Redevelopment of Porthcawl Waterfront

CHAPTER 9 - Ecology

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Written by –

BIOSCAN (UK) LTD

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9. Introduction

Background

9.1.1. The following Chapter has been prepared by Bioscan (UK) Ltd.

9.1.2. This Chapter of the Environmental Statement (ES) assesses the likely significant effects of the Proposed Development, as described in Volume 1, Chapter 4 of this ES, in terms of Ecology.

9.1.3. Bioscan (UK) Ltd was appointed by Bridgend County Borough Council in August 2024 to carry out an ecological appraisal of the Porthcawl Waterfront Regeneration project, with the intention of providing ecological information to support an upcoming planning application for redevelopment. This followed an initial commission in 2023 to prepare an ecology and nature conservation proof of evidence for the site to inform a compulsory purchase order inquiry (which ultimately did not need to proceed).

9.1.4. To inform development design and the avoidance, mitigation and compensation of ecological impacts, an appropriate suite of baseline ecology surveys was carried out in autumn 2024, winter 2024-25, and the 2025 ecological survey season.

9.1.5. This Chapter describes the methods and results of these surveys, summarises the baseline ecological conditions on the site, and identifies key ecological receptors. The significance of impacts from various identified sources on each of these receptors is then assessed, with avoidance and mitigation options discussed where appropriate.

9.1.6. The scope of the ecological impact assessment is defined at three geographic levels which equate to the zones of potential influence of the works. Immediate and direct ecological impacts have been assessed in the context of the application site as defined by the redline boundary. The potential for indirect ecological impacts is assessed on a wider scale, up to a distance of 2km from the site boundary. And the potential for indirect ecological impacts on international sites is assessed up to a distance of 10km from the site boundary. It is not considered that there is any scope for significant direct or indirect impacts on receptors further than this distance from the site to occur, so all receptors situated any further away from the site are excluded from this assessment.

9.1.7. This Chapter should be read in conjunction with the following Figures and Technical Appendices, contained in Volume 2 and Volume 3 of this ES, respectively:

- Volume 2, Figure 9.1a: Site Location, and European Statutory Nature Conservation Designations (10km radius)

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- Volume 2, Figure 9.5: Waterbodies & Great Crested Newt Survey Results (2025)
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- Volume 2, Figure 9.6e: Breeding Bird Territory Map (2025)
- Volume 2, Figure 9.6f: Buildings with Bird Nests – Fairground (2025)
- Volume 3, Appendix 9.1a: Statutory Designated Site Citations
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- Volume 3, Appendix 9.6b: Great Crested Newt eDNA Survey Results (2025)
- Volume 3, Appendix 9.7: Invertebrate Survey Report (2025)
- Volume 3, Appendix 9.8: UK Habitat Classification (UK Hab) Habitat Condition Assessments (2025)
- Volume 3, CONFIDENTIAL Appendix 9.9: Badger Survey Results (2025) (Confidential on Welfare Grounds)

Site Location and Description

9.1.8. The site is located around Sandy Bay in Porthcawl. The proposals consist of six main development areas which extend around Sandy Bay within the town of Porthcawl (see Figure 9.2a), though the site redline also encompasses adjoining areas where only minor works are proposed. To the north and west are urban / residential areas within the town of Porthcawl. To the east is a large caravan park. And to the south is the sea wall and coastal defences, Sandy Bay and the seashore.

Proposed Development

9.1.9. The proposed development comprises the following outline proposals for the redevelopment of Porthcawl Waterfront:

- Up to 980 new homes,
- Approximately 20 ha of open space including a series of new significant public open spaces with different offers,
- 2.2 ha of land for educational use,
- Approximately 130,000 square feet of commercial and leisure floorspace including retail uses, a hotel, Lido and Gym / Studio Space
- Enhancement of Porthcawl harbour environment,
- New coastal defence works,
- A flexible meanwhile leisure use space (approximately 23,500 square feet),
- Approximately 6,500 square feet of flexible community / civic space,
- Provision of up to 600 public parking spaces within the site area,
- New spine road access from the Eastern Promenade to Sandy Bay,
- Enhancement of the Griffin Park and proposed new facilities including MUGA.

Legislation and Policy Framework

9.1.10. Mechanisms for environmental conservation include a suite of international, European, national and local legislature, conventions and policies which recognise the need to protect and conserve wildlife and its habitats. These are discussed below and, where relevant, their application to the Development Site and to the Proposed Development is discussed.

International Conventions and Designations

9.1.11. The United Kingdom is a contracting party to the Convention on Wetlands of International Importance (known as the Ramsar Convention) which came into force in the UK in December 1975. This places obligations on signatories to identify and protect wetland areas, in particular those of international importance for waterfowl and waders. The Convention is not legally binding in the UK, and the designation of an area as a Ramsar Site will not, in itself, legally constrain development; however, most Ramsar Sites are also statutorily protected under other designations, mainly as Sites of Special Scientific Interest (see below) and Special Protection Areas (see below) but also in some instances Special Areas of Conservation (SAC). Besides, in the UK, the Government affords Ramsar sites the same protection as designated sites such as SPAs and SACs.

9.1.12. The Convention on the Conservation of Migratory Species of Wild Animals 1979 (the Bonn Convention) requires the protection of migratory species throughout their entire range. The Bern Convention on the Conservation of Wildlife and Natural Habitats, which came into force in 1982, requires contracting parties, including the UK, to maintain populations of wild flora and fauna and give particular protection to endangered and vulnerable species. Both these conventions are also effectively subsumed within or implemented through the workings of both the Wildlife and Countryside Act 1981 (as amended) and (via the EC Birds and Habitats Directives (see below)), The Conservation of Habitats and Species Regulations 2017 (as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019).

9.1.13. The International Convention on Biological Diversity signed at the Earth Summit in Rio in 1992 places obligations on signatories to conserve the full range of wildlife, habitats and natural processes within their national boundaries and those of their dependencies. In the UK this has been implemented initially through the Biodiversity Action Plan system, and latterly the Post 2012 Biodiversity Framework and the identification of species and habitats of 'Principal Importance' further to the Natural Environment and Rural Communities Act 2006, as discussed later in this section. In Wales this has since been superseded by the Environment (Wales) Act 2016.

European Community Directives and Designations

9.1.14. The European Community Directive on the Conservation of Wild Birds (Directive 2009/147/EC) originally came into force in April 1982 and requires all member states to maintain populations of naturally occurring wild birds and to preserve a sufficient diversity and area of habitats for their conservation. A list of bird species which require special conservation by means of

protecting their habitat is included as Annex 1 of the Directive. Member states are required to protect their most important ornithological sites through their designation as Special Protection Areas (SPAs).

9.1.15. EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the Habitats Directive or Habitats and Species Directive) was adopted in May 1992. This provides for the establishment of a network of sites of European importance for species and habitats identified as of 'Community interest'. The habitats and species considered to be of Community interest are listed in the various Annexes to the Directive. The sites to be created for their conservation, called Special Areas of Conservation (SACs), form, in conjunction with Special Protection Areas designated under the Birds Directive, a network of protected sites across Europe referred to as 'Natura 2000'. The articles of the Habitats and Species Directive extend and (in some instances) supersede those of the Birds Directive.

9.1.16. Under the provisions of retained law, sites in the UK considered for classification as SPAs or SACs (also collectively known as 'European Sites') and which were already subject to statutory protection as Sites of Special Scientific Interest (SSSIs) notified under the Wildlife and Countryside Act 1981, retain their elevated protection pursuant to the Conservation of Habitats and Species Regulations 2017 (as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019). As a matter of Government policy, sites under consideration for SPA or SAC status are afforded the same protection as fully classified or confirmed sites.

National Designations and Legislation

National Nature Reserves (NNR)

9.1.17. National Nature Reserves (NNRs) are designated by Natural Resources Wales (NRW) (and its precursors in function) under the terms of the National Parks and Access to the Countryside Act, 1949. NNRs represent some of the best ecological sites in the country.

Sites of Special Scientific Interest (SSSI)

9.1.18. In the UK, areas of national or regional conservation value (in terms of their biological or geological interest) can be designated as Sites of Special Scientific Interest (SSSIs) under the provisions of the Wildlife and Countryside Act 1981 (as amended). This, and subsequent legislation (including the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006) affords protection by way of limiting the activities which can be carried out on such sites, and imposing penalties for damage or destruction of the special interest. Areas with international value such as potential or confirmed SPAs are also protected

by being designated SSSI. In Wales SSSIs are designated and their condition monitored by Natural Resources Wales, the statutory authority for nature conservation.

Important Hedgerows

9.1.19. Statutory Instrument 1997/1160 ('The Hedgerows Regulations') came into force in June 1997. This applies a degree of statutory protection to all hedgerows in respect of removal, with increased levels applied to those hedgerows which are classed as 'Important' on the grounds of ecological, landscape, cultural and/or archaeological significance. The legislation does not apply to hedgerows removed as part of implementing a valid planning consent, although the treatment of hedgerows may be a material consideration in the determination of a planning application.

Nationally Protected Species

9.1.20. The Wildlife and Countryside Act 1981 (as amended) contains a number of schedules listing species subject to varying levels of protection. The most stringent protection is afforded to species considered particularly scarce or vulnerable in a national context. Other listed species receive more limited protection from certain activities, such as their use for sale or trade, and some species are merely the subject of restrictions over the times and/or methods by which they may be hunted or killed. The Schedules are reviewed on a quinquennial (five-year) cycle at which time species may be added or deleted.

9.1.21. Badgers are the subject of separate legislation contained within the 1992 Protection of Badgers Act which affords a high level of protection to both the animal and its sett and is aimed primarily at preventing deliberate persecution. The Act was introduced principally for reasons of animal welfare rather than due to any concern over the conservation status of what is one of Britain's more common larger mammals.

Priority Species and Priority Habitats

9.1.22. The UK Government's commitment to its obligations as a signatory of the Convention on Biological Diversity (see above) led to the production in 1994 of a national Biodiversity Action Plan (BAP). This set out a strategy for securing the conservation of a targeted list of species and habitats, with mechanisms, priorities and targets for each of these set out in subsequently published 'Species Action Plans' or 'Habitat Action Plans'. Many of the species subject to Species Action Plans were already protected under existing legislation, and many had also been identified as of high conservation status through being listed as Red Data, Nationally Scarce or Red List species (see below). Local and regional BAPs were produced to supplement the national plan and target local biodiversity priorities.

9.1.23. Further to the Nagoya Conference in October 2010 and the production of the new EU Biodiversity Strategy (EUBS) in May 2011, the UK BAP system was succeeded by the UK Post-2012 Biodiversity Framework published in July 2012, with much of the work now carried out at a national level. However, the lists of priority habitats and species developed under the UK BAP remain relevant to both site evaluation and the identification and weighting of material considerations in planning decisions, as they coincide in most instances with habitats and species of 'Principal Importance' identified pursuant to the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006.

9.1.24. The Countryside and Rights of Way Act 2000 imparted a statutory 'duty' on Government Ministers and Departments to 'have regard' to the conservation of biodiversity in the exercise of their functions. This duty was strengthened with the Natural Environment and Rural Communities Act 2006 and expanded to all public bodies, including local planning authorities, who are obliged under this legislation to take steps to further the conservation of habitats and species of 'Principal Importance' through their forward planning and development control functions. Lists of habitats and species of 'Principal Importance' have subsequently been produced by the relevant country agencies, and in accordance with the biodiversity duty, the presence of such resources is capable of being a material consideration in planning decisions. Habitats and species of 'Principal Importance' are now often collectively termed 'priority' species and habitats reflecting their identification as priorities for UK biodiversity conservation under both regimes.

9.1.25. In Wales, the above has since been superseded by the Environment (Wales) Act 2016 (Section 7), which lists habitats and species of principal importance in Wales.

Statutory Local Designations

Local Nature Reserves (LNR)

9.1.26. Local Nature Reserves (LNRs) are designated by Local Authorities under the terms of the National Parks and Access to the Countryside Act 1949. As well as having nature conservation importance, such sites are designated on the basis of having significant local amenity and educational value.

Non-Statutory Nature Conservation Designations

9.1.27. In addition to sites and species protected by legislation, other ecological designations have been devised by Local Authorities, Natural Resources Wales (and its predecessors) and other conservation organisations to identify sites of local importance and protect species of conservation significance.

Local Wildlife Sites

9.1.28. These sites (and their equivalents such as County Wildlife Sites or Sites of Importance for Nature Conservation) are generally identified by local Wildlife Trusts, planning authorities or Biological Records Centres, and are typically subject to policy protection in the relevant statutory development plans. They apply to areas considered to have substantive (e.g. County) importance for nature conservation, but which fall short of SSSI quality.

Non-Statutory Nature Reserves

9.1.29. These sites comprise nature reserves owned by organisations such as the Wildlife Trusts and the RSPB. They may have attendant statutory or non-statutory designations (e.g. SSSI/LWS) as well.

Ancient Woodland

9.1.30. Ancient woodland sites are those which have been continuously wooded or managed as woodland since at least 1600. They are valued for their rich and characteristic flora and fauna, much of which is dependent on a long continuity of woodland to survive. National planning policy now effectively recognises ancient woodland as an 'irreplaceable' resource and development that results in its loss or deterioration is generally only permitted in 'wholly exceptional' circumstances. This presumption against any further loss reflects the fact that the extent of ancient semi-natural woodland in the UK has declined substantially in the last 70 years.

Nationally Rare and Nationally Scarce Species

9.1.31. The accepted standard for defining the rarity and conservation status of animal and plant species in the UK remains the 'Red Data Book' (RDB) system. This was developed by the International Union for the Conservation of Nature and Natural Resources (IUCN) and is used world-wide. In the UK, RDB species are those considered Nationally Rare, i.e. they occur in less than 16 of the 10 by 10 kilometre squares of the National Grid. Nationally Rare species are further classified as Extinct, Critically Endangered, Endangered (RDB1), Vulnerable (RDB2) and Near Threatened or Lower Risk (RDB3) with further categories including 'Data Deficient' (RDBK) for species which are suspected to be Nationally Rare, but about which little is known (such as some invertebrates).

9.1.32. In the UK, the system has been expanded to account for species which have a poor conservation status but are not Nationally Rare. As such, species known to occur in over 16, but less than 100, of the 10 by 10 km squares of the National Grid may be further classified as Nationally Scarce.

9.1.33. In the UK, the Joint Nature Conservation Committee (JNCC) and organisations such as the Royal Society for Nature Conservation and the Botanical Society of the British Isles have been involved in the production of British Red Data Books. These apply standard criteria to assess the national importance of species, thus allowing the ecological significance of species records to be accurately assessed.

9.1.34. For birds and latterly (under the Species Status Assessment programme co-ordinated by the JNCC) plants, dragonflies and other taxa, the IUCN system has been further expanded in the UK to allow conservation categorisations to take account of long-term population trends.

9.1.35. For birds, the result has been the publication and periodic revision of lists of Birds of Conservation Concern for Wales (BoCCW4), divided into Red List species (considered of high conservation concern) and Amber List species (of medium conservation concern). Because they include species with declining populations, the Red and Amber lists for birds include several species which still remain generally common. The most recent revision to the BoCC lists for Wales was published in 2022 (Johnstone *et al.* 2022).

9.1.36. For plants, the 2005 publication by the JNCC of a revised Red List (Cheffings, C. and Farrell, L. [Editors], 2005) which takes account of longer-term population trends, similarly elevated the conservation status of a suite of plant species that remain essentially common but which appear to be under threat from long-term decline. The 2008 publication of the Odonata Red List (Daguet, C.A., French, G.C. and Taylor, P. 2008) marked the completion of a similar status review for dragonflies and damselflies, and there have since been reviews of butterflies, lichens, fungi, and partial reviews of certain families within the large insect orders Coleoptera and Diptera.

Planning Policy Context

National Planning Policy

9.1.37. National policy on nature conservation is set out by Planning Policy Wales (February 2021), supplemented by technical advice note (TAN) 5: nature conservation and planning. This document sets out that planning authorities must have regard to sites designated for their nature conservation interest, species protected under European or UK legislation, and habitats and species of principal importance in Wales (under Section 7 of the Environment (Wales) Act 2016, and must safeguard these from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them. In addition Planning Policy Wales cites the Section 6 Duty introduced by the Environment (Wales) Act 2016, which requires that public authorities must seek to maintain

and enhance biodiversity. Planning Policy Wales specifies that this means development should not cause any significant loss of habitats or populations of species, locally or nationally, and must provide a net benefit for biodiversity (giving consideration to the diversity between and within ecosystems, the connections between and within ecosystems, the scale of ecosystems, the condition of ecosystems including their structure and functioning, and the adaptability of ecosystems).

9.1.38. Future Wales (The National Plan 2040) further emphasises the resilience of ecological networks.

Local (District) Policy

9.1.39. Bridgend Local Development Plan 2018-2033 was adopted in March 2024, and includes the following policies of relevance:

9.1.40. PLA1: Porthcawl Waterfront, Porthcawl Regeneration Growth Area

This policy notes that "Land at Porthcawl Waterfront, as shown on the Proposals Map, is allocated for a comprehensive, regeneration-led, mixed-use development." With specific reference to ecology, it specifies:

"(c) Create a multi-functional green infrastructure network within the site that facilitates active travel, enhances biodiversity, provides sustainable drainage and fosters healthy communities. There must be particular emphasis on incorporating appropriate landscaping, protecting biodiversity, providing habitats for local species and supporting a range of opportunities for formal and informal play in addition to community-led food growing.

(10) Suitable buffers to habitats, particularly the relic dunes to the rear of Sandy Bay."

9.1.41. SP17: Conservation and Enhancement of the Natural Environment

"The County Borough has a rich and varied biodiversity with a broad range of species, habitats and unique, rich landscapes. In particular, these include the nationally important Glamorgan Heritage Coast, the outstanding historic landscapes of Kenfig and Merthyr Mawr Warren, and other regionally and locally important areas. Development which will maintain and, wherever possible, enhance the natural environment of the County Borough will be favoured. Development proposals will not be permitted where they will have an adverse impact upon:

1. The inegrity of the County Borough's countryside;
2. The character of its landscape;
3. Its biodiversity and habitats; and
4. The quality of its natural resources including water, air and soil.

Areas having a high and/or unique environmental quality will be protected and the following strategically important areas within the County Borough will specifically be protected from inappropriate development which directly or indirectly impacts upon them: SP17(1) National Site Network Sites (including Special Areas of Conservation (SACs)); SP17(2) Sites of Special Scientific Interest (SSSIs); SP17(3) Kenfig and Merthyr Mawr National Nature Reserves (NNRs); SP17(4) The Glamorgan Heritage Coast;

SP17(5) Mynydd Margam Registered Historic Landscape.

The weight to be afforded to environmental designations in the determination of relevant planning applications will be based on their statutory or non-statutory status and geographic scale of designation.

Proposals likely to have direct or indirect adverse effects on Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites, must be subject to Habitat Regulations Assessment (HRA). This includes development proposals on allocated sites where this plan indicates a project level HRA is required and any other development proposals likely to have adverse effects on SACs/SPAs/Ramsar sites. In addition, any proposals that could affect the habitat of marsh fritillary butterfly within 2km of Cefn Cribwr Grasslands SAC, as illustrated on the Policies Map, must be subject to HRA.

Development requiring HRA will only be allowed where it can be determined through HRA that:

a. taking into account mitigation, the proposal would not result in adverse effects on the integrity of the SACs/SPAs/Ramsar sites, either alone or in combination with other plans or projects; or

b. HRA proves there are no alternatives and that the development is of overriding public interest and appropriate compensatory measures are provided.

Proposals within or affecting a SSSI must demonstrate how they safeguard, support or where possible enhance identified special features of the designation.

The importance and features of Sites of Importance for Nature Conservation (SINCs) and local wildlife sites must also be considered as appropriate in the determination of relevant planning applications (refer to DNP5).

9.1.42. DNP5: Local and Regional Nature Conservation Sites

Development within or adjacent to a:

DNP5(1) Local Nature Reserve (LNR);

DNP5(2) Site of Importance for Nature Conservation (SINC); or

DNP5(3) Regionally Important Geodiversity Site (RIGS);

must be compatible with the nature conservation or scientific interest of the area, whilst promoting their educational role.

Developments which would have an adverse impact on these sites will not be permitted unless the benefits associated with the development can be demonstrated to outweigh the harm and/or the harm can be reduced or removed by appropriate mitigation and/or compensation measures.

9.1.43. DNP 6: Biodiversity, Ecological Networks, Habitats and Species

All development proposals must provide a net benefit for biodiversity and improved ecosystem resilience, as demonstrated through planning application submissions. Features and elements of biodiversity or green infrastructure value should be retained on site, and enhanced or created wherever possible, by adopting best practice site design and green infrastructure principles. Development proposals must maintain, protect and enhance biodiversity and ecological networks / services. Particular importance must be given to maintaining and

enhancing the connectivity of ecological networks which enable the dispersal and functioning of protected and priority species.

Development proposals that result in an adverse effect on the connectivity of biodiversity and ecological networks and/or have a significant adverse effect on the resilience of protected habitats and species will only be permitted where:

(1) The need for development outweighs the nature conservation importance of the site;

(2) It can be demonstrated that there is no satisfactory alternative location for the development which avoids damage to biodiversity and ecosystem functioning;

(3) A functional connected element of the natural resource is retained as part of the design of the development to maintain and enhance biodiversity and build resilient ecological networks; and

(4) Any unavoidable harm is minimised by effective mitigation to ensure that there is no reduction in the overall biodiversity value of the area. Where this is not feasible, compensation measures must be provided to enable habitat creation, or the provision of long-term management arrangements to enhance existing habitats and deliver a net benefit for biodiversity. Compensatory provision must be of comparable or greater ecological value to that lost as a result of the development.

A Project Level Ecological Impact Assessment (EcIA) must accompany development proposals on allocated sites with any identified likely significant adverse effects (pre-mitigation) in relation to SA Objective 9 (Biodiversity, Geodiversity and Soil).

9.1.44. DNP 7: Trees, Hedgerows and Development

Development that would adversely affect trees, woodlands and hedgerows of public amenity or natural/cultural heritage value, or that provide important ecosystem services, will not normally be permitted.

Development proposals on sites containing or adjacent to, trees will be required to assess the trees in line with BS 5837:2012 Trees in relation to design, demolition and construction. The assessment must include:

(1) a tree survey;

(2) an arboriculture impact assessment;

(3) an arboriculture method statement;

(4) and/or a tree protection plan.

Where trees are to be replaced a scheme for tree replacement must be agreed prior to the commencement of development, including details of planting and aftercare. If tree works are recommended, the works must comply with BS 2998:2010 Tree Works - Recommendations.

9.1.45. DNP8: Green Infrastructure

Development proposals will be required to integrate, protect and maintain existing green infrastructure assets and to enhance the extent, quality, connectivity and multi-functionality of the green infrastructure network. Where the loss or damage of existing green infrastructure is unavoidable, appropriate mitigation and compensation will be required.

All developments must seek to maximise, as far as practicable, the amount of green infrastructure on the site, as well as the interconnectedness of green infrastructure within and around the site to the wider green infrastructure network. Development must also maximise opportunities to achieve multi-functionality by bringing green infrastructure functions together.

All major developments will be required to submit a Green Infrastructure Assessment.

9.2. Assessment Methodology

9.2.1. The existing conditions forming the baseline for the ecological assessment of the project were established using a combination of desk study and a programme of ecological field surveys. The site location is shown on Figure 9.1a.

Consultation

9.2.2. A scoping letter was written to Natural Resources Wales (NRW) on 7th February 2025 to seek a scoping opinion on the proposed scope of the ecology surveys. NRW responded on 13th March 2025 stating "Unfortunately, we do not currently have the resources available to progress this request for pre app advice at present and therefore, we are currently unable to provide a site-specific preliminary opinion on this proposal".

9.2.3. Given that Bridgend County Borough Council is our client, the County Ecologist has been kept abreast of the proposed ecology survey programme throughout, and is understood to have agreed its scope. A meeting was held on 31st July 2025 to update the County Ecology team on the progress of the surveys to date, and to invite any interim comments. The Biodiversity Policy Manager responded by e-mail on 20th August 2025, stating "I think the surveys seem reasonable and should provide a good baseline understanding of the site and species using it, my only comment would to be mindful of any further surveys that may come as a result of the below surveys and subsequent mitigation / enhancement / management, particularly around the Rhych Point SINC to ensure there will be no negative impact as a result of the development". These comments were taken into consideration moving forward.

9.2.4. A formal scoping request (REF: P/25/462/ESO) was submitted to Bridgend County Borough Council on 28th July 2025. A response to this scoping request was received shortly prior to formal submission, and this included consultation input from NRW, which requested careful assessment of any recreational impacts on Kenfig SAC / Merthyr Mawr SSSI, and consideration of impacts of any knock-on coastal effects from the new sea wall (on Kenfig SAC / Merthyr Mawr SSSI in particular).

9.2.5. Meetings were held with the management team for Kenfig SAC / Merthyr Mawr SSSI (NRW lead, and ranger) on 17th August 2023 and 6th May 2025 to discuss the option of working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present as a means of providing an offsite biodiversity uplift for the project. This approach was agreed in principle.

Desk Study

9.2.6. In order to obtain archive data on the ecological interest present within the site and the surrounding area, in October 2024 the South East Wales Biodiversity Records Centre (SEWBReC) was contacted for information they held on species of conservation interest within a 5km radius of the centre of the site (taken as SS823769), as well as areas designated for their nature conservation interest for the same search radius. Consideration was then given to

those records within 2km of the site redline boundary (fully incorporated within the search area).

