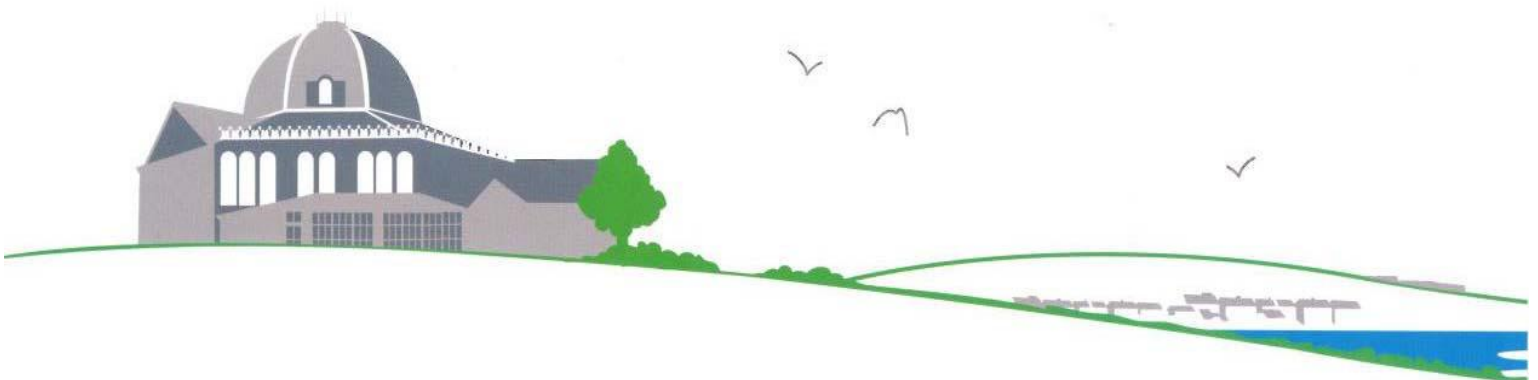




KIER CONSTRUCTION LTD  
ROYAL ALEXANDRA HOSPITAL RHYL  
ECOLOGICAL ASSESSMENT



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# KIER CONSTRUCTION LTD

## ROYAL ALEXANDRA HOSPITAL RHYL

### ECOLOGICAL ASSESSMENT

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Penny Anderson Associates Limited  
'Park Lea'  
60 Park Road  
Buxton  
Derbyshire  
SK17 6SN

Project Manager  
Gerard Hawley BA (Hons), MSc, DipPSE (Dist), MCIEEM

Authors  
Helen Hamilton BSc (Hons), MSc, CEnv, MCIEEM  
Gerard Hawley

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*This project has been undertaken in accordance with PAA policies and procedures on quality assurance.*

Signed: \_\_\_\_\_



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1	Summary Relevant Protected Species Legislation
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3	Desk Study Data
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# 1. INTRODUCTION

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- 1.1 Penny Anderson Associates Ltd (PAA) was commissioned by Kier Construction Ltd to carry out an ecological assessment of the site of the Royal Alexandra Hospital, Rhyl, North Wales (grid reference: SJ 014 820) hereafter referred to as the 'site', where there is a proposal for re-development. A new hospital is planned for the site although the façade and the chapel will be preserved.
- 1.2 The ecological assessment included a desk study for the site and the area within 1km of its centre. The desk study examined all data records for protected sites, habitats and species held by Cofnod Environmental Information Centre, the North Wales biological records centre, and other data repositories, in order to ecologically characterise and contextualise the site within the surrounding area.
- 1.3 This report details the results of a desk study and site visit, and evaluates the results in the context of the proposed re-development of the site, making recommendations for any further survey work as required.

## Site Description

- 1.4 The hospital is a Grade II listed Victorian building occupying a block of land between Alexandra Road and Grovenor Road with the front and entrance facing the sea front. Throughout its history it has expanded in a piecemeal fashion with the central block and west wing opened in 1902 and the east wing in 1910. It is built on a pavilion plan of brick with stone dressings and plain slate-tiled roof. In addition to the main hospital there are five other buildings separated by hardstanding and amenity grassland.

## Legislative Context

- 1.5 The text below provides a brief summary of the legislation in relation to the species or species group in England and Wales. The original Acts, Regulations and any amendments should be referred to for the precise wording.
- 1.6 A range of international and national legislation has been established in the UK to protect important nature conservation sites and priority species. At the international level, European Union (EU) Directives require individual member states to implement their

administrative changes following devolution, there is still an underlying objective of protecting and enhancing a range of priority species and habitats, often still based on the objectives and classifications of the original UK Biodiversity Action Plan. *Biodiversity 2020* is England's national biodiversity strategy. Building on the *Natural Environment White Paper* published in 2011, this provides a means of delivering the international and EU commitments to biodiversity. Under Biodiversity 2020, Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006.

