date. All watercourses within 50m of the proposed development, along with any associated construction areas, will be searched for signs of otter activity and potential resting places. If more than 18 months have elapsed since the surveys undertaken to inform this assessment full surveys will be repeated.

7.2 Monitoring During Construction

The contractor undertaking these works will incorporate all recommended mitigation from this HRA into the formal CEMP.

An ecologist should be retained to act as an Ecological Clerk of Works (ECoW) during the construction period as required. The ECoW will be available to monitor any potential aspects of the works as required and advise on potential constraints relating to qualifying features of the SAC that may arise.

7.3 Post-Construction Monitoring

The retained and newly created habitats as part of the site's landscaping will be subject to long term maintenance and monitoring.

7.4 Reporting

The results of the monitoring will be reported to NRW and other relevant statutory environmental bodies on an annual basis through the Ecological Monitoring Reports as required.

In addition, the scope of the monitoring, methods and results will be discussed through further engagement with the Carmarthenshire County Council's ecologist and NRW during and post construction as required.

8 Conclusion

Potential pathways for effect on the Carmarthen Bay and Estuaries SAC have been identified as part of consideration of the proposed development in relation to requirements of the Habitats Regulations.

Spatial separation from the Burry Inlet SPA and Ramsar Site precluded potential disturbance to overwintering bird features and an absence of a hydrological pathway between the site and the European Sites precluded potential water quality effects on habitat and overwintering bird features.

Potential effects were identified in terms of disturbance and potential entrapment of otter. The Appropriate Assessment has considered these effects in relation to the Conservation Objectives for the features of the European Sites and identified a number of mitigation measures. These measures along with the proposed monitoring are considered sufficient to ensure that the construction of the proposed development does not give rise to any adverse effects on the integrity of the European sites.

Any construction phase water quality effects from the proposed works will be avoided through the mitigation integrated into the outline CEMP ensuring adherence with best practice; GPPs and CIRIA best practice guidance. It is therefore reasonable to conclude that there would be no effect from pollution risk on the features of the Carmarthen Bay and Estuaries SAC.

A potential pathway exists for otter to become trapped within excavations should they gain access to construction areas, and there is risk of disturbing otter should construction task lighting be required. On a precautionary basis, deep excavations will be covered at night or a suitable means of escape will be provided. There will be restrictions on working after daylight hours, or where this is not possible lighting will be minimised and directed away from areas of adjacent semi-natural habitat to avoid disturbing any commuting otter. Consequently, it is considered reasonable to conclude that the proposed works would have no effect on otter.

Following the integration of best practice construction measures (timing of works, pollution prevention, escape measures) in the proposed development and the Llanelli Wellness Centre, no significant in-combination effects are predicted that may incur an adverse effect on site integrity in isolation or with other plans or projects.

It is therefore reasonable to conclude that there are no likely significant effects, either alone or in-combination with other plans and projects, resulting from the proposed improvement works.