9.2.7. The above data request was supplemented by a search of relevant internet sources such as the government's interactive website providing geographic information about the natural environment, magic.defra.gov.uk, for the same search radius as the desk study.

9.2.8. Information on local strategies, initiatives and objectives to further biodiversity conservation was also obtained from web-based documents such as the adopted Bridgend Local Development Plan 2018-2033.

9.2.9. In addition, the desk study was informed by a prior ecological assessment covering the majority of the site carried out by David Clements Ecology Ltd (dated March 2023), and by a previous site visit carried out by Bioscan on 21st April 2023 to inform the preparation of a proof of evidence for a compulsory purchase order inquiry.

Habitat Survey

9.2.10. A habitat classification and botanical survey was carried out on 24th September 2024 and on 13th-14th May 2025 (both visits within the optimal period to conduct botanical surveys), and subsequently added to and updated over the course of further ecology surveys across the 2025 survey season. The habitat surveys provide an inventory of the basic habitats present, mapped in accordance with the UK Habitat Classification System (version 2, 2023), in combination with the standard Phase 1 approach devised by the former Nature Conservancy Council (updated JNCC, 2016). The habitat surveys also target areas of greater interest which are then subject to more detailed examination, or which may require further survey. Such additional detail was collected at the time in the form of representative lists of species compiled for each habitat. The existence and extent of any Habitats of Principal Importance further to Section 7 of the Environment (Wales) Act 2016 was also noted during these surveys.

9.2.11. The hedgerows were assessed for their potential to meet the criteria of an 'Important' hedgerow as defined by the Hedgerow Regulations 1997. This involved assessing the number of woody species (listed on Schedule 3 of the Hedgerow Regulations 1997) in a sample 30m stretch of hedgerow (for hedgerows between 100m and 200m in length two 30m stretches of hedgerow are surveyed and an average taken, and for hedgerows in excess of 200m in length three 30m stretches of hedgerow are surveyed and an average taken). Relevant features along each hedgerow were recorded, such as ditches, banks, standard trees (at least one per 50m hedgerow length), lack of gaps, parallel hedgerows, multiple connections with other

hedgerows / woodlands / ponds, and woodland ground flora (listed on Schedule 2 of the Hedgerow Regulations 1997, with at least 3 species required).

Protected Species Surveys

9.2.12. Searches for evidence of protected species were carried out concurrently with the habitat survey visits on 24th September 2024 and 13th-14th May 2025, and in tandem with other ecology survey visits. They involved checking the site for evidence of badger *Meles meles* activity such as active or disused setts, latrines, runs, snagged hair and foraging evidence, as well as assessing the site's potential to support other protected species such as bats and reptiles. All incidental observations of other fauna were recorded during the survey, with particular attention paid to any Priority Species further to Section 7 of the Environment (Wales) Act 2016, or otherwise of elevated conservation status.

9.2.13. In terms of survey restrictions, several areas were not possible to access at close range to survey for badger setts due to the presence of dense scrub (shown on the Figure within Confidential Appendix 9.7). It is noted that these inaccessible areas could potentially contain unrecorded badger setts. To provide further information within these inaccessible areas, a strimming team was commissioned on 11th-12th February 2025 to assist the ecologists by cutting paths along several animal trails which had been noted leading into dense scrub, mainly at the eastern end of a large bund in the north-eastern part of the site, and on the eastern side of the Monster Park, in order to investigate them further.

Bat Surveys

9.2.14. The bat survey programme was led by Geoff Moxon (NRW bat survey licence number S090955/1), with assistance from Chloe Tucker, Sam Forrest, Will Fitchett and Rosie Berkin, all experienced bat surveyors employed or sub-contracted by Bioscan (UK) Ltd.

Tree Inspection Surveys

9.2.15. The trees within and bordering the site were subject to a ground-based assessment for their potential to be occupied by roosting bats on 10th-11th March 2025 (at a time of year when deciduous trees were yet to fully regrow their leaves, rendering bat roosting potential features more visible). With the assistance of binoculars and a high-powered torch, trees were searched for potential roosting features (PRF) for bats, such as woodpecker holes, cracks or fractures, dense ivy cover or flaking bark. Trees were then assigned to the appropriate category below (in accordance with the Bat Survey Good Practice Guidelines 4th edition, Bat Conservation Trust 2023):

- NONE: either no potential roosting features in the tree or highly unlikely to be any,
- FAR: further assessment required to establish whether PRFs are present within the tree,
- PRF-I: potential roosting features present, but only suitable for individual bats or very small numbers of bats, either due to size of features or lack of suitable surrounding habitats,
- PRF-M: potential roosting features present, suitable for multiple bats and may therefore be used by a maternity colony.

9.2.16. In terms of survey restrictions, occasional trees within areas of denser scrub had to be viewed from further away, though with binoculars and a bright torch it was still possible to assess features, so this is not considered a significant survey limitation.

Building / Structure Inspection Surveys

9.2.17. The only buildings within the site anticipated to be affected by the proposals are those associated with the fairground towards the centre of the site, which is proposed to be demolished, as well several other buildings along the seafront. These are shown on Figures 9.3a and 9.3b. The remaining buildings shown as not surveyed on Figure 9.3a are those which will be retained and not impacted.

9.2.18. An initial interior and exterior inspection of all the fairground buildings was made on 23rd January 2025 in order to search for any evidence of bats (e.g. droppings, scratch/stain marks, or the bats themselves), and to assess their bat roosting potential from negligible to high based on their design, construction materials and condition.

9.2.19. In addition, all the current structures (walls and buildings) beneath the footprint of the proposed new coastal defences along the northern edge of Sandy Bay were surveyed for any evidence of bats on 13th May 2025.

9.2.20. The building inspection survey employed as needed a 4.8m telescopic ladder, endoscope and high-powered Clu-lite torch.

9.2.21. In terms of survey limitations, it was not possible to access the interior of buildings B and C within the fairground, or to view the roof void in building E (or the roof void in the southern part of building J). It was also not possible to obtain internal access into the buildings along the seafront. However, given the nature of these buildings (e.g. with flat or corrugated metal / asbestos roofs) it was considered possible to confidently assess these buildings to have negligible bat roosting potential from the exterior survey alone. The one exception was the only building labelled as having low bat roosting potential on Figure 9.3a (due to the presence of small numbers of hanging tiles with gaps leading into them), though it is understood that

further bat surveys of this building were undertaken separately by the demolition company as part of their contract (i.e. this building is not considered as part of this application).

Activity Surveys

9.2.22. In accordance with the Bat Survey Guidelines, 4th edition (Bat Conservation Trust, 2023), NBW transect surveys of the site were carried out once in each season (spring – April/May, summer – June/July/August, and autumn – September/October). The details of these surveys are tabulated below.

Table 9.1. Bat Activity Surveys

Date	Sunset/ Sunrise	Start Time	End Time	Temperature Range (˚C)	Weather
13/05/2025	20:56	20:56	22:56	15-15	Dry, 80% cloud, 4-4mph wind (light air)
08/07/2025	21:33	21:33	23:33	17-15	Dry, 65% cloud, 12mph wind (gentle breeze)
03/09/2025	19:56	19:46	21:56	16-16	Dry, 90% cloud, 14mph wind (moderate breeze)

9.2.23. The surveys were each carried out by two surveyors, each walking half of a set transect route around the site (routes shown on bat activity maps – see Figures 9.3c-e). Surveyors each utilised sets of bat detectors enabling them to both record sonograms and have an audio output to allow field identification of bat species, including Anabat SD1/2 frequency division bat detectors (with internal recording system), Anabat Express ZCA frequency division bat detectors (with internal recording system), and Pettersson D240x time expansion and heterodyne bat detectors. Start and end points and direction of travel were varied between surveys in an attempt to minimise sequential / temporal bias.

9.2.24. In accordance with the Bat Survey Guidelines (4th edn) the first 30 minutes of each survey was spent with surveyors observing bat activity from a variety of static positions (shown on Figures 9.3c-e) selected to provide information on key parts of the site (e.g. the Monster Park, which is lined with trees and through which a road link is proposed).

9.2.25. The sonograms and call parameters recorded during the above activity surveys were later analysed using Analook software.

9.2.26. Temperature data is taken from a temperature logger built into the Anabat detectors. Weather data is taken from the nearest weather station.

9.2.27. Optimal or close to optimal weather conditions for bat activity were encountered during all the bat activity surveys.

9.2.28. It is noted as a survey limitation that Griffin Park is locked at night on security grounds, so activity surveys could only cover this area from the perimeter fence.

Remote Surveys

9.2.29. The remote bat surveys were designed in accordance with the Bat Survey Guidelines, 4th edition (Bat Conservation Trust, 2023). The habitats within the site were assessed overall to have 'moderate' suitability for bats (with the presence of some areas of trees and scrub in association with grassland being favourable for bats, though with this value limited by the urban context, large areas of hardstanding and bright lighting in many areas). On this basis, remote surveys were carried out for a minimum of five consecutive nights per month from April to October inclusive, in appropriate (or the best available) weather conditions for bats.

9.2.30. A total of nine remote detectors were deployed around the site, with the aim of both maximising site-wide survey coverage, while also focusing in on areas with the highest potential impacts. It is noted that the public nature of the site meant that remote detectors had to be deployed at height, on trees, so the survey is by necessity constrained by locations within the site where trees are available (e.g. no remote detectors could be placed within the open sand dunes, though were deployed on the closest possible tree).

9.2.31. The bat detectors deployed were all full-spectrum Anabat Express remote bat detectors.

9.2.32. The details of these surveys (survey period dates, temperatures and weather conditions) are tabulated in Appendix 9.4, and remote bat detector locations are shown on Figure 9.3g.

9.2.33. Temperature data is taken from a temperature logger built into the Anabat detectors. Weather data is taken from the nearest available weather station with access to historic records.

9.2.34. The sonograms recorded during the above remote surveys were subsequently analysed using Analook software.

9.2.35. Nights in which weather conditions are considered sub-optimal (taken to be where there is persistent rainfall, excessively low temperatures and/or high winds) are greyed out in Appendix 9.4, and data from these nights is excluded from the analysis section below. The remaining nights are assessed to have mostly optimal weather conditions for bat activity survey.

Reptile Surveys

9.2.36. On 8th April 2025, 41 artificial reptile refugia (1m x 0.5m bitumen sheets) were installed onsite. These were focused mainly on the Monster Park, which is the only part of the site to which

public access is prohibited, due to concerns about high levels of public interference with the survey given the context of this site. In addition some reptile tins were placed around parts of the Sandy Bay East development area, in particular along the large mound at the northern end of this area, and in its north-eastern corner (areas with scrub / long grass at the time of the survey). Figure 9.4a shows the location of the refugia.

9.2.37. Following a bedding-in period of 8 days, these were checked on ten occasions between 16th April 2025 and 20th June 2025. On each visit the surveyors checked not only the artificial refugia but also any natural refugia found. Where possible, the checks were carried out under good conditions for reptile survey in accordance with standard guidelines (Froglife, 1999), i.e. between 8.30am and 11.00am or between 4.00pm and 6.30pm, and on sunny (or intermittently sunny) days with a temperature between 9˚C and 18˚C and without continuous rain (though the surveys were also deliberately carried out under a range of varied conditions to capture as broad a view of reptile use of the site as possible, and additional surveys were carried out to compensate for visits where weather conditions were deemed to be sub-optimal). The location of any reptiles found was recorded, along with species and (when possible) sex.

9.2.38. It was subsequently decided that it was necessary to obtain more information on reptiles around the more publicly accessible parts of the site, despite the potential issues with this approach. On this basis, a much larger larger reptile survey with full site-wide coverage (employing 204 artificial reptile refugia) was set out on 19th August 2025, with the reptile tins checked on 13 occasions between 3rd September 2025 and 8th October 2025. As anticipated there were some problems arising from public access during the survey (for example some of the refugia in the sand dunes being collected up by beach clean volunteers not understanding their purpose, and others being removed or destroyed on occasion). The worst affected areas were the western edge of the sand dunes and the north-western edge of the Salt Lake Central area (see Figure 9.2). However, refugia were always replaced on the next visit following such incidents, and on this basis it was assessed on balance that this did not represent a significant limitation to the survey as a whole.

Great Crested Newt Survey

9.2.39. The site only supports a single, small pond, which is situated in the north-western corner of the Monster Park (see Figure 9.5), and is separated from other ponds by urban areas across which it is not considered that great crested newts would travel.

9.2.40. A Habitat Suitability Index (HSI) assessment was carried out for this pond on 10th March 2025. Habitat suitability indices follow the methodology described by Oldham (2000), which uses ten

suitability indices derived from factors believed to influence great crested newt distribution and pond occupancy. An HSI score of > 0.8 indicates excellent pond suitability for occupation by great crested newts, while an HSI score of < 0.5 indicates poor pond suitability for great crested newts. Whilst the efficacy of the HSI in predicting the presence of great crested newts is highly variable, it does allow certain conclusions about the potential value of a pond to be drawn, albeit with caveats attached.

9.2.41. An eDNA survey of this pond was subsequently carried out on 22nd April 2025. In accordance with standard guidance, 20 water samples were taken, mixed together in a sterile bag, and then 6 sub-samples taken from the bag, transferred to test tubes with ethanol, and sent off for laboratory analysis.

9.2.42. Surveys of ponds in the wider area were not carried out because these ponds are all assessed to be severed from the site by the urban area of Porthcawl.

Breeding Bird Surveys (BBS)

9.2.43. A breeding bird survey was undertaken over five visits during the 2025 breeding season, as set out in Table 9.2 below. The survey was based upon the application of the territory mapping technique which forms the basis of the British Trust for Ornithology's (BTO) Common Birds Census (CBC) methodology (Bibby et al, 2000), and is consistent with the methodology set out in the Bird Survey Guidelines.

9.2.44. Each survey visit was carried out in suitable weather for recording birds, and conditions that could suppress bird activity or otherwise compromise the effectiveness of the technique (e.g. strong wind, heavy rain and poor visibility) were avoided.

Table 9.2. Breeding Bird Survey Dates, Timings & Weather Conditions

Visit	Date	Sunrise time	Survey timing	Weather conditions
1	08 April 2025	06:34	06:50 – 09:18	6.5-10°C, 0-15% cloud, little/no wind.
2	02 May 2025	05:44	05:45 – 09:00	13-15°C, 100% cloud, little/no wind.
3	20 May 2025	05:15	05:16 – 08:20	7-14°C, 15% cloud, little/no wind.
4	20 June 2025	04:57	05:19 – 08:10	20-22°C, 75-100% cloud, light breeze at start increasing during visit.
5	09 July 2025	05:09	05:22 – 07:50	12-17°C, 50-15% cloud, little/no wind.

9.2.45. The morning/dawn survey visits commenced shortly after sunrise, when birds are most active. During each visit, an experienced ornithologist walked the site as a continuous transect for approximately three hours. The transect followed features such the paths and the site boundaries, ensuring that all of the site was walked to within 50m, with the more densely vegetated areas walked to within 20m. The exception to this was the amusement park (which was not able to be accessed), and Griffin Park (which was not open at the times of the survey visits). Nevertheless, birds were noted in these areas from the outside. All bird registrations (visual or aural) were noted on large-scale maps using standard BTO notation, and included annotations of behaviour to assist with determining breeding status, and the results are presented at Figure 9.6e.

9.2.46. Each species recorded was assigned to one of the categories within Table 9.3 below, to assist with assessing the overall likelihood of breeding taking place within the site. The highest category observed over the visit was used as the basis for breeding status assessment for each species.

Table 9.3. Breeding Bird Status Categories

Breeding status category[1]	Survey evidence
Confirmed breeding	Recently fledged young in suitable nesting habitat Adults entering or leaving a nest site Adult carrying a faecal sac or food Nest with eggs Nest with young
Probable breeder	Pair present in suitable nesting habitat Territory present between survey visits Courtship/ displaying

[1] Derived from the methodology of the UK Breeding Bird Atlas 2007-11

	Visiting probable nest Agitated behaviour from a parent bird Nest building
Possible breeder	Species observed in suitable nesting habitat Singing male in suitable nesting habitat
Non-breeding	Flying over Feeding on site only (likely to be breeding off-site) Winter migrant

9.2.47. At the completion of the survey, the number of distinct bird registrations recorded during each visit was counted in order to produce a species list along with the number of individuals of each species present. In addition, the visit maps were further analysed and the number of apparent territories, based on a combination of the number of singing males and territory mapping, were counted to give a site territory number for each breeding species.

9.2.48. To assess the importance of the site for birds, the bird species recorded within the site can be compared against bird indicator lists published by Defra (Eaton & Noble, 2024). The birds on the Defra lists are divided according to habitat type (e.g. farmland, woodland, wetland), and these indicator species are monitored by organisations such as the BTO in order to measure progress in safeguarding and enhancing biodiversity in the UK. Defra sub-divides the species lists for each habitat into generalist and specialist species (the former consists of those species that can be found in a particular habitat, as well as in other habitats; whilst the latter are typically highly associated with that habitat). The species present within a site can be compared with these lists in order to gain an indication of the relative diversity of the avifauna for a particular habitat type.

9.2.49. Bird nests were also noted incidentally during the survey of the fairground buildings carried out on 23rd January 2025.

Wintering Bird Surveys

9.2.50. There are no Special Protection Areas[2] (SPA) or Ramsar Sites[3] within at least 30km of the site and therefore it is considered that the site (or land adjacent) is unlikely to form functionally linked land to any designated sites. Nevertheless, a wintering bird survey of the site was undertaken to understand: 1) whether any waders from the Severn Estuary use the site; and 2) the general use of the site by birds over the winter period. The survey comprised two visits

[2] Special Protection Areas are designated due to the presence of rare or migratory birds and their habitats.
[3] Ramsar Sites are designated due to the presence of wetlands with such habitats typically supporting high numbers of waterfowl.

covering the winter of 2024/25, with high and low tide transects undertaken during each visit (as set out in Table 9.4 below).

Table 9.4. Wintering Bird Survey Dates, Timings & Weather Conditions

Visit	Date	Sunrise time	Survey Type	Low tide time	High tide time	Survey timings	Survey conditions
1	11 December 2024	08:10	Low tide	08:13	-	08:15 – 10:30	6°C, cloud cover 8/8, wind BF1-3.
			High tide	-	14:32	12:45 – 14:45	7oC, cloud cover: 8/8. Wind BF1-3.
2	12 February 2025	07:33	High tide	-	06:22	06:55 – 09:43	4.5 to 5°C, cloud cover 8/8, wind BF0-1.
			Low tide	12:28	-	11:15 – 12:55	5 to 6.5°C, cloud cover 8/8, wind BF1-3.

9.2.51. The methodology used during the wintering bird surveys essentially followed the same as the breeding bird survey; whereby the site was subject to the BTO's Common Bird Census (CBC) technique (Bibby et al, 2000). This involved a continuous transect following the field boundaries, ensuring that the site was walked to within 50m, with the more densely vegetated areas walked to within 20m. During high tide particular survey effort was made of four potential high tide roosting areas. These areas comprised: 1) the car park (although not in use as such during the survey) between the new bus station and Eastern Promenade; 2) the Sandy Bowl; 3) the sea wall leading to Porthcawl lighthouse; and 4) the land surrounding Trecco Bay Lookout Tower. In addition, the intertidal areas adjacent to the site (comprising Sandy Bay, Trecco Bay and Porthcawl Point) were surveyed during low tide from vantage points such as Trecco Bay Lookout Tower and near the lighthouse.

9.2.52. During the December 2024 wintering bird survey visit, the first transect was commenced shortly after sunrise and was timed to coincide with low tide, with the site and the inter-tidal areas surveyed. During the second transect during the same visit, the site (including the potential high tide roosting areas) was resurveyed at high tide.

9.2.53. During the first transect during the second wintering bird survey visit (in February 2025), the four potential high tide roosting areas (as listed above) were walked over at high tide and prior to sunrise to check if these areas were being used as high tide night roosts by waders. Following these checks, the remainder of the site was subject to a transect as per the CBC

technique. During the second transect during the same visit, the site was resurveyed at low tide, with the intertidal areas also surveyed.

9.2.54. At the completion of the survey, the number of distinct bird registrations recorded during the two visits was counted in order to produce a species list along with the number of individuals of each species present.

Invertebrate Survey

9.2.55. An invertebrate survey was carried out on 24th – 25th June 2025, covering the entire site but focusing in particular on the sand dunes and adjoining sandy maritime grassland.

9.2.56. Weather conditions were sub-optimal for invertebrate survey, with light rain in the early morning of both days (temperatures were 17-18°C on both days, with 18-20mph winds on day 1 and 8-10mph winds on day 2). It was noted that this did not significantly affect the techniques of direct observation and ground-searching, though meant sweep netting could only be carried out in short spells before the net became too wet. From around midday on the 25th June 2025 it dried up sufficiently for the suction sampler to be deployed.

9.2.57. The site was sampled using the following techniques designed to target a wide range of invertebrate fauna: ground searching and hand searching, suction sampling, sweep-netting with a canvas net, spot netting with a 'butterfly net', and direct observation.

9.2.58. Invertebrates were identified in situ where possible, but when in doubt samples were taken for laboratory analysis.

9.2.59. Invertebrate assemblages were subsequently analysed using Pantheon, an analytical tool developed by Natural England and the Centre for Ecology and Hydrology.

Other Surveys

9.2.60. Dormouse surveys were scoped out of the assessment on the basis that the site is entirely surrounded by urban areas (with a large caravan park to the east), and the sea to the south. There are no dormouse records within 2km of the site, and (despite the presence of suitable dormouse habitat within the site such as scrub and woodland) it is not considered that there would be any scope for dormice to colonise the site given its isolation from other areas, with no paths of habitat connectivity noted connecting the site with the wider area.

Impact Assessment Methodology

Terms of Reference

9.2.61. The assessment of likely significant ecological effects arising from the project follows the guidelines produced for EcIA by the Chartered Institute for Ecology and Environmental Management (CIEEM 2018 et seg). The approach taken is set out below:

Determining the Sensitivity of Key Receptors

9.2.62. In order to determine whether a specific identified effect on a key ecological receptor is 'significant', the sensitivity of the affected habitat, site or species must be considered. The sensitivity of an individual receptor is a product of various factors including:

- habitat extent or population size (at a given geographical level)
- habitat or population fragility (including ability to recover)
- the rarity of a species or habitat; and
- susceptibility to environmental change (e.g. from disturbance or pollution).

9.2.63. Applying the above criteria, the sensitivity of individual receptors can be put into 'High', 'Moderate' or 'Low' categories as follows:

Table 9.5: Sensitivity

Sensitivity	Habitat Example	Species example
High	Habitat is highly susceptible to nutrient enrichment or invasion from competitive species Habitat has highly specialised hydrological or soil/geology requirements (e.g. calcareous fen) Habitat is present as small and isolated fragments vulnerable to edge effects Habitat takes an extended period to develop full suite of components (e.g. ancient woodland)	Species is highly intolerant of disturbance or pollution Species is present in a small and isolated population and/or has low dispersal rates Species has low recruitment rates and population recovery is likely to be very slow
Moderate	Habitat can tolerate some elevated levels of pollution or will recover within a short-medium term (e.g. <20 years) Habitat has hydrological or soil/geology requirements that can be recreated or are fairly widely met Habitat may be isolated, but is present at an extent that provides resistance to edge effects and is better able to accommodate damage Habitat develops over a moderate timescale given the right conditions (e.g. unimproved acid grassland)	Species is able to tolerate some levels of disturbance or pollution (e.g. sub-lethal effects). Species population is restricted, but large enough to accommodate some temporary reduction without long term consequences for viability. Species has moderate recruitment rates
Low	Habitat is highly resistant to nutrient enrichment or other forms of pollution and physical disturbance (e.g. improved grassland) Habitat has non-specific requirements that are readily met elsewhere Habitat is extensive and well able to accommodate localised or more extensive damage Habitat is easily recreated over a short timescale (e.g. arable)	Species is highly resistant to disturbance and pollution (e.g. most urban wildlife) Species' population is widespread and recolonisation in the wake of any localised range reduction likely to occur readily Species has high recruitment rates likely to lead to rapid recovery of population levels

9.2.64. As with the identification of which resources should be considered key receptors, a certain amount of subjectivity and the application of professional judgment is unavoidable when determining sensitivity. However, in addition to first-hand experience of the species/habitat and locality in question, a wealth of scientific literature and/or local conservation status information can often be drawn upon to inform such judgements.

Identification of impacts and their magnitude

9.2.65. Impacts arising from the Proposed Development that have the potential to be significant are identified from review of the scheme details, and tandem assessments for other environmental disciplines based on them.

9.2.66. The following terms are used to quantify the 'magnitude' of identified impacts in this assessment:

Table 9.6: Impact Magnitude

Impact Magnitude	Definition
Very High	An example of a very high magnitude impact would be direct mortality or displacement of a significant proportion of a species' population or loss of habitat at a level likely to remove its continued representation at the given geographical level being considered.
High	An example of a high magnitude impact would be direct mortality, indirect displacement or habitat loss that would be likely to substantially reduce the population level or degree of representation at the given geographical level being considered.
Moderate	Moderate impacts include those likely to result in a net reduction of population or habitat representation (at least in the absence of effective mitigation or compensation) at the given geographical level being considered
Minor	Minor impacts include those that may result in loss of a few individuals from a species' population or minor reduction in habitat extent at the given geographical level being considered.
Negligible	Negligible impacts are those that are not likely to give rise to measurable effects on population level or habitat representation at the given geographical scale.

