

Carmarthenshire County Council

Machynys Hotel

EIA Screening Request

4-50

Issue | 22 December 2020

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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1 Introduction

1.1 Purpose

This Screening Report (the ‘Report’) has been prepared on behalf of the Physical Regeneration and Economic Development department at Carmarthenshire County Council (‘the Applicant’) to support a formal request for a Screening Opinion from Carmarthenshire County Council (‘the Local Planning Authority’).

This Screening Opinion is sought to determine whether the proposed hotel development described within this Report is Environmental Impact Assessment (EIA) development, requiring an Environmental Statement to support an outline planning application.

The proposed development seeking outline planning permission, with all matters reserved, is for a new 140-bed hotel and associated works, located on land to the west of Nicklaus Avenue, Machynys, Llanelli, Carmarthenshire.

A Pre-Application Consultation (PAC) is being held on draft application between 11th January 2021 and 8th February 2021. The consultation is being undertaken in accordance with The Planning Applications (Temporary Modifications and Disapplication) (Wales) (Coronavirus) Order 2020. The PAC involves a website where the proposals are explained and supporting information is available to view. The information is available at:

- <https://www.llanelli-waterside.wales/development-opportunities/machynys-hotel/>; and
- <https://www.morlan-elli.cymru/cyfleoedd-datblygu/gwesty-machynys/>

Where appropriate, cross references to the PAC draft application are made within this Report.

1.2 EIA

An EIA may be required to understand significant environmental effects arising from a proposed development. The EIA process, as set out in the Town and County Planning (Environmental Impact Assessment) Regulations (Wales) 2017 (‘the Regulations’), includes:

- a) the preparation of an environmental statement by the person seeking or initiating planning permission;
- b) any consultation, publication and notification required by Parts 5, 9 and where relevant, Part 12 of these Regulations, the 2012 Order or the 2016 Order in respect of EIA development; and
- c) the steps required under regulation 25(1).

The aim of an EIA is to protect the environment by ensuring that a Local Planning Authority (LPA) has full knowledge of the likely significant effects of the proposed development.

The EIA must identify, describe and assess the direct and indirect significant effects of the population and human health, biodiversity, land, soil, water, air and climate, material assets, cultural heritage and the landscape and the interaction of the aforementioned factors.

1.3 EIA Screening

The first stage of the EIA process is to undertake Screening. This is required to determine whether a proposed project falls within the remit of the Regulations, whether it is likely to have a significant effect on the environment and that an EIA is required to support a planning application.

Regulation 6(3) of the Regulations states that a request for a Screening Opinion should be accompanied by:

- A plan sufficient to identify the land;
- Sufficient information to enable the relevant planning authority to identify any planning permission granted for the development in respect of which a subsequent application has been made;
- Information regarding the likely significant effects on the environment which were not previously identified; and
- Such information or representations that the person making the request may wish to provide or make.

It is a requirement of the LPA to determine through Screening whether development would constitute Schedule 1 or Schedule 2 Development as listed within the Regulations. Schedule 1 and Schedule 2 list a series of development types and thresholds where an EIA would be required. The following standards apply for Screening:

- if the proposed development is listed in Schedule 1 an EIA is required in every case; and
- if the proposed development is listed in Schedule 2, the LPA should consider whether it is likely to have significant effects on the environment.

Issues and characteristics that could result in significant effects on the environment to be assessed via EIA are outlined within Schedule 3 of the Regulations, including:

- The characteristics of development;
- The environmental sensitivity of geographical areas likely to be affected by development; and
- The likely significant effects of the development on the environment.

This Report has been prepared to enable the LPA to issue a Screening Opinion. Regulation 6(3) of the EIA Regulations requires that a Screening Opinion is issued within 3 weeks of receipt by the LPA of the request for a Screening Opinion. We trust that provision of the information within this Report, produced in accordance with Regulation 6(3), will ensure these timescales can be met.

2 Proposed development

2.1 Project description

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 levels for the development.

The proposed hotel would not exceed 15 metres in height, and the overall area of new hotel floorspace would not exceed 10,000sqm.

This application follows a previous full planning application (ref. S/22567) 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.

2.2 Site description

The proposed development site is located approximately 1.5 miles to the south-east of Llanelli town centre and overlooking the Burry Inlet and the Millennium Coastal Path to the south and west. A Site Location Plan is provided at Figure 1.

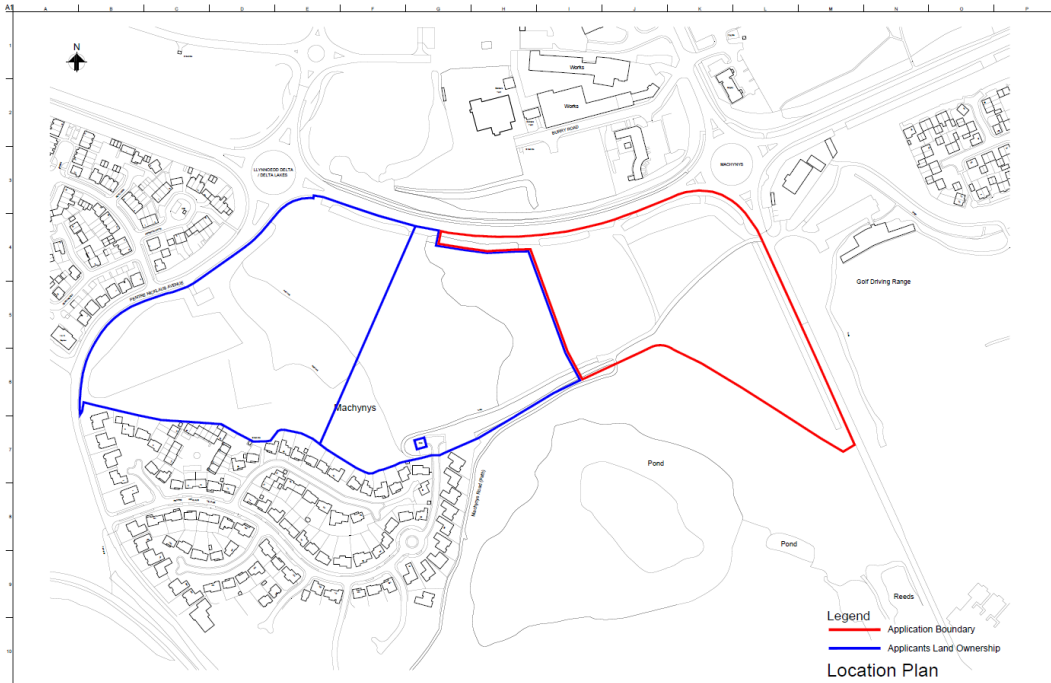
The site is bounded by the B43034 coastal link road to the north, the access road to the Machynys Peninsular Golf & Country Club to the east, the Club House and golf course to the south and the Pentre Niklaus residential development to the west. The northern boundary has a number of landscaped bunds 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. A number of water bodies on the site were created by the extraction of clay for the brickworks.