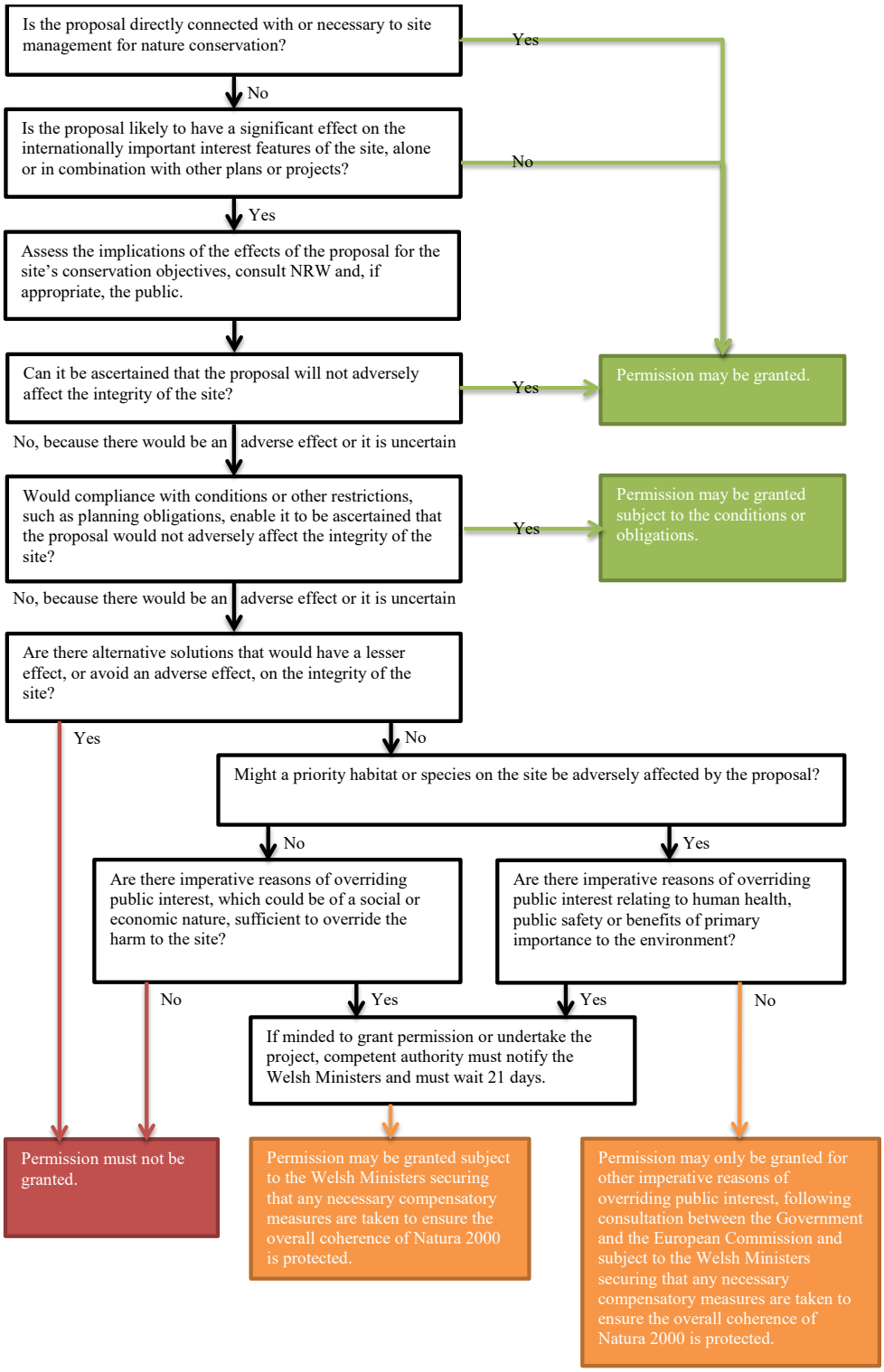
Given the conclusion that the Proposal is not likely to have an adverse effect on site integrity, the proposed works are not considered to be contrary to the provisions of Regulation 63 of the Conservation of Habitats and Species Regulations 2017.

Appendix A

HRA Process Overview

A1

An overview of the HRA process as provided within Tyldesley (2020).



Appendix B

Illustrative Site Layout Plan

B1

Illustrative Site Layout

Notes:

1. Illustrative masterplan layout only to define development quantum.
2. All matters are reserved, final design/layout is subject to design development.
3. Highway access is subject to development and agreement with the Local Authority as a reserved matters application or to be developed by the adjacent housing development.

Issue	Date	By	Chkd	Appd
P01	18/12/20	PB	AP	ME
Issued for Planning Purposes				

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Client: Carmarthenshire County Council

Job Title: Proposed Hotel at Machynys East, Llanelli

Drawing Title: Illustrative Site Layout

Scale at A1: 1:500
Discipline: Architectural
Job No: 278688
Drawing Status: Outline Planning
Drawing No: AL-0-02
Issue: P01