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LLANELLI LOCAL DEVELOPMENT ORDER

INFORMATION TO INFORM HABITATS REGULATIONS SCREENING

VERSION 1

SEPTEMBER 2017

WSP | PARSONS BRINCKERHOFF

LLANELLI LOCAL DEVELOPMENT ORDER

INFORMATION TO INFORM HABITATS REGULATIONS ASSESSMENT SCREENING

Carmarthenshire County Council

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1 EXECUTIVE SUMMARY

1.1.1 Carmarthenshire County Council (CCC) is preparing a Local Development Order (LDO) to enable change of use of buildings within Llanelli town centre. This will grant permission for changes of use as detailed within the LDO without the need for applicants to apply for planning permission. It should be noted that it does not negate the need to attain any permissions relating to regulations etc that are outside of the planning system – eg building regulations.

1.1.2 All plans or projects require assessment under the Conservation of Habitats and Species Regulations 2010 (the 'Habitats Regulations') to identify whether significant effects upon designated sites of European or international importance (Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar sites) are likely.

1.1.3 WSP (WSP) has therefore been commissioned to prepare information to inform the screening of the LDO by CCC. As the LDO permits development without the requirement for planning permission there will be no opportunity for any mitigation requirements to be captured by lower tier assessment. Therefore, a project level approach to HRA screening has been taken.

1.1.4 Several designated sites of European or international importance have been identified within 10 km of the LDO area (as shown on Figure 2). The closest of these is the Carmarthen Bay and Estuary European Marine Site (CBEEMS), approximately 1 km from the LDO site.

1.1.5 The LDO could potentially affect these designated sites via the following effect pathways: reductions in water quality due to increased pressure on local waste water treatment systems; potential recreational disturbance of European Site species; and potential air quality effects from increased road traffic emissions. The Project has been subject to screening under the Habitats Regulations to determine whether these identified effect pathways could lead to likely significant effects on the identified European Sites.

1.1.6 This assessment has concluded that the Project will not lead to likely significant effects, either alone or in combination with other Plans or Projects. This finding is made on the basis that the mitigation measures set out in this HRA are incorporated into the Adopted LDO. In accordance with the Habitats Regulations 2010 (as amended) the screening decision made by the Competent Authority (Carmarthenshire Council) should be documented and as a matter of good practice relevant statutory bodies (NRW) should be notified. Based on the information provided to inform this screening assessment further assessment of the Project through appropriate assessment and subsequent stages is not considered necessary.

2 INTRODUCTION

2.1.1 Carmarthenshire County Council (CCC) commissioned WSP | Parsons Brinckerhoff (WSP|PB) to prepare information to inform the screening of the proposed Llanelli town centre Local Development Order (LDO) under the Conservation of Habitats and Species Regulations 2010 (the 'Habitats Regulations'. As changes permitted by the LDO will not be subject to lower tier assessment that could ensure mitigation is built in if required, the approach within this document is that required for a project level assessment. The LDO (hereafter known as 'the Project') is centred on approximate grid reference SN 50746 00224, as shown on Figure 1: Site Location Plan.

2.1.2 Under the requirements of the European Council Directive 92/43/EEC 'The Habitats Directive and the Council Directive 79/409/EEC 'The Wild Birds Directive' it is necessary to consider whether the proposed project may have significant effects upon areas of nature conservation importance designated/classified under the Directives. This requirement is translated into UK law through the Habitats Regulations.

2.1.3 The Habitats Regulations place a duty upon 'Competent Authorities' to consider the potential for effects upon sites of European importance prior to granting consent for projects or plans. Should likely significant effects be identified by the initial screening process it is necessary to further consider the effects by way of an 'Appropriate Assessment'. Overall this process of assessment is known as Habitats Regulations Assessment (HRA). Further details of the applicable legislative context are summarised within Section 2.2 below.

2.1.4 This document provides information to enable the screening of the Project, covering the following four elements:

- → determining whether the Project is directly connected with or necessary for the management of applicable sites (SAC, SPA, Ramsar);
- → describing the Project that may have the potential for significant effects upon applicable sites;
- → undertaking an initial scoping for potential direct and indirect effects upon applicable sites; and
- → assessing the likely significance of any potential effects identified.

2.1.5 A description of the Project and the designated sites identified are provided within Sections 3 and 4 respectively. Consideration of potential effects of the Project upon the designated sites and whether these are likely to be significant is provided within Section 5, including an assessment of potential in-combination effects.

2.2 HABITAT REGULATIONS ASSESSMENT CONTEXT

LEGISLATIVE CONTEXT

2.2.1 Article 6 (3) of the European Union Habitats Directive (1992, as amended, 'the Habitats Directive') sets out the need for 'Appropriate Assessment' of plans or projects which have potential to affect the integrity of a Natura 2000 site (including Special Protection Area (SPA) and Special Area of Conservation (SAC) and candidate SAC (cSAC) sites such as those in proximity to the Project):

- '*Any plan or project likely to have a significant effect on a Natura 2000, either individually or in combination with other plans or projects, shall undergo an Appropriate Assessment to determine its implications for the site. The competent authorities can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site concerned'* (Article 6.3).