The proposed hotel would benefit from views to the south and west, across the golf course and to the Burry Inlet beyond. The beaches of the Gower peninsular and the Pendine Country Park are all a short drive away. The hotel is also ideally located for guests who wish to explore the attractions that South and West Wales has to offer.

Subject to ongoing discussions with the local authority highways department and Golf & 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.

Figure 1: Site Location Plan (not to scale)



2.3 Planning designations

The Statutory Development Plan for the application site comprises the Carmarthenshire Local Development Plan (LDP) 2006-2021, which was adopted in July 2006.

A revised Development Plan (LDP2) for Carmarthenshire is currently being prepared. It is anticipated that the LDP2 will be adopted in late 2021. The Revised 2018-2033 Carmarthenshire Local Development Plan Deposit was published for consultation that ended on the 2nd October 2020.

2.3.1 Carmarthenshire Local Development Plan 2006-2021

The site is identified as a Strategic Site (Policy SP4) and the adopted LDP states that proposals in respect of the strategic sites must have regard to the identified uses and the relevant policies of the Plan.

The site is allocated within the adopted LDP for mixed use development, incorporating residential, amenity (Eco park) and commercial leisure in Machynys (Site Reference: GA2/MU3; Policy Reference: EMP5).

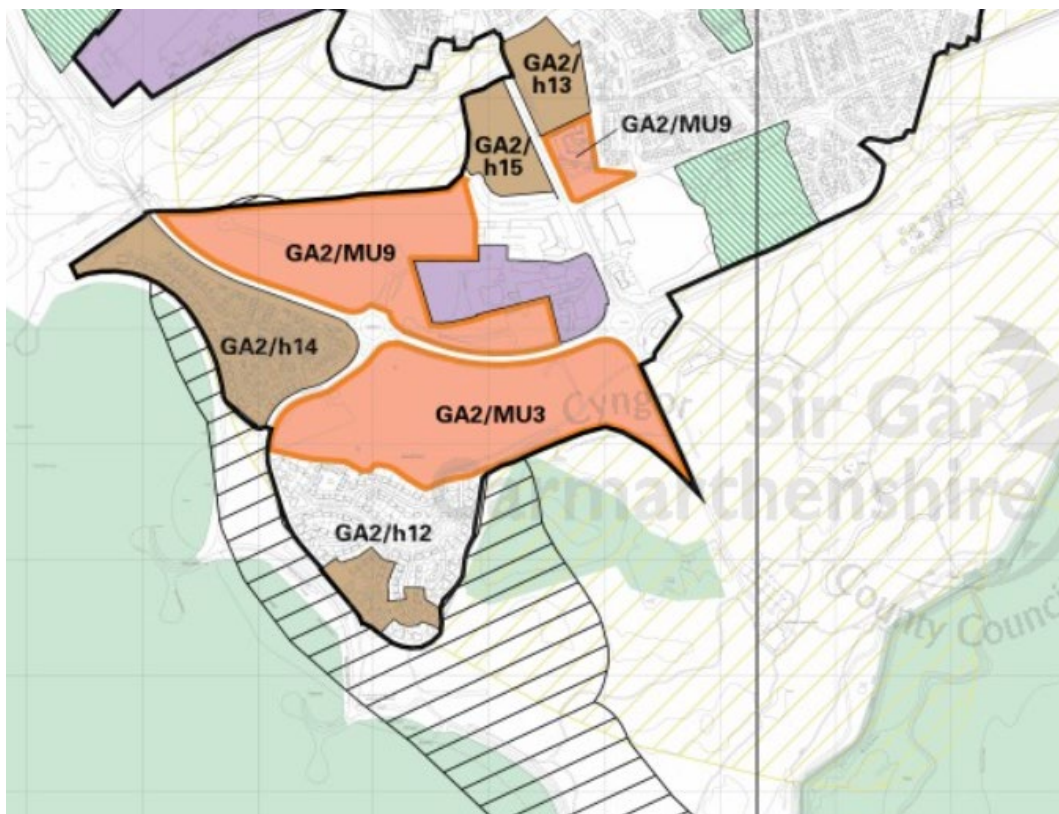
The allocation is referred to as 'Machynys Bund' and its allocation also includes the provision of vital ecological/amenity space and potential mitigation for surface water.

As illustrated within Figure 2, this strategic allocation sits within the context of the surrounding area being identified for ongoing development, with allocations including:

- Machynys (GA2/H12 and GA2/H14 – Residential);
- Delta Lakes (GA2/MU9 – Mixed Use);
- The Avenue (GA2/h15 and GA2/h13 – Residential);
- Employment Area (EMP1) (shown in purple in Figure 2); and
- Recreation / Open Space (REC1) (shown in green hatching in Figure 2).

In terms of other designations, the LDP identifies the site within proximity to a Sand and Gravel Mineral Safeguarding Area (Category 1) (MPP3) (shown in the diagonal brown lines) to the south-east of the site, and the River Loughor and an area of the Golf Course are designated as Areas of International and National Nature Conservation (SP14) (shown in green).

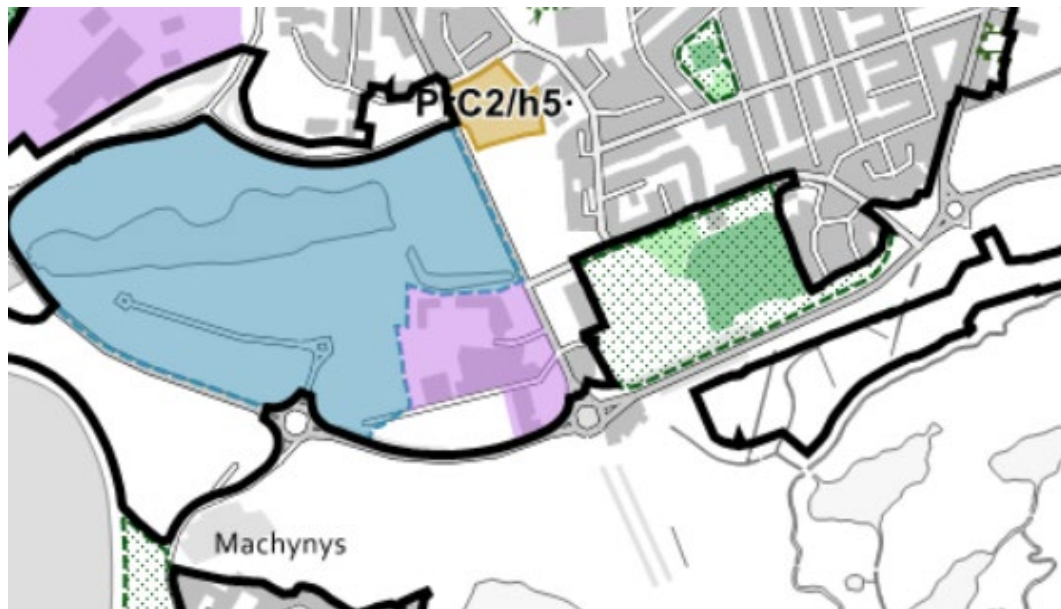
Figure 2: Extract from Carmarthenshire Local Development Plan 2006-2021 Proposals Map



2.3.2 The Revised 2018-2033 Carmarthenshire Local Development Plan Deposit (January 2020)

As shown in Figure 3, the Deposit Plan identifies an Existing Employment Area (Delta Lakes) to the north of the site (shown in purple) and a Strategic Site (Llanelli Wellness & Life Science Village) to the north-west (shown in blue). Parks and Gardens (shown in green hatching), Outdoor Sports Facility (shown in dark green) and Play Space (shown in light green) allocations are situated to the north-east of the site.