1.9 Finally, the National Planning Policy Framework (NPPF 2019) provides guidance for local authorities on the content of the Local Plans and is a material consideration in determining planning applications. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks. Furthermore, the NPPF also states that any planning proposals for which significant negative impacts on biodiversity cannot be avoided, mitigated or compensated for should be refused. The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services; and
- minimising impacts on biodiversity and providing net gains for biodiversity including establishing coherent ecological networks that are more resilient to current and future pressures.

1.10 To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration

- 1.14 Commonly introduced Schedule 9 species include non-native cotoneaster species, specifically, small-leaved cotoneaster (*Cotoneaster microphylla*)<sup>1</sup> and wall cotoneaster (*C. horizontalis*), Himalayan balsam (*Impatiens glandulifera*) and Japanese knotweed (*Reynoutria japonica*).

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<sup>1</sup> Plant names follow Stace 2019 where possible

## 2. METHODS

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### Desk Study

- 2.1 The desk study consisted of a consultation exercise to gather local and site-specific ecological information, which was used to help identify species and habitats that could be present on site and nearby areas that could potentially be affected by the proposals. A request for details of protected species and wildlife sites within 1km of the centre of the site was made to Cofnod, the North Wales biological records centre. In addition, the Multi Agency Geographic Information for the Countryside (MAGIC)<sup>2</sup> website was used to identify the location of wildlife sites and protected species.

### Fieldwork

- 2.2 A daytime site visit was carried out by Principal Ecologist Helen Hamilton (MCIEEM<sup>3</sup>) on 29<sup>th</sup> April 2020. All methods, equipment and assessment criteria were consistent with current good practice guidelines for each survey type and the surveyor was competent for the assigned tasks based on the CIEEM competency framework (CIEEM 2013a and CIEEM 2013b).
- 2.3 Further details of survey methods and assessment criteria are provided under the individual sub-headings below.

### Phase 1 Habitat Survey

- 2.4 The survey followed the standard JNCC (2010) technique for classifying and mapping British habitats based on the identification of individual plant species. The plant species present within the site and their relative abundances are listed in Appendix 2, which shows both common and scientific names according to Stace (2019). Common names only are referred to in the text. The relative abundance of each plant species is described using the 'DAFOR' scale (where D = dominant; A = abundant; F = frequent; O = occasional; R = rare).
- 2.5 The extent of each habitat type was mapped in the field, with target notes to highlight any features of particular ecological interest.

### Scoping for Protected/Notable Species

- 2.8 Buildings and trees were inspected from ground level and the types and locations of any potential roost features (PRF) that appeared to provide sufficient shelter for bats were recorded. On buildings, example PRF include slipped tiles, gaps at eaves, missing mortar, lifted lead flashings, and in trees, woodpecker holes, knot holes and crevices in deadwood or beneath loose bark. Any potential indication of bat presence that could be seen was also recorded, for example bat droppings beneath PRF or scratch marks at the entrance. Each PRF was categorised either as Low, Moderate or High potential for roosting bats and, using this data, each tree was assigned to one of five categories based on its most suitable feature (Table 1 below).
- 2.9 The habitats within the site and immediately adjacent areas were also considered for their general suitability for commuting and foraging bats in order to place the site in the context of its surroundings, as this can have a bearing on the likelihood of a roost being present.
- 2.10 The assessment of suitability was based on the broad criteria outlined in Tables 1 and 2 (Collins 2016), combined with the professional judgement and experience of the surveyor in recognising suitable habitat features and field signs of bats. The Bat Tree Habitat Key (Andrews and Gardener 2016) was also used for reference on features in trees.

**Table 1 Bat Potential Roost Feature Assessment Criteria**

Suitability	Description of Roosting Habitats
Negligible	No features likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically, but does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats. A tree of sufficient size to contain potential roost features but none seen from the ground or only those with very limited suitability. (i.e. suitable for occasional day roosting but unsuitable for maternity or hibernation roost).
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost type of high conservation significance. (i.e. suitable for day roosting but unsuitable for maternity or hibernation roost).
High	A structure or tree with one or

**Table 2 Bat Habitat Suitability Assessment Criteria**

Suitability	Description of Commuting / Foraging Habitats
Negligible	No habitat features likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to known roosts.

## Limitations

### Desk Study

- 2.11 It is important to note that the desk study results provide an indication of the species present in and around the site, but do not confirm current presence or absence of any particular species. Protected species are often under recorded in county wildlife databases.