2.2.2 As the purpose of the Natura 2000 network is preservation of examples of species and habitats across Europe, rather than preservation of individual sites, Article 6 (4) allows for exceptional circumstances where negative effects may be permitted. This reads:

- '*In exceptional circumstances, a plan or project may still be allowed to go ahead, in spite of a negative assessment, provided there are no alternative solutions and the plan or project is considered to be of overriding public interest*[1]*. In such cases the Member State must take*

[1] An exact definition of 'imperative reasons of overriding public interest' is not provided, but EC guidance states *'It is reasonable to consider that the "imperative reasons of overriding public interest, including those of social and economic nature" refer to situations where plans or projects envisaged prove to be indispensable:*
- within the framework of actions or policies aiming to protect fundamental values for the citizens' life (health, safety, environment);
- within the framework of fundamental policies for the State and the Society;
- within the framework of carrying out activities of economic or social nature, fulfilling specific obligations of public service.'

appropriate compensatory measures to ensure that the overall coherence of the N2000 Network is protected.' (Article 6.4)

2.2.3 The Habitats Directive is translated into UK law through the Conservation of Habitats and Species Regulations 2010 ('Habitat Regulations'); Regulation 61 (1) states that *'A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—*

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of that site,

—must make an Appropriate Assessment of the implications for that site in view of that site's conservation objectives.'

2.2.4 Like the Habitats Directive, the Habitat Regulations also make allowance for projects or plans to be completed if they satisfy 'imperative reasons of overriding public interest'[2]. Regulations 62 and 66 relate to such situations.

POLICY CONTEXT

2.2.5 It is a matter of Government policy (NPPF paragraph 118) that sites designated under the 1971 Ramsar Convention for their internationally important wetlands (commonly known as Ramsar sites) and potential SPAs (pSPA) are also considered in the same way as SACs, SPAs and cSACs. As a matter of good practice possible SACs (pSACs) should also be considered in the same way.

2.1 STAGES OF HABITATS REGULATIONS ASSESSMENT

2.1.1 Guidance on the Habitats Directive (European Commission, 2000) sets out the step wise approach which should be followed to enable Competent Authorities to discharge their duties under the Habitats Directive and provides further clarity on the interpretation of Articles 6 (3) and 6 (4). The process used is usually summarised in four distinct stages of assessment.

- Stage 1: Screening: the process which identifies whether effects upon a Natura 2000 site of a plan or project are possible, either alone or in combination with other plans or projects, and considers whether these effects are likely to be significant.
- Stage 2: Appropriate Assessment: the detailed consideration of the effect on the integrity of the Natura 2000 site of the plan or project, either alone or in combination with other plans or projects, with respect to the site's conservation objectives and its structure and function.
- Stage 3: Assessment of alternative solutions: the process which examines alternative ways of achieving the objectives of the plan or project that avoid adverse effects on the integrity of the Natura 2000 site.
- Stage 4: Assessment where no alternative solutions exist and where adverse effects remain: an assessment of whether the development is necessary for imperative reasons of overriding

[2] '*(a) reasons relating to human health, public safety or beneficial consequences of primary importance to the environment; or .*
(b) any other reasons which the competent authority, having due regard to the opinion of the European Commission, consider to be imperative reasons of overriding public interest.'

public interest (IROPI) and, if so, of the compensatory measures needed to maintain the overall coherence of the Natura 2000 network.

2.1.2 This report presents information to enable the screening assessment required as part of Stage 1 of the HRA process, to establish whether or not the Project will have a likely significant effect upon Natura 2000 and Ramsar sites.

2.1.3 The precautionary principle is applied at all stages of the HRA process. In relation to screening this means that projects or plans where effects are considered likely and those where uncertainty exists as to whether effects are likely to be significant must be subject to the second stage of the HRA process, Appropriate Assessment.

3 PROJECT DESCRIPTION

OVERVIEW

3.1.1 CCC is preparing an LDO to aid regeneration of Llanelli town centre. The LDO will grant planning permission within a defined spatial area for development as specified within the LDO in ground and upper floor units. The LDO is intended to increase occupancy levels and footfall in the town centre.

3.1.2 The uses the LDO will permit include shops, financial and professional services, restaurants and cafes, drinking establishments (but not nightclubs), hot food takeaways, business offices, hotels and guest houses, residential dwellings, non-residential institutions, assembly and leisure buildings, laundrettes and taxi businesses.

PROJECT AIMS

3.1.3 Following a three year period, the LDO will be considered successful if two or more of the following changes have occurred:

- Five or more vacant ground-floor units have been issued with Certificates of Conformity;
- Annual footfall has increased within the LDO area;
- The number of vacant ground-floor units has decreased within the LDO area;
- Three or more upper floor vacant units have been issued with Certificates of Conformity – this includes flats and residential uses.

3.1.4 The LDO will be subject to on-going review during this three year period and may be extended or reduced in light of success or failure of the LDO to achieve the above aims. Change of Use which has begun during the three year period may continue; however, no new changes will be approved without formal planning permission.

Key conditions

3.1.5 No change in use permitted by the LDO shall occur until a certificate of conformity has been approved in writing by CCC, following review of proposals.

3.1.6 Physical commencement of any change of use permitted by the LDO shall not commence until any conditions/matters identified in the certificate of conformity have been addressed and approved in writing by CCC and relevant consultees and a Commencement Notice Approval issued.

3.1.7 The LDO permits change in use, it does not permit change in building structure, size or external appearance.

LOCATION

3.1.8 Llanelli SN 50746 00224] is the largest town in the county of Carmarthenshire, with a population of approximately 50,000. To the north and west of the town, the land use is predominantly agricultural. The Laughor River and estuary are directly to the south and east, which separates the town from Swansea, situated approximately 16 km away.