Figure 3: Extract from the Revised 2018-2033 Carmarthenshire Local Development Plan Deposit (January 2020) Proposals Map



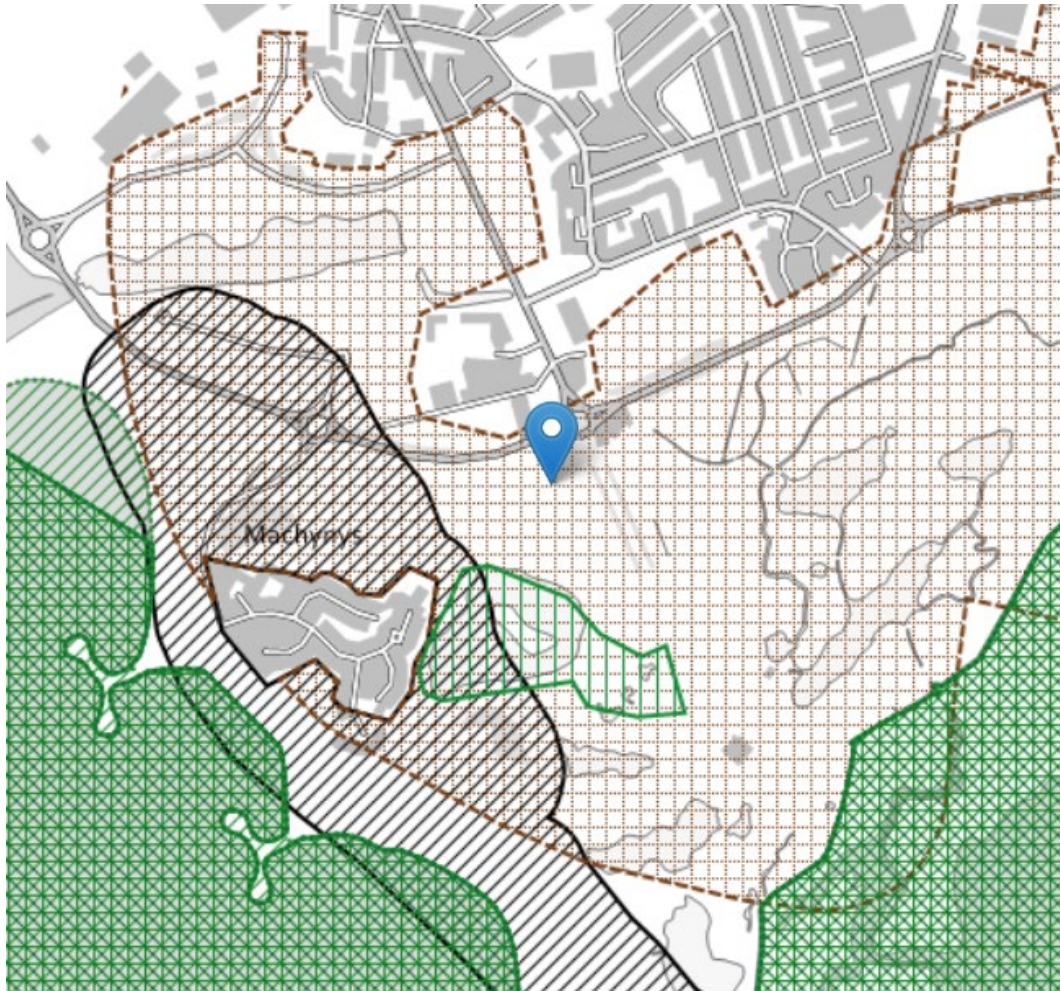
Through the emerging revised Development Plan, the site would be located within the context of environmental designations as are shown in Figure 4.

In summary:

- Within Category 1 Sandstone Safeguarding area (High Specification Aggregate – Sandstone and Igneous Rocks – MR3) (shown in brown hatching in Figure 4);
- Near to a Category 1 Superficial sand and gravel deposits safeguarding area (Sand and Gravel – MR3) (shown in black diagonal lines); and
- Near a Site of Special Scientific Interest (SSSI) (Pyllau Machynys (Machynys Ponds) – SP13) (shown in light green vertical lines).

To the south and west of the site, there is a Ramsar site (Burry Inlet - SP13) (shown in light green hatching); a Special Protection Area (Burry Inlet - SPA) (shown in dark green diagonal lines); a SSSI (Burry Inlet and Loughor Estuary - SP13) (shown in light green vertical lines); and a Special Area of Conservation (Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd - SAC – SP13) (shown in light green diagonal lines).

Figure 4: Extract from the Revised 2018-2033 Carmarthenshire Local Development Plan Deposit (January 2020) Environmental Designations Map



3 Potential environmental effects

3.1 Overview

This section describes the likely impacts of the proposed development upon the environment. Whilst it is the responsibility of the LPA to determine whether an EIA is required, Arup has undertaken a review of the Regulations and provides this Report to help inform the LPA's opinion as to whether an EIA is needed.

The Regulations set out the legislative framework for establishing the need for an EIA to be undertaken and submitted in the form of an Environmental Statement (ES) with a planning application. Schedule 1, 2 and 3 set out the process for identifying whether or not an EIA is required.

Schedule 1 of the Regulations outlines 24 no. projects that would require an EIA. The proposed development would not accord with any of these projects.

It is concluded that the proposed development is not a Schedule 1 project.

To be classified as a Schedule 2 development a proposal must be of a kind described in Schedule 2 of the Regulations and either, located within a 'sensitive area', or any applicable threshold or criterion must be exceeded or met.

Under Schedule 2, the proposed development would fall within category 10 (b) 'urban development projects'. The applicable thresholds and criteria of relevance include:

- (i) The development includes more than 1 hectare of urban development which is not dwellinghouse development; or
- (ii) the development includes more than 150 dwellinghouses; or
- (iii) the overall area of the development exceeds 5 hectares.