### Site Visit

- 2.12 No significant limitations to the habitat assessment were encountered and the surveys took place in good weather during daylight hours. Therefore, the findings of the survey are considered to be robust

### 3. RESULTS

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#### Desk Study

- 3.1 The results of the desk study are summarised below; the full desk study data is provided in Appendix 3.

#### **Statutory Protected Sites**

##### **Internationally Protected Sites**

- 3.2 These include Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites.
- 3.3 The search area falls within the Liverpool Bay SPA. SPA are classified in accordance with European Council Directive 2009/147/EC on the conservation of wild birds, known as the Birds Directive. SPA protect rare and vulnerable birds (as listed on Annex I of the Birds Directive), and regularly occurring migratory species. They are protected areas for birds in the UK classified under the Wildlife & Countryside Act 1981 (as amended) and the Conservation (Natural Habitats, & c.) Regulations 2010 (as amended) in England, Scotland and Wales.
- 3.4 The Liverpool Bay SPA supports an internationally important assemblage of birds. Over-wintering species include the migratory aquatic species red-throated loon (formerly red-throated diver) (*Gavia stellata*) and little gull (*Hydrocleus minutus*) and the large sea duck common scoter (*Malanitta nigra*). Notable Breeding species include the red-throated loon and common tern (*Sterna hirundo*). Details of the reasons for notification as a SPA are provided in Appendix 4.

##### **Nationally Protected Sites**

##### **Sites of Special Scientific Interest (SSSI)**

- Common pipistrelle (*Pipistrellus pipistrellus*);
- Soprano pipistrelle (*Pipistrellus pygmaeus*); and
- Brown long-eared bat (*Plecotus auritus*).

3.10 Known only from a small number of bat detector records, the Nathusius pipistrelle (*Pipistrellus nathusii*) and Leisler's (*Nyctalus leisleri*) may have been overlooked. Noctule (*Nyctalus noctula*) is present, mainly roosting in tree-holes. Serotine (*Eptesicus serotinus*) is poorly known in Wales but a roost has been recently discovered in North Wales. Barbastelle (*Barbastella barbastellus*) is a very rare tree-roosting bat. It has been recorded in North-West Wales, but no roosts have yet been found.

3.11 The members of the closely related *Myotis* group are relatively numerous in Wales:

- Natterer's bat (*Myotis nattereri*);
- Whiskered bat (*Myotis mystacinus*);
- Brandt's bat (*Myotis brandtii*); and
- Daubenton's bat (*Myotis daubentonii*).

3.12 Greater horseshoe bats (*Rhinolophus ferrumequinum*) are very rare with only a few individuals recorded in North Wales. Lesser horseshoe (*Rhinolophus hipposideros*) is also a rare species but one that has core populations in North-west Wales.

## Section 41 Species

3.13 Some of the rarest and most threatened

Common Name	Scientific Name	Green	Amber	Red	Sch 1
Great black-backed gull	<i>Larus marinus</i>		x		
House sparrow	<i>Passer domesticus</i>			x	
Lesser black-backed gull	<i>Larus fuscus</i>		x		
Meadow pipit	<i>Anthus pratensis</i>		x		
Oystercatcher	<i>Haematopus ostralegus</i>		x		
Red-throated loon (formerly red-throated diver)	<i>Haematopus ostralegus</i>	x			
Redwing	<i>Turdus iliacus</i>			x	x
Sanderling	<i>Calidris alba</i>		x		
Sandwich tern	<i>Sterna sandvicensis</i>		x		
Shelduck	<i>Sterna sandvicensis</i>		x		
Starling	<i>Sturnus vulgaris</i>			x	
Swallow	<i>Hirundo rustica</i>	x			
Turnstone	<i>Arenaria interpres</i>		x		
Wheatear	<i>Oenanthe oenanthe</i>	x			
Whimbrel	<i>Numenius phaeopus</i>				

- 3.21 New Zealand barnacle (*Austrominius modestus*) is recorded on the coast. This invasive barnacle has been present in Europe since the 1940s, and has recently been recorded to outnumber native barnacle species at some locations.

### ***Invertebrates***

- 3.22 There is a record for grayling (*Hipparchia semele*) butterfly, a species more widespread on the coast and southern heaths, but it is declining in many areas, particularly inland. The main caterpillar food plants are sheep's-fescue (*Festuca ovina*), red fescue (*Festuca rubra*), bristle bent (*Agrostis curtisii*), early hair-grass (*Aira praecox*) and some other coarser grasses are also used. It is listed in Section 42 species of principal importance under the NERC Act in Wales and a UK BAP Priority Species.