4 RELEVANT DESIGNATED SITES

4.1.1 As shown on Figure 2, seven designated sites of European or international importance lie within 10 km of the Project. These designated sites are listed in order of proximity below:

- Burry Inlet Ramsar (1km west);
- Carmarthen Bay and Estuaries SAC (1km west);
- Burry Inlet SPA (1km west);
- Bristol Channel Approaches pSAC (6.3km west);
- Carmarthen Bay Dunes SAC (6.7km south-west);
- Carmarthen Bay SPA (8.7km south-west); and
- Gower Commons SAC (9.3km south-east).

4.1.2 The reasons for designation of these sites are summarised in Table 1 overleaf. The known vulnerabilities of these sites are summarised in Table 2, collated from the Natura 2000 standard data forms (JNCC, 2016) and Carmarthen Bays and Estuaries European Marine Site Regulation 33 Advice (Countryside Council for Wales (CCW), 2009).

4.1.3 With regard for the qualifying features within Table 1 and information on vulnerability of the sites within Table 2, the broad conservation objectives for the Carmarthen Bay and Estuaries European Marine Site, which includes Carmarthen Bay and Estuaries Marine SAC, Burry Inlet SPA and Carmarthen Bay SPA, as defined by CCW (2009) are to:

- Achieve favourable conservation status for all of the following habitat features:
  - Sandbanks which are slightly covered by seawater all the time;
  - Estuaries Mudflats and sandflats not covered by seawater at low tide;
  - Large shallow inlets and bays;
  - Atlantic salt meadows; and
  - Salicornia and other annuals colonising mud and sand.
- Achieve favourable conservation status for the following species:
  - Otter;
  - Shad (*Alosa* sp.);
  - River lamprey;
  - Sea Lamprey; and
  - All bird species listed under the Burry Inlet SPA and Carmarthen Bay SPA.

4.1.4 The broad conservation objectives for Carmarthen Bay Dunes SAC are:

- Natural processes will be allowed to determine the time and place when the strandline and embryonic dunes exist. These processes will not be impeded by direct or indirect human intervention;
- A strandline will be present at least one year in every five within the areas identified;
- Embryonic dunes will be present on the seaward side of the mobile frontal dune ridge at least one year in every three;

- Shifting dunes will exist as part of the dynamic natural processes which create the dune systems;
- There will be an interaction between the three dune systems such that the natural process of erosion in some parts and accretion in others will continue without direct or indirect human disturbance;
- Shifting dunes will comprise a significant part of the dune system but will increase and decrease in extent and location as natural processes determine the landscape of the dune systems;
- Fixed dunes with herbaceous vegetation (grey dunes) will occur where older, shifting dunes become more stabilised and in early successional stages become colonised by lichens and other species indicative of the transition from less mobile habitat;
- The habitat will encompass a range of successional stages throughout the area, determined by patterns of natural factors and grazing;
- Grey dunes will comprise a significant part of the dune system but will increase and decrease in extent and location as natural processes determine the landscape of the dune systems;
- Dunes with *Salix repens* and humid dune slacks will occur as part of the dune system, their location will be determined by natural processes and appropriate grazing management;
- Sufficient and suitable habitat to support populations of narrow mouthed whorl snail *Vertigo angustior*, petalwort *Petalophyllum ralfsii* and fen orchid *Liparis loeselii* will be present; and
- All of the factors affecting the features are under control.

4.1.5 Specific conservation objectives for the Bristol Channel Approaches cSAC and Gower Bay SAC are not freely available but can be assumed to comprise maintaining the features of interest of these sites in favourable condition.

4.1.6 The Habitats Directive provides further interpretation of the meaning of '*favourable conservation status'* within Article 1 parts a, e and i as below:

4.1.7 *'(a) conservation means a series of measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favourable status as defined in (e) and (i);…..*

4.1.8 *(e) conservation status of a natural habitat means the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species within the territory referred to in Article 2. The conservative status of a natural habitat will be taken as "favourable" when:*

- *- its natural range and areas it covers within that range are stable or increasing, and*
- *- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and*
- *- the conservation status of its typical species is favourable as defined in (i);*

4.1.9 *(i) conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within the territory referred to in Article 2; The conservation status will be taken as "favourable" when:*

- *- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and*
- *- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and*

→ *- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis;'.*

4.1.10 Specific conservation objectives for Ramsar sites are not available.

Table 1 - Relevant Natura 2000 or Ramsar Sites

SITE NAME	SUMMARY OF REASONS FOR DESIGNATION SUMMARISED ON NATURA 2000 STANDARD DATA FORM OR RAMSAR INFORMATION SHEET
Burry Inlet Ramsar (1km west)	**Description:** Burry Inlet is a large estuarine complex located between the Gower Peninsula and Llanelli in South Wales. It includes extensive areas of intertidal sand and mud-flats, together with large sand dune systems at the mouth of the estuary. The site contains the largest continuous area of saltmarsh in Wales (2,200 ha). **Qualifying species/populations with peak counts in spring/autumn** → Common redshank (*Tringa totanus totanus*): 857 individuals, representing an average of 0.7% of the GB population. **Qualifying species/populations with peak counts in winter** → Northern pintail (*Anas acuta*): 2687 individuals, representing an average of 4.4% of the population; → Eurasian oystercatcher (*Haematopus ostralegus ostralegus*): 14861 individuals, representing an average of 1.4% of the population; and → Red knot (*Calidris canutus islandica*): 3618 individuals, representing an average of 1.2% of the GB population. **Species/populations identified subsequent to designation for possible future consideration** → Northern shoveler (*Anas clypeata*) 467 individuals, representing an average of 1.1% of the population.
Carmarthen Bay and Estuaries SAC (1km west)	**Annex I habitats that are a primary reason for selection this site** → Sandbanks which are slightly covered by seas water all the time; → Estuaries; → Mudflats and sand flats not covered by seawater at low tide; → Larger shallow inlets and bays; → *Salicornia* and other annuals colonising mud and sand; and → Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*). **Annex II species that are a primary reason for selection of this site** → Twaite shad (*Alosa fallax*). **Annex II species present as a qualifying feature, but not a primary reason for site selection** → Sea lamprey (*Petromyzon marinus*); → River lamprey (*Lampetra fluviatilis*); → Allis shad (*Alosa alosa*); and