The overall development area (based on drawing Illustrative Site Layout Plan, submitted alongside this Screening Request) is 3.67ha and the overall area of new hotel floorspace total would not exceed 10,000sqm.

The proposal is therefore considered likely to trigger the threshold set out in Schedule 2, 10 (b) (i) described above.

On the basis of the size and type of development, the development would be considered Schedule 2 development under the Regulations.

As such, Schedule 3 of the Regulations 'Selection Criteria for Screening Schedule 2 Development' must be considered.

Schedule 3 identifies three broad criteria that should be considered in establishing whether EIA is required for Schedule 2 development. These include the environmental sensitivity of the location, the characteristics of the development, and the characteristics of the potential impact.

In general, EIA will only be needed for Schedule 2 development in three main types of cases:

- a) for major development that are of more than local importance;
- b) for developments that are proposed within a particularly environmentally sensitive or vulnerable locations; and
- c) for developments with unusually complex and potentially hazardous environmental effects.

An assessment as to whether the proposed hotel development would require EIA is set out below. Mitigation measures are included within the assessment and it is expected that the LPA takes these into consideration when assessing the need for EIA.

3.2 Environmental Designations

There are no statutory designated sites within the site boundary.

The following designates sites are located within a 4km radius of the site:

- Pyllau Machynys (Machynys Ponds) Site of Special Scientific Interest (SSSI) is located within approximately 100m of the site to the south. This site has two special features: standing water and swamp; and a dragonfly assemblage. As well as these features this site has other habitats that contribute to the special wildlife interest. These include areas of wet willow woodland and scrub, and flower-rich grassland. This diversity of habitats similarly supports a wide range of species and these too are a key component of the special interest of the site.
- Burry Inlet and Loughor Estuary is located within approximately 550m of the site to the west. This site is the largest estuarine complex within the old West Glamorgan county and Borough of Llanelli. Comprising extensive areas of grazed saltmarsh, sand and mud flats, the area is internationally significant for its wader and wildfowl populations with overwintering totals averaging in excess of 46,000 birds.
- Burry Inlet Special Protection Area (SPA) and RAMSAR (Wetlands of International Importance) is located within approximately 550m of the site to the west. This site is designated for regularly supporting, in winter, over 20,000 waterfowl and for supporting internationally important wintering populations of the following four species of migratory waterfowl: pintail (*Anas acuta*), oystercatcher (*Haematopus ostralegus*), knot (*Calidris canutus*) and redshank (*Tringa totanus*). Additional species cited under the SPA designation are internationally or nationally important wintering populations of the following species of migratory wildfowl: shelduck (*Tadorna tadorna*), teal (*Anas crecca*), wigeon (*Anas penelope*), shoveler (*Anas clypeata*), grey plover (*Pluvialis squatarola*), dunlin (*Calidris alpina*), curlew (*Numenius arquata*) and turnstone (*Arenaria interpres*).

- Carmarthen Bay and Estuaries / Bae Caeryrddin ac Aberoedd is located within approximately 550m of the site to the west. The SAC is designated for its habitats (estuaries, mudflats and sandflats not covered by seawater at low tide, Atlantic salt meadows, Salicornia and other annuals colonising mud and sand, large shallow inlets and bays and sandbanks which are slightly covered by sea water all the time) supporting allis shad (*Alosa alosa*), twaite shad (*Alosa fallax*), river lamprey (*Lampetra fluviatilis*), sea lamprey (*Petromyzon marinus*) and otter (*Lutra lutra*).
- North Dock Dunes Local Nature Reserve is located within approximately 1km of the site to the north-west.
- Gower Area of Outstanding Natural Beauty (AONB) is located within approximately 1.5km of the site to the west at its closest point. The primary objective for the Gower AONB designation is for the conservation and enhancement of its natural beauty.
- No SINC's or other non-statutory sites have been identified.

As set out in the draft Statement to Inform Appropriate Assessment (Habitat Regulations Assessment), there are not anticipated to be any effects on the Burry Inlet SPA and Ramsar site, Carmarthen Bay and Estuaries SAC or any other European Designated sites.

A Preliminary Ecological Appraisal has been undertaken, and an Ecological Impact Assessment report is to be submitted with the outline planning application to assess potential impacts upon the above designations and associated habitats.

The draft Ecological Impact Assessment report outlines that no protected species were identified onsite and that potential effects were identified in terms of disturbance and potential entrapment of otter could be mitigated via a Construction Environment Management Plan, an Ecological Management Plan and biodiversity enhancement measures.

3.3 Landscape

Whilst the site is located within proximity to a SSSI (Pyllau Machynys (Machynys Ponds), the site itself is not subject to any nationally or locally important landscape designations. There are no Tree Preservation Orders on site, however an arboricultural report could be provided as part of any future reserved matters application to assess any impacts upon trees and hedgerows. Replacement planting would be sensitively incorporated into development to minimise visual impact.

A Planning, Design and Access Statement (PDAS) will be submitted with the outline planning application including illustrative information regarding how landscaping could be incorporated into the development and to demonstrate how the proposed development would be acceptable from a landscape perspective. A draft PDAS supports PAC.

A Landscape Appraisal and Landscaping scheme would be submitted as part of any future reserved matters application.

3.4 Historic environment

An Archaeological Desk-Based Assessment was undertaken in 2006 by Cambria Archaeology for Llanelli Coast Joint Venture in support of full planning application (ref. S/22567). The assessment included consideration for the application site, referred to as Machynys East. The site boundary includes the site of Machynys Brickworks Llanelli (NPRN: 40762); Machynys Brickworks (PRN DAT9037); and Machynys (PRN DAT31419).

In June 2007, an archaeological field evaluation was carried out in support of full planning application (ref. S/22567). The site of the proposed development was investigated.

The assessments show no conclusive evidence of the brickworks structure. The amount of brick rubble suggests that it had been completely demolished prior to site investigation. Two concrete surfaces were identified at the site and have been assessed to be clearly a later reuse of the site, although their function is unknown.

An Archaeological Watching Brief could be undertaken during construction to ensure the protection and recording of previously unidentified heritage assets.

3.5 Pollution

3.5.1 Noise

The site is not located within a Noise Action Plan Priority Area (NAPPA). The closest NAPPA to the site is located within the centre of Llanelli to the north of the site.

There would be some increase in noise associated with the use of the site. The proposed development would result in an increase in the number of people in the area and the number of vehicles visiting the site.

Noise arising from construction would be minimised through implementation of appropriate mitigation measures set out in a site-specific Construction Environmental Management Plan (CEMP), secured at reserved matters stage. An Outline CEMP will be provided as part of the outline planning application and a draft is provided in support of PAC. It sets out that measures to protect sensitive receptors should be implemented at construction stage.

A significant effect on the environment as a result of noise and vibration would not be expected.