### ***Mammals***

#### **Hedgehog**

- 3.23 There are ten records of hedgehog (*Erinaceus europaeus*) in the search area, which is protected in the UK under the WCA, 1981 and is a Priority Species under the UK Post-2010 Biodiversity Framework.

### ***Plants***

- 3.24 A number of plants are recorded including *Porphyra*, a coldwater seaweed that grows in shallow seawater. Other recorded species include white stonecrop (*Sedum album*), small flowered crane's-bill (*Geranium pusillum*) and lesser chickweed (*St*

habitat, with common lawn grasses perennial rye-grass, red fescue and Yorkshire fog dominant and a few associated herbs such as daisy, dandelion and ribwort plantain.

- 3.30 Ephemeral short perennial areas were localised, with two distinct types. One area contained typical species such as poppies and some tall herb species such as cleavers and field horsetail. Another area, close to Marine Drive, was strongly influenced by its proximity to the coastal environment over the sea wall with coastal species such as bucks-horn plantain evident in a sandier shorter sward.
- 3.31 Introduced shrub was typical of the site with a varied array of planted landscaping plants. All areas were managed. The Schedule 9 non-native species wall cotoneaster and montbretia occurred on site, both being present in some areas.
- 3.32 Scattered trees on site were all young and relatively stunted. A mix of species was present and suggestive of planting rather than self-colonisation.
- 3.33 Buildings and hardstanding were by far the dominant feature of the site. Victorian hospital buildings and some more recent structures were present. Hardstanding was of varying ages and types, from tarmac to compacted hardcore, mostly unvegetated.
- 3.34 Walls were also present on site. These were low, brick and in acceptable condition, with some epiphytes of ferns and ivy-leaved toadflax.
- 3.35 Table 4 presents the habitat descriptions.

**Table 4 Habitat Descriptions**

Habitat	Description
Amenity	Mown amenity grassland was present around the site as shown in Figure 1. It was mainly associated with the edges of the site, car parking areas and gardens. Dominated by grasses such as perennial rye-grass, red fescue and Yorkshire fog, some common amenity herbs were also present, e.g. daisy, dandelion white clover and others. The habitat was typical of intensively managed man-made environments such as those found in suburban settings, around dwellings and public buildings.
Introduced shrub	Planted landscaping was dominated by a varied

## Protected Species Assessment

### Birds

- 3.36 Bird species noted nesting on site during the survey<sup>5</sup> included:
- herring gull (*Larus argentatus*) – main hospital roof (B1);
  - feral pigeon (*Columba livia*) – roofs of B1 and B2;
  - common blackbird (*Turdus merula*) – hole in wall, B1; and
  - house sparrow (*Passer domesticus*) – gaps on B1, B2 and B3 as well as in trees and shrubs on site.
- 3.37 Also seen was carrion crow (*Corvus corone*) but no evidence of breeding activity was noted. Herring gull is a Red listed in birds of conservation concern (Eaton *et al.* 2015).

### Bats

- 3.38 A total of six buildings were found on site, plus low walls at the perimeter of various sections. The building references are presented on Figure 1. The building descriptions are presented in Table 5. The table also shows bat roost potential category and further survey requirements. Building photographs are presented in Appendix 5.

**Table 5 Assessment of Potential Roost Features**

Building No.	Description	Bat Roost Potential Category	Action
B1	The main hospital building is a large Victorian structure of red brick, four storeys high. It is in overall good condition, having been occupied and maintained. The roof is complex with many pitches, turrets and towers as well as decorative features along ridges. The main roofing material is slate tile. Some modifications have been made, creating areas with more modern flat roofs and modern materials such as sheet metal. Slipped tiles and other gaps are occasional on all visible faces of the roof, providing potential		

Building No.	Description	Bat Roost Potential Category	Action
B2	A modern brick building with intact pitched pantile roof, all in overall very good condition. Mostly single-storey. Windows uPVC and doors modern. Some gaps at eaves with potential for bat use, but mostly cobwebbed and no evidence of occupation.	Low	1 x bat emergence/re-entry surveys
B3	A house-style building, two storeys with a pitched slate roof and clay ridge. The building has been extended behind (single storey) and has an enclosed garden to the south backing onto Russell Road. Some cracks in brickwork on north-facing gable end by the chimney and a few other gaps at the ridge and where tiles have slipped, but no evidence of bat use.	Low	1 x bat emergence/re-entry surveys
B4	Victorian building, dated 1908, and built of red brick with a complex slate roof with a clay ridge. There are 3 storeys and the structure is in reasonably good condition. A few slipped slates are present on the roof. Several air bricks are present at 3 <sup>rd</sup> floor window level.	Moderate	2 x bat emergence/re-entry surveys
B5	A single storey rendered flat roofed structure, with no windows.	Negligible	None
B6	A collection of plant sheds augmented by shipping containers in the hospital car park. Single storey and of concrete construction with flat roofs, these structures.	Negligible	None

- 3.39 All trees on site were assessed to be too small and young to support bat roosts. Likewise, the walls were unsuitable.
- 3.40 Habitats on site for bats were overall poor, with very negligible vegetation to support bats commuting and foraging activities. The site has a high degree of exposure to wind and weather, which is also a negative consideration. The distance of the site from open terrestrial habitats that bats could use for foraging and commuting was over 1km and thus the site was considered to be remote from potential feeding resources. Therefore, the overall quality of the site for bat use was assessed to be low.