SITE NAME	SUMMARY OF REASONS FOR DESIGNATION SUMMARISED ON NATURA 2000 STANDARD DATA FORM OR RAMSAR INFORMATION SHEET
	→ Otter (*Lutra lutra*).
Burry Inlet SPA (1km west)	**Qualifying over wintering species** → Oystercatcher (*Haematopus ostralegus*): 13,590 individuals representing at least 1.5% of the wintering Europe & Northern/Western Africa population; and → Pintail (*Anas acuta*): 1,772 individuals representing at least 3.0% of the wintering Northwestern Europe population. **Assemblage qualification:** A wetland of international importance.
Bristol Channel Approaches pSAC (6.3km west)	Protected features: → Harbour porpoise (*Phocoena phocoena*): Annex II species, 4.7% of the Celtic and Irish seas management unit population.
Carmarthen Bay Dunes SAC (6.7km south-west)	**Annex I habitats that are a primary reason for selection this site** → Embryonic shifting dunes; → Shifting dunes along the shoreline with *Ammophila arenaria* (“”white dunes””); → Fixed coastal dunes with herbaceous vegetation (“”grey dunes””); → Dunes with *Salix repens* spp. *Argentea* (*Salicion arenariae*); and → Humid dune slacks. **Annex II species that are a primary reason for selection of this site** → Narrow-mouthed whorl snail (*Vertigo angustior*); → Petalwort (*Petalophyllum ralfsii*); and → Fen orchid (*Liparis loeselii*).
Carmarthen Bay SPA (8.7km south-west)	**Annex II species** → Common scoter (*Melanitta nigra*): 1.0% of the population.
Gower Commons SAC (9.3km south-east)	**Annex I habitats that are a primary reason for selection this site** → Northern Atlantic wet heaths with *Erica tetralix;* → European dry heaths; and → *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*). **Annex II species that are a primary reason for selection of this site**

Site Name	Summary of reasons for designation summarised on Natura 2000 Standard Data Form or Ramsar Information Sheet
	→ Southern damselfly (*Coenagrion mercuriale*); and → Marsh fritillary butterfly (*Euphydryas (Eurodryas, Hypodryas) aurinia*).

Table 2 - Known threats and pressures upon relevant designated sites

Site Name	Activities with greatest effect upon the site, as listed on Natura 2000 standard data forms / Information Sheets for Ramsar Wetlands / SAC Selection Assessment Document	Pressures and threats listed within the European Marine Site Regulation 33 Advice (CCW, 2009)
Burry Inlet Ramsar (1km west)	**Erosion:** 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. Studies suggest that overall erosion rates are more or less matched by sediment accretion. Erosion of/loss of *Salicornia* zone is occurring – loss of this early successional vegetation is changing the overall saltmarsh habitat distribution on the site.	**As part of the European Marine Site:** → Dock harbour and marina structures; → Dredging; → Construction; → Land claim; → Coastal protection; → Foreshore deposit of rock, rubble; → Hard-engineered fresh water watercourses; → Pipelines; → Effluent disposal; → Inorganic wastes and debris; → Dredge spoil disposal; → Urban industrial run-off; → Agricultural run-off; → Netting; → Potting; → Hand gathering; → Bait collection; → Grazing;
Carmarthen Bay and Estuaries SAC (1km west)	→ Fishing and harvesting aquatic resources; → Pollution to surface water; → Human induced changes in hydraulic conditions; → Marine and freshwater aquaculture; → Invasive non-native species; → Hunting, fishing or collecting activities not referred to above; → Soil pollution and solid waste (excluding discharges); → Changes in abiotic conditions; → Marine water pollution; → Outdoor sports and leisure activities, recreational activities (also considered to be a positive impact); → Air pollution, air-borne pollutants; → Shopping lanes, ports, marine constructions; → Other urbanisation, industrial and similar activities; and → Grazing.	

Site Name	Activities with greatest effect upon the site, as listed on Natura 2000 standard data forms / Information Sheets for Ramsar Wetlands / SAC Selection Assessment Document	Pressures and threats listed within the European Marine Site Regulation 33 Advice (CCW, 2009)
		→ Angling;
Burry Inlet SPA (1km west)	→ Air pollution, air-borne pollutants; → Marine water pollution; → Changes in abiotic conditions; → Outdoor sports and leisure activities (also considered to be a positive impact); → Military use and civil unrest; and → Fishing and harvesting aquatic resources.	→ Recreational boating; → Coastal access for recreation; → Wildfowling; and → Education
Bristol Channel Approaches pSAC (6.3km west)	→ Removal of non-target species during fishing → Contaminants → Anthropogenic underwater sound → Death or injury of harbour porpoise by collision → Removal of target species, which are harbour porpoise prey	Not available.
Carmarthen Bay Dunes SAC (6.7km south-west)	→ Grazing (also considered to be a positive impact); → Air pollution, air-borne pollutants; → Structures, buildings in the landscape; → Biocenotic evolution, succession (also considered to be a positive impact); → Other ecosystem modification; → Forestry activities; → Changes in abiotic conditions; → Abiotic (sloe) natural processes; → Outdoor sports and leisure activities, recreational activities; → Invasive non-native species; and → Human induced changes in hydraulic conditions.	→ Grazing; → Erosion; → Illegal off-road driving; → Litter; → Pine tree invasion; → Other scrub encroachment; → Ordnance; → Hydrological issues; and → Nutrient enrichment.