3.5.2 Lighting

Plans would be submitted alongside the reserved matters application detailing the approach to lighting. Given that bats are known to be present in the wider area, an ecologically sensitive approach to lighting could be proposed.

Night-time working during construction will be avoided where possible to reduce the need for lighting. Any construction lighting would seek to avoid sensitive habitats. Details of the approach to minimise the effects of lighting would be included within a CEMP, secured at reserved matters stage.

A significant effect on the environment as a result of light pollution would not be expected.

3.5.3 Air quality

The site is not located within an Air Quality Management Area (AQMA). The nearest AQMA (Llanelli AQMA) is approximately 1.8km to the north of the site and has been designated in relation to Nitrogen dioxide (NO₂).

The proposed development would not generate any significant emissions and it is considered that the potential for effects is limited to the construction stage.

Emissions associated with the construction would be minimised through the implementation of appropriate mitigation measures which would be included within a CEMP, secured at reserved matters stage. An Outline CEMP is to be provided as part of an outline planning application and a draft is provided to support PAC. This includes principles such as dust management, enclosing spaces that may produce dust and cleaning using wet methods to dampen down dust.

It is considered that a significant effect as a result of air pollution is highly unlikely.

3.5.4 Waste

It is considered that there are sufficient measures in place to manage the production of waste and ensure there are no significant environmental effects. A waste management plan could be provided as part of a future reserved matters application.

3.6 Transport and highways

The site is located on the Machynys Peninsula to the immediate south of the B4304 Coastal Road.

The site is bounded to the north by the B4304 Coastal Road, to the east by the access road to Machynys Peninsula Golf Course, to the south by the Golf Course itself and to the south-west by Machynys Mound (with the Pentre Nicklaus residential development beyond).

Machynys Peninsula also accommodates the existing Pentre Nicklaus Residential Development, which is accessed via the newly constructed roundabout junction on the Coastal Road. The Machynys West and Delta Lakes developments are also accessed via this modified junction.

Access to or from the proposed development site would be via the B4304 / The Avenue (New Dock Road) and/or the Nicklaus Avenue (Golf Club access) road. Access is to be finalised at reserved matters stage, however both junctions have been tested as part of a Transport Assessment, to be submitted as part of the outline planning application and a draft is provided to support PAC.

The Transport Assessment demonstrates that the proposed development would be acceptable from a transport and highways perspective. This includes a Framework Travel Plan to contribute towards promoting sustainable travel methods.

The Transport Assessment forecasts a relatively low vehicle trip rate and no significant impacts on the local highway network have been identified.

It is considered that the proposed development would not result in a significant impact upon the transport network and that impacts can be appropriately mitigated by careful access design and supporting management plans.

3.7 Ecology and habitats

Ecological surveys have been carried out during December 2020, with findings supplemented by a review of previous surveys undertaken between 2004 and 2020. The findings have been presented within an Ecological Impact Assessment Report (EcIA) which will be submitted in support of the outline planning application and is provided to support PAC.

Table 1 contains a review of previous ecology survey reports relevant to the site.

Table 1: Previous ecology survey reports

Survey Report	Methodology	Results
2007 Ecological Assessment Report ¹	An Extended Phase 1 Habitat Survey of the site was undertaken in 2004. Breeding bird surveys were also undertaken in 2004. The phase 1 survey was then updated in May, June & July 2007.	The 2007 report referenced breeding bird surveys undertaken in 2004, during which breeding territories were identified for lapwing (<i>Vanellus vanellus</i>), linnet (<i>Linaria cannabina</i>) and skylark (<i>Alauda arvensis</i>), with blackbird (<i>Turdus merula</i>), dunnock (<i>Prunella modularis</i>), greenfinch (<i>Chloris chloris</i>), meadow pipit (<i>Anthus pratensis</i>),

¹ Pryce Consultant Ecologists (2007). Machynys East and Machynys Central Development Sites Ecological Assessment.

Survey Report	Methodology	Results
		<p>stonechat (<i>Saxicola rubicola</i>), whitethroat (<i>Sylvia communis</i>) and willow warbler (<i>Phylloscopus trochilus</i>) also recorded breeding within the site.</p> <p>Habitat on site was considered unsuitable for otter. No evidence of water vole was identified, but the ditch on site was considered to provide suitable habitat due to the variety of foraging species, though it was largely dry at the time of survey. It was considered likely that water vole would colonise the ditch if the channel was deepened to hold water permanently.</p> <p>No reptiles were identified during the survey, but habitat was considered suitable. Where the ditch was wetter, it was considered suitable for breeding common frog (<i>Rana temporaria</i>).</p> <p>The site was not considered to be suitable for supporting badgers, dormice or roosting bats.</p>
2013 Habitats Regulations Assessment ²	A screening assessment was undertaken to assess the likelihood of significant effects upon the international designated sites within 10km of the Machynys Central site immediately west of the site.	<p>The following potential effects were identified:</p> <ul style="list-style-type: none"> • Pollutants or high sediment load in surface water run-off from active construction areas; • Disturbance to species caused by increased use of the

² Arup (2013). Machynys Central Residential Development and Eco-Park Development. Statement to Inform a Habitats Regulations Assessment.

Survey Report	Methodology	Results
		<p>site, construction activities etc;</p> <ul style="list-style-type: none"> • Noise and vibration disturbance to species; and • Physical restrictions to species movements. <p>The screening assessment concluded that there were no likely significant effects, either alone or in-combination with other plans and projects, resulting from the proposed development at Machynys Central.</p>
2013 Reptile Survey Report ³	37 artificial refugia were laid across the site and the Machynys Central site and checked on five occasions during late September and the first week of October 2012 during mild weather conditions.	<p>No reptiles were identified within the site. However, autumn 2012 was an unseasonably wet period and this may not be characteristic of the site in normal conditions.</p> <p>It was considered that the habitats within the site would remain largely suitable for reptiles in normal dry conditions and it cannot be ruled out that they might colonise the site at some point in the future, particularly in drier conditions.</p>
2013 Water Vole Survey Report ⁴	A water vole survey was undertaken of the ditches on site and of the water bodies within Machynys Golf Course in August 2013.	Potential signs of water vole (feeding stations and runs) were identified within the largest pond on the golf course. However, no droppings or burrows were identified.

³ Arup (2013). Machynys Residential Development Masterplan. Reptile Survey Report.

⁴ Arup (2013). Machynys Central Masterplan. Water Vole Survey Report.