### ***Protected Species***

## 4. EVALUATION

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### **Designated Sites**

- 4.1 The search area falls within the Liverpool Bay SPA which supports an internationally important assemblage of birds.
- 4.2 There are no SSSI within the search area.
- 4.3 There are no SINC or RIGS within the search area.

### **Habitats and Botanical Interest**

- 4.4 Vegetated habitats comprised a relatively small proportion of the overall site, and in themselves contained only common and widespread species and were species-poor. Therefore they have a low ecological value.
- 4.5 Buildings made up the majority of the site, and several showed potential roost features for bats. Given the general low quality of the site for bat commuting and foraging, its relative isolation from rural terrestrial areas and the low occurrence of bat records in the desk study data, the buildings' value was considered to be lower than it otherwise would have been in a more favourable setting. Consequently, two buildings were assessed to have 'moderate' bat roost potential and two 'low'.
- 4.6 The Schedule 9 non-native species wall cotoneaster and montbretia occurred on site.

### **Protected Species**

#### ***Nesting Birds***

- 4.7 The trees, introduced shrub and buildings are being actively used by nesting birds. As all nesting birds, their nests, eggs, and dependant young are all fully protected under current wildlife legislation, this may have implications for the timing of any vegetation clearance works.

## 5. RECOMMENDATIONS

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### Further Surveys

- 5.1 Further bat dusk emergence/dawn re-entry surveys are required on the following buildings:
- B1 – 2 surveys of a large structure, needing 4-5 surveyors;
  - B2 – one survey with 2 surveyors;
  - B3 – one survey with 2 surveyors; and
  - B4 – 2 surveys with 2 surveyors.
- 5.2 Surveys should follow good practice guidelines (Collins 2016), be carried out in suitable weather conditions between May and August/September.

### Mitigation/Avoidance Measures

- 5.3 Based on the information available to date, some general recommendations are made under the headings below.
- 5.4 Additional mitigation may be required in relation to roosting bats, depending on the results of the surveys recommended above.

### *Retaining Existing Features of Ecological Value*

- 5.5 As a general principle, any features of existing ecological value should be retained in developments wherever possible. On this site, no habitats have been identified as having ecological value, although trees should be retained where possible.

### *Site Clearance Works*

- 5.6 Where possible, site clearance should be undertaken during the period October to February inclusive to avoid the bird nesting season. Prior to any clearance of potential nesting habitat at other times of the year, a check for nests must be made by a suitably experienced ecologist no more than 48hrs in advance of clearance. Any active nests will need to be left *in situ* and undisturbed until the young have fledged, which may be a period of several weeks.
- 5.7 Care must be taken to avoid causing harm to any hedgehog that may be sheltering in dense shr

- Ensuring that work compounds and access tracks etc. are not located in, or adjacent to, areas that maintain habitat value, e.g. hedgerows and trees;
- Establishing protection zones around the retained trees and hedgerows, which are clearly marked out to be visible to site operatives both on foot, in vehicles and when using machinery;
- Implementing procedures to cover site safety issues, including storage of potentially dangerous materials and having at hand 'spill kits' for any potentially contaminating operations such as refuelling of vehicles and machinery; and
- Trenches and excavations should be covered at night to avoid mammals such as badger becoming trapped.

## Ecological Enhancements

- 5.10 National Planning policy requires that opportunities for ecological enhancement are sought within all development proposals, moving towards the aim of 'biodiversity net gain'. To achieve this, projects must be considered on an individual basis to ensure that new features, planting and management regimes are suitable for the conditions on site and thus likely to be successful in the longer-term. Some potential options are presented for consideration in Table 6.