Significance of Effects

9.2.67. Whether a potential effect is 'significant' or not at the given geographical level that a receptor is valued at, is determined by quantifying the magnitude of effect and the sensitivity of the receptor. Thus, for receptors of national or international value and high sensitivity, negative effects measured at high or very high magnitude are likely to represent a significant impact at that geographical scale. At the other end of the scale, minor magnitude effects on receptors of low sensitivity and only immediate local value are likely to be below significance thresholds, and to merit relatively low weight in planning decisions[4]. Substantial effects on high value receptors that are of low sensitivity may fall either side of the significance threshold - in such cases further avoidance or mitigation may be able to be employed to ameliorate effects. A key

[4] Albeit the cumulative effect of small-scale impacts can be significant in policy terms, for example in assessing compliance with policies relating to net benefit for biodiversity. Such cumulative and additive effects are also considered in this assessment and encapsulated in the quantitative considerations of whether the project achieves a net benefit for biodiversity.

consideration is whether the 'integrity' of a site or ecosystem (e.g. the coherence of its structure and function) and/or the 'conservation status' of a species or habitat (e.g. the ability of a population/habitat to maintain itself at pre-development levels/quality) will be compromised.

Cumulative Impacts

9.2.68. Cumulative or 'in combination' effects on ecological resources have been assessed at scales up to and including internationally designated areas. Information has been obtained where possible for other consented or recent developments with the potential for any cumulative impacts on key receptors.

Impact Prediction Confidence

9.2.69. For the impacts identified, confidence levels in the assessments made may be attributed and/or discussed where there is a significant degree of uncertainty.

9.3. Baseline Conditions

Desk Study Results and Data Review

Statutory Nature Conservation Designations

9.3.1. Sites with statutory nature conservation designations within 2km from the application site are shown at Figure 9.1b (with citations included at Appendix 9.1a). The search radius for international sites extends to 10km from the application site, as displayed at Figure 9.1a.

9.3.2. There are no statutory nature conservation designations which impinge directly upon the application site.

9.3.3. Table 9.7 lists all the sites with statutory nature conservation designations within the 2km search radius from the application site boundary (extending to 10km from the application site boundary for international sites), and summarises the reasons for their designation.

Table 9.7. Sites with Statutory Nature Conservation Designations

Site Name	Approximate Distance & Direction from Application Site Boundary	Reasons for Designation (and any Notes)
Kenfig SAC	800m east (with other part of designation 3.58km north-west)	Annex I habitats which are primary reason for designation: fixed coastal dunes with herbaceous vegetation ("grey dunes"), dunes with Salix repens ssp. Argentea (Salicion arenariae), humid dune slacks, hard oligo-mesotrophic waters with benthic vegetation of Chara spp. Annex II species which are a primary reason for designation: petalwort *Petalophyllum ralfsii*, fen orchid *Liparis loeselii*. Annex I habitats (other qualifying features): Atlantic salt meadows (Glauco-Puccinellietalia maritimae)
Merthyr Mawr SSSI	800m east	Saltmarsh, sand dunes (range of habitats, including extensive areas of semi-fixed and fixed dunes) and associated coastal habitats including calcareous grassland, swamp, dune slack and intertidal habitats, and woodland. Significant population of the rare liverwort petalwort *Petalophyllum ralfsii*, and assemblages of nationally scarce plants, and rare macrofungi (including *Tulostoma melanocyclum*).

		Invertebrate assemblage, including the rare weevil *Glocianus pilosellus*.
Merthyr Mawr Warren National Nature Reserve (NNR)	1.42km east	As per Merthyr Mawr SSSI
Cefn Cribwr Grasslands SAC	4.68km north-north-east (nearest component)	Annex I habitats which are a primary reason for designation: Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) Annex II species (other qualifying features): marsh fritillary butterfly *Euphydryas aurinia*
Dunraven Bay SAC	6.87km south-east	Annex II species which are a primary reason for designation: shore dock *Rumex rupestris*

Non-Statutory Nature Conservation Designations

9.3.4. Sites with non-statutory nature conservation designations within 2km from the application site are shown at Figure 9.1c (with citations included at Appendix 9.1b).

9.3.5. There are no non-statutory nature conservation designations which impinge directly upon the application site (with the exception of the B-Lines designation which covers the entire site, though this is noted to extend all around the Welsh Coastline; to avoid obscuring other designations the B-Lines designation has been omitted from Figure 9.1c).

9.3.6. Table 9.8 lists all the sites with non-statutory nature conservation designations within the 2km search radius from the application site boundary, and summarises the reasons for their designation.

Table 9.8. Sites with Non-Statutory Nature Conservation Designations

Site Name	**Approximate Distance & Direction from Application Site Boundary**	**Reasons for Designation (and any Notes)**
B-Lines	Onsite (covering entirety of site)	B-Lines are a series of insect pathways along which people are encouraged to create wildflower-rich habitat stepping stones to create routes for pollinators. This represents an opportunity for pollinator-specific ecological enhancement. B-Lines extend all around the Welsh coastline.

Rhych Point SINC	10m south-east	Rocky shoreline.
Pwll-y-Waun SINC	165m north	Lake on the eastern side. Broad-leaved plantation. Improved grassland.
The Wilderness SINC (& ancient semi-natural woodland)	245m north	Amenity grassland on the eastern and western sides. Broad-leaved plantation around the lake. Broad-leaved semi-natural woodland on the islands. (Broad-leaved plantation is ancient woodland). Scattered broad-leaved trees. Improved grassland in NW part of site.
Newton Point SINC	430m south-east	Rocky shoreline.
Trafalgar Wood SINC (& restored ancient woodland site)	540m north-west	Broad-leaved scattered trees. (Restored ancient woodland.)
Newton Burrows SINC	745m east	Open dune and dune grassland. Amenity grassland to the north. Small area of spoil. Scattered scrub. Small areas of broad-leaved semi-natural woodland.
NRW Priority Area (Coastal Sand Dune)	835m east	Coastal sand dune habitat.
Important Plant Area	835m east	Important Plant Areas are identified by the conservation charity Plantlife, based on international scientific guidelines for their plant and fungal diversity. They are not a legally protected status themselves, but highlight sites of high botanical value.
Manor Farm Fields SINC	900m north-east	Grazed agricultural fields with hedgerows.
Lock's Common LNR & SINC	950m west	Amenity grassland. Semi-improved calcareous grassland. Continuous bracken. Dense scrub. Sand dune. Dry heath / acidic grass mosaic. Basic inland cliff. Semi-improved neutral grassland. Limestone pavement.
Nottage Court Wood SINC (& ancient semi-natural woodland)	1.06km north-north-west	Ancient woodland along the middle of site. Unimproved neutral grassland. Improved grassland field in the northern corner of the site.
Black Rocks SINC	1.16km east	Rocky shoreline.
Coedargraig SINC	1.26km north-east	Broad-leaved woodland.
Graig Wood SINC (& ancient semi-natural woodland; & restored	1.36km north-east	Broad-leaved semi-natural woodland. (Ancient woodland, and restored ancient woodland.)

ancient woodland site)		
Pant-y-Hyl SINC (& ancient semi-natural woodland)	1.46km north-north-east	Broad-leaved semi-natural woodland (ancient woodland). Dense / continuous scrub. Continuous bracken. Scattered bracken. Semi-improved neutral grassland.
NRW Priority Area (Coastal Saltmarsh)	1.75km south-east	This relates to the edge of a designated block. Where this falls within 2km of the site it is mapped in the sea, so no saltmarsh habitat will be present.

9.3.7. All areas of ancient woodland mapped within 2km of the application site are associated with SINCs, so are considered as part of these SINCs in the table above.

Protected and Notable Species

9.3.8. The closest specific (6 figure grid reference or more accurate) records of each of the following protected or notable species to the application site held by LERC Wales are shown in Table 9.9 below. Species are plotted by increasing distance from the application site boundary.

Table 9.9. Closest records of species with elevated conservation interest to the application site.

Species	Approximate Distance & Direction from Application Site Boundary	Source & Date (and any Notes)
Common pipistrelle bat *Pipistrellus pipistrellus*	250m north (SS8231377489) 250m north (SS82157744) 270m east (SS832773)	LERC Wales (2011) LERC Wales (2013) LERC Wales (2010)
Soprano pipistrelle bat *Pipistrellus pygmaeus*	250m north (SS8231377489)	LERC Wales (2011)
Slow worm *Anguis fragilis*	270m east (SS832773)	LERC Wales (2010)
Noctule bat *Nyctalus noctule*	270m east (SS832773)	LERC Wales (2010)
Myotis bat *Myotis* sp	270m east (SS832773)	LERC Wales (2010)
Natterer's bat *Myotis nattereri*	700m north (SS824780)	LERC Wales (1975)
Brown long-eared bat *Plecotus auritus*	800m east-north-east (SS837775)	LERC Wales (2019)
Lesser horseshoe bat *Rhinolophus hipposideros*	800m east-north-east (SS837775)	LERC Wales (2019)
Adder *Vipera berus*	980m east (SS839770)	LERC Wales (2009)
Common lizard *Zootoca vivipara*	1.15km west (SS807770) 1.37km east (SS843772)	LERC Wales (1990) LERC Wales (2014)
Harvest mouse *Micromys minutus*	1.20km west (SS808775) 1.76km east (SS8469177296)	LERC Wales (1975) LERC Wales (2014)
Badger *Meles meles*	1.40km north (SS823787)	LERC Wales (2018)

Brown hare *Lepus europaeus*	1.75km north-west (SS813787)	LERC Wales (2020)
Grass snake *Natrix helvetica*	2.00km north-north-west (SS816791)	LERC Wales (2007)
Polecat *Mustela putorius*	2.00km north-east (SS84667832) 2.05km north-west (SS80787869)	LERC Wales (2022) LERC Wales (2018)
Great crested newt *Triturus cristatus*	2.02km north-west (SS807786)	LERC Wales (2014) Numerous great crested newt records to north-west
Nathusius' pipistrelle *Pipistrellus nathusii*	2.52km north-west (SS804790)	LERC Wales (2023)

9.3.9. In addition, the following species have been recorded locally, though further than 2km from the application site: otter *Lutra* lutra, water vole *Arvicola amphibius*, serotine bat *Eptesicus serotinus* and Daubenton's bat *Myotis daubentonii*.

9.3.10. There are also records of marine mammals offshore (mostly common porpoise *Phocoena Phocoena*, plus occasional records of common dolphin *Delphinus delphis*, striped dolphin *Stenella coeruleoalba* and long-finned pilot whale *Globicephala melas*.

9.3.11. There are also extensive invertebrate records associated with Kenfig SAC / Merthyr Mawr SSSI.

Supplementary Ecology Reports

9.3.12. Additional information has been drawn from the following supporting ecology report, and is summarised below.

Sandy Bay, Porthcawl Ecological Assessment Update & Revision (David Clements Ecology Ltd, March 2023)

9.3.13. The full report is included at Appendix 9.2 for reference, and covers the majority of the application site, though excludes Griffin Park, and the Hi-Tide and Harbour areas.

9.3.14. The habitat information is incorporated into the results section below, supplemented as necessary by the additional surveys carried out by Bioscan during the 2024-25 survey season.

9.3.15. A ground-based survey for trees with bat roosting potential noted a single tree with significant bat roosting potential on the roundabout in the north-western part of the application site – this has been incorporated into Figure 9.3a (Bat Roosts & Bat Roosting Potential).

9.3.16. A single common lizard was recorded incidentally within the eastern part of the application site.

9.3.17. Four 'Priority' bird species listed on Section 7 Environment (Wales) Act 2016 were noted to be probably breeding within the application site: dunnock, house sparrow, skylark and song

thrush. Four 'Priority' bird species listed on Section 7 Environment (Wales) Act 2016 were noted to be possibly breeding within the application site: herring gull, kestrel, linnet and starling.

Field Survey Results

Field Survey Results (Habitats and Flora)

9.3.18. The following main habitats were identified within the application site:

- Modified grassland
- Other neutral grassland
- Other woodland; mixed
- Urban trees
- Non-native and ornamental hedgerow
- Mixed scrub
- Bramble scrub
- Introduced shrub
- Ponds (non-priority habitat)
- Coastal sand dunes
- Bare sand
- Other sea buckthorn scrub
- Low energy littoral rock
- Artificial unvegetated, unsealed surface
- Buildings
- Developed land; sealed surface
- Sea

9.3.19. Each habitat is mapped on Figure 9.2b (with zoomed in maps of Sandy Bay East, Sandy Bay West and Salt Lake & Hillsboro respectively at Figures 9.2bi, 9.2bii and 9.2biii), and example photographs of the key ecological features of the application site are included at Appendix 9.3. The characteristic species within each habitat type are described in the following sections. Habitat condition assessments[5] are provided within Appendix 9.8.

[5] Habitat condition assessments are made with reference to the Statutory Biodiversity Metric Technical Annex 1 (Condition Assessment Sheets). While is it is recognised that the Statutory Biodiversity Metric is not directly applicable within Wales, this is included as supplementary information.

Modified Grassland

9.3.20. Modified grassland habitat appears in various parts of the application site. Many of these grasslands grow on sandy soils as a result of their proximity to the coast. A description of the main areas of modified grassland follows.

9.3.21. In the Sandy Bay East area, modified grassland is found on the eastern, northern and western edges, as well as at the base of the Sandy Bay Bowl. These areas are in the most part intensively managed by regular cutting, regularly disturbed by trampling and dog fouling, and parts are used for recreation (e.g. a playing field to the north, occasional festivals in the Sandy Bay Bowl, and a caravan ground in a particularly skeletal area of grassland to the west). These areas are in general relatively species-poor, typified by cock's-foot *Dactylis glomerata*, perennial rye-grass *Lolium perenne*, Yorkshire fog *Holcus lanatus*, creeping bent *Agrostis stolonifera*, timothy *Phleum pratense,* false oat-grass *Arrhenatherum elatius* and common bent *Agrostis capillaris* and, together with broadleaved species typical of amenity swards such as ribwort plantain *Plantago lanceolata*, dandelion *Taraxacum officinalis* agg, daisy *Bellis perennis*, yarrow *Achillea millefolium*, clovers *Trifolium* spp, creeping buttercup *Ranunculus repens* and black medick *Medicago lupulina*.

9.3.22. Within the Monster Park, the grassland is encircled by mixed woodland, and has been left unmanaged since the park closed down several years ago, resulting in a rank grassland with encroaching scrub and herbs. Grasses here predominantly comprise red fescue *Festuca rubra*, cock's-foot, common couch *Elymus repens*, creeping bent and Yorkshire fog. Herbs include biting stonecrop *Sedum acre*, cat's-ear *Hypochaeris radicata*, common vetch *Vicia sativa*, weld *Reseda luteola,* ribwort plantain, hedgerow crane's-bill *Geranium pyrenaicum*, cut-leaved crane's-bill *Geranium dissectum*, creeping cinquefoil *Potentilla reptans*, red clover *Trifolium pratense*, dandelion, cleavers *Galium aparine*, greater periwinkle *Vinca major*, spotted medick *Medicago arabica*, hogweed *Heracleum mantegazzianum*, bird's-foot trefoil *Lotus corniculatus* and groundsel *Senecio vulgaris*, plus very occasional bluebell *Hyacinthoides non-scripta*. Cotoneaster *Cotoneaster horizontalis* and hollyberry cotoneaster *Cotoneaster bullatus* were both noted growing through large areas of the sward; both are invasive non-native species listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended).

9.3.23. In the Salt Lake Central area, much of the modified grassland is used as a car park, resulting in a patchy and species-poor sward together with large areas of bare ground. Species-composition is similar to the Sandy Bay East area.

9.3.24. Other areas are likely to have been seeded, such as Griffin Park, the roundabout, and small patches of amenity grassland (e.g. in the marina area). Species include red fescue, cock's-

foot, annual meadow grass *Poa annua* and soft brome *Bromus hordeaceus*, with occasional daisy, dandelion, ribwort plantain, bugle *Ajuga reptans*, creeping buttercup and common ragwort *Senecio jacobaea*. These grasslands are generally kept cut short to varying degrees, with the exception of the grassland on the roundabout which was noted to be longer.

9.3.25. Figure 9.2b shows the areas of modified grassland assessed to have good condition (e.g. Sandy Bay East area, Monster Park, roundabout), moderate condition (e.g. Salt Lake Central area, Griffin Park, caravan park west of Sandy Bay Bowl) and poor condition (Griffin Park central greens, which are highly intensively managed). See Appendix 9.8 for details.

Other Neutral Grassland

9.3.26. Much of the other neutral grassland within the site could be described as maritime grassland, with sandy soils and species influences from proximity to the coast and sand dunes.

9.3.27. The largest area of other neutral grassland within the application site is in the Sandy Bay East area, mainly in parts which are less intensively managed and allowed to grow long, promoting species diversity. Species include soft brome, red fescue, creeping bent, cock's-foot, common bird's-foot trefoil, lady's bedstraw *Galium verum*, bulbous buttercup *Ranunculus bulbosus*, buck's-horn plantain *Plantago coronopus*, hare's-foot clover *Trifolium arvense*, red clover, St John's-wort *Hypericum* sp, evening primrose *Oenothera biennis*, common knapweed *Centaurea nigra*, dove's-foot crane's-bill *Geranium molle*, hedgerow crane's-bill, bloody crane's-bill *Geranium sanguineum*, common stork's-bill *Erodium cicutarium*, common vetch *Vicia sativa*, common centaury *Centaurium erythraea*, spotted medick and biting stonecrop. This area was noted in general to be more species-rich closer to its southern interface with the sand dunes.

9.3.28. Rhych Point also mainly comprises other neutral grassland, with red fescue, perennial rye-grass, sand sedge *Carex arenaria*, buck's-horn plantain, common bird's-foot trefoil, red clover, ribwort plantain, cut-leaved crane's-bill, creeping thistle *Cirsium arvense* and creeping cinquefoil. This area was noted to be partially cut short, and partially left to grow long. During a bird survey visit on 20th June 2025, 92 pyramidal orchids *Anacamptis pyramidalis* were noted growing within the grassland on Rhych Point.

9.3.29. In the Salt Lake Central area, the western margin of the car park is typically left to grow long, and is more species-rich than the nearby modified grassland. In this area graminoids include annual meadow-grass, false oat-grass, cock's-foot, soft brome and red fescue. The herb component includes curled dock *Rumex crispus*, silverweed *Argentina anserina*, creeping cinquefoil, common knapweed, common vetch, hogweed, creeping buttercup, meadow

buttercup *Ranunculus acris*, bulbous buttercup, common vetch, red clover, white clover *Trifolium repens*, yarrow, buck's-horn plantain, greater plantain *Plantago major*, black medick, ribwort plantain, common bird's-foot trefoil, dove's-foot crane's-bill and common chickweed *Stellaria media*.

9.3.30. All the above other neutral grassland areas are assessed to have moderate condition. See Appendix 9.8 for details.

Other Woodland; Mixed

9.3.31. The only area of woodland within the application site is around the periphery of the Monster Park. This woodland comprises a mixture of mainly non-native conifers (pines *Pinus* sp and firs *Abies* sp), together with occasional native and non-native broadleaved trees including white poplar *Populus alba*, birch *Betula* sp, willow *Salix* sp, ash *Fraxinus excelsior* and sycamore *Acer pseudoplatanus*. The woodland comprises mainly canopy trees, lacking a well defined understorey (aside from occasional hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, elder *Sambucus nigra*, dogwood *Cornus sanguinea*, cherry laurel *Prunus laurocerasus* and buddleia *Buddleja davidii*). The ground flora comprises a mixture of grassy areas and scrub (the latter particularly along the eastern side of the Monster Park). The Monster Park has also been planted with various ornamental species such as yucca *Yucca* sp and tree-mallows, to simulate a landscape populated by dinosaurs (this park is understood to have previously been used to display model dinosaurs as a tourist attraction, prior to its closing down several years ago).

9.3.32. The woodland is assessed to have moderate condition. See Appendix 9.8 for details.

Urban Trees

9.3.33. The individual trees around the site mainly comprise ash and sycamore, together with some grey willow *Salix cinerea*, and a range of planted ornamental species. A line of trees defines the eastern boundary of Griffin Park, mainly sycamore, but also including black pine *Pinus nigra* and other non-native ornamental species. Extensive planting of tree saplings was noted in association with the new Aldi supermarket in the Salt Lake North area, mainly non-native ornamental species such as Holm oak *Quercus ilex*, lodge pole pine *Pinus cortorta* and black pine.

9.3.34. The urban trees are assessed to have good condition in all cases, except in the Aldi car park where they are assessed to have moderate condition. See Appendix 9.8 for details.

Non-native and ornamental hedgerow

9.3.35. Figure 9.2b shows the location of all the hedgerows within the application site, all of which are associated with Griffin Park.

9.3.36. A hedgerow is considered to be 'Important' in accordance with the Hedgerow Regulations 1997 if it, amongst other criteria, has:

- At least 7 woody species within 30m
- At least 6 woody species within 30m and at least 3 features (as described in methodology section)
- At least 5 woody species within 30m and at least 4 features (as described in methodology section)
- At least 6 woody species within 30m including one of: black poplar, large-leaved lime, small-leaved lime, wild service-tree (not relevant to the application site)
- At least 4 woody species within 30m and at least 2 features and is adjacent to a public right of way (PROW)

9.3.37. Hedgerows cannot be 'Important' in accordance with the Hedgerow Regulations 1997 if they are less than 20m in length, were planted within the last 30 years or lie within / mark the boundary of the curtilage of a dwelling house.

9.3.38. For the purposes of this assessment, a hedgerow is considered to be species-rich if it contains five or more native woody species per 30m section on average, and is considered species-poor if it contains four or fewer native woody species per 30m section on average.

9.3.39. Table 9.10 below gives an account of the woody species found within the hedgerows, together with an assessment of their potential to meet the criteria of 'Important' hedgerows in accordance with the Hedgerow Regulations 1997.

Table 9.10. Hedgerow assessment.

Hedgerow reference	Average no of woody species per 30m section	Description of woody species present (Hedge Regs 1997 Schedule 3)	Species richness	Description of ground flora present (Hedge Regs 1997 Schedule 2)	Features present / (Notes)	Likely classification in accordance with Hedgerow Regulations 1997
Griffin Park roadside boundary hedgerows	2	Garden privet, sycamore, pine	Species-poor	None	2 – No gaps, trees / PROW, trimmed	Not Important
Griffin Park internal hedgerows	1	Garden privet	Species-poor	None	1 – No gaps / trimmed	Not Important

9.3.40. Condition assessment is N/A for non-native and ornamental hedgerows.

9.3.41. Scrub

9.3.42. The majority of the scrub within the site is mapped as mixed scrub. The largest area of scrub habitat is on top of the mound on the northern side of the Sandy Bay East area. Pockets of mixed scrub are also present around other parts of the Sandy Bay East area, the Salt Lake Central area, and on the roundabout to the north-west. The mixed scrub typically comprises bramble *Rubus fruticosus* agg, elder, dogwood, hawthorn, blackthorn, gorse *Ulex europaeus* and buddleia. Ruderal species including weld, broad-leaved dock *Rumex obtusifolius*, creeping thistle and nettle *Urtica dioica* are often found at the scrub margins.

9.3.43. A small patch of exclusively bramble scrub is present along the causeway leading to Rhych Point.

9.3.44. Pockets of introduced shrub (ornamental planting) are also present along some of the road and car park edges.

9.3.45. A small patch of the invasive non-native species Japanese knotweed was found on the northern side of the bund on the northern side of Sandy Bay East (W3W unwraps.prevented.splinters).

9.3.46. The mixed scrub is assessed to have moderate condition. Condition assessment is N/A for bramble scrub and introduced shrub. See Appendix 9.8 for details.

Ponds (non-priority habitat)

9.3.47. Only a single pond is present within the application site, in the north-western corner of the Monster Park. This is a small pond (approx 30m^2), overshaded by trees, and with no associated aquatic vegetation (only a cover of duckweed *Lemna minor*). The pond also contains some dumped litter.

9.3.48. The pond is assessed to have moderate condition. See Appendix 9.8 for details.

Coastal sand dunes

9.3.49. An extensive area of mobile (yellow) sand dunes is present south of the Sandy Bay East area (and encroaching slightly into it in places). The sand dunes are dominated by marram grass *Ammophila arenaria*, together with associated species including sea barley *Hordeum marinum*, bulbous meadow-grass *Poa bulbosa*, dune fescue *Vulpia fasciculata*, squirrel-tail fescue *Vulpia bromoides*, compact brome *Bromus madritensis*, sea spurge *Euphorbia paralias,* sea radish *Raphanus rephanistrum* ssp *maritimus*, sea holly *Eryngium maritimum*, common broomrape *Orobanche minor*, sand sedge, sea bindweed *Calystegia soldanella*, horseradish *Amoracia rusticana*, common stork's-bill and evening primrose.

9.3.50. The coastal sand dunes are assessed to have moderate condition. See Appendix 9.8 for details.

Bare sand

9.3.51. Two small parts of the site are mapped as bare sand. The first is just beyond the western edge of the dunes, where a mound of sand is present, but has not been colonised with any sand dune vegetation such as marram grass. The second is a flat area of exposed sand on the eastern side of the Sandy Bay East area, again comprising bare sand with no associated sand dune vegetation.