Survey Report	Methodology	Results
		<p>It was considered that water voles were not present within the ditch on site at the time of survey. Due to the lack of water within the ditch, growth of scrub and the availability of abundant better quality habitat within the immediate surroundings it was also considered that water voles were not likely to utilise the ditch to forage on a regular basis.</p>
<p>2015 Water Vole Survey Report⁵</p>	<p>A water vole survey was undertaken of the ditches on site and of the water bodies within Machynys Golf Course in October 2015.</p>	<p>Signs of water vole were identified again on the large golf course pond (droppings, feeding stations and a nest). However, no burrows were identified.</p> <p>No water vole field signs were noted within the ditch on site. Due to the limited water level and the presence of dry sections within the ditch, along with overgrown scrub, it was considered that the ditch had negligible potential to support water voles. Evidence of pollution / contamination was also identified within this ditch, indicated by an oily water surface layer. In addition is less likely that water vole would utilise this ditch to burrow or forage in due to availability to more favourable habitats within the adjacent golf club waterbodies.</p>
<p>2017 Ecological Survey Update Report⁶</p>	<p>An Extended Phase 1 Habitat Survey of the site was undertaken in April 2017.</p>	<p>There had been little change in the habitats present within the site compared to the</p>

⁵ Arup (2015). Machynys Water Vole Survey Report.

⁶ Arup (2017). Machynys Eco Park. Ecological Survey Update.

Survey Report	Methodology	Results
		previous studies. Some of the areas of bramble have been cleared and there was evidence of some spray treatment of Japanese knotweed close to the existing roads.
2018 Water Vole Mitigation Strategy and Method Statement ⁷	At this time, it was proposed that the ditches on site would be lost to the development. Therefore, a construction mitigation strategy was written in 2016 and revised in 2018 after consultation with CCC and NRW, due to the likely presence of water voles within habitats adjacent to the site.	Proposals included a pre-construction survey of the ditch for water voles. If burrows were found then further consultation would be required, since no evidence of water vole has ever been found within the ditch. Displacement by directional strimming of vegetation and then a destructive search were proposed, prior to removal of the ditch. Habitat connectivity corridors were recommended within the site and from the site to the golf course, as well as off-site habitat creation for water voles and on-site planting for water voles.
2018 Ecological Baseline Report (for the Llanelli Wellness and Life Science Village) ⁸	A reptile survey and water vole survey, of which the survey area included the site, were undertaken as part of the ecological assessment for the Llanelli Wellness and Life Science Village, just north of the B4304. The reptile survey was undertaken between September and October 2016 and the water vole survey was undertaken in October 2016.	The water vole survey of the ditch found no evidence of water voles. The ditch was assessed as having negligible potential for water voles as it appeared to be dry for the majority of the year and contains no aquatic or emergent vegetation. The ditch had been colonised by scrub and willow. Both common lizard and slow worm were recorded within the site. Both adult and sub-adult common lizard were

⁷ Arup (2018). Machynys Central Residential Development, Llanelli. Water Vole Mitigation Strategy and Method Statement.

⁸ Arup (2018). Llanelli Wellness and Life Sciences Village, Delta Lakes. Ecological Baseline Report.

Survey Report	Methodology	Results
		recorded with a maximum count of 11 animals.
2020 Ecological Appraisal (for the Machynys Central Housing & Eco Park) ⁹	An Extended Phase 1 Habitat Survey was undertaken and riparian mammal surveys of the ditches on site and of the water bodies within Machynys Golf Course were undertaken, including a camera trap survey of the ditch running along the southern boundary.	<p>Grassland and scrub habitats on site were considered suitable for common reptiles and amphibians (a common lizard was seen on site) and invertebrate communities.</p> <p>Trees and scrub were considered to provide suitable habitat for common nesting bird species and limited foraging/commuting habitat for bats. No suitable roosting habitat for bats was identified.</p> <p>Evidence of otter was identified within the golf course, however the habitats on site were considered sub-optimal. Potential evidence of water vole was identified within the golf course. No evidence of water voles was found on site and none were recorded on the cameras. The ditch on site was completely dry with little riparian vegetation and so considered sub-optimal for water vole. It is considered that water vole are absent from site.</p> <p>Invasive non-native plant species (Japanese knotweed and Japanese rose (<i>Rosa rugosa</i>)) were identified on site and montbretia (<i>Crocsmia x crocosmiiflora</i>) was identified at the golf course.</p>

The findings of the Extended Phase 1 Habitat Survey are presented within the EcIA, and are summarised as follows:

⁹ Arup (2020) Machynys Central Housing and Machynys Eco Park Ecological Appraisal Report

- a) One tree was identified on the site, and it has been considered as providing low bat roost suitability. The woodland edge and scrub habitat within the site were also considered to likely provide limited habitat for foraging and commuting bats.
- b) The site provides suitable habitats for badgers however the site is not well connected to other wooded habitat. No setts or other signs of badger were identified during the survey.
- c) Fox scats were identified within the grassland and a fox hole was identified. A fox hole was also identified in a previous survey.
- d) No evidence of dormice have been found on site or recorded in previous surveys. It is considered that the lack of connectivity to suitable habitat in the wider landscape mean that the site is not considered suitable for dormice.
- e) Previous surveys have shown evidence of otters adjacent to the site, and there have been potential feeding signs evidence on the application site in previous recent surveys.
- f) The potential for water voles on the site is limited due to the close-mown grass of the adjacent golf course likely acting as a barrier to dispersal.
- g) The woodland, scrub, hedgerow and grassland habitats are likely to provide nesting habitat for a range of bird species. An old birds nest was identified within scrub habitat on site. In addition, more open areas with short grassland swards could support ground nesting species such as skylark or lapwing, although the site is likely to be too disturbed by dog-walkers and golfers. Various species were identified during the December 2020 survey.
- h) Reptiles have been recorded within the site and adjacent. Areas of scrub and wetter habitats to the west of the site, such as the marshy grassland, and the waterbodies in the south provide suitable habitat for other common reptile species including slow-worm and grass snake. A compost heap of cut grass (TN4) was present on site, which could provide suitable refuge for reptiles.
- i) Previously there have been records of amphibians close to the site. No amphibians were observed during the survey. The mosaic of grassland, scrub, dry ditches and woodland offers moderate quality terrestrial habitat providing a foraging and shelter resource for amphibians that may be present in local waterbodies. However, the suitability of the five identified waterbodies for common amphibian species is limited due to the close-mown grass of the adjacent golf course likely acting as a barrier to dispersal. A compost heap of cut grass (TN4) was present on site, which could provide suitable refuge for common amphibians.
- j) A relatively large range of flowering species were present to the west of the site, which could support a good invertebrate population.

- k) No Section 7 plant species were identified on site during the survey. Grassland and scrub habitats on site are suitable for hedgehog, particularly towards the south and west near residential gardens. It is considered likely that this species is present on site. A compost heap of cut grass (TN4) was present on site, which could provide suitable refuge for small mammals.
- l) Three invasive non-native plant species were recorded to the west and south of the site earlier in 2020. These were: multiple stands of Japanese knotweed of varying sizes (including one stand adjacent to one of the waterbodies to the south which appeared to have been treated); two stands of montbretia (*Crocsmia × crocosmiiflora*); and one stand of Japanese rose (*Rosa rugosa*). American mink scats were also identified within the golf course. One stand of montbretia (TN1) was identified on site during the December 2020 survey.