**Table 6 Potential Enhancement Measures for Consideration**

Enhancement	Description
Bird nest boxes	Boxes designed for a range of different species are available and could be positioned within planted areas and on built structures. Particular consideration should be given to providing nesting habitat for Red and Amber List species that may be found in urban/suburban areas such as swift ( <i>Apus apus</i> ), house martin ( <i>Delichon urbicum</i> ), house sparrow ( <i>Passer domesticus</i> ) and starling ( <i>Sturnus vulgaris</i> ).
Hedgehog	Incorporate habitat features for hedgehog. See <a href="http://www.hedgehogstreet.org">www.hedgehogstreet.org</a> for more details. In particular, creating holes at the base of the stone walls separating the site from its neighbours would allow hedgehogs to utilise habitats within the mature gardens of the site.
Bat	

good practice to adopt a sensitive lighting scheme to maximise biodiversity value post-development, with consideration given to the following points:

- Directing lamps where they are needed to avoid unnecessary light spillage;
- Use of narrow spectrum light sources with low ultra-violet, blue or white wavelength component to minimise insect attraction at lamps;
- Avoiding illumination of features and habitats that are likely to have greatest value to bats, such as tree canopies; and
- Use of timers and/or motion sensors to limit periods of illumination to essential times only.

5.13 Further guidance on lighting specifications is provided in publications available via the Bat Conservation Trust website [www.bats.org.uk](http://www.bats.org.uk), such as the impacts of different types of lighting (RCEP 2009), effects of artificial lighting on bat behaviour (Stone 2013) and guidelines for mitigation (BCT 2018).

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## 7. ABBREVIATIONS

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BAP	Biodiversity Action Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CRoW	Countryside and Rights of Way
EU	European Union
JNCC	Joint Nature Conservation Committee
LPA	Local Planning Authority
MAGIC	Multi Agency Geographic Information for the Countryside
NERC	Natural Environment and Rural Communities
LWS	Local Wildlife Site(s)
NPPF	National Planning Policy Framework
PAA	Penny Anderson Associates Ltd
PRF	Potential Roost Feature(s)
RIGS	Regionally Important Geological and Geomorphological Site(s)
SAC	Special Area(s) of Conservation
SINC	Site(s) of Importance for Nature Conservation
SSSI	Site(s) of Special Scientific Interest
SPA	Special Protected Area(s)
WCA	Wildlife and Countryside Act

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FIGURE

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# APPENDICES

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## **APPENDIX 1**

### **Summary Relevant Protected Species Legislation**

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## SUMMARY OF THE LEGISLATION RELATING TO BADGERS AND THEIR SETTS

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Badgers (*Meles meles*) are not an endangered species but have a long history of persecution and cruelty. As such, badgers and their setts are protected under the Protection of Badgers Act 1992 (as amended), which makes it illegal for any person to kill, injure or take a badger. It is also an offence to destroy, damage or obstruct a badger sett, or to disturb a badger whilst it is within a sett. There are also additional offences relating to possession of, buying and selling a dead badger, or anything derived from a badger, and causing a dog to enter a sett.

The Act defines a sett as 'any structure or place which displays signs of current use by a badger'. Setts are defined by English Nature (1995) as 'usually underground tunnel systems providing shelter for badgers, but may include other structures used by badgers such as hay bales, drainage culverts, or cellars'. 'Current use' is more difficult to define but is usually interpreted by the presence/absence of badger field signs over several observations of the sett (Natural England 2006).

In addition, the National Planning Policy Framework (NPPF 2019) has an overall focus on sustainable development, and states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks. Furthermore, the NPPF also states that any planning proposals for which significant negative impacts on biodiversity cannot be avoided, mitigated or compensated for should be refused. Reference is made to Circular 06/2005 *Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System* in respect of statutory obligations for biodiversity and geodiversity conservation.

The commitment to preserving, restoring or enhancing biodiversity is further emphasised for England and Wales in Section 40 of the NERC Act 2006.

Local authorities in England are required to consider the likelihood of any proposed development adversely affecting badgers' foraging territory, or links between them, or significantly increasing the likelihood of road or rail casualties amongst badger populations. The planning guidance for Wales, Technical Advice Note (Wales) 5, identifies the need to

## SUMMARY OF THE LEGISLATION RELATING TO BATS (WALES)

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All wild species of bat are protected under the Wildlife and Countryside Act (WCA) 1981 (amended), which has also been amended by later legislation including the Countryside and Rights of Way (CROW) Act 2000 and the Conservation of Habitats and Species Regulations 2017 (amended), and this legislation is applicable to England and Wales. Bats are listed on Schedule 5 of the WCA and are therefore subject to some the provisions of Section 9 which, with the amendments, make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection (S9:4b).
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat (S9:4c).

There are additional offences in relation to buying and selling (S9:5) any live or dead animal of this species or anything derived from them.

Bats species are also listed under Annexes IIa and IVa of EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, also known as the 'Habitats Directive'. Inclusion on Annex IVa means they are consequently identified as European Protected Species (EPS) and protected under the Conservation of Habitats and Species Regulations 2017.