9.3.52. Condition assessment is N/A for bare sand.

Other sea buckthorn scrub

9.3.53. Sea buckthorn *Hippophae rhamnoides* is a locally invasive and undesirable species. Some areas on the eastern side of the sand dunes have extensive areas overgrown by sea buckthorn. This has also resulted in an influx of other grassland species, and over time is expected to transform the mobile dunes into fixed (grey) dunes.

9.3.54. Condition assessment is N/A for other sea buckthorn scrub.

Low energy littoral rock

9.3.55. A small amount of bare rock exposed to the sea (but sheltered from prevailing winds by the sea wall) is present at the entrance of the harbour.

9.3.56. The low energy littoral rock is assessed to have moderate condition.

Artificial unvegetated, unsealed surface

9.3.57. This habitat type relates to the areas of bare ground in the Salt Lake Central car park, and in the construction compound in the southern part of this area.

9.3.58. Condition assessment is N/A for artificial unvegetated, unsealed surface.

Buildings

9.3.59. The main built-up areas within the site are the fairground, the Hi-Tide area, school, supermarket and marina.

9.3.60. Condition assessment is N/A for buildings.

Developed land; sealed surface

9.3.61. This refers to all the hardstanding within the site, including roads, paths and all other hard surfaces (for example within the fairground and built-up areas).

9.3.62. Condition assessment is N/A for developed land; sealed surface.

Sea

9.3.63. The marina and its entrance are open to the sea.

9.3.64. Condition assessment is N/A for the sea.

Non-Native Invasive Species

9.3.65. The following non-native invasive species were noted within the site:

- Sea buckthorn, whilst not listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended), is a non-native and undesirable species in Wales, and can have negative impacts on sand dune communities. Several large clumps of sea buckthorn are growing on the eastern side of the sand dunes.
- Cotoneaster (*Cotoneaster horizontalis* and *Cotoneaster bullatus*), fairly prolific in Monster Park.
- Japanese knotweed (small patch on northern side of mound to north of Sandy Bay East area, W3W: unwraps.prevented.splinters).
- Virginia creeper *Parthenocissus quinquefolia*, which has colonised edge habitat and the adjoining grass sward across approximately the central third of the northern boundary of the Sandy Bay East area (north of the mound).

9.3.66. Japanese knotweed, Virginia creeper and the two cotoneaster species recorded in the Monster Park are all listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended), and represent invasive non-native species.

Field Survey Results (Fauna)

Badgers

9.3.67. Badger survey results are included separately within confidential Appendix 9.9 (which should have a limited circulation on animal welfare grounds).

9.3.68. It is noted in summary however that no active badger setts have been recorded within the application site. In addition, no signs of recent badger activity (such as latrines, prints, fresh spoil, bedding material or badger hairs) were recorded.

Bats

Bat Roosting Potential (Trees)

9.3.69. Figure 9.3a shows the locations of all the trees within the site noted to have potential bat roosting features.

9.3.70. 5 trees within the application site were noted to be PRF-I. One of these was noted to be a 'possible' PRF-I (see target note 1 on Figure 9.3a), with closer inspection of the PRF needed to check it is not just a surface feature. Another was noted in 2023 by David Clements Ecology, but no potential roosting feature could be found at this location in 2025 (see target note 2 on Figure 9.3a).

9.3.71. No trees were noted to be PRF-M. The majority of the trees within the site were not assessed to have any potential bat roosting features.

Bat Roosting Potential (Buildings / Structures)

9.3.72. Figure 9.3a shows which buildings within the site were surveyed for bat roosting potential (only those buildings expected to be impacted by the proposals were surveyed – other buildings which are expected to be retained, such as the school, supermarket, marina buildings and Hi-Tide, were not subject to survey). For the buildings which were surveyed, the bat roosting potential of each building is shown. Figure 9.3b contains the same information as Figure 9.3a, but is zoomed in on the fairground, which is the location of the majority of the buildings proposed to be demolished, and gives letter labels for each of the fairground buildings which are referenced in the building descriptions below.

9.3.73. The results of the bat building surveys are set out below:

- Building A. A large disused warehouse, with metal walls and a pitched asbestos roof. Assessed to have negligible bat roosting potential.
- Building B. A small fairground building, with metal walls and a pitched metal roof. Assessed to have negligible bat roosting potential.
- Building C. A small fairground building, with metal walls and a monopitch metal roof. Assessed to have negligible bat roosting potential.
- Building D. A fairground building housing a ghost train ride, with brick walls and a flat concrete roof. Brick walls noted to be in relatively good condition, with no obvious crevices. Assessed to have negligible bat roosting potential.

- Building E. A large disused warehouse building, with asbestos and wooden board walls and a pitched asbestos roof, and a hanging ceiling. Assessed to have negligible bat roosting potential.
- Building F. A large office complex over a ground-floor arcade, with tile covered brick walls (with no obvious gaps) and a flat roof. Assessed to have negligible bat roosting potential.
- Building G. A fairground arcade, with plastered walls and a pitched metal roof. Assessed to have negligible bat roosting potential.
- Building H. A long building containing multiple stalls, with metal and wooden board walls and a pitched metal roof (with an adjoining flat extension). Assessed to have negligible bat roosting potential.
- Building J. A large complex of warehouses and back rooms, with a pub / restaurant at its southern end. Brick walls (with occasional plaster), and a pitched asbestos roof (flat roof over the pub / restaurant), with the section adjoining the pub having a hanging ceiling, plus a flat metal roof in its north-western corner. Assessed to have negligible bat roosting potential.
- Building K. A single-storey building beneath a fairground slide, with metal and breeze block walls and a flat metal roof. Breeze block wall sections noted to be in relatively good condition, with no obvious crevices. Assessed to have negligible bat roosting potential.
- Building L. Large warehouses, with breeze block walls and a pitched metal roof, plus areas with flat metal, asbestos and concrete roofs. Portacabin-style buildings on western side. Assessed to have negligible bat roosting potential.
- Building M. A large workshop, with metal walls and a pitched asbestos roof. Assessed to have negligible bat roosting potential.
- Complex of small stalls and kiosks along the northern edge of Sandy Bay (south of the fairground and Hi-Tide) (see Figure 9.3a). Single-storey buildings variously constructed from metal, asbestos and breeze blocks, and all assessed from exterior inspection to have negligible bat roosting potential.
- The Buccaneer (situated between fairground and Hi-Tide) (see photo 22 in Appendix 9.3). Abandoned pub / restaurant, with plastered walls and a flat roof. Area of hanging tiles on northern side of building. Occasional gaps noted beneath hanging tiles. Assessed to have low bat roosting potential (associated with the hanging tile gaps).

- In addition, all the current structures (walls and buildings) beneath the footprint of the proposed new coastal defences along the northern edge of Sandy Bay between the western side of the fairground and the eastern end of the Hi-Tide area were surveyed for bat roosting potential. The seafront along this edge currently comprises a mixture of grassy mounds (in most areas with low (less than 2m high) stone / blockwork walls at their base), blockwork buildings, plus a sloping concrete slab at the western end (see photos 25-30 in Appendix 9.3). None of these structures were assessed to have any significant bat roosting potential.
- At the western end the proposed new coastal defences will also impact on the northern end of the existing sea wall along the eastern edge of Sandy Bay. While the eastern sea wall was noted to have numerous crevices along its length, at this northern end the only gap noted was a fairly large hole approximately 5 feet from the ground, leading into a rubble filled interior. However, given the fairly large size of the hole, and the fact that it is subject to wave action at each high tide, it is not assessed that this feature has any significant bat roosting potential.

Bat Activity Surveys (Transects)

9.3.74. The dusk bat transect survey results are shown on Figures 9.3c, 9.3d and 9.3e. Figure 9.3f is a summary map showing overall bat activity from all the transect surveys combined.

9.3.75. The grassland areas (particularly those within the Sandy Bay East area) are considered to have some suitability for bat activity, in particular along the scrub-lined edges such as the northern edge and the elevated scrub-covered mound in the northern part of Sandy Bay East. The Monster Park's juxtaposition of woodland (with scrub) and grassland is also considered suitable for bat activity, as is the line of trees on the eastern side of Griffin Park (with the pond in the Monster Park potentially providing a foraging resource, albeit a limited one due to its small size). The dunes are also assessed to have some suitability for bat activity.

9.3.76. Conversely, the suitability of the area for bats is likely to be reduced by its encirclement on land by brightly lit urban areas (and a large caravan park to the east), and its paucity of boundary features such as hedgerows. The areas of hardstanding and buildings within the site are considered to have minimal suitability for bat activity. And bat activity is expected to be significantly reduced in all areas subject to lighting within the application site, such as along roadsides, in urban areas and at the caravan parks in Sandy Bay East.

9.3.77. On 13th May 2025 bat activity levels were noted to be moderate on the eastern side of the site (Sandy Bay East grassland and dunes), and to comprise mainly common pipistrelle, plus

occasional noctule registrations. Bat activity levels on the western side of the site were very low, with only a single noctule registration noted near the marina. No bat activity was noted at the two observation points (northern edge of the dunes, and western end of the beach observing a hole in the sea wall (see above) to provide additional survey information on this feature). Some common pipistrelle foraging was noted on Rhych Point.

9.3.78. On 8th July 2025 bat activity levels were again observed to be moderate on the eastern side of the site, with bat activity also observed within the Monster Park (the location of the two observation points) and Griffin Park. All the bat activity was attributable to common pipistrelle. No bat activity was noted anywhere west of Griffin Park. Some common pipistrelle foraging was noted on the eastern side of the Monster Park.

9.3.79. On 3rd September 2025 bat activity levels were noted to be relatively low, with the exception of the area of grassland / woodland edge north-east of the Monster Park, where three common pipistrelle were observed to be foraging. The only other bat activity recorded was a common pipistrelle on the western side of the Salt Lake car park, near the long grass and scrub edge. No bat activity was noted at the two observation points (southern edge of the Sandy Bay East mound, and southern edge of the Salt Lake car park).

9.3.80. The bat activity summary displayed at Figure 9.3f shows that the peaks of bat activity were noted at the eastern end of the sand dunes near Rhych Point, and at the grassland / woodland interface north-east of the Monster Park. It also highlights that the majority of bat activity is noted on the eastern side of the site (Monster Park and Sandy Bay East, including the sand dunes), while bat activity on the western side of the site is relatively limited.

9.3.81. Overall, common pipistrelle was the most frequently noted bat species across the application site. The only other species recorded was noctule, which was noted only occasionally, and only during the spring survey.

Remote Bat Surveys

9.3.82. The results of the remote bat surveys undertaken within the Phase 2 Study Area are presented within Table 9.11 and Table 9.12 below. Table 9.11 gives the absolute bat count by species at each remote detector position, for all survey nights with suitable weather conditions. Table 9.12 gives values for the average number of bat registrations from each species per night (permitting direct comparisons between remote positions, despite their being deployed for varying numbers of suitable survey nights). Figure 9.3g shows the location of the remote bat detectors.

Table 9.11. Remote bat survey results (total number of registrations).

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus/ Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
Apr-25	1	16/04/25, and 19/04/25-21/04/25 (4 nights)	9	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	16
	2	16/04/25, and 19/04/25-21/04/25 (4 nights)	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
	3	16/04/25, and 19/04/25-21/04/25 (4 nights)	368	4	1	1	0	5	0	0	0	0	0	0	0	0	0	0	379
	4	Detector failed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
	5	16/04/25, and 19/04/25-21/04/25 (4 nights)	8	1	0	0	0	4	0	0	1	0	0	0	0	0	0	0	14
	6	16/04/25, and 19/04/25-21/04/25 (4 nights)	49	0	0	0	9	21	0	0	0	0	0	0	0	0	0	0	79
	7	16/04/25, and 19/04/25-21/04/25 (4 nights)	156	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	175
	8	16/04/25, and 19/04/25-21/04/25 (4 nights)	1645	74	0	0	91	20	0	0	0	0	0	0	3	0	0	0	1833
	9	16/04/25, and 19/04/25-20/04/25 (3 nights)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-25	1	13/05/25-19/05/25 (7 nights)	3780	17	1	1	3	26	0	0	0	0	0	0	1	0	0	0	3829
	2	13/05/25-16/05/25 (4 nights)	209	3	1	0	5	3	0	0	0	0	0	0	0	0	0	0	221
	3	13/05/25-19/05/25 (7 nights)	6837	221	30	10	344	16	0	0	0	0	0	0	3	0	5	0	7466
	4	13/05/25-19/05/25 (7 nights)	985	43	1	0	39	24	4	50	1	4	10	14	12	0	4	0	1191

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus/ Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
	5	13/05/25-19/05/25 (7 nights)	211	16	0	3	1	9	0	5	0	0	0	42	7	0	0	0	294
	6	13/05/25-19/05/25 (7 nights)	2463	140	290	4	307	11	0	2	0	0	0	0	1	0	0	0	3218
	7	13/05/25-19/05/25 (7 nights)	1115	237	23	0	26	12	0	1	0	0	2	0	1	0	0	0	1417
	8	13/05/25-19/05/25 (7 nights)	2656	268	91	2	147	2	0	0	0	0	0	1	4	0	0	0	3171
	9	13/05/25-19/05/25 (7 nights)	3108	86	54	0	90	9	0	2	0	0	0	0	0	1	0	0	3350
Jun-25	1	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	3939	8	26	9	161	233	3	0	0	0	7	0	0	0	0	0	4386
	2	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	327	1	1	0	2	95	2	0	0	0	4	0	0	0	0	0	432
	3	05/06/25, 07/06/25 (2 nights)	85	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	94
	4	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	447	11	1	0	2	1133	210	156	1	0	257	11	11	0	0	0	2240
	5	05/06/25, 07/06/25-12/06/25, 14/06/25 (8 nights)	790	19	0	0	0	2552	378	31	1	0	154	3	0	0	0	0	3928
	6	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	544	5	11	0	1	230	9	1	0	0	7	0	0	0	0	0	808
	7	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	318	8	41	0	20	276	21	0	0	0	10	0	0	0	0	0	694
	8	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	936	13	88	0	64	16	14	0	1	0	2	0	0	0	0	0	1134

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus/ Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
	9	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	3363	6	894	0	224	255	18	3	0	0	8	0	0	0	0	0	4771
Jul-25	1	08/06/25-14/07/25 (7 nights)	1730	30	0	0	0	20	0	0	0	0	3	0	0	0	0	0	1783
	2	08/06/25-14/07/25 (7 nights)	2380	15	1	0	132	13	0	0	0	0	2	0	0	0	0	0	2543
	3	08/06/25-11/07/25 (4 nights)	2697	13	0	0	15	16	3	0	0	0	0	0	0	0	0	0	2744
	4	08/06/25-13/07/25 (6 nights)	176	36	1	0	1	16	0	0	0	0	0	0	6	0	1	0	237
	5	08/06/25-14/07/25 (7 nights)	159	7	0	0	0	10	1	0	0	0	0	0	0	0	1	0	178
	6	08/06/25-14/07/25 (7 nights)	557	31	96	1	49	31	2	0	0	0	0	1	0	0	3	0	771
	7	08/06/25-14/07/25 (7 nights)	795	79	377	0	221	16	1	0	0	0	0	0	1	0	1	0	1491
	8	08/06/25-14/07/25 (7 nights)	5638	62	926	0	305	22	7	0	0	0	1	3	0	0	2	0	6966
	9	08/06/25-14/07/25 (7 nights)	3358	7	23	0	50	24	4	0	0	0	1	0	0	0	0	0	3467
Aug-25	1	05/08/25-08/08/25 (4 nights)	1123	672	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1795
	2	05/08/25-10/08/25 (6 nights)	704	12	0	0	0	0	2	0	0	0	0	0	0	0	0	0	718
	3	05/08/25-07/08/25 (3 nights)	1881	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1894
	4	05/08/25-08/08/25 (4 nights)	85	21	0	0	0	0	0	0	0	0	0	1	11	0	0	0	118
	5	05/08/25-07/08/25 (3 nights)	116	3729	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3845
	6	05/08/25-09/08/25 (5 nights)	108	3	1	0	9	0	0	0	0	0	0	0	0	0	0	0	121
	7	05/08/25-09/08/25 (5 nights)	284	3	158	0	331	0	0	0	0	0	0	0	2	0	0	0	778
	8	05/08/25-09/08/25 (5 nights)	3121	15	466	0	786	0	0	0	0	0	0	1	9	0	0	0	4398

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus/ Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
	9	05/08/25-08/08/25 (4 nights)	725	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	768
Sep-25	1	03/05/09-05/09/25 (3 nights)	69	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	70
	2	03/05/09-08/09/25 (6 nights)	56	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	59
	3	03/05/09-05/09/25 (3 nights)	1671	10	0	15	1	13	0	0	0	0	2	0	0	0	0	0	1712
	4	03/05/09-05/09/25 (3 nights)	230	4	0	5	0	3	0	0	0	0	0	0	28	0	1	0	271
	5	03/05/09-05/09/25 (3 nights)	408	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	413
	6	03/05/09-08/09/25 (6 nights)	85	8	1	1	0	6	0	0	0	0	0	0	0	0	0	0	101
	7	03/05/09-04/09/25 (2 nights)	18	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	22
	8	03/05/09-08/09/25, 10/09/25, 12/09/25-13/09/25 (9 nights)	303	5	5	0	0	0	0	0	0	0	0	0	0	0	1	0	314
	9	03/05/09-06/09/25 (4 nights)	837	5	1	0	0	0	0	0	0	0	1	0	0	0	0	0	844
Oct-25	1	08/10/15-12/10/25 (5 nights)	1755	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	1759
	2	08/10/15-15/10/25 (8 nights)	192	6	0	0	0	6	1	0	0	0	0	1	0	0	1	0	207
	3	08/10/15-11/10/25 (4 nights)	1452	2	4	0	0	20	0	0	0	0	0	0	1	0	1	0	1480
	4	08/10/15-15/10/25 (8 nights)	295	22	0	0	0	6	2	0	0	0	0	3	205	0	37	1	571
	5	08/10/15-12/10/25 (5 nights)	22	18	0	0	0	0	0	0	0	0	0	0	4	1	1	0	46
	6	08/10/15-15/10/25 (8 nights)	205	26	0	0	1	5	0	0	0	0	0	0	0	0	52	0	289
	7	08/10/15-15/10/25 (8 nights)	2618	45	5	0	1	6	0	0	0	0	0	1	0	0	206	0	2882
	8	08/10/15-15/10/25 (8 nights)	1711	12	0	0	0	0	0	0	0	0	0	0	0	0	1473	0	3196

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus/ Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
	9	08/10/15-15/10/25 (8 nights)	1681	42	15	0	1	4	0	0	0	0	0	0	0	0	29	0	1772

Table 9.12. Remote bat survey results (average number of registrations per suitable survey night).

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus /Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
Apr-25	1	16/04/25, and 19/04/25-21/04/25 (4 nights)	2.25	0.00	0.00	0.00	0.00	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
	2	16/04/25, and 19/04/25-21/04/25 (4 nights)	0.75	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25
	3	16/04/25, and 19/04/25-21/04/25 (4 nights)	92.00	1.00	0.25	0.25	0.00	1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.75
	4	Detector failed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00	0.00
	5	16/04/25, and 19/04/25-21/04/25 (4 nights)	2.00	0.25	0.00	0.00	0.00	1.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.50
	6	16/04/25, and 19/04/25-21/04/25 (4 nights)	12.25	0.00	0.00	0.00	2.25	5.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.75
	7	16/04/25, and 19/04/25-21/04/25 (4 nights)	39.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.75
	8	16/04/25, and 19/04/25-21/04/25 (4 nights)	411.25	18.50	0.00	0.00	22.75	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	458.25
	9	16/04/25, and 19/04/25-20/04/25 (3 nights)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus /Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
May-25	1	13/05/25-19/05/25 (7 nights)	540.00	2.43	0.14	0.14	0.43	3.71	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	547.00
	2	13/05/25-16/05/25 (4 nights)	52.25	0.75	0.25	0.00	1.25	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.25
	3	13/05/25-19/05/25 (7 nights)	976.71	31.57	4.29	1.43	49.14	2.29	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.71	0.00	1066.57
	4	13/05/25-19/05/25 (7 nights)	140.71	6.14	0.14	0.00	5.57	3.43	0.57	7.14	0.14	0.57	1.43	2.00	1.71	0.00	0.57	0.00	170.14
	5	13/05/25-19/05/25 (7 nights)	30.14	2.29	0.00	0.43	0.14	1.29	0.00	0.71	0.00	0.00	0.00	6.00	1.00	0.00	0.00	0.00	42.00
	6	13/05/25-19/05/25 (7 nights)	351.86	20.00	41.43	0.57	43.86	1.57	0.00	0.29	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	459.71
	7	13/05/25-19/05/25 (7 nights)	159.29	33.86	3.29	0.00	3.71	1.71	0.00	0.14	0.00	0.00	0.29	0.00	0.14	0.00	0.00	0.00	202.43
	8	13/05/25-19/05/25 (7 nights)	379.43	38.29	13.00	0.29	21.00	0.29	0.00	0.00	0.00	0.00	0.00	0.14	0.57	0.00	0.00	0.00	453.00
	9	13/05/25-19/05/25 (7 nights)	444.00	12.29	7.71	0.00	12.86	1.29	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	478.57
Jun-25	1	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	358.09	0.73	2.36	0.82	14.64	21.18	0.27	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	398.73
	2	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	29.73	0.09	0.09	0.00	0.18	8.64	0.18	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	39.27
	3	05/06/25, 07/06/25 (2 nights)	42.50	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.00
	4	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	55.88	1.38	0.13	0.00	0.25	141.63	26.25	19.50	0.13	0.00	32.13	1.38	1.38	0.00	0.00	0.00	280.00
	5	05/06/25, 07/06/25-12/06/25, 14/06/25 (8 nights)	71.82	1.73	0.00	0.00	0.00	232.00	34.36	2.82	0.09	0.00	14.00	0.27	0.00	0.00	0.00	0.00	357.09
	6	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	49.45	0.45	1.00	0.00	0.09	20.91	0.82	0.09	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	73.45

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus /Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
	7	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	28.91	0.73	3.73	0.00	1.82	25.09	1.91	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00	63.09
	8	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	82.54	1.15	7.76	0.00	5.64	1.41	1.23	0.00	0.09	0.00	0.18	0.00	0.00	0.00	0.00	0.00	100.00
	9	05/06/25, 07/06/25-12/06/25, 14/06/25-17/06/25 (11 nights)	305.73	0.55	81.27	0.00	20.36	23.18	1.64	0.27	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.00	433.73
Jul-25	1	08/06/25-14/07/25 (7 nights)	247.14	4.29	0.00	0.00	0.00	2.86	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	254.71
	2	08/06/25-14/07/25 (7 nights)	340.00	2.14	0.14	0.00	18.86	1.86	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	363.29
	3	08/06/25-11/07/25 (4 nights)	674.25	3.25	0.00	0.00	3.75	4.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	686.00
	4	08/06/25-13/07/25 (6 nights)	29.33	6.00	0.17	0.00	0.17	2.67	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.17	0.00	39.50
	5	08/06/25-14/07/25 (7 nights)	22.71	1.00	0.00	0.00	0.00	1.43	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	25.43
	6	08/06/25-14/07/25 (7 nights)	79.57	4.43	13.71	0.14	7.00	4.43	0.29	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.43	0.00	110.14
	7	08/06/25-14/07/25 (7 nights)	113.57	11.29	53.86	0.00	31.57	2.29	0.14	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.14	0.00	213.00
	8	08/06/25-14/07/25 (7 nights)	805.43	8.86	132.29	0.00	43.57	3.14	1.00	0.00	0.00	0.00	0.14	0.43	0.00	0.00	0.29	0.00	995.14
	9	08/06/25-14/07/25 (7 nights)	479.71	1.00	3.29	0.00	7.14	3.43	0.57	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	495.29
Aug-25	1	05/08/25-08/08/25 (4 nights)	280.80	168.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	448.75
	2	05/08/25-10/08/25 (6 nights)	117.33	2.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	119.67
	3	05/08/25-07/08/25 (3 nights)	627.00	4.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	631.33
	4	05/08/25-08/08/25 (4 nights)	21.25	5.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	2.75	0.00	0.00	0.00	29.50

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus /Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
	5	05/08/25-07/08/25 (3 nights)	38.67	1243.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1281.67
	6	05/08/25-09/08/25 (5 nights)	21.60	0.60	0.20	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.20
	7	05/08/25-09/08/25 (5 nights)	56.80	0.60	31.60	0.00	66.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	155.60
	8	05/08/25-09/08/25 (5 nights)	624.20	3.00	93.20	0.00	157.20	0.00	0.00	0.00	0.00	0.00	0.00	0.20	1.80	0.00	0.00	0.00	879.60
	9	05/08/25-08/08/25 (4 nights)	181.25	10.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	192.00
Sep-25	1	03/05/09-05/09/25 (3 nights)	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	23.33
	2	03/05/09-08/09/25 (6 nights)	9.33	0.17	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	9.83
	3	03/05/09-05/09/25 (3 nights)	557.00	3.33	0.00	5.00	0.33	4.33	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	570.67
	4	03/05/09-05/09/25 (3 nights)	76.67	1.33	0.00	1.67	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	9.33	0.00	0.33	0.00	90.33
	5	03/05/09-05/09/25 (3 nights)	136.00	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	137.67
	6	03/05/09-08/09/25 (6 nights)	14.17	1.33	0.17	0.17	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.83
	7	03/05/09-04/09/25 (2 nights)	9.00	0.50	0.00	0.50	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.00
	8	03/05/09-08/09/25, 10/09/25, 12/09/25-13/09/25 (9 nights)	33.67	0.56	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	34.89
	9	03/05/09-06/09/25 (4 nights)	209.25	1.25	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	211.00
Oct-25	1	08/10/15-12/10/25 (5 nights)	351.00	0.00	0.00	0.00	0.00	0.60	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	351.80
	2	08/10/15-15/10/25 (8 nights)	24.00	0.75	0.00	0.00	0.00	0.75	0.13	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.13	0.00	25.88
	3	08/10/15-11/10/25 (4 nights)	363.00	0.50	1.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.00	370.00
	4	08/10/15-15/10/25 (8 nights)	36.88	2.75	0.00	0.00	0.00	0.75	0.25	0.00	0.00	0.00	0.00	0.38	25.63	0.00	4.63	12.50	71.38

Survey period	Detector ID (see Figure 9.3g)	Dates (night starting only)	45 Pip	55 Pip	Nathusius' pipistrelle	45/55 Pip	45/ Nathusius' pipistrelle	Noctule	Nyctalus	Serotine	Serotine/ Brown long eared	Leisler's/ Serotine	Nyctalus /Serotine	Brown long eared	Lesser horseshoe	Greater horseshoe	Myotis	Brown long eared/ Nyctalus	Total
	5	08/10/15-12/10/25 (5 nights)	4.40	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.20	0.20	0.00	9.20
	6	08/10/15-15/10/25 (8 nights)	25.63	3.25	0.00	0.00	0.13	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	36.13
	7	08/10/15-15/10/25 (8 nights)	327.25	5.63	0.63	0.00	0.13	0.75	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	25.75	0.00	360.25
	8	08/10/15-15/10/25 (8 nights)	213.88	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	184.13	0.00	399.50
	9	08/10/15-15/10/25 (8 nights)	210.13	5.25	1.88	0.00	0.13	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63	0.00	221.50

9.3.83. Table 12 shows that the highest average levels of bat activity per night were recorded by:

- Detector 5 (northern bund, August), 1282 registrations
- Detector 3 (Griffin Park, May), 1067 registrations
- Detector 8 (Monster Park north, July), 995 registrations
- Detector 8 (Monster Park north, August), 880 registrations
- Detector 3 (Griffin Park, July), 686 registrations
- Detector 3 (Griffin Park, August), 631 registrations
- Detector 3 (Griffin Park, September), 571 registrations
- Detector 1 (Sandy Bay Bowl west, May), 547 registrations

9.3.84. Summing the average levels of bat activity in every month for each detector location to give a measure of bat activity throughout the season gives the following results:

- Detector 3 (Griffin Park): 3466 registrations
- Detector 8 (Monster Park north): 3320 registrations
- Detector 9 (Monster Park south-east): 2032 registrations
- Detector 1 (Sandy Bay Bowl west): 2028 registrations
- Detector 5 (northern bund): 1857 registrations
- Detector 7 (Monster Park north-west): 1049 registrations
- Detector 6 (Monster Park south-west): 740 registrations
- Detector 4 (north-eastern corner): 681 registrations
- Detector 2 (roundabout): 614 registrations

9.3.85. The above demonstrates that the consistently highest levels of bat activity throughout the entire season were observed at Griffin Park, and the Monster Park, followed by the western side of Sandy Bay Bowl, then the northern bund.