Site Name	Activities with greatest effect upon the site, as listed on Natura 2000 standard data forms / Information Sheets for Ramsar Wetlands / SAC Selection Assessment Document	Pressures and threats listed within the European Marine Site Regulation 33 Advice (CCW, 2009)
Carmarthen Bay SPA (8.7km south-west)	→ Marine water pollution; → Air pollution, air-borne pollutants; and → Military use and civil unrest.	**As part of the European Marine Site:** As stated above.
Gower Commons SAC (9.3km south-east)	→ Outdoor sports and leisure; → Biocenotic evolution, succession; → Fire and fire suppression (also considered to be a positive impact); → Human induced changes in hydraulic conditions (also considered to be a positive impact); → Grazing (also considered to be a positive impact); → Problematic native species; → Fertilisation; → Air pollution, air-borne pollutants; → Invasive non-native species; and → Mowing / cutting of grassland.	Not available.

5 SCREENING OF POTENTIAL EFFECTS

5.1.1 The Project is not directly connected with or necessary for the management of the identified European Sites:

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

5.1.2 It has not been conceived solely to further the conservation of the site(s) and nor is it essential to the management of the site(s). Therefore, further consideration of the Project within the HRA process is required.

5.2 CONSIDERATION OF EFFECTS IN ISOLATION

5.2.1 Utilising the information included within Sections 3 and 4 the Project has been screened to identify whether potential effect pathways between the Project and the designated sites are present which are likely to result in significant effects upon the designated sites.

5.2.2 The following potential effect pathways have been screened out:

- DIRECT HABITAT LOSS: No works will be completed within any of the relevant designated sites or within 1 km of them. Therefore, no habitat loss within the designated sites or to adjacent supporting habitats will occur as part of the proposals.
- FRAGMENTATION OF HABITAT: The Project lies within the built environment of Llanelli, approximately 1 km from the Burry Inlet Ramsar, SPA and Carmarthen Bay and Estuaries SAC (the closest European Site). Therefore, the Project will not result in direct fragmentation of habitat within the designated site; nor are the proposals considered likely to significantly affect how key species move around or through the designated sites.
- RESOURCE REQUIREMENTS: The Project is unlikely to require resources from any designated sites; therefore, no potential effects are likely via this pathway.

5.2.3 Potential effects as a consequence of marine water pollution, air pollution and recreation (outdoor sports and leisure activity) are considered in further detail below. Other site vulnerabilities identified within Table 2 above, such as fishing or other marine harvesting, management methods used within the designated sites and port and shipping activities or coastal defence, will not be influenced by the Project. Therefore, existing effects upon the designated sites via these pathways will not be affected by the Project and the Project is also not likely to result in new significant effects via these pathways.

WASTE WATER

5.2.4 The JNCC data sheet & EMS Regulation 33 Advice (see Table 2) for the Carmarthen Bay EMMS identify marine and surface water pollution as potential threats. The findings of the Habitats Regulations Assessment for the Carmarthenshire Local Plan (Carmarthenshire County Council, 2014) are also relevant. This identified that growth in the South Llanelli Strategic Zone could lead to reduced water quality in the EMMS. Reference is also made to the infrastructure / drainage strategy being prepared in support of the LDO, together with EIA and SFCA.

5.2.5 An assessment of the existing utilities within the Llanelli Town Centre is detailed in the Infrastructure Study report that accompanies the LDO. This report provides information on the location and capacity of the existing utilities and the utility company requirements for new connections into the existing service network, particularly with sewerage discharge and water supply. It makes a recommendation in relation to the implementation of a drainage strategy to support the delivery of the LDO (see section 3.1 of that report).

5.2.6 In order to minimise the risk of compromising the public sewerage system and hence impacting water quality within the CBEMMS, it is recommended that the following measures (as referenced within the LDO Drainage Strategy) are included in the Adopted LDO in the form of conditions:

- No change of use shall commence where it will result in the hydraulic overload of the public sewerage system. Where required and requested; a drainage strategy should be submitted to, and approved by, Dwr Cymru Welsh Water.
- No change of use shall commence where it will result in the compromising of the integrity of any public sewer and/or water main assets within and/or adjacent to the site. Where required and requested; an assessment should be submitted to, and approved by, Dwr Cymru Welsh Water which clarifies any impact and where necessary any mitigation.

5.2.7 A Memorandum of Understanding (MoU) is also in place between Carmarthenshire Council, Swansea Council, DCWW & NRW that aims to "set out a partnership approach to improve and safeguard the environmental quality of the CBEEMS, when taking decisions on development and regeneration schemes." It is not envisaged that the LDO itself will be subject to the provisions of the MoU.

5.2.8 The MoU contains guidance with regard to surface water management for development in the Llanelli and Gowerton catchment (the sewage catchments with greatest risk of affecting the water quality of the CBEEMS). This is implemented by Carmarthenshire Council by only giving planning permission once existing flows (surface water or foul) have been removed from the system to allow capacity, or other works undertaken to improve the infrastructure. There is also the requirement for a betterment factor. Both planning authorities manage this process by keeping a Surface Water and Hydraulic Register for the Llanelli and Gowerton catchments.

5.2.9 In addition, stakeholders including DCWW would be notified of proposals for residential conversions (and other developments under the LDO), via the certificate of conformity notification process. DCWW (and other stakeholders) would therefore be able to identify specific requirements should the levels of development being authorised under the LDO be considered excessive.