The Conservation of Habitats and Species Regulations 2017 (amended) states that a person commits an offence if they:

- (a) deliberately capture, injure or kill any wild animal of a European protected species,
- (b) deliberately disturb wild animals of any such species, in such a way as –
  - (i) to impair their ability to survive, to breed or reproduce, or to rear their young, or
  - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or
  - (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- (c) deliberately take or destroy

Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

The Nature Recovery Plan for Wales aims to address the underlying causes of biodiversity loss by:

- putting nature at the heart of our decision-making;
- increasing the resilience of our natural environment; and
- taking specific action for habitats and species.

It sets out how Wales will deliver the commitments of the UN Convention on Biological Diversity and the EU Biodiversity Strategy to halt the decline in biodiversity by 2020 and then reverse that decline.

*Please note: the above text provides a brief summary of the legislation in relation to bats for England and Wales and the original Acts, Regulations and any amendments should be referred to for the precise wording.*

## SUMMARY OF THE LEGISLATION RELATING TO BREEDING BIRDS

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All wild species of breeding birds and their nests are protected under Part 1 of the Wildlife and Countryside Act (WCA) 1981, as amended by later legislation including the Countryside and Rights of Way (CROW) Act 2000. This legislation applies in England and Wales.

Part 1 (Section 1:1) of the WCA states that:

'If any person intentionally,

- (a) kills, injures or takes any wild bird;
- (b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- (c) takes or destroys an egg of any wild bird,

he shall be guilty of an offence.'

Part 1 (Section 1:5) of the WCA (amended by the CROW Act 2000) refers to specific birds listed on Schedule 1 of the WCA, and states that:

'If any person intentionally or recklessly,

- (a) disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- (b) disturbs dependent young of such a bird,

he shall be guilty of an offence and liable to a special penalty.'

Schedule 1 includes birds such as Western barn owl (*Tyto alba*



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**APPENDIX 2**

**Botanical Species List**

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## Appendix 2 Botanical Species List

Common Name	Scientific Name	Habitat				
		Amenity	Introduced Shrub	Scattered Trees	Ephemeral Short Perennial	Ephemeral Short Perennial (Coastal)
<b>Woody Species</b>						
Bramble	<i>Rubus fruticosus</i>		R			
Broom cultivar	<i>Genista</i> sp.		R			
Butterfly-bush	<i>Buddleia davidii</i>		R			
Californian lilac	<i>Ceanothus thyrsiflorus</i>		R			
Corsican pine	<i>Pinus nigra</i> ssp <i>laricio</i>			O		
Dog rose	<i>Rosa canina</i>			R		
Elder	<i>Sambucus nigra</i>		R			
English elm	<i>Ulmus procera</i>			O		
Fuchsia	<i>Fuchsia magellanica</i>		R			
Gorse	<i>Ulex europaeus</i>		R			
Hebe species	<i>Hebe</i> sp.		R			

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## **APPENDIX 3**

### **Desk Study Data**

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Data Description

Distance	Indicates the distance, in metres, between the GRID REFERENCE of the record (using the central point of the grid square) and the search location. For any Sensitive Species Records, this cannot be released into the Public Domain.
Species Name	Name of the taxon (usually identified to species level) using the binomial system.
Grid Reference	Full grid reference based on the Ordnance Survey grid system. For any Sensitive Species Records, this cannot be released into the Public Domain.
Date	Date on which the record was made. In some cases this might be a date range, or a vague date such as 'Summer 2010'.
Recorder(s)	One or more people who made the original observation and recorded it in some way. It may have subsequently been included in a data collation by another person or it may have been submitted to Cofnod directly.
Abundance	Number of individuals recorded. Where not specified it is assumed that at least one was present.
Record Type	The recording methods used (only where specified).
Site Name	The site name (if one has been supplied). For any Sensitive Species Records, this cannot be released into the Public Domain.
Comments	Any additional notes about the sighting, including any information on habitat or substrate if this is available. For any Sensitive Species Records, this cannot be released into the Public Domain.
Dataset ID	ID of this dataset. See 'Important Issues' for more details.
Lists	Any local, national or international conservation statuses or legal protection which apply to this species and whether it is included in any Local Biodiversity Action Plans. See 'Abbreviations' for more details.
V	Summarised record Verification Level. The following codes are used: 1 - Unassessed, 2 - Unconfirmed, 3 - Considered Correct by Cofnod, 4 - Considered Correct by Expert. See our Data Quality policy, available from the Cofnod website for more details.



