9.3.86. The fewest bat registrations were noted at the roundabout, followed by the north-eastern corner of the application site.

9.3.87. By month, the highest average levels of bat activity per night (divided by the number of operational detectors) were recorded during:

- August (418 registrations)

- May (386 registrations)
- July (354 registrations)
- October (205 registrations)
- June (199 registrations)
- September (123 registrations)
- April (78 registrations)

9.3.88. In terms of overall species composition taken from Table 11, by far the highest number of registrations are attributable to the ubiquitous species common pipistrelle (64,423 registrations). Other species recorded were as follows:

- Soprano pipistrelle (5351 registrations)
- Noctule (5154 registrations)
- Nathusius' pipistrelle (3610 registrations, with a further 3464 registrations noted to be either common or Nathusius' pipistrelle)
- Serotine (251 registrations)
- Lesser horseshoe bat (100 registrations)
- Brown long-eared bat[6] (77 registrations)
- Myotis sp (22 registrations)
- Greater horseshoe bat (1 registration)

9.3.89. Of particular note are the registrations of Nathusius' pipistrelle, lesser horseshoe and greater horseshoe, all of which are rare species. On the basis of the high number of Nathusius' pipistrelle calls in particular, the assemblage of rarer bats within the application site is considered highly notable. Further analysis of these three rare bat species follows.

9.3.90. The total number of Nathusius' pipistrelle registrations noted at the following detectors throughout the survey season is as follows:

- Detector 8 (Monster Park north): 1576 registrations (& 1393 common or Nathusius pipistrelle registrations)

[6] While calls from the brown long-eared bat and much rarer grey long-eared bats are indistinguishable, these calls are considered to be from brown long-eared bat due to the location of the application site outside the known range of the grey long-eared bat. It is also noted that brown long-eared bats are a common species but have very quiet echolocation calls, so the recorded number of registrations is likely to be an underestimate.

- Detector 9 (Monster Park south-east): 972 registrations (& 364 common or Nathusius pipistrelle registrations)
- Detector 7 (Monster Park north-west): 599 registrations (& 617 common or Nathusius pipistrelle registrations)
- Detector 6 (Monster Park south-west): 399 registrations (& 375 common or Nathusius pipistrelle registrations)
- Detector 3 (Griffin Park): 31 registrations (& 369 common or Nathusius pipistrelle registrations)
- Detector 1 (Sandy Bay Bowl west): 27 registrations (& 164 common or Nathusius pipistrelle registrations)
- Detector 2 (roundabout): 3 registrations (& 139 common or Nathusius pipistrelle registrations)
- Detector 4 (north-eastern corner): 3 registrations (& 42 common or Nathusius pipistrelle registrations)
- Detector 5 (northern bund): 0 registrations (& 1 common or Nathusius pipistrelle registrations)

9.3.91. The above shows that the Nathusius' pipistrelle activity is strongly centred in the Monster Park, with only occasional registrations recorded elsewhere.

9.3.92. The total number of lesser horseshoe registrations noted at the following detectors throughout the survey season is as follows:

- Detector 4 (north-eastern corner): 68 registrations
- Detector 8 (Monster Park north): 16 registrations
- Detector 5 (northern bund): 7 registrations
- Detector 7 (Monster Park north-west): 4 registrations
- Detector 3 (Griffin Park): 3 registrations
- Detector 6 (Monster Park south-west): 1 registration
- Detector 1 (Sandy Bay Bowl west): 1 registration
- No registrations recorded on Detector 9 (Monster Park south-east) or Detector 2 (roundabout)

9.3.93. The above shows that lesser horseshoe activity is highest in the north-eastern corner of the application site (N.B. this activity was recorded throughout the season rather than attributable to a single high activity event), with only occasional registrations noted elsewhere.

9.3.94. Only a single greater horseshoe registration was recorded during the entire 2025 season, at Detector 9 (Monster Park south-east) in May, suggesting that this species is only a very sporadic visitor.

Reptiles

9.3.95. The reptile refugia locations and survey results from the spring 2025 survey are displayed on Figures 9.4a-c, and the raw survey data is within Appendix 9.5a. The reptile refugia locations and survey results from the autumn 2025 survey are displayed on Figures 9.4d-f, and the raw survey data is within Appendix 9.5b.

9.3.96. The areas assessed to have the highest suitability for reptiles are those where the grass is allowed to grow long. The main areas where this applies are the unmanaged grassland in the centre of the Monster Park, and the areas of long grass in the Sandy Bay East area (e.g. those around the Sandy Bay Bowl, and along the southern edge of the northern mound). The sand dunes are assessed to have moderate suitability for reptiles, particularly in the more grassy areas to the north-east of the dunes (where sea buckthorn is gradually fixing the dunes). Those parts of the site comprising hardstanding / buildings, or intensively cut grasslands (e.g. those in Griffin Park) are assessed to have minimal suitability for reptiles. Other parts of the site such as the north-western side of Salt Lake carpark and Rhych Point have some areas of long grass, but their suitability for reptiles is still considered to be low due to their relative isolation from other suitable reptile habitat.

9.3.97. The spring 2025 reptile survey recorded maximum counts of 10 common lizards and 35 slow worms.

9.3.98. The autumn 2025 reptile survey (covering a much larger area) recorded maximum counts of 62 common lizards and 11 slow worms.

9.3.99. In general reptiles are situated all around the areas with long grass around Sandy Bay bowl and along the southern edge and on top of the mound on the northern side of Sand Bay East, and throughout the grassy areas within the Monster Park (also extending into areas mapped as woodland, where there are canopy gaps letting in light and long grass is still growing beneath). Reptiles in the sand dunes appear to be restricted to the north-eastern part of the dunes which have been semi-fixed by sea buckthorn, making them more grassy (though it is

also noted that the western part of the dunes is one of the areas where public disturbance of reptile refugia was the highest).

9.3.100. Occasional reptiles were recorded around the northern and eastern edges of Sandy Bay East, presumably in lower numbers due to the more intensive grass cutting regime in these areas. In terms of the more isolated areas of suitable habitat, a single common lizard was noted in the grassland on Rhych Point.

9.3.101. No reptiles were noted in any other locations, with no reptile records in any part of the application site west of the Monster Park (including in Griffin Park and the grassy edges of Salt Lake car park).

9.3.102. Slow worms were mainly recorded within the Monster Park, with a secondary hotspot being the mound on the northern side of Sandy Bay East (particularly at its western end). Occasional slow worms were also noted around the northern and eastern edges of Sandy Bay East. None were noted in the long grass around the Sandy Bay Bowl, or in the sand dunes.

9.3.103. Common lizards were noted in their highest numbers in the long grassland around the Sandy Bay Bowl, particularly on its sloping sides. Secondary hotspots were in the Monster Park and on top of and on the southern side of the mound on the northern side of Sandy Bay East. Occasional lizards were recorded on the north-eastern side of the sand dunes, and around the eastern and northern margins of Sandy Bay East.

Great Crested Newts

9.3.104. Figure 9.5 shows the location of the only pond within the application site. Appendix 9.6a shows the results of the Habitat Suitability Index (HSI) assessment for this pond. Appendix 9.6b shows the results of the eDNA survey at this pond.

9.3.105. The HSI assessment noted the pond to have poor overall suitability for great crested newts, largely as a result of its small area, heavy overshading, isolation from other ponds and lack of aquatic macrophytes.

9.3.106. The eDNA survey gave a negative result for presence of great crested newts within this pond.

Breeding Birds

9.3.107. A total of 44 bird species were noted within the site during the five breeding bird survey visits undertaken in 2025. Table 9.13 below provides the species recorded on the site during the surveys, as well as the conservation status of each species, the number of individuals recorded during each visit, the assessed number of breeding territories, the highest level of breeding evidence recorded over the five visits, and a brief note regarding the status of each species.

Figure 9.6e provides the broad locations of the territory centres of the birds assessed to be breeding within the site.

Table 9.13. Results of 2025 Breeding Birds Survey

Species	Scientific Name	Status +	08/04/25	02/05/25	20/05/25	20/06/25	09/07/25	Assessed no. of breeding territories	Highest breeding category	Notes
Blackbird	Turdus merula		11	14	12	11	16	4-6	Probable	Relatively low density throughout the site.
Blackcap	Sylvia atricapilla		1	1	1	2	1	1-2	Probable	One territory in Monster Park, and possibly one on the mound to north of Sandy Bay Bowl.
Blue Tit	Cyanistes caeruleus		2	1	1	0	0	0-1	Possible	Very low numbers present.
Carrion Crow	Corvus corone		2	3	0	1	1	0-1	Possible	Low numbers present.
Chiffchaff	Phylloscopus collybita		2	3	2	2	0	1-2	Probable	One territory in Monster Park, and possibly one on the large mound to north of Sandy Bay Bowl.
Coal Tit	Periparus ater	Amber	0	0	0	1	1	0-1	Possible	One pair possibly breeding in Monster Park.
Collared Dove	Streptopelia decaocto		1	1	1	4	1	0-1	Possible	Mainly encountered on mound to north of Sandy Bay Bowl, with further individuals noted in the residential area to the north of the mound.

Species	Scientific Name	Status +	08/04/25	02/05/25	20/05/25	20/06/25	09/07/25	Assessed no. of breeding territories	Highest breeding category	Notes
Common Crossbill	Loxia curvirostra	Sch1	0	0	0	13	0	0	Not breeding	Flock flying over calling during one visit.
Dunnock	Prunella modularis	Priority/ Amber	13	6	14	4	10	12-13	Probable	Concentrated in the scrubby areas throughout the site.
Feral Pigeon	Columba livia		4	6	7	7	7	2-3	Probable	Present around the fairground and the harbour.
Goldcrest	Regulus regulus	Red	1	0	0	0	0	0-1	Possible	One pair possibly breeding in Monster Park.
Goldfinch	Carduelis carduelis		10	7	6	13	4	2-3	Probable	Low numbers present and likely to be nesting on the mound to the north of Sandy Bay Bowl.
Great Black-backed Gull	Larus marinus	Amber	0	0	0	0	1	0	Not breeding	One individual in the temporary car park during one visit.
Great Tit	Parus major		0	0	0	1	1	0-1	Possible	Low number present.
Green Woodpecker	Picus viridis	Amber	0	0	0	0	1	0-1	Possible	One individual during one visit.

Species	Scientific Name	Status +	08/04/25	02/05/25	20/05/25	20/06/25	09/07/25	Assessed no. of breeding territories	Highest breeding category	Notes
Greenfinch	Chloris chloris	Red	0	0	0	0	2	0-1	Possible	Two individuals during one visit.
Grey Wagtail	Motacilla cinerea	Amber	0	0	0	1	0	0-1	Possible	Flying over low during one visit.
Herring Gull	Larus argentatus	Priority/ Red	3	4	2	3	0	0	Not breeding	Typically found in the grassland in the east of the site feeding on discarded food.
House Sparrow	Passer domesticus	Priority/ Amber	34	25	39	36	67	2-3	Confirmed	Relatively high numbers present and typically found in the peripheral vegetation. Small nesting colony on a building south of Griffin Park.
Jackdaw	Coloeus monedula		4	21	6	0	4	0	Not breeding	Small flocks present in the grassland.
Lesser Black-backed Gull	Larus fuscus	Red	2	3	2	3	0	0	Not breeding	As per herring gull.
Linnet	Linaria cannabina	Priority/ Red	14	12	13	4	18	5-6	Probable	Typically found in the grassland and scattered scrub around Sandy Bay Bowl.

Species	Scientific Name	Status +	08/04/25	02/05/25	20/05/25	20/06/25	09/07/25	Assessed no. of breeding territories	Highest breeding category	Notes
Long-tailed Tit	Aegithalos caudatus		0	3	4	0	0	0-1	Possible	Low numbers present in scrubby areas.
Magpie	Pica pica	Amber	2	2	0	3	3	1-2	Possible	Low numbers present throughout.
Meadow Pipit	Anthus pratensis	Red	4	1	3	5	4	2-3	Confirmed	Typically found in the grassland around Sandy Bay Bowl.
Pied Wagtail	Motacilla alba		1	0	0	3	1	0-1	Possible	Low numbers present and typically recorded flying over.
Raven	Corvus corax		1	1	1	0	1	1	Confirmed	One pair likely nesting in a pine tree in the northern part of the Monster Park.
Redstart	Phoenicurus phoenicurus		1	0	0	0	0	0	Not breeding	Migrant bird passing through. Found near the Lookout Tower.
Robin	Erithacus rubecula		1	1	1	1	2	1-2	Probable	Surprisingly low numbers found.
Rock Pipit	Anthus petrosus		2	3	2	0	0	1-2	Probable	Typically found within the vicinity of the harbour.

Species	Scientific Name	Status +	08/04/25	02/05/25	20/05/25	20/06/25	09/07/25	Assessed no. of breeding territories	Highest breeding category	Notes
Sedge Warbler	Acrocephalus schoenobaenus	Amber	0	1	0	0	0	0	Not breeding	One individual singing near the temporary car park during one visit. Considered to be passing through on migration.
Skylark	Alauda arvensis	Priority/ Amber	1	2	1	1	1	1-2	Probable	One individual singing in the grassland around Sandy Bay Bowl.
Song thrush	Turdus philomelos	Priority	3	5	3	0	3	1-2	Probable	Typically found in or adjacent to the mound to the north of Sandy Bay Bowl.
Sparrowhawk	Accipiter nisus		0	0	1	0	0	0-1	Possible	One individual noted flying through the Monster Park.
Starling	Sturnus vulgaris	Priority/ Red	7	40	47	38	66	0	Not breeding	Relatively high numbers encountered, with individuals noted to be foraging in the grassland around Sandy Bay Bowl before flying north to the residential areas where they are likely to be nesting. The numbers recorded during the July visit include recently fledged individuals.

Species	Scientific Name	Status +	08/04/25	02/05/25	20/05/25	20/06/25	09/07/25	Assessed no. of breeding territories	Highest breeding category	Notes
Stonechat	Saxicola rubicola		4	5	4	0	3	2-4	Confirmed	Typically found in the scrubby areas around Sandy Bay Bowl, and likely to be nesting in these locations.
Swallow	Hirundo rustica		1	4	5	7	8	0	Not breeding	Relatively low numbers noted foraging over the site.
Swift	Apus apus	Red	0	2	1	1	2	0	Not breeding	Relatively low numbers noted foraging over the site.
Treecreeper	Certhia familiaris		0	0	0	1	0	0-1	Possible	One pair possibly breeding in Monster Park.
Wheatear	Oenanthe oenanthe	Amber	1	1	0	0	0	0	Not breeding	Migrant bird passing through. Found near Lookout Tower.
Whitethroat	Curruca communis	Red	0	5	1	2	2	2-3	Probable	Two territories noted in the scrub on the mound to the north of Sandy Bay Bowl.
Willow Warbler	Phylloscopus trochilus	Red	0	2	1	0	0	0-1	Possible	Territory in scrub adjacent to the sand dunes.

Species	Scientific Name	Status +	08/04/25	02/05/25	20/05/25	20/06/25	09/07/25	Assessed no. of breeding territories	Highest breeding category	Notes
Woodpigeon	Columba palumbus	Amber	6	11	10	10	7	5-7	Probable	Territories concentrated in the Monster Park and in the scrub on the mound to the north of Sandy Bay Bowl.
Wren	Troglodytes troglodytes	Amber	10	8	9	5	7	7-8	Probable	Territories concentrated in the scrubby areas of the Monster Park, the mound to the north of Sandy Bay Bowl, and peripheral areas to the north of the mound.

+ Sch1: Species subject to special protection due to inclusion on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended).
+ Red/Amber: Species having undergone a decline of >50% in the 25 years to 2021 (Red List) or a 25-49% decline over the same period (Amber List) (After Johnstone *et al*., 2022).
+ Priority: Species of Principal Importance further to s.7 of the Environment (Wales) Act 2016.

9.3.108. In addition to the birds recorded within the site boundary, birds were also noted in the intertidal areas adjoining the site. Table 9.14 below provides the species, and their numbers, found within each of the intertidal areas during the survey visits.

Table 9.14. Species, and their numbers, found during each breeding bird survey visit within the intertidal areas adjacent to the site in 2025

Species	Scientific Name	Status +	08/04/25	02/05/25	20/05/25	20/06/25	09/07/25
Porthcawl Point to Irongate Point							
Herring gull	Larus argentatus	Priority/ Red	21		11	9	
Oystercatcher	Haematopus ostralegus	Amber	6		1		
Sandy Bay							
Herring Gull	Larus argentatus	Priority/ Red	16		2	20	12
Ringed plover	Charadrius hiaticula	Red			3		
Sanderling	Calidris alba			44			
Rhych Point							
Herring Gull	Larus argentatus	Priority/ Red	8		66	6	
Trecco Bay							
Herring gull	Larus argentatus	Priority/ Red		6		10	
Great black-backed gull	Larus marinus	Amber				1	

[+] Sch1: Species subject to special protection due to inclusion on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended).
[+] Red/Amber: Species having undergone a decline of >50% in the 25 years to 2021 (Red List) or a 25-49% decline over the same period (Amber List) (After Johnstone *et al*., 2022).
[+] Priority: Species of Principal Importance further to s.7 of the Environment (Wales) Act 2016.

9.3.109. No evidence of nesting was noted by the above species during the surveys.

9.3.110. Figure 9.6f shows the location of bird nesting evidence recorded incidentally within the fairground buildings during the bat survey of these structures. With reference to this figure:

- Building A: An old bird nest was noted within this large abandoned building.
- Building J: Pigeons were noted flying within this large building. In the southern part of the building (adjoining the pub / restaurant at its southern end) is an area with a hanging ceiling. It is possible that this could obscure pigeon nests, though otherwise it is likely the building is only used for roosting.
- Building L: Pigeons were noted flying within this large building, and an egg shell was noted, suggesting that it has been used for nesting in the past.
- Building M: Two active pigeon nests were noted on a high beam on the northern side of the building in early 2025.

Wintering Birds

9.3.111. A total of 29 bird species were recorded within the site during the wintering bird surveys. Table 9.15 below provides the species recorded on the site, as well as the conservation status of each species, and the number of individuals recorded during each visit. Figures 9.6a to 9.6d provides the results of each survey visit.

Table 9.15. Results of Winter 2024-25 Wintering Bird Survey

Species	Scientific Name	Status +	11/12/2024		12/02/2025	
			08:15-10:30 Low Tide	12:45-14:45 High Tide	06:55-09:43 High Tide	11:15-12:55 Low Tide
Blackbird	Turdus merula		3	2	8	
Black-headed Gull	Chroicocephalus ridibundus	Red	16	6	4	

Species	Scientific Name	Status +	11/12/2024		12/02/2025	
			08:15-10:30 Low Tide	12:45-14:45 High Tide	06:55-09:43 High Tide	11:15-12:55 Low Tide
Blue Tit	Cyanistes caeruleus		3	1	3	
Carrion Crow	Corvus corone		2		2	
Chaffinch	Fringilla coelebs	Amber	1			
Coal tit	Periparus ater	Amber			1	
Collared Dove	Streptopelia decaocto		2		4	
Dunnock	Prunella modularis	Priority/ Amber	3	2	12	
Feral pigeon	Columba livia				15	
Goldfinch	Carduelis carduelis		3		1	
Great Tit	Parus major		1		1	
Greenfinch	Chloris chloris	Red	4			
Herring Gull	Larus argentatus	Priority/ Red	33	17	8	
House Sparrow	Passer domesticus	Priority/ Amber	2		17	
Jackdaw	Coloeus monedula		8	11	100	
Linnet	Linaria cannabina	Priority/ Red		18		

Species	Scientific Name	Status +	11/12/2024		12/02/2025	
			08:15-10:30 Low Tide	12:45-14:45 High Tide	06:55-09:43 High Tide	11:15-12:55 Low Tide
Magpie	Pica pica	Amber	2	1	3	
Meadow Pipit	Anthus pratensis	Red	2	1	3	
Merlin	Falco columbarius	Sch1/ Red			1	
Pied Wagtail	Motacilla alba		2		3	
Robin	Erithacus rubecula		3	5	6	1
Rock Pipit	Anthus petrosus		1		5	
Skylark	Alauda arvensis	Priority/ Amber				1
Song Thrush	Turdus philomelos	Priority	2	1	5	
Sparrowhawk	Accipiter nisus			1		
Starling	Sturnus vulgaris	Priority/Red	17	34		49
Stonechat	Saxicola rubicola		2	1	2	2
Woodpigeon	Columba palumbus		9	3	8	
Wren	Troglodytes troglodytes		9	5	11	

+ Sch1: Species subject to special protection due to inclusion on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended).
+ Red/Amber: Species having undergone a decline of >50% in the 25 years to 2021 (Red List) or a 25-49% decline over the same period (Amber List) (After Johnstone *et al*., 2022).

[+] Priority: Species of Principal Importance further to s.7 of the Environment (Wales) Act 2016.

9.3.112. In addition to the birds recorded within the site boundary, birds were also noted in the intertidal areas adjoining the site during high and low tide during each survey visit. Table 9.16 below provides the species, and their numbers, found within each of these intertidal areas during the survey visits.