It is considered within the EcIA that no further species-specific surveys are required at the site, except for pre-construction checks for badger, otter, water vole and invasive non-native plant species.

It is considered that with the mitigation measures proposed within the EcIA, it would be unlikely that the proposed development would have a significant negative impact upon the ecological receptors on site and in the local area.

The proposed development would include a new pond, a new reed and associated planting that would connect the site to habitats in the wider area. Additional biodiversity enhancement measures are also proposed, including but not limited to the installation of bird and bat boxes on site, log / brush piles on site and the consideration of green roofs for the hotel.

3.8 Land contamination and geo-environmental considerations

A Geo-environmental and geotechnical desk study has been carried out for the proposed development and will be provided in support of the outline planning application. A draft is provided to support PAC. Further investigations have been recommended for a more comprehensive understanding of the geotechnical constraints of the site.

The primary sources of contamination on the site are considered to be associated with the site's industrial history, the made ground present under the site and the backfilling of the reservoir (north western part of the site). See Table 2.

Table 2 Potential Sources of Contamination

Potential Source	Potentially Contaminative Materials
On Site	
Made Ground within site area related to historic use as Machynys Brick Works (including contaminated perched groundwater within the made ground)	Likely to have been imported during industry construction. Asbestos, Metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn), sulphate, phenol, petroleum and polycyclic aromatic hydrocarbons, volatile compounds and cyanide considered potential contaminants. Potential for leachable contaminants Source of ground gas (methane, carbon dioxide)
Historic Railway and tram lines (across site area)	Hydrocarbons (including petroleum hydrocarbons and polycyclic aromatic hydrocarbons) fuel oils, lubricating oils, greases, solvents, paints, heavy metals, asbestos, phenols and creosote considered likely contaminants. Possible historic herbicides used to control growth on tracks and sidings.
Existing bunds on the western and northern part of the site	Materials forming the bunds are of unknown nature and origin. Asbestos, Metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn), sulphate, phenol, petroleum and polycyclic aromatic hydrocarbons, volatile compounds and cyanide considered potential contaminants. Potential for leachable contaminants.
Backfilled reservoir (partially under the site in the north western part)	Based on available ground investigation information the historic reservoir was infilled with materials comprising silty sandy gravel to sandy gravelly clay. Gravel is of brick, concrete, metal, slag, clinker and industrial waste i.e. plastic, pipes etc. (thickness of at least 2m). Source of ground gas (methane, carbon dioxide)
Alluvium with peat bands	Natural soil strata with a high degradable organic content. Source of ground gas (methane, carbon dioxide)
Off Site	
Engineering works and other industrial units including shell factory (west off-site)	Specific activities undertaken within historic works units (iron, steel and tin plate works as part of "Burry Works" and Llanelli National Shell Factory). Potential contaminants therefore considered to be: Asbestos, metals, sulphate, pH, total petroleum hydrocarbons, polycyclic aromatic hydrocarbons, semi volatile and volatile organic compounds, PCBs, phenol and cyanide.

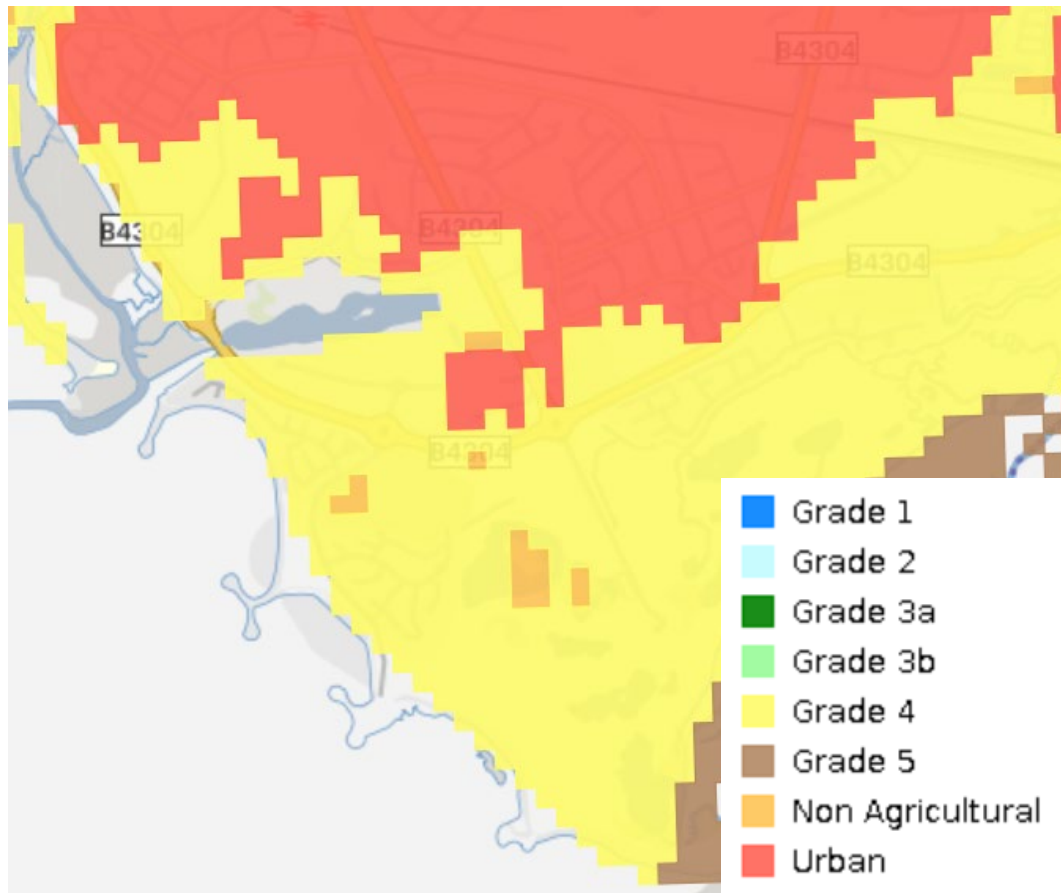
The desk study concludes with a number of considerations and constraints for the site's development in terms of land contamination and other geotechnical / geo-environmental issues. The full list of considerations is contained within the desk study, submitted alongside this Screening Request, but include:

- a) Buried obstructions are expected to be encountered from the historic use of the site. These include disused building foundations (possibly including piles as well as shallow foundations and substructure), disused railways and infrastructure.
- b) As part of the development the ground levels in the hotel, car park and hardstanding areas will need to be raised due to the risk of flooding within the area surrounding the site.
- c) Construction workers are likely to be exposed as part of the development works, during earthworks and enabling works. However, exposure duration will be short term only. Evidence of hydrocarbon contamination has been identified within the perched groundwater within the made ground. This may be encountered as part of the works. The use of PPE and good hygiene practice throughout earthworks and construction phase is considered sufficient to mitigate the risks presented.
- d) Further information is required to ascertain the full thickness and consolidation characteristics of the estuarine alluvium across the site and to provide more robust data on soil, groundwater and gas contamination, for subsequent risk assessments to be undertaken.