5.2.10 Given the above, it is anticipated that the change in use limits will utilise existing capacity within the waste water treatment system or utilise additional treatment capacity from waste water treatment upgrades or reduction in inputs from other sources. As such, **no likely significant effects** on the designated sites which make up the CBEEMS are expected.

DISTURBANCE OF KEY SPECIES DUE TO INCREASED RECREATION

5.2.11 The Burry Inlet SPA and Ramsar site components of the CBEEMS have been designated for the wetland bird species they support. Many of these species are known to be susceptible to the effects of recreational disturbance[3,4,5] (for example activities such as dog-walking, bait-digging and recreational beach use). The JNCC datasheet and Site Management Plan (see Table 2) also identify recreational activities as a potential threat to the CBEEMS.

5.2.12 A range of studies have been completed across the UK to assess how increases in residential development can affect recreational use of designated sites[6,7]. A common finding from such studies is that a high proportion of recreational users of designated sites live relatively close to the designated site. For example, in one study in North Kent, 50% of visitors who arrived by car lived within 4.2 km of their visit location whilst 50% of visitors who arrived by foot lived within 0.8 km of their visit location[7]. It is therefore possible that a net increase in residential development within the LDO area could lead to increased recreational use of the CBEEMS, which at its closest point is 1 km from the LDO area.

5.2.13 The LDO area is located to the east of the closest part of the CBEEMS. In this area, the CBEEMS boundary is adjacent to a coastal road and footpath in the north (grid reference SN 492 002) and then a coastal path / sandy foreshore in the south (to grid reference SS 500 985). In total, this length of accessible foreshore is approximately 1.8 km (see Figure 3). The boundary of the CBEEMS then becomes more accessible by road and footpaths approximately 2 km south of the LDO area at grid reference SS 503 984. To the west there is limited public access to the CBEEMS. This is because the Swansea to Carmarthen railway line runs adjacent to the coast up to approximately 6 km west of the LDO area, limiting public access to the coastline.

5.2.14 The LDO will permit the conversion of existing properties to create residential units in upper stories of existing buildings; any conversions taken forwards are likely to yield primarily 1 – 2 bedroom flats. The average number of residents per property is therefore likely to be relatively low. The exact number of conversions that will come forward under the LDO cannot be predicted, given the flexibility built into it.

[3] Thomas, K., Kvitek, R. G. & Bretz, C. (2003). Effects of human activity on the foraging behaviour of sanderlings Calidris alba. Biological Conservation 109: 67-71
[4] Liley, D. & Fearnley, H. (2011).Bird Disturbance Study, North Kent 2010/11.Footprint Ecology.
[5] Gill, J.A., Sutherland, W.J. & Norris, K. (1998). The consequences of human disturbance for estuarine birds. RSPB Conservation Review 12: 67-72.
[6] Stillman, R. A., West, A. D., Clarke, R. T. & Liley, D. (2012) Solent Disturbance and Mitigation Project Phase II: Predicting the impact of human disturbance on overwintering birds in the Solent. Report to the Solent Forum.
[7] Fearnley, H. & Liley, D. (2011). North Kent Visitor Survey Results. Footprint Ecology.

5.2.15 Based on the number of existing units within the Project site, it is unlikely that more than 180 residential conversions could be physically delivered. In practice, it is highly unlikely that applications for this many conversions would come forward under the LDO. A worst-case scenario of 180 residential units receiving Commencement Notice Approval has therefore been assumed for the purposes of this assessment. Should a figure of 100 Commencement Notice Approvals for residential units be reached within the 3 year period lifetime, then a moratorium will be placed on the LDO and it will be reviewed with the outcomes reported to full Council. Such a review will be informed by the input of the notification stakeholders (including NRW and DCWW).

5.2.16 As set out above there is limited access to the CBEEMS from the LDO area. Furthermore, only a limited amount of residential development can be brought forward under the LDO. In light of these factors, it is considered unlikely that the LDO will lead to a significant increase in recreational use of the CBEEMS and therefore no likely significant effects are expected.

5.2.17 Other European Sites identified as part of this study are located in excess of 6.3 km from the Project site. The closest terrestrial European Site is the Carmarthen Bay Dunes SAC, located 6.7 km (as the crow flies) from the Project Site. Carmarthen Bay Dunes SAC is located on the opposite shore of Carmarthen Bay from Llanelli; the actual distance to travel to the Site overland is in excess of 10 km. Other European Sites identified are located in excess of 8 km from the Project Site. Given these distances any net increase in residential dwellings under the LDO is unlikely to result in a significant increase in recreational use of the European Sites. As such, no likely significant effects are expected to arise.

AIR QUALITY: ROAD TRAFFIC

5.2.18 The LDO aims to increase footfall in the town centre and to introduce new/converted residential and commercial properties. Delivery of these objectives could result in increased levels of traffic around the town centre and on associated approach roads. It is not possible to predict the levels of traffic that will be generated as a result of the LDO given the range of development scenarios that might be delivered.

5.2.19 Should the LDO lead to a significant increase in vehicle emissions, this could in turn lead to an increase in ambient nitrous oxide (NOx) concentrations and nitrogen deposition onto habitats within the CBEEMS, and potentially other more distant sites. Nitrogen deposition in particular can increase the nutrient status of habitats, leading to increases in plant species better adapted to high nutrient environments and the loss of plant species associated with low-nutrient environments. Vehicle emissions tend to only have a significant effect on air quality close to the point of emission, with concentrations on NOx (and associated nitrogen deposition) reducing rapidly with increasing distance from roads.