Table 9.16. Species, and their numbers, found during each bird survey visit within the intertidal areas adjacent to the site over the winter of 2024-25

Species	Scientific Name	Status +	11/12/2024		12/02/2025	
			08:15-10:30 Low Tide	12:45-14:45 High Tide	06:55-09:43 High Tide	11:15-12:55 Low Tide
Porthcawl Point to Irongate Point						
Black-headed gull	Chroicocephalus ridibundus	Red	7			4
Great black-backed gull	Larus marinus	Amber				2
Herring gull	Larus argentatus	SPI/Red	5	4		18
Mediterranean gull	Ichthyaetus melanocephalus	Sch1/Amber	4			
Oystercatcher	Haematopus ostralegus	Amber	2			2
Rock pipit	Anthus petrosus	Green		2		
Sandy Bay						
Great black-backed gull	Larus marinus	Amber				2

Species	Scientific Name	Status +	11/12/2024		12/02/2025	
			08:15-10:30 Low Tide	12:45-14:45 High Tide	06:55-09:43 High Tide	11:15-12:55 Low Tide
Herring Gull	Larus argentatus	SPI/Red				2
Sanderling	Calidris alba			2		
Rhych Point						
Curlew	Numenius arquata	SPI/Red	1			
Herring Gull	Larus argentatus	SPI/Red	16			32
Trecco Bay						
Black-headed gull	Chroicocephalus ridibundus	Red				4
Dunlin	Calidris alpina	Red		24		
Great black-backed gull	Larus marinus	Amber	2			
Herring gull	Larus argentatus	SPI/Red				30
Oystercatcher	Haematopus ostralegus	Amber			1	
Ringed plover	Charadrius hiaticula	Red		48	35	
Sanderling	Calidris alba		6	7	8	

Species	Scientific Name	Status +	11/12/2024		12/02/2025	
			08:15-10:30 Low Tide	12:45-14:45 High Tide	06:55-09:43 High Tide	11:15-12:55 Low Tide
Turnstone	Arenaria interpres	Amber			3	

+ Sch1: Species subject to special protection due to inclusion on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended).
+ Red/Amber: Species having undergone a decline of >50% in the 25 years to 2021 (Red List) or a 25-49% decline over the same period (Amber List) (After Johnstone *et al*., 2022).
+ Priority: Species of Principal Importance further to s.7 of the Environment (Wales) Act 2016.

Invertebrates

9.3.113. The full invertebrate survey report is within Appendix 9.7, and a summary of the key findings is given below.

9.3.114. The survey recorded a total of 170 invertebrate species, including the following notable species:

- 3 Species of Principal Importance ('Research Only'): lackey moth *Malacosoma neustria*, garden tiger moth *Arctia caja*, and cinnabar moth *Tyria jacobaeae*.
- 1 Nationally Rare (NR) species: the dung beetle *Psammodius asper.*
- 1 Vulnerable (VU) species: lackey moth *Malacosoma Neustria*
- 4 Nationally Scarce (NS) species: the spider *Xerolycosa miniata*, the rhopalid bug *Liorhyssus hyalinus*, the ground beetle *Harpalus anxius*, and the tumbling flower-beetle *Mordellistena parvula*.
- 5 Nationally Scarce (Nb) species: the leafhopper *Euscelis ohausi*, the weevil *Catapion pubescens*, the weevil *Calosirus terminatus*, the weevil *Tychius pusillus*, and the ant *Myrmica schencki*.
- 1 Nationally Scarce (N) species: the picture-winged fly *Acanthiophilus helianthi*.
- 3 Near Threatened (NT) species: the dung beetle *Psammodius asper,* garden tiger moth *Arctia caja*, and the parasitic fly *Cistogaster globosa*.

Evaluation and Identification of Key Receptors

Methodology and Criteria

9.3.115. For the purposes of assessing likely significant effects on ecological assets and resources, a suite of key ecological receptors have been drawn out from the baseline information set out in the preceding sections. This screening process identifies ecological receptors for which impacts could be significant, whether in a formal EIA context, or in terms of assessing compliance with relevant statute and policies at sub-EIA level.

9.3.116. The decision as to which ecological receptors are 'key' in this context is in part a subjective value judgement. The current guidance for Ecological Impact Assessment issued by the Chartered Institute for Ecology and Environmental Management (CIEEM 2018 last updated April 2022) recognises that professional judgement and a certain level of subjectivity is unavoidable when apportioning value to individual ecological receptors. However, the process is informed and to some degree standardised by reference to factors such as formal national and local conservation status, legal protection and other frameworks that help ensure consistency – these are discussed below.

9.3.117. Sites already possessing statutory or non-statutory nature conservation designations will have been subjected to some form of evaluation process in the past, and their importance defined at a geographical scale (e.g. international, national, local). For these, evaluation will generally reaffirm their qualifying attributes, or in some cases may identify where designation may no longer be appropriate.

9.3.118. Factors such as extent, naturalness, rarity, fragility and diversity are all relevant to the determination of ecological value, and for the evaluation of sites and habitat features outside designated sites, these and other criteria as described by Ratcliffe (1977), may be applied. Ratcliffe's criteria are integral to the procedure for selecting both Sites of Special Scientific Interest and many non-statutory designation systems in the UK, and therefore remain an accepted industry standard for site evaluation.

9.3.119. In applying these criteria, attention may be drawn to the relative scarcity or abundance of features within the survey area and in the wider geographical context. Some criteria are, however, absolute and not relative to scale. Ancient woodland, for example, is a fragile and high value habitat irrespective of whether it is being considered in an international or local context. Similarly, the value of an otherwise poor habitat may be elevated if it is central to the survival of a rare species.

9.3.120. Where evaluation is important for the purposes of informing decisions related to land-use planning and development control, the above approach needs to be supplemented by consideration of whether individual species are subject to legal protection[7], or whether habitats or species are present which have been identified as 'priorities' for biodiversity conservation in the UK[8]. Planning authorities have a statutory duty[9] to have regard to protected species and to further biodiversity objectives and the presence of such resources may therefore be material to the determination of development control decisions (ODPM Circular 06/2005).

9.3.121. Finally, attention may be drawn to species not necessarily subject to special legal protection or identified by Government as a priority for biodiversity conservation, but which nonetheless have an 'unfavourable' conservation status as defined by the Red Data Book system[10] or the Red and Amber lists for birds (Johnstone *et al*, 2022) or which are otherwise known to be rare or scarce in a local or regional context.

9.3.122. Scales of comparison varying from international to the context of the local area may be used to define the measure of importance (or value) attached to individual features. The definition of geographic terms can vary, but in this evaluation the following geographic frame of reference is used:

- International;
- UK;
- National (i.e. England/NI/Scotland/Wales);
- Regional (e.g. relevant Natural Area or area covered by a regional records' centre)
- County (or Metropolitan - e.g. in London);
- District (or Unitary Authority, City, or Borough);
- Local or Parish; and
- within Site or zone of influence (the latter of which might be the project Site or a larger area) only.

7 Principal legislation being the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). Some animals are protected under separate legislation (e.g. the Protection of Badgers Act 1992).

8 As published by the Welsh Ministers further to their duties under Section 7 of the Environment (Wales) Act 2016.

9 Section 40 of the Natural Environment and Rural Communities Act 2006.

10 Following the British Red Data books published by the JNCC/RSNC, the Red List reviews for various taxa and the Nationally Notable (Nationally Scarce) categorisations recognised by the JNCC.

Evaluation

Designations

9.3.123. There are no sites with statutory nature conservation designations which impinge directly on the application site. Full details of nearby statutory sites and their reasons for designation are set out in the Desk Study Results and Data Review section above, but they are summarised below (with distances quoted from the application site boundary):

- Kenfig SAC (800m east, with other part of designated area 3.58km north-west, designated for coastal habitats and plant species)
- Merthyr Mawr SSSI (800m east, designated for coastal habitats, plant and fungi assemblages, and invertebrate assemblage)
- Merthyr Mawr Warren National Nature Reserve (1.42km east, as per Merthyr Mawr SSSI)
- Cefn Cribwr Grasslands SAC (4.68km north-north-east, designated for Molinia meadows and marsh fritillary butterfly)
- Dunraven Bay SAC (6.87km south-east, designated for shore dock)

9.3.124. The only site with a non-statutory nature conservation designation which impinges directly on the application site is B-Lines (which extend all around the Welsh coastline). Full details of these sites and their reasons for designation are set out in the Desk Study Results and Data Review section above, but they are summarised below:

- B-Lines (onsite (covering entirety of site), insect pathways along which the creation of wildflower rich habitat is encouraged)
- Rhych Point SINC (10m south-east), designated for rocky shoreline)
- Pwll-y-Waun SINC (165m north, designated for lake, broad-leaved plantation and improved grassland)
- The Wilderness SINC (245m north, designated for lake, broad-leaved plantation (ancient woodland), scattered broad-leaved trees, and improved and amenity grassland)
- Newton Point SINC (430m south-east, designated for rocky shoreline)
- Trafalgar Wood SINC (540m north-west, designated for broad-leaved scattered trees, restored ancient woodland)

- Newton Burrows SINC (745m east, designated for open dune and dune grassland, with woodland and scrub)
- NRW Priority Habitat (Coastal Sand Dune) (835m east, coastal sand dune habitat)
- Important Plant Area (835m east, sites of high botanical value)
- Manor Farm Fields SINC (900m north-east, designated for grazed agricultural fields with hedgerows)
- Lock's Common LNR & SINC (950m west, designated for sand dune, basic inland cliff, dry heath/acidic, calcareous and neutral grassland, limestone pavement and scrub)
- Nottage Court Wood SINC (1.06km north-north-west, designated for ancient woodland and unimproved neutral grassland)
- Black Rocks SINC (1.16km east, designated for rocky shoreline)
- Coedargraig SINC (1.26km north-east, designated for broad-leaved woodland)
- Graig Wood SINC (1.36km north-east, designated for broad-leaved semi-natural woodland (ancient woodland and restored ancient woodland)
- Pant-y-Hyl SINC (1.46km north-north-east, designated for broad-leaved ancient woodland, scrub and semi-improved neutral grassland)
- NRW Priority Area (Coastal Saltmarsh) (1.75km south-east, coastal saltmarsh habitat, though the part of this designated block which is within 2km of the application site is plotted in the sea, so no coastal saltmarsh habitat will be present)

9.3.125. All areas of ancient woodland mapped within 2km of the application site are associated with SINCs, so are considered as part of these SINCs above.

Habitats

9.3.126. The mobile sand dune habitat is assessed to qualify as a Priority Habitat under Section 7 of the Environment (Wales) Act 2016 ('Coastal Sand Dunes'), and is considered to be 'irreplaceable habitat' and the highest value habitat within the application site.

9.3.127. The 'other woodland, mixed' is not assessed to meet the criteria of Priority Lowland Mixed Deciduous Woodland habitat, given that it was originally planted as part of an urban 'pleasure garden', and includes a high proportion of non-native tree species.

9.3.128. None of the hedgerows within the site (including the line of trees on the eastern side of Griffin Park) are assessed to meet the definition of Priority Hedgerows habitat, as they do not have '80% or greater cover of at least one woody UK species'.

9.3.129. The pond is not assessed to meet the criteria of Priority Pond habitat.

9.3.130. None of the other habitats within the application site are assessed to be Priority Habitats.

9.3.131. The 'other neutral grassland' (maritime grassland) habitat around the Sandy Bay Bowl and on Rhych Point is not assessed to meet any Priority Habitat criteria for grassland, though has increasing species-richness with increasing proximity to the sand dunes, and on this basis is considered to be notable for its intrinsic biodiversity value. To a lesser extent, the other areas of other neutral grassland, other woodland mixed, urban trees and mixed scrub are also considered notable for their intrinsic biodiversity value.

9.3.132. The other habitats (modified grassland, non-native and ornamental hedgerow, bramble scrub, introduced shrub, pond, bare sand, other sea buckthorn scrub, low energy littoral rock, artificial unvegetated unsealed surface, buildings and developed land sealed surface) are considered to be of relatively low intrinsic ecological value overall.

9.3.133. The non-native invasive species (sea buckthorn, cotoneaster, Japanese knotweed and Virginia creeper) are considered to be negative features.

Fauna

Badgers

9.3.134. See confidential Appendix 9.9 (which has a restricted distribution on animal welfare grounds) for the full evaluation relating to badgers.

9.3.135. It is noted in summary however that no active badger setts have been recorded within the application site. In addition, no signs of recent badger activity (such as latrines, prints, fresh spoil, bedding material or badger hairs) were recorded.

9.3.136. As such, it is considered that badgers are likely to be absent from the application site, and this species is not considered any further in this assessment, other than to recommend removal of dense vegetation prior to earthworks in directly impacted areas which were not fully searched for badger setts on a precautionary basis.

Bats

9.3.137. 5 trees within the application site were identified as having potential roosting features (PRF-I), though one of these was noted to be only 'possible PRF-I' (subject to further survey) and another relates to a 2023 record which was not rediscovered in 2025. A single building (The Buccaneer) was assessed to have low bat roosting potential as a result of occasional gaps noted beneath hanging tiles.

9.3.138. The desk study has records of common pipistrelle, soprano pipistrelle, noctule, *Myotis* bat sp, Natterer's bat, brown long-eared bat and the rare species lesser horseshoe bat within a 2km radius of the application site, and of serotine, Daubenton's bat and the rare species Nathusius' pipistrelle locally though further than 2km away.

9.3.139. The bat activity and remote surveys showed hotspots of bat activity were fairly well distributed around the central and eastern parts of the application site, with particularly high levels of bat activity recorded at Griffin Park, and the Monster Park. Common pipistrelle was by far the most common species recorded within the application site during the remote surveys (77% of all bat registrations), followed by soprano pipistrelle (6.4% registrations), noctule (6.2% registrations), Nathusius' pipistrelle (4.3% registrations), serotine (0.30% registrations), lesser horseshoe (0.12% registrations), brown long-eared bat (0.09% registrations), Myotis sp (0.03% registrations), and greater horseshoe (<0.01% registrations). In terms of the rarer species, Nathusius' pipistrelle was strongly centred on the Monster Park, while lesser horseshoe bat was found in highest numbers in the north-eastern corner of the application site (and a single greater horseshoe registration was noted in the Monster Park). All species of bats found in Britain and any place they use for shelter and protection are fully protected under the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats & Species Regulations 2010 (as amended).

Reptiles

9.3.140. The parts of the application site assessed to have the highest suitability for reptiles are the Monster Park, Sandy Bay East area, and to a lesser extent the sand dunes (particularly where becoming fixed by sea buckthorn). There are desk study records of slow worm, common lizard, grass snake and adder within 2km (nearest grass snake record 2.00km north-north-west, nearest adder record 980m east in association with Kenfig SAC / Merthyr Mawr SSSI). Taking the highest maximum counts from the spring 2025 and autumn 2025 reptile surveys, maximum counts within the application site comprised 35 slow worms and 62 common lizards. Particular reptile hotspots are the Monster Park, the areas of long grass around the Sandy Bay Bowl, the mound on the northern side of Sandy Bay East, and to a lesser extent the eastern side of the sand dunes. In accordance with standard guidelines (Froglife, 1999) this equates to an 'exceptional' population of slow worms and an 'exceptional' population of common lizards (though it is noted that these numbers were recorded over a large area, which the guidelines do not take into account). Common reptile species are subject to partial

protection under the Wildlife & Countryside Act 1981 (as amended), and are Priority Species under Section 7 of the Environment (Wales) Act 2016.

Great Crested Newts

9.3.141. The nearest great crested newt record is 2.02km north-west of the application site, and is the nearest of a relatively large cluster of great crested newt records around this location. However, it is noted to be separated from the application site by the urban area of Porthcawl. The application site supports only a single pond, which is assessed to have poor suitability for great crested newts, and an eDNA test has confirmed that no great crested newts are present within the pond. On this basis, and given that the application site is separated from any other ponds by encircling development (and a large caravan park to the east), it is considered that great crested newt is likely to be absent from the application site, so this species is not considered any further in this assessment.

Breeding Birds

9.3.142. Birds of Conservation Concern: Ten of the 44 species encountered within the site during the breeding bird survey in 2025 are on the Red List of Birds of Conservation Concern (BoCC) for Wales (Johnstone et al, 2022). These ten species comprise: goldcrest *Regulus regulus*, greenfinch *Chloris chloris*, linnet *Linaria cannabina*, meadow pipit *Anthus pratensis*, whitethroat *Curruca communis*, willow warbler *Phylloscopus trochilus*, herring gull *Larus argentatus*, lesser black-backed gull *Larus fuscus*, starling *Sturnus vulgaris* and swift *Apus apus*, with the former six species assessed as possibly or probably breeding within the site.

9.3.143. Twelve species recorded during the breeding bird survey are on the Amber List of BoCC (Johnstone et al, 2022). These species include: coal tit *Periparus ater*, dunnock *Prunella modularis*, green woodpecker *Picus viridis*, grey wagtail *Motacilla cinerea*, house sparrow *Passer domesticus*, magpie *Pica pica*, skylark *Alauda arvensis*, woodpigeon *Columba palumbus*, wren *Troglodytes troglodytes*, great black-backed gull *Larus marinus*, sedge warbler *Acrocephalus schoenobaenus* and wheatear *Oenanthe oenanthe*, with the former nine species assessed as possibly or probably breeding within the site.

9.3.144. Species of Principal Importance: Seven species noted within the site are listed as Priority species, or Species of Principal Importance (SPI) (Johnstone et al, 2022). These species comprise: dunnock, house sparrow, linnet, skylark, song thrush *Turdus philomelos*, herring gull and starling, with the two latter species not assessed to be breeding with the site.

9.3.145. Dunnock, house sparrow, skylark and song thrush were noted to be probably breeding by David Clements in 2023, and herring gull, kestrel, linnet and starling were noted to be possibly breeding by David Clements in 2023.

9.3.146. Breeding densities: The species that appeared to be holding the highest number of territories was dunnock (with 12-13 territories present), with this followed by wren (7-8 territories), woodpigeon (5-7), linnet (5-6), blackbird *Turdus merula* (4-6), stonechat *Saxicola rubicola* (2-4), and whitethroat, goldfinch, house sparrow and meadow pipit (2-3 territories each). The majority of these species are typically associated with scrubby habitats, therefore it is not unexpected, by reference to Figure 9.6e, that the majority of these territories are concentrated on the scrub dominated mound to the north of Sandy Bay Bowl and in the Monster Park.

9.3.147. Habitat indicator species: Sixteen of the species assessed to be breeding within the site (possible breeding status or higher) are recognised as woodland species by Defra (Eaton & Noble, 2024), with these comprising eight generalist species (i.e. those species that can be found in woodland as well as other habitats), and eight specialist woodland species. The eight generalist species encountered comprise blackbird, blue tit *Cyanistes caeruleus*, dunnock, great tit *Parus major*, long-tailed tit *Aegithalos caudatus*, robin *Erithacus rubecula*, song thrush and wren. The eight specialist woodland species encountered comprise blackcap *Sylvia atricapilla*, chiffchaff *Phylloscopus collybita*, coal tit, goldcrest, green woodpecker, sparrowhawk *Accipiter nisus*, treecreeper *Certhia familiaris* and willow warbler. As would be expected, given the presence of suitable habitat, these species were typically found in the Monster Park and/or on the scrub dominated mound to the north of Sandy Bay Bowl. Nevertheless, the number of territories of these species was typically low and this is likely to reflect the small size of the woodland in the Monster Park and its species composition (i.e. dominated by non-native pines).

9.3.148. Eight species recorded are recognised as farmland species (Eaton & Noble, 2024), with these comprising three generalist species (i.e. those species that can be found in farmland as well as other habitats), and five specialist farmland species (comprising goldfinch *Carduelis carduelis*, linnet, skylark, starling and whitethroat). These species were typically encountered in the grassland and scattered scrub within the vicinity of Sandy Bay Bowl. The number of territories within the open grassland (including meadow pipit) is considered to be limited considering the size of the habitat. This is considered to be due to the regular disturbance that this area receives from activities such as dog walking and general public access, with footpaths crisscrossing through this habitat.

9.3.149. The avifauna assemblage of the site also included species typically associated with urban areas. Although relatively high numbers of starling were noted, there was no evidence of nesting, with this species highly likely to be nesting in the residential areas to the north of the site. A review of the counts of this species during the period of the survey visits indicates that there were low numbers during the first visit (when females were likely incubating eggs), there was then an increase in the numbers present as birds were foraging within the grassland and carrying food northward, with the highest count during the final visit when the adults birds were joined by recently fledged individuals. Numbers of house sparrow within the site were also relatively high, with the majority of these noted in the peripheral scrubby areas; nevertheless, a small nesting colony was noted in a building to the south of Griffin Park. Finally, low numbers of collared dove *Streptopelia decaocto* were noted within the site, with additional individuals recorded in the residential areas to the north.

9.3.150. A small number of migrant species were encountered during the survey visits, with wheatear noted on Rhych Point during the first two visits, common redstart at the same location during the first (April) visit, and a sedge warbler singing adjacent to the temporary car park during the second survey visit. Also noted moving through the site was a flock of 13 common crossbills *Loxia curvirostra* which were recorded flying over the site (heading east) during the penultimate visit. Although this species is listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), it is not considered to have bred on the site in 2025.

9.3.151. Of minor note was a probable raven *Corvus corax* nest in the Monster Park.

9.3.152. Intertidal areas: During the surveys of the four intertidal areas, three species of wader were recorded with these comprising oystercatcher *Haematopus ostralegus*, ringed plover *Charadrius hiaticula* and sanderling *Calidris alba*. In respect of oystercatcher, six individuals were noted between Porthcawl Point and Irongate Point during the first visit, with one noted during the third visit. Three ringed plovers were noted near the harbour during the third visit, with 44 sanderlings foraging along the shoreline of Sandy Bay Beach during the second visit. Other species noted comprise herring gull, with this species recorded in all four intertidal areas, and great black-backed gull. No evidence that these species were nesting was noted.

9.3.153. County context: To aid placing the results of the survey in a county context, the breeding bird species list was assessed against the requirement for record submission by

Glamorgan Rarities Committee. This revealed that no species found within the site are considered to be British, Welsh or county rarities.

9.3.154. To further aid in assessing the breeding bird assemblage of the site in a local context, the 'Guidelines for the Selection of Wildlife Sites in South Wales (South Wales Partnership, 2004) was reviewed. In respect of birds, the Guidelines provide four criteria whereby a site meeting one or more these criteria would merit consideration for designating a site as a Local Wildlife Site (LWS). Table 9.17 below provides each criterion and whether this would be met based on the breeding bird assemblage of the Site in 2025.

Table 9.17. Assessment of the breeding bird assemblage of the site against the Guidelines for the Selection of a Wildlife Site in South Wales.

Criteria	Breeding bird assemblage of the site meeting criteria?
"Sites supporting breeding populations, of any size, of species marked with an A in Table 9."	No. No species recorded on the site are listed in Table 9 with an 'A'.
"Sites supporting wintering or passage refuelling populations, of any size, of species marked with an A in Table 10"	No. No passage populations of the species listed in Table 10 with an 'A' noted (see section below regarding wintering populations).
"Sites supporting a predetermined number (to be agreed by the LBAP partnerships) of those species that are marked B in Tables 9 & 10, or identified as additions to the tables by the LBAP partnership, that collectively designate a site and/or contribute towards its designation"	Unlikely. The following species encountered on the site are marked with a 'B' in Tables 9 & 10: common crossbill, herring gull, lesser black-backed gull, **linnet**, redstart, **skylark**, **house sparrow**, starling, **stonechat**, **song thrush**, and **green woodpecker**. Species in bold are assessed to have bred on the site; however, the number of territories of these did not exceed six territories.
"Any site with 100 or more bird species recorded in the previous five years"	Unlikely. Data was only gathered for one year; however, it is considered unlikely that 100 species would be recorded on the site if surveys were undertaken over a five-year period.

9.3.155. Overall, the breeding bird assemblage is relatively diverse and is considered to be broadly consistent with the habitats present, the size of the site and its geographic location. The main habitats of interest for breeding birds are considered to be the woodland and scrub (primarily comprising the Monster Park and the scrub covered mound to the north of Sandy Bay Bowl), and the open grassland within the vicinity of Sandy Bay Bowl to some extent. The species assemblage and the number of breeding territories within this latter habitat is likely to be limited due to the regular disturbance that this area receives from activities such as dog walking and general public access. Overall, the site does not appear to be particularly remarkable in terms of its breeding bird assemblage.

9.3.156. Lastly, it is noted that bird nests (some recent, some old) have been confirmed within several buildings within the fairground complex.

Wintering Birds

9.3.157. Birds of Conservation Concern: Seven of the 29 species encountered within the site during the wintering bird survey over the winter of 2024/25 are on the Red List of Birds of Conservation Concern (BoCC) for Wales (Johnstone et al, 2022). These seven species comprise: black-headed gull *Chroicocephalus ridibundus*, greenfinch, herring gull, linnet, meadow pipit, merlin *Falco columbarius* and starling.

9.3.158. Six species recorded during the wintering bird survey over the winter of 2024/25 are on the Amber List of BoCC (Johnstone et al, 2022). These species comprise chaffinch, coal tit, dunnock, house sparrow, magpie and skylark.

9.3.159. Species of Principal Importance: Seven species noted within the site are listed as Priority species, or Species of Principal Importance (SPI).[11] These species comprise: dunnock, herring gull, house sparrow, linnet, skylark, song thrush, and starling.

9.3.160. Counts: The number of individuals of the majority of the species was relatively low. Species recorded in higher numbers largely comprised the flocking species such as herring gull, jackdaw *Corvus monedula*, and starling.

9.3.161. Habitat indicator species: Ten of the species recorded within the site are recognised as woodland species by Defra (Eaton & Noble, 2024), with these comprising eight generalist species, and two specialist woodland species. The eight generalist species recorded comprise blackbird, blue tit, chaffinch *Fringilla coelebs*, dunnock, great tit, robin, song thrush and wren. The two specialist woodland species recorded comprise

[11] Species of Principal Importance further to s.7 of the Environment (Wales) Act 2016.

coal tit and sparrowhawk, As would be expected, given the presence of suitable habitat, these species were typically found in the Monster Park, on the scrub dominated mound to the north of Sandy Bay Bowl, and in peripheral scrubby areas.