Butterflies and Moths											
Distance	Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
100m	<i>Hipparchia semele</i> (Grayling / Gweirlöyn Llwyd)	<a href="#">SJ014819</a>	09/07/2018	Gordon Plater	6 Adult		Rhyl	Garden	<a href="#">D1373/001/05</a>	RD1(UK)VU, S7, LBAP[GWY]	3

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Fungi, Lichen and Slime Moulds											
Distance	Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
1098m (1km)	<i>Toninia sedifolia</i>	<a href="#">SJ0081</a>	1972 - 1977	Allan Pentecost; Richard Bailey			Rhyl		<a href="#">D1577/001/02</a>	RD1(Wales)LC, S7	3

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Distance	Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
950m	<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	<a href="#">SJ01958124</a> (Selected from Interactive Map)	30/11/2017	Tracy Pierce	1 Adult	Live Sighting	Botanical gardens Rhyl	463g female. Bleeding from face. Crow has pecked at eyes. Roundworm. Lungworm. Painkillers, antibiotics, heat, fluids, wormers. Now 681g intermittently hibernating H.H.P.; Time of sighting: 10.30; Habitat: Garden	<a href="#">D1383/001/01</a>	Bern, S7, LBAP[ANG, CON, FLI, GWY]	4
1098m (1km)	<i>Lutra lutra</i> (Otter / Dyfrgi)	<a href="#">SJ0081</a> (Estimated (Centroid of Site))	08/10/2011	Anon	Spraint		Rhyl Z		<a href="#">D1651/001/01</a>	Bern, CITES, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3

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Other Invertebrates											
Distance	Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
224m	<i>Austrominius modestus</i>	<a href="#">SJ015822</a>	29/08/2000 - 27/08/2003	CCW Phase 1 Intertidal Team			Point of Ayr to Afon Clwyd		<a href="#">D1156/004/02</a>	INNS	3
500m	<i>Austrominius modestus</i>	<a href="#">SJ017824</a>	29/08/2000 - 27/08/2003	CCW Phase 1 Intertidal Team			Point of Ayr to Afon Clwyd		<a href="#">D1156/004/02</a>	INNS	3
640m	<i>Austrominius modestus</i>	<a href="#">SJ019824</a>	29/08/2000 - 27/08/2003	CCW Phase 1 Intertidal Team			Point of Ayr to Afon Clwyd		<a href="#">D1156/004/02</a>	INNS	3
721m	<i>Austrominius modestus</i>	<a href="#">SJ020824</a>	29/08/2000 - 27/08/2003	CCW Phase 1 Intertidal Team			Point of Ayr to Afon Clwyd		<a href="#">D1156/004/02</a>	INNS	3
781m	<i>Austrominius modestus</i>	<a href="#">SJ020825</a>	29/08/2000 - 27/08/2003								











Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year	Total Records
Plants	Stellaria pallida	Lesser Chickweed	Gwlyddyn-y-Dom Bach	2015	2015	1
Plants	Valerianella carinata	Keeled-fruited Cornsalad	Gwylaeth-yr-Oen Ffrwythau Rychog	2017	2017	1
Reptiles and Amphibians	Epidalea calamita	Natterjack Toad	Llyffant y Twyni	1995	1995	1
Reptiles and Amphibians	Rana temporaria	Common Frog	Llyffant Melyn	1988	1988	1
Reptiles and Amphibians	Zootoca vivipara	Common Lizard	Madfall	1917	1995	2

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## **APPENDIX 4**

### **SPA Designation**

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## 5. SITE PROTECTION STATUS (optional)

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### 5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK02	11.0	UK00	89.0		

## 6. SITE MANAGEMENT

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### 6.1 Body(ies) responsible for the site management:

Organisation:	For information about relevant management for offshore waters please contact JNCC
Address:	
Email:	

Organisation:	Natural England (inshore waters)
Address:	
Email:	

Organisation:	Natural Resources Wales (inshore waters)
Address:	
Email:	

### 6.2 Management Plan(s):

An actual management plan does exist:

<input checked="" type="checkbox"/> Yes	Name: Liverpool Bay / Bae Lerpwl Special Protection Area Link: <a href="https://naturalresources.wales/media/678824/liverpool-bay-bae-lerpwl-spa-conservation-advice.pdf">https://naturalresources.wales/media/678824/liverpool-bay-bae-lerpwl-spa-conservation-advice.pdf</a>
	Name: Conservation Advice for European Marine Sites Link:

Reference(s) to the original map used for the digitalisation of the electronic boundaries (optional).











## 5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (UK)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area (SPA, EC Birds Directive)	67
IN09	Special Area of Conservation (SAC, EC Habitats Directive)	67

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## **APPENDIX 5**

### **Habitat and Building Photographs**

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