5.2.20 The habitats that make up the qualifying interests of the CBEEMS and which are used by the associated bird species are primarily intertidal. These include habitats such as intertidal mud-flats, sandbanks and bays and estuaries. In most cases, nitrogen inputs into inter-tidal habitats from the atmosphere are likely to be miniscule compared to inputs from marine and riverine sources. For saltmarsh (as an example) this is reflected on APIS (Air Pollution Information Service), which states that 'Overall, N deposition [from the atmosphere] is likely to be of low importance for these systems as the inputs are probably significantly below the large nutrient loadings from river and tidal inputs'[8].

5.2.21 There have been steady reductions in ambient NOx concentrations and consequent nitrogen deposition across much of the UK over recent decades. Part of these improvements are as a result of reduced emissions from motor vehicles. There have been reductions in NOx emissions from vehicles with combustion engines due to increasingly tight emissions standards. The recently introduced Euro 6 standard brought in particularly tight controls, including real-world emissions testing for diesel engines. Part of the reduction in emissions has also come about as a result of the increasing number of hybrid and electric vehicles on the road.

[8] APIS website [accessed 21/08/17]: http://www.apis.ac.uk/node/968

5.2.22 The UK government recently published the UK Air Quality Strategy. This identifies a range of measures to address air quality concerns (primarily in relation to human health) in the UK. The strategy includes a commitment to phase out sales of cars with internal combustion engines by 2040. This is aligned with the previous UK Air Quality Strategy published in 2011, which included the same commitment. Uptake of electric and hybrid cars continues to increase, with low emissions vehicles expected to make up an increasing proportion of the UK vehicle fleet over the coming years[9].

5.2.23 As set out above, the intertidal habitats associated with the CBEEMS are considered relatively insensitive to changes in air quality. Any increase in vehicle movements on the local road network, is also likely to be offset by improved vehicle emission standards and the ongoing uptake of ultra-low emission vehicles, with a net reduction in vehicle-related emissions likely to occur over the LDO period. Given the above, no likely significant effects to European Sites are expected to arise as a result of LDO-related road traffic emissions.

5.3 POTENTIAL IN-COMBINATION EFFECTS

5.3.1 The assessment of the potential effects of the Project in isolation completed in Section 5.2 has concluded that the Project is unlikely to result in significant effects in isolation. It is a requirement of the Habitats Regulations that the potential effects of a plan or project also be considered *in combination* with other plans and projects. This section therefore provides an assessment of the potential for the Project to lead to in-combination effects with other Plans or Projects.

5.3.2 The CCC Planning Portal was used to identify other plans or projects within the vicinity of the Project which are known to be permissioned or are awaiting decision. Given the urban nature of Llanelli, a large number of permissioned and pending planning applications were identified. Many of these relate to proposals for residential or commercial development, much of which relates to development areas identified under Growth Area 2 (GA-2) Site Allocation of the Carmarthenshire Local Development Plan (LDP) (adopted 2014). Growth Area 2 includes Llanelli and surrounding conurbations of Llangennech, Burry Port and Pembrey. The HRA for the LDP[10] was therefore reviewed, including the specific assessment for Policy GA-2.

5.3.3 In addition the Nationally Significant Infrastructure Project (NSIP) website[11] was reviewed to identify any large-scale infra-structure projects for which consent was being sought within 10 km of the Project Site.

WASTE WATER

5.3.4 Population growth and wider economic development arising from other plans and projects could lead to an increased demand on waste water and sewage treatment facilities in the local area. This could potentially impact on water quality within the CBEEMS. As set out in Section 5.2, a series of measures are proposed for inclusion within the LDO to ensure the Project in isolation does not lead to such effects. Reference is made to the Infrastructure Study which accompanies the LDO.

5.3.5 A Memorandum of Understanding (MoU) is also in place between Carmarthenshire Council, Swansea Council, DCWW & NRW that aims to “set out a partnership approach to improve and safeguard the environmental quality of the CBEEMS, when taking decisions on development and regeneration schemes.”

5.3.6 This MoU is applied by both Carmarthenshire and Swansea Councils when assessing planning applications with potential effects upon the CBEEMS, and by DCWW whilst discharging its functions as a utility provider. It is not envisaged that the LDO itself will be subject to the provisions of the MoU.

5.3.7 The MoU applies across both the Carmarthenshire and Swansea Council planning authority areas. Given this and that individual developments brought forward under the Project will have to demonstrate that they will not compromise waste water treatment systems, no likely significant effects are expected to any European Site.

DISTURBANCE OF KEY SPECIES DUE TO INCREASED RECREATION

5.3.8 The Project will permit the development of up to 180 residential units; as set out in section 5.2 a net increase in residential development could lead to increased recreational use of European Sites. The assessment in section 5.2 has concluded that this is unlikely to lead to a significant effect in isolation.

5.3.9 Other plans or projects, particularly those which include residential or other accommodation development within close proximity of European Sites, could contribute to increased recreational pressure on European Sites. Any such effects could combine with those from The Project, leading to a significant effect in-combination with other plans and projects.

5.3.10 The HRA of the Carmarthenshire LDP concluded that the GA-2 site allocation would not lead to likely significant effects in relation to disturbance of CBEEMS bird species. This conclusion was reached on the basis of similar factors to the assessment for the Project; namely the limited extent of the CBEEMS that is publicly accessible from Llanelli due to factors such as the coastal location of the Carmarthen to Swansea railway line. Given the distance between the Project and other European Sites (see paragraph 5.2.17), the Project is not expected to generate sufficient recreational pressure to contribute to a likely significant effect in combination with other developments.