9.3.162. Seven species recorded are recognised as farmland species (Eaton & Noble, 2024), with these comprising three generalist species (i.e. those species that can be found in farmland as well as other habitats), and four specialist farmland species (comprising goldfinch, linnet, skylark and starling). These species were typically encountered in the grassland and scattered scrub within the vicinity of Sandy Bay Bowl.

9.3.163. Of minor note was a record of a merlin during the February 2025 visit. This individual appeared to make an unsuccessful attempt at taking a jackdaw as it passed through the site.

9.3.164. Despite timing the survey visits to coincide with high tide, no wader species were encountered within the site. This is likely to be due to a combination of sub-optimal habitat and regular disturbance arising from public access.

9.3.165. Intertidal areas: During the surveys of the four intertidal areas, six species of wader were noted with these comprising low numbers of curlew *Numenius arquata*, oystercatcher, sanderling and turnstone *Arenaria interpres*, with higher numbers of dunlin *Calidris alpina* and ringed plover recorded in Trecco Bay. During the survey visits, it was noted that these birds and the areas in which they were encountered was typically subject to regular disturbance from dog walking and public sea swimming.

9.3.166. County context: To aid placing the results of the wintering bird survey in a county context, the bird species list was assessed against the requirement for record submission by Glamorgan Rarities Committee. This revealed that no species found within the site are considered to be British, Welsh or county rarities.

9.3.167. As for the breeding bird evaluation above, the 'Guidelines for the Selection of Wildlife Sites in South Wales (South Wales Partnership, 2004) was reviewed. In respect of birds, the Guidelines provide four criteria whereby a site meeting one or more these criteria would merit consideration for designating a site as a Local Wildlife Site (LWS). Table 9.18 below provides each criterion and whether this would be met based on the wintering bird assemblage of the Site over the winter of 2024/25.

Table 9.18. Assessment of the wintering bird assemblage of the site against the Guidelines for the Selection of a Wildlife Site in South Wales.

Criteria	Breeding bird assemblage of the site meeting criteria?
"Sites supporting breeding populations, of any size, of species marked with an A in Table 9."	N/A (see above breeding bird section)
"Sites supporting wintering or passage refuelling populations, of any size, of species marked with an A in Table 10"	No. No wintering populations of the species listed in Table 10 with an 'A' noted (see section above regarding passage populations).
"Sites supporting a predetermined number (to be agreed by the LBAP partnerships) of those species that are marked B in Tables 9 & 10, or identified as additions to the tables by the LBAP partnership, that collectively designate a site and/or contribute towards its designation"	Unlikely. The following species encountered on the site are marked with a 'B' in Tables 9 & 10: herring gull, linnet, merlin, skylark, house sparrow, stonechat, and song thrush, with numbers of these species typically low.
"Any site with 100 or more bird species recorded in the previous five years"	Unlikely. Data was only gathered for one winter; however, it is considered unlikely that 100 species would be recorded on the site if surveys were undertaken over a five-year period.

9.3.168. Overall, the wintering bird assemblage of the site is generally unremarkable but is considered to be broadly consistent with the habitats present, the size of the site and its geographic location. As for the breeding season, the main habitats of interest for wintering birds are considered to be the woodland and scrub (primarily comprising the Monster Park and the scrub covered mound to the north of Sandy Bay Bowl), and the open grassland within the vicinity of Sandy Bay Bowl to some extent. No waders from the adjoining Bristol Channel were encountered on the site, and this is likely to be due to a combination of regular public (and dog) disturbance, and the paucity of highly suitable habitat.

Invertebrates

9.3.169. Desk study invertebrate records relate primarily to the invertebrate communities at Kenfig SAC / Merthyr Mawr SSSI (with no invertebrate records relating to the mobile sand dunes within the application site).

9.3.170. The invertebrate survey recorded 170 invertebrate species, including 3 species of Principal Importance 'Research Only' (lackey moth *Malacosoma neustria*, garden tiger moth *Arctia caja*, and cinnabar moth *Tyria jacobaeae*), 1 Nationally Rare (NR) species (the dung beetle *Psammodius asper*), 1 Vulnerable (VU) species (lackey moth *Malacosoma Neustria*), 4 Nationally Scarce (NS) species, 5 Nationally Scarce (Nb) species, 1 Nationally Scarce (N) species and 2 Near Threatened (NT) species.

9.3.171. Pantheon analysis indicated that the survey area supports a high quality assemblage of 'bare sand & chalk' species, amongst a fairly high quality assemblage of 'short sward & bare ground' species.

9.3.172. In terms of rare species, the Nationally Rare (NR) dung beetle *Psammodius asper* was recorded at a small patch of bare sand (separate from the mobile dunes) on the eastern side of Sandy Bay East. This species is recently known from five dune systems (in Lancashire, Pembrokeshire, Glamorganshire, North Devon and North Lincolnshire) and from the coastal sand and shingle of Dungeoness, East Kent, as well as a smaller scatter of inland sites, and inhabits bare or sparsely vegetated sandy places. The Vulnerable species lackey moth *Malacosoma neustria* was found in a sparsely vegetated area on the southern side of the Sandy Bay Bowl (but is noted to remain a widespread and common species locally, despite wider declines). The solitary wasp *Gonatopus albosignatus* was recorded within the sand dunes, and also appears to be a rare species in Britain, though lacks any formal conservation status as it is a poorly-known family.

9.3.173. The specialist invertebrate survey report (see Appendix 9.7) concludes on balance of evidence that the invertebrate assemblage within the application site should be considered to be of County Importance overall, with this importance strongly concentrated in the sand dunes and adjacent areas of sandy grassland (both north of the dunes, and south of the dunes at Rhych Point). It also states 'it would be reasonable to conclude that Porthcawl survey area may play a nationally important part in the conservation of the dung beetle *Psammodius asper*'.

Dormice

9.3.174. Dormouse surveys were scoped out of the assessment on the basis that the site is entirely surrounded by urban areas (with a large caravan park to the east), and the sea to the south. There are no dormouse records within 2km of the site, and (despite the presence of suitable dormouse habitat within the site such as scrub and woodland) it is not considered that there would be any scope for dormice to colonise the site given its isolation from other areas, with no paths of habitat connectivity noted connecting the site with the wider area. On this basis it is considered that dormice are likely to be absent from the application site, and this species is not considered any further in this assessment.

Otters

9.3.175. There are records of otters within the local area, though further than 2km away from the application site (and as such separated from it by the urban area of Porthcawl). There are no streams or rivers within the application site, though otters could potentially operate around the coastline. It is not considered that the application site contains any suitable habitat for otters to create couches or holts, due to its paucity of densely vegetated areas along the shoreline, high levels of public activity (including dogs), and relatively high levels of artificial illumination at night. As such, any possible otter presence is considered likely to be restricted to occasional adventitious nocturnal visits to the coastal fringe to forage in rock pools etc or to commute to other locations nearby, and so it not anticipated there would be any significant impact on otters arising from the proposals. On this basis otter is not considered any further in this assessment.

Water Voles

9.3.176. There are records of water voles within the local area, though further than 2km away from the application site (and as such separated from it by the urban area of Porthcawl). There are no streams or rivers within the application site. On this basis it is considered that water voles are likely to be absent from the application site, and this species is not considered any further in this assessment.

Other Species

9.3.177. Harvest mice have been recorded from 1.20km west and 1.76km east of the application site. However, these areas are cut off from the application site by urban development. The site is also considered sub-optimal for harvest mice due to its high levels of disturbance from humans and dogs. On this basis it is considered that harvest mice are

likely to be absent from the application site, and this species is not considered any further in this assessment.

9.3.178. Brown hare has been recorded from 1.75km north-west of the application site (with this area being separated from the application site by urban development). The site is considered sub-optimal for brown hare due to its high levels of disturbance from humans and dogs. On this basis it is considered that brown hare is likely to be absent from the application site, and this species is not considered any further in this assessment.

9.3.179. Polecat has been recorded from 2.00km north-east and 2.05km north-west of the application site (with this area being separated from the application site by urban development). The site is considered sub-optimal for polecat due to its high levels of disturbance from humans and dogs. On this basis it is considered that polecat is likely to be absent from the application site, and this species is not considered any further in this assessment.

9.3.180. Marine mammals have been recorded offshore (mostly common porpoise, plus occasional records of dolphin, striped dolphin and long-finned pilot whale). Given that no impacts on offshore / marine habitats are anticipated, it is therefore not anticipated that there would be any significant impact on marine mammals arising from the proposals. On this basis marine mammals are not considered any further in this assessment.

Key Receptors

9.3.181. Taking into account the survey information and the overall baseline site evaluation above, the key receptors to consider when assessing the potential ecological effects of the Proposed Development are adjudged to be as follows:

Table 9.19: Key receptors

Scale	Key Receptor
International	1. Kenfig SAC (coastal habitats & plant species). 2. Cefn Cribwr Grasslands SAC (Molinia meadows & marsh fritillary butterfly). 3. Dunraven Bay SAC (shore dock).
UK/National	1. Merthyr Mawr SSSI (coastal habitats, plant and fungi assemblages, and invertebrate assemblage). Merthyr Mawr Warren National Nature Reserve is also considered as part of this same category. 2. Dung beetle *Psammodius asper* (on patch of bare sand on eastern side of Sandy Bay East).
Regional	Except where considered above, no receptors of regional importance are assessed to be within range of any likely significant effects arising from the Proposed Development.

Scale	Key Receptor
County (Bridgend County Borough)	1. Coastal Sand Dunes Priority Habitat (onsite mobile sand dunes; 'irreplaceable habitat'). 2. NRW Priority Habitat (Coastal Sand Dune) (mapped in association with Kenfig / Merthyr Mawr). 3. Important Plant Area (mapped in association with Kenfig / Merthyr Mawr). 4. Various SINCs (Rhych Point, Pwll-y-Waun, The Wilderness, Newton Point, Trafalgar Wood, Newton Burrows, Manor Farm Fields, Lock's Common (also LNR), Nottage Court Wood, Black Rocks, Coedargraig, Graig Wood and Pant-y-Hyl). Several SINCs including ancient woodland. 5. Invertebrate assemblage (importance strongly concentrated in sand dunes and adjoining areas of sandy grassland).
District (Porthcawl & surrounding area)	Except where considered above, no receptors of district-wide importance are assessed to be on the Development Site or within range of any likely significant effects arising from the Proposed Development.
Parish (Porthcawl)	1. Other Neutral Grassland around Sandy Bay Bowl and on Rhych Point (maritime grassland, with increasing species richness with proximity to the sand dunes). 2. Rare bat species (activity). Nathusius' pipistrelle (4.3% registrations), lesser horseshoe (0.12% registrations) and greater horseshoe (single registration), assessed to be present in significant numbers overall considering their rarity.
Immediate local (within zone of influence only)	1. Bats (activity). High levels of bat activity around field margins, mostly from the ubiquitous species common pipistrelle (77% registrations), but also occasional activity from soprano pipistrelle and noctule, and very occasional activity from serotine, brown long-eared bat and Myotis sp. 2. Bats (roosting). Potential for bat roosts in trees, and one building (The Buccaneer). 3. Reptiles (maximum counts of 62 common lizards and 35 slow worms). 4. Breeding birds (including skylark in open grassland). 5. Wintering birds. 6. Invasive non-native species (negative feature; sea buckthorn, cotoneaster, Japanese knotweed & Virginia creeper).
Scoped out	The populations of other species and representations of other habitats within the application site are either small, of negligible significance or value, or both, and are similarly assessed as of only immediate local (i.e. Site) value. They are therefore scoped out as a key receptor. However, the habitats will still be considered in terms of their biodiversity value when assessing overall net benefit for biodiversity.

9.3.182. The following are excluded as key receptors (with reasons for their exclusion given below):

- Badgers. Scoped out for reasons set out in evaluation section above (though removal of dense vegetation prior to earthworks in directly impacted areas which were not fully searched for badger setts recommended on a precautionary basis).
- Great crested newts. Scoped out for reasons set out in evaluation section above.

- Dormice. Scoped out for reasons set out in evaluation section above.
- Otters. Scoped out for reasons set out in evaluation section above.
- Water voles. Scoped out for reasons set out in evaluation section above.
- Harvest mice. Scoped out for reasons set out in evaluation section above.
- Brown hare. Scoped out for reasons set out in evaluation section above.
- Polecat. Scoped out for reasons set out in evaluation section above.
- Marine mammals (common porpoise, dolphin, striped dolphin, long-finned pilot whale). Scoped out for reasons set out in evaluation section above.
- NRW Priority Area (Coastal Saltmarsh) is not considered as a key receptor given that there is no coastal saltmarsh habitat mapped within 2km of the application site (with the part of this designated block overlapping within 2km of the application site being mapped in the sea, where no coastal saltmarsh will be present).

- B-Lines represent an opportunity for enhancement rather than a key receptor.

9.3.183. The remaining sections consider the potential for, and the magnitude and significance of, any impacts arising on the above key receptors from the Proposed Development, along with any mitigation and/or compensation proposed, and its likely efficacy.

9.4. Assessment of potential Effects, Mitigation Measures and Residual Effects

Description of Proposals and Avoidance by Design

Ecological input to design process

9.4.1. Ecology has been carefully considered in the design of the proposed development.

9.4.2. Wherever possible, the proposed development has sought to minimise ecological impacts by preserving key habitats, and to minimise biodiversity losses. The main example of this is the retention by design of the mobile sand dunes, which are assessed to be the habitat with the highest ecological value within the application site. Where small pockets of sand dune habitat must by necessity be impacted (for example by the proposed infilling of Sandy Bay Bowl), these will all be translocated to retained areas close to existing sand dune. The development will also stand well off from Rhych Point, preserving its species-rich maritime grassland, and rocky shoreline SINC. In addition, whilst it is essential to create a road link through the southern part of the Monster Park, the northern part of the Monster Park is being retained by design to minimise impacts on the local reptile population (it is noted that the road link was previously proposed to go through the centre of the Monster Park, but was moved to the southern edge to minimise landtake and allow the northern part of the Monster Park to be retained as a single habitat unit, rather than splitting it in half).

9.4.3. The proposed development has also sought to maximise onsite biodiversity enhancements within the space available. A key example of this is that where species-rich maritime grassland close to the sand dunes needs to be impacted, it will be stockpiled then spread onto other retained parts of the site wherever this is deemed feasible (thus preserving the sandy substrates and species-rich seedbank). In addition, the proposals will provide a broad green corridor through the centre of the development, which will extend from Griffin Park, through the northern part of the Monster Park, and into the sand dunes (with an underpass provided for use by wildlife where the green corridor will be bisected by the new link road). A continuous green buffer will also be provided around the edges of the Sandy Bay East area to facilitate movement of reptiles and other wildlife.

Summary description of the Proposed Development in the context of likely ecological effects

9.4.4. The proposed development comprises the following outline proposals for the redevelopment of Porthcawl Waterfront:

- Up to 980 new homes,
- Approximately 20 ha of open space including a series of new significant public open spaces with different offers,
- ha of land for educational use,
- Approximately 130,000 square feet of commercial and leisure floorspace including retail uses, a hotel, Lido and Gym / Studio Space
- Enhancement of Porthcawl harbour environment,
- New coastal defence works,
- A flexible meanwhile leisure use space (approximately 23,500 square feet),
- Approximately 6,500 square feet of flexible community / civic space,
- Provision of up to 600 public parking spaces within the site area,
- New spine road access from the Eastern Promenade to Sandy Bay,
- Enhancement of the Griffin Park and proposed new facilities including MUGA.

9.4.5. Access will be via the existing local roads. The key new access requirement will be the creation of a link road which will pass through the existing fairground site and the southern part of the Monster Park, opening up a main vehicular access route into the proposed new residential area in Sandy Bay East. The northern part of the Monster Park will be retained by design to minimise impacts on the local reptile population.

9.4.6. Much of the application site is already considered to be at least semi-urban. The main area of habitat loss will occur at Sandy Bay East (where residential development will be situated on grassland[12], and the material from the scrub-covered mound to the north will be used to fill in the Sandy Bay Bowl and level the site). There will also be smaller scale losses of habitat in the southern part of the Monster Park, and on the western side of Hillsboro car park.

9.4.7. The mobile sand dunes (which are assessed to be the part of the application site with the highest ecological value, and to represent 'irreplaceable habitat') will be retained by design. Where it is absolutely necessary to impact small pockets of sand dune habitat

[12] Though noting that parts of the grassland area are regularly used for camping activities, and on occasion local festivals. This area of grassland has open public access, and is used regularly by dog walkers and passersby.

(for example by the proposed infilling of Sandy Bay Bowl), the sand dune material in these areas will be translocated to retained areas near the sand dunes (with the majority of the material being moved to an existing area of hardstanding east of the sand dunes). The small affected areas of sand dune habitat are those on the periphery of the dunes, some understood to have established over hardstanding, and in the case of the sand dunes on the southern edge of the Sandy Bay Bowl it is noted that these are already separated from the remainder of the sand dunes by an area of hardstanding. Figure 9.2c shows in dark pink the locations where peripheral dune habitat would be lost (total 0.50 ha area), and in purple the areas where dune habitat will be moved to and establish going forwards (total 0.63 ha).

9.4.8. Rhych Point, which comprises species-rich maritime grassland (with pyramidal orchids), as well as Rhych Point SINC covering the surrounding rocky shoreline, will be fully retained by design, with the development proposals set well away from this area.

9.4.9. Air quality effects during construction are assessed to be temporary, short-term and not significant in the air quality chapter. The air quality chapter models air quality effects from increased traffic associated with the completed scheme on Kenfig SAC and Cefn Cribwr Grasslands SAC (with no other ecological receptors modelled).

9.4.10. Key information on bats has been shared with the lighting engineers to inform a sensitive lighting strategy with the aim of minimising impacts on bats from lighting.

9.4.11. The effects of the new sea wall are assessed by the coastal processes ES chapter.

9.4.12. Given that the site is surrounded by human noise receptors, mitigation measures will be employed to keep noise levels during construction to the minimum possible. Post-development noise levels are expected to continue to be representative of the site's existing urban context.

9.4.13. In terms of biodiversity, the proposed development has sought to maximise onsite biodiversity enhancements. This includes the following measures:

9.4.14. Where species-rich maritime grassland in close proximity to the sand dunes is to be lost, the soils at this location will be scraped, and the material stockpiled and spread on other retained parts of the site wherever this is deemed feasible, in order to make use of the sandy substrates and species-rich seedbank. The specific locations identified as suitable to receive species-rich topsoil spreading are shown in green on Figure 9.2c (the periphery of the Sandy Bay East area, selected parts of the green corridor leading from Griffin Park to the sand dunes, and the roundabout to the north-west). The species-rich

topsoils with their associated seedbank will be stockpiled ready for spreading in each of these areas in the relevant phase.

- A broad green corridor will be provided leading from Griffin Park, through the retained northern part of the Monster Park, and into the sand dunes. This will include the creation of a new green area on existing hardstanding where it passes through the current fairground. An underpass for wildlife will be provided where this green corridor is bisected by the new link road. In addition, a narrower green corridor will be provided all around the edge of the Sandy Bay East development area (incorporating SUDS features with wildlife planting into its route). Additional green spaces (e.g. north of the sand dunes to provide a buffer zone) are shown by the landscape strategy. The new green spaces will incorporate tree planting to replace losses of trees for the access road in the southern part of the Monster Park, with in excess of three trees planted for every tree lost (where the new access road passes through the southern edge of the Monster Park), in accordance with Planning Policy Wales guidance. The landscape strategy will favour native species, though will also include cultivars.
- Non-native invasive species will be removed from the site. This will include the removal of sea buckthorn from the eastern side of the sand dunes (which is considered to be a key benefit to the mobile sand dunes), the removal of cotoneaster from the Monster Park, and the removal of Japanese knotweed and Virginia Creeper.
- With the mitigation hierarchy in mind, the above measures have sort to maximise onsite biodiversity enhancements. However, it is recognised that the quantum of biodiversity losses arising primarily from loss of grassland in Sandy Bay East cannot be fully offset by the onsite enhancements described above. On this basis, meetings were held with the management team for Kenfig SAC / Merthyr Mawr SSSI (NRW lead, and ranger) on 17th August 2023 and 6th May 2025 to discuss the option of working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present as a means of providing an offsite biodiversity uplift for the project. The approach was agreed in principle. It is assessed that there is considerable scope for biodiversity benefits to be realised via this route, which will contribute towards vital work on the exceptionally high quality (and European-designated) habitats at Kenfig SAC, with the aspiration of providing a net benefit to biodiversity from the development as a whole.

Potential Effects

9.4.15. As a result of avoidance by design, the following key receptors are excluded on the basis of no significant direct or indirect effects upon them being anticipated:

- Bats (roosting). Only two features assessed to have bat roosting potential will be impacted by the proposals. One of these relates to a tree on the north-western roundabout, where a potential bat roosting feature was noted in 2023, approx 6m up on a white poplar tree; however, this feature was not rediscovered in 2025 despite a thorough search, and on this basis it is assumed that the feature is no longer present (e.g. it may have been associated with a branch which has fallen during the interim period, or have become sufficiently overgrown to preclude potential bat roosting). The other relates to occasional gaps under hanging tiles on The Buccaneer (the only building noted to have bat roosting potential on Figure 9.3a); however Bioscan have been advised that this building is expected to be retained and redeveloped, and that bat surveys as needed would be undertaken as a separate works package by contractors for that individual scheme, and on this basis the demolition of this building is not included for assessment as part of the wider proposals. The rest of the features with identified bat roosting potential features will be retained unaffected, and with buffer zones from the nearest development area in each case.

9.4.16. Taking into account design mitigation and avoidance, the project is considered to have the potential to give rise to the following direct and indirect effects on the identified ecological receptors:

Construction Phase - Direct Effects

- Loss of species-rich Other Neutral Grassland habitat (maritime grassland) around Sandy Bay bowl.
- Translocation of small areas of Coastal Sand Dunes Priority habitat ('irreplaceable habitat') out of areas impacted by development to specifically allocated areas close to the retained sand dunes (affecting both habitat and associated invertebrate assemblage).
- Translocation of patch of bare sand on eastern side of Sandy Bay East where rare dung beetle *Psammodius asper* recorded to nearby retained area to avoid loss from development.
- Potential impacts on bat activity (including rare species) arising from loss of woodland, scrub and pond habitat.

- Potential impacts on common reptiles from the removal of grassland habitat in Sandy Bay East and the southern part of the Monster Park.
- Potential impacts on breeding birds from loss of woodland and scrub, and potential impacts on skylark from loss of grassland.
- Potential impacts on wintering birds from loss of woodland, scrub and grassland.
- Consideration is also given to biodiversity losses arising from the scheme, primarily associated with loss of grassland in Sandy Bay East, and also including the loss of mixed scrub on the mound to the north of Sandy Bay East and woodland in the southern part of the Monster Park.

9.4.17. Consideration was given as to whether or not the sand dune habitat within the application site could have any functional linkage with Kenfig SAC. Firstly, in terms of habitats, it was noted that none of the habitats for which Kenfig SAC is designated (fixed dunes with herbaceous vegetation ("grey dunes"), dunes with Salix repens ssp. Argentina (Salicion arenariae), humid dune slacks, hard oligo-mesotrophic waters with benthic vegetation of Chara spp., Atlantic salt meadows) occur within the application site sand dunes, with these instead comprising mobile sand dunes ("yellow dunes"). Secondly, it was noted that neither of the two plant species for which Kenfig SAC is designated (petalwort *Petalophyllum ralfsii* and fen orchid *Liparis loeselii*) have been recorded within the application site. On this basis, together with the 800m separation between the application site and Kenfig SAC (across a large caravan park), it was assessed that the application site does not have any functional linkage with Kenfig SAC, and as such no direct impacts on Kenfig SAC are listed above.

Construction Phase - Indirect Effects

- Potential impacts on Kenfig SAC / Merthyr Mawr SSSI / Dunraven Bay SAC / Coastal Sand Dunes Priority Habitat / NRW priority habitat (Coastal Sand Dunes), Important Plant Area (Kenfig), coastal SINCs and invertebrate assemblage from coastal processes associated with construction of new sea wall.
- Potential impacts on bat activity (including rare species) from lighting.
- Potential disturbance to breeding birds.
- Potential disturbance to wintering birds.
- Potential effects on retained peripheral and adjoining habitat features and associated fauna from construction phase lighting, noise, dust and surface water run off.

9.4.18. Kenfig SAC, Merthyr Mawr SSSI, Cefn Cribwr Grasslands SAC and Dunraven Bay SAC are all situated well away from the application site (nearest site is 800m away), and on this basis no significant construction phase impacts on sites with statutory nature conservation designations is anticipated. Equally, Rhych Point SINC is separated from the proposed development area by the retained sand dunes, and the next nearest SINC is 165m away from the application site, and situated within an existing urban area, so no construction phase impacts are anticipated on sites with non-statutory nature conservation designations either.

9.4.19. In relation to Cefn Cribwr Grasslands SAC, it is noted that this site is also designated for a more mobile species: marsh fritillary butterfly. However, this species typically stays within a limited area, with adults rarely flying more than 50-100 metres (though some can disperse up to 5km, or even further, in 'good' years). Given that the application site is situated 4.68km away however, and more so that it is separated from Cefn Cribwr Grasslands SAC by the urban area of Porthcawl, it is considered extremely unlikely that any marsh fritillary butterflies would make this journey. Lastly, and crucially, marsh fritillary butterflies require abundant devil's-bit scabious as their foodplant, a plant species which has not been recorded within the application site. On this basis it is not considered that there is any significant scope for impacts on marsh fritillary butterflies arising from the proposed development, and so no construction phase impacts on Cefn Cribwr Grasslands SAC are anticipated.