3.9 Agricultural Land Quality

The Predictive Agricultural Land Classification Map identifies the site to be within a grade 4 area which is poor quality agricultural land. Urban land is located to the north of the site and pockets of non-agricultural land to the south and south-west. This is shown in Figure 5 below.

Figure 5 Agricultural Land Classification Map



3.10 Flood Risk / Drainage

The site is situated within Flood Zone C1 (served by significant infrastructure, including flood defences, as shown in Figure 6). Flood Zone C1 is used to indicate that development can take place subject to application of justification test, including acceptability of consequences.

A Flood Consequences Assessment has been undertaken and will be submitted as part of the outline planning application. A draft is provided in support of PAC.

The assessment has recommended that the site is raised to a minimum development level of 6.87m AOD. The post-development results confirm that with this, the site would remain flood free in the event of a potential breach in the existing defences for events up to and including the 1 in 1000-year tide return period, including climate change estimated for the year 2120. The assessment concludes that the risk of flooding for the proposed development is acceptable in accordance with TAN 15, and that there is no significant change to the flood risk of third parties as a result of the development.

A Drainage Strategy has also been undertaken and will be submitted as part of the outline planning application. A draft is provided in support of PAC.

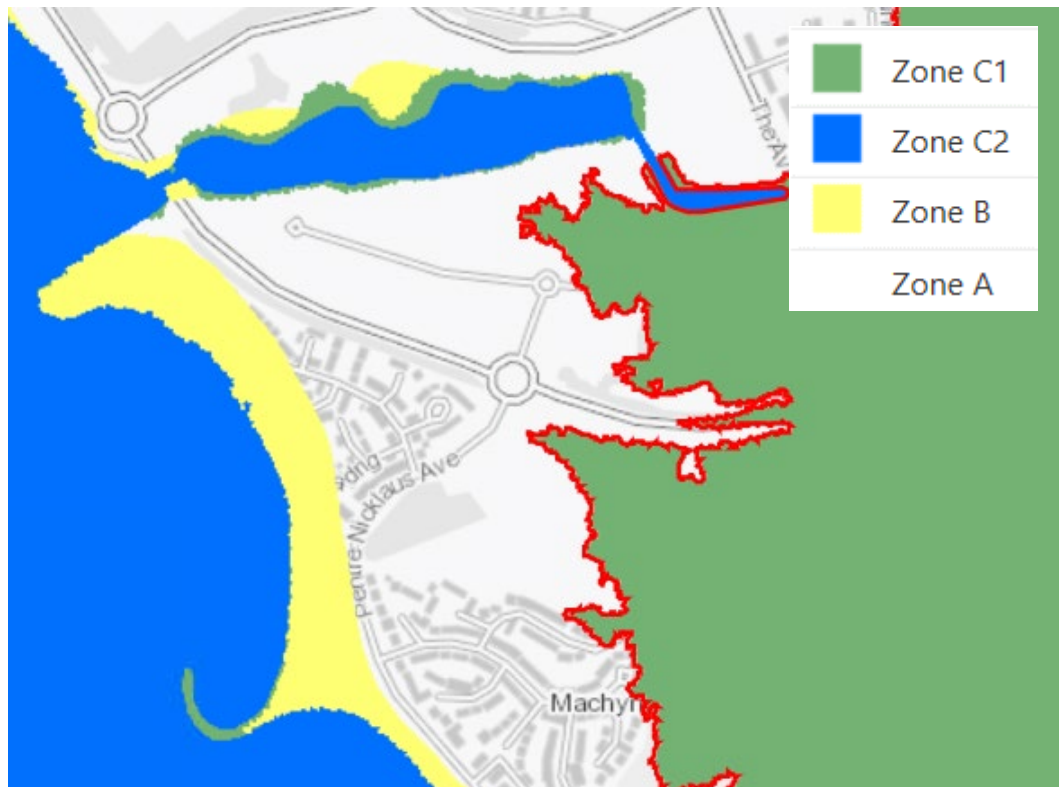
It includes proposed strategies for the supply of potable water and drainage. The point of connection for the foul drainage to the DCWW network is to the 150mm sewer to the south west of the site, adjacent to the existing Nicklaus Coast Villages Sewerage Pumping Station. DCWW are still to confirm that the proposed neighbouring residential development has been included in their assessment. It is yet to be confirmed by DCWW.

Within the Drainage Strategy, sustainable drainage measures are proposed to deal with surface water discharge. These include rain gardens, swales, permeable paving and an attenuation pond to treat and attenuate flows before discharge into the existing watercourse to the south of the site.

It is not considered that the development would have any significant implications for flood risk or drainage that cannot be mitigated through surface water management design.

From 7th January 2019, all new developments of more than 1 dwelling house or where the construction area is 100 square meters or more, will require sustainable drainage systems (SuDS) for surface water. The SuDS must be designed and built in accordance with Statutory SuDS Standards and an application will be made to Carmarthenshire County Council acting in its SuDS Approving Body (SAB) role, before any construction work begins.

Figure 6 Flood Zones



4 Screening Schedule 2 Development

As per Schedule 3, the following criteria should be considered in order to help establish whether an EIA is required under Schedule 2:

- the environmental sensitivity of the location;
- the characteristics of the development; and
- the characteristics of the potential impact.

The application site is not considered to be an environmentally sensitive location, as there are no national or international designations onsite and it is located adjacent to the existing urban area of Llanelli.

The proposed development would be a high-quality scheme which takes account of existing site constraints and opportunities in terms of the environment.

The potential environmental effects of the proposed development have been considered, in order to assess the potential need for the planning application to be accompanied by an Environmental Statement. Those are presented in section 3 of this Report.

The characteristics of the proposed development mean that it would not result in any significant effects, with appropriate mitigation measures.

It would not have a significant adverse impact on the use of natural resources, and it would be unlikely to give any significant rise to environmental pollution. The proposed development is unlikely to have any impacts beyond those of local importance with any environmental effects limited to the immediate area in terms of highways, pollution and visual impact.

The proposed development would **not** constitute either of the following:

- a) major development that is of more than local importance;
- b) development that is proposed within a particularly environmentally sensitive or vulnerable location;
- c) development with unusually complex and potentially hazardous environmental effects.

Based on the assessment of environmental effects, **we consider that an EIA is not required.**

We trust that the LPA has sufficient information in order to determine the application for a screening opinion within the statutory period of 21 days as set out in the EIA Regulations.