5.3.11 As such, no likely significant effects are expected to any European Site.

AIR QUALITY: ROAD TRAFFIC

5.3.12 As set out in Section 5.2, changes in road-traffic related emissions from the LDO are not expected to lead to likely significant effects in isolation.

5.3.13 Other plans and projects in the local area could potentially lead to increases in road traffic, with consequent effects on air quality from the increased number of vehicles. This is not expected to arise for the same reasons as the assessment of the Project in isolation, namely that:

- Increasingly restrictive emissions standards apply to all new vehicles;
- The proportion of the UK vehicle fleet that will comprise ultra-low emissions vehicles is expected to increase, with no new emitting vehicles sold after 2040; and
- Many of the European Sites within the study area are marine or intertidal and hence considered relatively insensitive to air quality effects arising from road traffic.

[9] https://www.gov.uk/government/news/more-drivers-choose-ultra-low-emission-vehicles
[10] Carmarthenshire County Council Local Development Plan (LDP) Habitats Regulations Assessment Volume 1: Main Text / Volume 3: Appendices. November 2014.
[11] https://infrastructure.planninginspectorate.gov.uk/projects/Wales/. Downloaded 11/09/2017

5.3.14 Given the above, no likely significant effects to European Sites are expected to arise in-combination with other plans or projects.

NATIONALLY SIGNIFICANT INFRASTRUCTURE PROJECTS

5.3.15 In addition, no NSIPs have been identified for which there are potential pathways through which the Project may contribute to or cause in-combination effects, with the closest NSIP in excess of 10 km from the LDO area.

IN-COMBINATION EFFECTS SUMMARY

5.3.16 In addition to the absence of potential effects upon the designated sites in isolation the Project also lacks potential to result in in-combination effects upon the designated sites assessed. The Project is not considered likely to increase the significance of any potential effects other projects or plans may have in isolation, nor cause additional effects to be likely.

6 CONCLUSIONS

6.1.1 The Project is not considered likely to result in significant effects upon CBEEMS or any other European sites, alone or in combination with other plans or projects. No potential pathways of effect have been identified following consideration of the Project's potential impacts and the reasons for designation of the relevant sites.

6.1.2 In accordance with the Habitats Regulations 2010 (as amended) the screening decision made by the Competent Authority (Carmarthenshire Council) should be documented and as a matter of good practice relevant statutory bodies (NRW) should be notified. Based on the information provided to inform this screening assessment further assessment of the Project through appropriate assessment and subsequent stages is not considered necessary.

7 REFERENCES

- APIS (2011). Air Pollution Information System Database, available at www.apis.ac.uk.
- Carmarthenshire County Council (2014) Local Development Plan (Adopted December 2014): Written Statement.
- Carmarthenshire County Council, City and Council of Swansea, Natural Resources Wales & Dwr Cymru Welsh Water (2011). Safeguarding the Environment of the Carmarthen Bay and Estuaries European Marine Site (CBEEMS) whilst enabling Social and Economic Development for Communities around the Burry Inlet: Memorandum of Understanding.
- 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.
- Council of the European Union (1992). Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora. Available online: http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31992L0043.
- Council of the European Union (2009). Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. Available online: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:ev0024.
- Countryside Council for Wales (CCW) (February 2009) Carmarthen Bay and Estuaries European Marine Site: Regulation 33 Advice. Available Online: https://www.naturalresources.wales/media/673515/Carmarthen%20Bay%20R33%20Advice%20February%202009.pdf. Last accessed: April 2017
- CCW (2008) Carmarthen Bay Dunes / Twyni bae Caerfyrddin SAC Core Managament Plan including conservation objectives. Available Online: https://www.naturalresources.wales/media/671189/Carmarthen%20Dunes%20-Management%20plan%20English.pdf
- Department for Communities and Local Government (DCLG) 2012. National Planning Policy Framework.
- DETR (1998) European Marine Sites in England & Wales: A guide to the Conservation (Natural Habitats &c.) Regulations 1994 and to the Preparation and Application of Management Schemes.Department of the Environment, Transport and the Regions: UK.
- European Commission (2000). Managing Natura 2000 Sites, the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Available http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision_of_art6_en.pdf.
- European Communities (2007). Guidance document on Article 6 (4) of the 'Habitats Directive' 92/43/EEC; Available: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/guidance_art6_4_en.pdf
- Gill, J.A., Sutherland, W.J. & Norris, K. (1998). The consequences of human disturbance for estuarine birds. RSPB Conservation Review 12: 67-72.
- Her Majesty's Stationary Office (2010). The Conservation of Habitats and Species Regulations 2010/490.
- HMSO (2007). The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007, SI 2007/1842.
- Joint Nature Conservation Committee (JNCC) (2016). SAC and SPA Standard Data Forms and Ramsar Information Sheets. Available online: http://www.jncc.gov.uk/. Accessed: April 2017

- Joint Nature Conservation Committee (JNCC) (January 2017) Inshore and Offshore Special Area of Conservation: Bristol Channel Approaches: SAC Selection Assessment Document. Available online: http://jncc.defra.gov.uk/pdf/BristolChannelApproachesSelectionAssessmentDocument.pdf. Accessed: April 2017
- Liley, D. & Fearnley, H. (2011).Bird Disturbance Study, North Kent 2010/11. Footprint Ecology.
- Thomas, K., Kvitek, R. G. & Bretz, C. (2003). Effects of human activity on the foraging behaviour of sanderlings Calidris alba. Biological Conservation 109: 67-71

8 FIGURES