Completed Scheme - Direct Effects

- In areas where species-rich maritime grassland in close proximity to sand dunes is lost to development, stockpiling and spreading of material on other parts of the site (shown in green on Figure 9.2c), in order to make use of the sandy substates and species-rich seedbank.
- Provision of a green corridor leading from Griffin Park to the sand dunes, via the retained northern part of the Monster Park (and including grassland creation on existing hardstanding within the current fairground area). Also provision of a narrower green corridor around the Sandy Bay East area.
- Removal of invasive non-native species (sea buckthorn from the eastern side of the dunes (considered a key benefit to the valuable mobile sand dune habitat), removal of cotoneaster from the Monster Park, and removal of Japanese knotweed and Virginia Creeper).

Completed Scheme - Indirect Effects

- Potential impacts on Coastal Sand Dunes Priority Habitat (onsite) from increased recreational pressure arising from new housing, and air quality effects from increased traffic.
- Potential impacts on invertebrate assemblage in and around sand dunes from increased recreational pressure arising from new housing.
- Potential impacts on reptiles from increased recreational pressure arising from new housing.
- Potential disturbance to breeding birds from increased recreational pressure arising from new housing.
- Potential disturbance to wintering birds from increased recreational pressure arising from new housing.
- Potential impacts on Kenfig SAC from increased recreational pressure arising from new housing, and air quality effects from increased traffic.
- Potential impacts on Cefn Cribwr Grasslands SAC from air quality effects from increased traffic.
- Potential impacts on Dunraven Bay SAC from increased recreational pressure arising from new housing.
- Potential impacts on Merthyr Mawr SSSI from increased recreational pressure arising from new housing.
- Potential impacts on NRW Priority Habitat (Coastal Sand Dune) at Kenfig / Merthyr Mawr from increased recreational pressure arising from new housing.
- Potential impacts on Important Plant Area at Kenfig / Merthyr Mawr from increased recreational pressure arising from new housing.
- Potential impacts on various SINCs (Rhych Point, Pwll-y-Waun, The Wilderness, Newton Point, Trafalgar Wood, Newton Burrows, Manor Farm Fields, Lock's Common (also LNR), Nottage Court Wood, Black Rocks, Coedargraig, Graig Wood and Pant-y-Hyl; including several with ancient woodland) from increased recreational pressure arising from new housing, and air quality effects from increased traffic.

- Potential impacts on retained Other Neutral Grassland (e.g. on Rhych Point) from increased recreational pressure arising from new housing, and air quality effects from increased traffic.
- Potential impacts on bat activity (including rare species) from lighting.
- Potential impacts on Kenfig SAC / Merthyr Mawr SSSI / Dunraven Bay SAC / Coastal Sand Dunes Priority Habitat / NRW priority habitat (Coastal Sand Dunes), Important Plant Area (Kenfig), coastal SINCs and invertebrate assemblage from coastal processes associated with function of new sea wall.
- Benefits to Kenfig SAC and Merthyr Mawr SSSI from working with NRW on the ongoing management to enhance the quality of habitats present.

9.4.20. The Cefn Cribwr Grasslands SAC are understood to be privately owned and grazed (though some parts incorporate PROWs). None of the conservation objectives make any mention of recreational pressure as a concern. On this basis no recreational impacts on Cefn Cribwr Grasslands SAC are anticipated.

9.4.21. In terms of air quality impacts, the eastern component of Kenfig SAC (and Merthyr Mawr SSSI) is scoped out on the basis that it is more than 200m from any road where the proposed development is anticipated to cause an increase in traffic.

9.4.22. No significant effects on any key receptors are anticipated to arise from hydrological changes (aside from direct impacts from creation of SUDs features, which are considered above together with other land loss impacts).

Assessment of effects in the absence of mitigation and compensation

9.4.23. In terms of the habitat losses affecting woodland, scrub and pond habitats (and its significance), there are expected to be some impacts on bat activity (including rare species), breeding birds and wintering birds. There will potentially also be scope for impacts on any hitherto undiscovered badger setts. The loss of grassland habitat is expected to impact on reptiles. Works could cause disturbance to breeding and wintering birds. Recreational impacts from the completed scheme could cause disturbance to reptiles, breeding birds and wintering birds. Excessive lighting at the boundary features would likely result in their being avoided by light-sensitive bat species (including rare species). Relatively minor magnitude net negative effects in terms of carrying capacity for some of these species will occur, but in the context of immediate local and wider

habitat availability, even in the absence of mitigation or compensation[13], these would not be significant at anything above the immediate site level.

9.4.24. Overall the proposals would be expected to result in a localised loss of biodiversity, largely arising from the loss of maritime grassland in Sandy Bay East, together with woodland and mixed scrub habitat.

9.4.25. In the absence of translocation of affected areas of sand dune and bare sand, the proposals would result in the loss of irreplaceable habitat (Coastal Sand Dunes Priority Habitat), and uncontrolled public access could result in degradation in the sand dunes, also potentially affecting their invertebrate interest. The rare dung beetle *Psammodius asper* could potentially be lost from the site.

9.4.26. In the absence of a suitable reptile mitigation strategy, the works could potentially result in significant impacts on local reptile populations.

9.4.27. The coastal processes ES chapter notes in relation to the new sea wall that construction was scoped out of modelling on the basis of it being temporary and likely predominantly land based, with no materials delivered by sea, no working at sea, and no dredging. In relation to the operation of the sea wall post development, it makes the following assessments:

- Magnitude of change to wave conditions is negligible
- Magnitude of change to flow conditions is negligible
- Magnitude of change to sediment transport is negligible
- Magnitude of impact on the beach is negligible

9.4.28. Air quality effects during construction are assessed to be temporary, short-term and not significant in the air quality chapter.

9.4.29. Air quality modelling for the completed scheme and anticipated increases in traffic relates to only two ecological receptors: Kenfig SAC (N.B. only the western component of Kenfig SAC was subject to modelling as the area of Kenfig SAC east of Porthcawl (and Merthyr Mawr SSSI) is located more than 200m from any road where the proposed development is anticipated to cause an increase in traffic of over 1000 journeys per day, and so is scoped out) and Cefn Cribwr Grasslands SAC. It has been assessed that there will be negligible effects on air quality at Cefn Cribwr Grasslands SAC. For Kenfig SAC (western component only) it has been assessed that there will be negligible effects from

[13] Which will be a statutory requirement in any event for those species subject to legal protection.

NOx and acid deposition, but for the closest study point from the M4 NH_3 levels are modelled to just exceed 1% of the Critical Level of 1µg/m^3 (modelled to be 1.1% of the Critical Level), and for the closest three study points from the M4 nitrogen deposition is modelled to exceed the 1% Lower Critical Load of 5 kg N/ha/year.

9.4.30. Further to the above it is noted however that only those parts of the SAC closest to the M4 motorway (up to approximately 50m away from the M4) are affected by the above non-negligible air quality effects, and in this context it is noted that the future baseline (2033 without development) shows exceedances of critical levels for NH_3 and critical loads for nitrogen deposition at these locations in any case from other M4 traffic (not associated with the proposed development). It is also noted for context that the habitats at this location are some 2.34km from the coast, and situated along the M4 corridor (with aerial photography giving the impression that the habitats along this strip mainly comprise woodland, scrub and grassland, with an apparent paucity of open sand or the habitats such as grey dunes for which Kenfig SAC is designated.

9.4.31. With reference to other potential key receptors which were not subject to air quality modelling (onsite Coastal Sand Dunes Priority Habitat, retained Other Neutral Grassland (e.g. on Rhych Point), and the various local SINCs, it must be assumed on a worst-case basis that potential impacts arising from air quality from increased traffic are possible.

9.4.32. In consideration of offsite recreational impacts on Kenfig SAC (and by association on Merthyr Mawr SSSI, NRW Priority Habitat (Coastal Sand Dune) and Important Plant Area), a search of internet resources was carried out to seek quantitative information on visitor pressures at Kenfig SAC to support the assessment but none could be located. As such the following qualitative points are made:

- Firstly, Kenfig SAC is separated from the application site by a large holiday / caravan park (as well as residential development along Beach Road adjoining the SAC), and as such is expected to already be subject to a high degree of recreational pressure. Part of the site is managed as a National Nature reserve, and there is a visitor car park provided to the north, enabling visitors to gain access. However, Newton car park on the eastern side of the holiday park, adjoining the SAC, links directly to the Wales Coast Path, which acts to direct much of the recreational pressure through the SAC via a well-defined route (and this would also apply to any increases in recreational usage arising from the proposed development).
- Secondly, it is understood from meetings with the Kenfig SAC ranger that trampling of vegetation by pedestrians is one of the lesser concerns at the site (except in

localised sensitive areas away from footpaths), with greater problems being experienced from illegal off road motorcycling, 4x4s, uncontrolled horse riding and camping. Rather the main focus of the reserve management is the re-profiling of dunes to create movement in the sand (along with scrub control and grazing). Other impacts, such as littering, are understood to have a more minor effect (though litter control is still listed as a key management issue on the overlapping Merthyr Mawr SSSI management statement).

- Thirdly, the proposed areas of residential development directly abut Sandy Bay beach, so new residents would have an excellent recreational facility on their doorstep, and one which is considered likely to be much more of a draw for new residents than regular excursions into the dune systems of Kenfig SAC (a round trip of 1.6km away, and further if not walking through the middle of the caravan park). In addition, the proposed development would itself provide significant additional recreational areas for the benefit of new residents, with approximately 20 ha of open space including a series of new significant public open spaces with different offers, and new shops, cafes and leisure activities. This is considered likely to act to greatly reduce additional recreational pressure on Kenfig SAC resulting from the new development.
- Fourthly, it is noted that there are several SINCs closer to the application site than Kenfig SAC, together with many other undesignated recreational areas such as Griffin Park, and the proximity of these is considered likely to make these more of a regular draw for new residents than Kenfig SAC.

9.4.33. On the basis of the above, it is assessed that the proposals are not likely to have any significant effect on the integrity of Kenfig SAC from increased recreational pressure.

9.4.34. For Dunraven Bay SAC, the same points are made with regard to recreational pressure, and it is also noted that it is situated much further from the application site (6.87km south-east). It is also noted that recreational pressure is not listed as a key concern / feature in the site management plan.

9.4.35. For the closest SINC to the application site, Rhych Point (10m south-east), it is noted that the designation is for rocky shoreline, which is relatively inaccessible, and considered likely to restrict visitors to occasional rockpoolers. The same is true for Newton Point SINC and Black Rocks SINC.

9.4.36. For the other nearby SINCs, the closest of these being Pwll-y-Waun SINC 165m north of the application site, it is considered likely that there will be some increase in

recreational pressure, which may be significant for those sites closest to the proposed new residential area. However, this additional recreational pressure is again considered likely to be ameliorated by more local facilities such as the Sandy Bay beach and Griffin Park, together with the new open space, green space, play and other recreational facilities provided by the proposed scheme. It is also noted that these closest SINCs are already situated within the urban area of Porthcawl, and as such will be well used to dealing with impacts from recreational pressure, such as by employing footpaths and signage to direct the majority of visitor activity along dedicated routes (thus minimizing effects from people straying into more ecologically sensitive areas).

Mitigation, Compensation and Enhancement Measures

9.4.37. A Construction Environmental Management Plan (CEMP) will be put in place to ensure that key retained ecological features within the application site are properly protected during the construction phase.

9.4.38. Where small areas of sand dune habitat are by necessity affected by development (e.g. the sand dune habitat on the southern part of the Sandy Bay Bowl, which is proposed to be filled in), they will be translocated to retained areas near the sand dunes. The majority of the sand dune material will be moved to an existing area of hardstanding east of the dunes. Figure 9.2c shows in dark pink the locations where peripheral dune habitat would be lost (total 0.50 ha area), and in purple the areas where dune habitat will be moved to and establish going forwards (total 0.63 ha, greater than the area lost). There will be no overall reduction in extent of sand dune habitat, with the areas the affected pockets of sand dune are translocated to being larger than the areas lost. It is also noted that the small areas of sand dune to be translocated are those on the periphery of the sand dune system (for example those within Sandy Bay Bowl are separated from the main sand dunes by an area of hardstanding used as a caravan park). The mobile sand dune habitat is considered to lend itself well to translocation, given that it is already a habitat type which is subject to natural movement, and the regular covering of vegetation by wind-blown sand.

9.4.39. The translocation of sand dune habitat (and of the patch of bare sand on the eastern side of Sandy Bay East) is also intended to retain the associated invertebrate interest, and in particular to enable the rare dung beetle *Psammodius asper* to continue to successfully occupy the site post-development.

9.4.40. A Reptile Mitigation Strategy will be produced to minimise impacts on reptiles. An initial design has already been drafted, which incorporates the following:

- Overall approach favouring habitat manipulation rather than translocation of reptiles. This approach follows the Mitigation Hierarchy, and is based on sufficient peripheral habitat assessed to be retained to continue to adequately support local reptile populations. It is also of relevance that no translocation sites are readily available, and any such sites identified in future would by necessity need to be outside Porthcawl, which would mean translocating reptiles a considerable distance. The public nature of the site could also pose significant constraints on any reptile translocation works.
- The north-western corner of the Sandy Bay East area will provide compensatory reptile habitat, with its existing grassland allowed to grow long. Different parts of this area are earmarked for school expansion and motorhomes use in the future, but such proposals are a long way off. When the time comes, consideration will be given as to whether reptile populations in these areas can still be adequately maintained as part of the detailed proposals (e.g. by incorporating broad buffer strips), or whether a reptile translocation may ultimately be required.
- A wide strip will be strimmed through bramble scrub from within the Monster Park leading north-east into the above area at the outset of the scheme, and sown with grass seed, with the intention of creating a route for reptiles to move along, and linking these two areas. This will open up new habitat to compensate for the squeeze on local reptile populations when the road link is created in the southern part of the Monster Park. The northern part of the Monster Park will be mostly retained, with the exception of its western edge which will be overlapped by a karting track (with gabion edges which could provide potential hibernation features), and paths through this area will comprise raised boardwalks which will not impede movement of reptiles). Reptile hibernacula will be placed in the retained part of the Monster Park (as well as in other parts of the site dedicated to receive reptiles) to increase carrying capacity.
- The edges of the Sandy Bay East development area will be brought forward to an early phase, so that necessary works (such as creation of SUDS features) can be completed early, then these areas allowed to have their grass grow long over 1-2 full growing seasons, with a view to their becoming suitable for receiving reptiles from the centre of Sandy Bay East during later phases.
- As each phase comes forward, reptiles will be gradually pushed out from the centre of Sandy Bay East towards its retained edges, employing habitat manipulation (two-

stage strimming methodology). It will be ensured that the areas where reptiles are to be pushed in each phase are suitable to receive reptiles (i.e. grass will have been left to grow long for the preceding 1-2 growing seasons). A similar procedure will be employed to push reptiles northwards in the Monster Park, and safely out of the way of the area where the new road needs to be constructed.

- Within the sand dunes area, reptiles have been recorded mainly around the areas where there is sea buckthorn present, as this is beginning to fix the dunes and allow grass species to colonise. While the presence of sea buckthorn is undesirable for the sand dunes, and the ultimate aim is for sea buckthorn to be fully removed, it is envisaged that this process will be phased to ensure that sufficient suitable reptile habitat remains when reptiles from the nearest corner of Sandy Bay East are encouraged towards this area.
- In terms of connectivity for reptiles, a broad green link will extend from Griffin Park, though the northern part of the Monster Park, under an underpass beneath the new link road, and into the retained sand dunes. In addition, a narrower green link will be created all around the periphery of the Sandy Bay East development area. These linkages aim to ensure that local reptile populations do not become fragmented.

9.4.41. Where areas of dense vegetation shaded purple on the Figure within Appendix 9.9 fall within development areas (for example the scrub growing atop the mound along the northern edge of Sandy Bay East), it is recommended on a precautionary basis that the vegetation is all removed with hand tools prior to any earthworks, in order to reveal any hitherto undiscovered badger setts (in the unlikely event that any are present). The uncovered area should then be subject to a walkover by an ecologist prior to any earthworks commencing. Should any active or potentially active badger sett be uncovered, all local works will stop and an ecologist contacted for advice, with the expectation removal of the holes will be subject to trail camera monitoring, and an NRW badger licence application.

9.4.42. Vegetation clearance will be timed for outside the main breeding bird season (March to August inclusive), and if this is not possible an Ecological Clerk of Works will be employed to check for nesting birds (and any active nests will be left in situ and unaffected, with a 10m buffer, until such time as the chicks are confirmed to have fledged).

9.4.43. Key information on bats has been shared with the lighting engineers to inform a sensitive lighting strategy with the aim of minimising impacts on bats from lighting. This is anticipated to include:

- Monster Park: light spill shields and dark sky luminaires (controlled by photocells and timeclocks) employed to reduce light spill on retained component of Monster Park north of the new access road, to minimise impacts from light spill on the rare Nathusius pipistrelle bat in particular (a species with activity strongly centred on the Monster Park). The detailed lighting design lighting contour plan shows that the vast majority of the retained portion of the Monster Park will have light levels below 0.2 lux (from the access road lighting) as a result of these measures, representing a significant improvement on the original design.
- The sand dunes and Rhych Point will be entirely unlit. The path along the northern edge of the sand dunes will be sensitively lit, employing directional dark sky bollard facing northwards to reduce light spill to the south. The existing lighting columns in this area (which were noted during bat surveys to be extremely bright and to illuminate much of the northern part of the dunes – see photo 31 in Appendix 9.3) will be removed, representing a substantial betterment on the current lighting situation. The dunes south of the path will constitute a dark corridor for use by bats.
- Griffin Park: Lighting will be minimised (e.g. directional, dark sky bollards for pathway lighting, removal of previously proposed uplighting on feature trees) with a view to minimising light spill, particularly along the tree line on the eastern side of the park (which was noted to be a hotspot for bat activity).
- Dark corridors for bats are proposed all around the periphery of the Sandy Bay East area (the rare and light sensitive species lesser horseshoe bat having been recorded mainly on the north-eastern edge of Sandy Bay East), and along the new green corridor to be created leading from Griffin Park to the Monster Park, then on to the sand dunes. These areas will be subject to sensitive lighting schemes for bats, and lighting will only be installed where absolutely necessary. The aim in these dark corridors will be to reduce light spill to a maximum of 0.2 lux horizontal and 0.4 lux vertical.
- Light levels will be also kept to the minimum necessary for safety along the new flood defences.
- Minimal lighting restrictions are proposed to be applied in the western part of the application site (Hillsboro and Salt Lake) given that very few bats were noted in these areas during the activity surveys, likely due to their existing urban and well-lit context.

9.4.44. Although no significant coastal process effects are anticipated from the new sea wall, nonetheless the process will follow a CEMP, no works will be carried out below tide level, subject to regular visual monitoring, arisings to remain on the beach, works will be carried out in small sections, and any significant variation in beach levels reinstated.

9.4.45. The air quality chapter notes that the CEMP should consider appropriate routing and management of construction routes to further reduce air quality effects during the construction phase (N.B. noting that these are already assessed to be not significant). And for the completed development it notes that Link Transport Planning have advised that a Travel Plan should be secured by Condition, which would set out a package of measures to be introduced in order to encourage residents, staff and visitors to travel to and from the application site via sustainable travel modes. This would be beneficial for air quality as it would be expected to reduce the overall traffic generation from the Proposed Development.

9.4.46. In terms of biodiversity, the proposed development has sought to maximise onsite biodiversity enhancements. This includes the following measures:

- Where species-rich maritime grassland in close proximity to the sand dunes is to be lost, the soils at this location will be scraped, and the material stockpiled and spread on other retained parts of the site wherever this is deemed feasible, in order to make use of the sandy substrates and species-rich seedbank. The specific locations identified as suitable to receive species-rich topsoil spreading are shown in green on Figure 9.2c (the periphery of the Sandy Bay East area, selected parts of the green corridor leading from Griffin Park to the sand dunes, and the roundabout to the north-west). The species-rich topsoils with their associated seedbank will be stockpiled ready for spreading in each of these areas in the relevant phase.
- A broad green corridor will be provided leading from Griffin Park, through the retained northern part of the Monster Park, and into the sand dunes. This will include the creation of a new green area on existing hardstanding where it passes through the current fairground. An underpass for wildlife will be provided where this green corridor is bisected by the new link road. In addition, a narrower green corridor will be provided all around the edge of the Sandy Bay East development area (incorporating SUDS features with wildlife planting into its route). Additional green spaces (e.g. north of the sand dunes to provide a buffer) are shown by the landscape strategy. The new green spaces will incorporate tree planting to replace losses of trees for the access road in the southern part of the Monster Park, with in excess of

three trees planted for every tree lost (where the new access road passes through the southern edge of the Monster Park), in accordance with Planning Policy Wales guidance. The landscape strategy will favour native species, though will also include cultivars.

- Non-native invasive species will be removed from the site. This will include the removal of sea buckthorn from the eastern side of the sand dunes (which is considered to be a key benefit to the mobile sand dunes, though is proposed to be phased to ensure that suitable habitat for reptiles remains present at the appropriate juncture for habitat manipulation), the removal of cotoneaster from the Monster Park, and the removal of Japanese knotweed and Virginia Creeper.
- With the mitigation hierarchy in mind, the above measures have sort to maximise onsite biodiversity enhancements. However, it is recognised that the quantum of biodiversity losses arising primarily from loss of grassland in Sandy Bay East cannot be fully offset by the onsite enhancements described above. On this basis, meetings were held with the management team for Kenfig SAC / Merthyr Mawr SSSI (NRW lead, and ranger) on 17th August 2023 and 6th May 2025 to discuss the option of working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present as a means of providing an offsite biodiversity uplift for the project. The approach was agreed in principle. It is assessed that there is considerable scope for biodiversity benefits to be realised via this route, which will contribute towards vital work on the exceptionally high quality (and European-designated) habitats at Kenfig SAC, with the aspiration of providing a net benefit to biodiversity from the development as a whole.
- While it has been assessed on balance that the proposals are not likely to have any significant effect on Kenfig SAC from increased recreational pressure, nonetheless it is envisaged that contributions could be made towards further reducing the effects of recreational pressure at Kenfig SAC, for example by providing signage as appropriate (in key areas such as Newton car park).

9.4.47. Recreational pressures on the sand dunes within the application site to be minimised by the provision of raised boardwalks to direct people through the sand dunes along specific routes.

9.4.48. A Habitat Management Plan will be produced to ensure the onsite post-development habitats are managed sensitively for wildlife.

9.4.49. The application site will also be enhanced by the provision of bat and bird boxes (e.g. in the northern part of the Monster Park and on the eastern side of Griffin Park), and insect hotels.

Residual Effects

9.4.50. The residual ecological effects anticipated to arise as an overall consequence of the project (i.e. taking into account both the design mitigation set out in section 7, and the further avoidance, mitigation and compensation measures set out in section 9) are summarised for each of the key receptors in Table 9.20 below.

Table 9.20: Residual Effects

Key Receptor	Value	Residual effect
Kenfig SAC	International	Moderate positive effect (working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present; no significant adverse effects expected from increased recreational pressure; air quality effects from increased NH3 and nitrogen deposition close to M4; negligible effect from coastal processes)
Cefn Cribwr Grasslands SAC	International	No likely significant effect (no marsh fritillary butterflies in application site, no recreational impacts expected, negligible air quality impacts)
Dunraven Bay SAC	International	No likely significant effect (no significant adverse effects expected from increased recreational pressure; negligible effect from coastal processes)
Merthyr Mawr SSSI	UK/National	Moderate positive effect (working with NRW on the ongoing management of Merthyr Mawr SSSI to enhance the quality of habitats present; no significant adverse effects expected from increased recreational pressure; negligible effect from coastal processes)
Dung beetle *Psammodius asper*	UK/National	No likely significant effect to minor impact (translocation of patch of bare sand to enable species retention as part of the scheme)

Key Receptor	Value	Residual effect
Coastal Sand Dunes Priority Habitat (onsite)	County	Minor impact (majority retained by design; CEMP; translocation of small areas of affected habitat; recreational pressure ameliorated by raised boardwalks along specific routes; potential air quality effects from increased traffic in completed scheme; phased removal of sea buckthorn as benefit; Habitat Management Plan; negligible effect from coastal processes)
NRW Priority Habitat (Coastal Sand Dune) (Kenfig)	County	Moderate positive effect (working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present; no significant adverse effects expected from increased recreational pressure; negligible effect from coastal processes)
Important Plant Area (Kenfig)	County	Moderate positive effect (working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present; no significant adverse effects expected from increased recreational pressure; negligible effect from coastal processes)
Various SINCs (Rhych Point, Pwll-y-Waun, The Wilderness, Newton Point, Trafalgar Wood, Newton Burrows, Manor Farm Fields, Lock's Common (also LNR), Nottage Court Wood, Black Rocks, Coedargraig, Graig Wood and Pant-y-Hyl). Several SINCs including ancient woodland.	County	No likely significant effect to minor impact (minor increases in recreational pressure likely for closest SINCs, though ameliorated by Sandy Bay, Griffin Park and recreational facilities provided by scheme, and urban SINCs expected to already be well used to managing visitor pressures; no recreational effects expected for rocky shoreline SINCs, including the closest: Rhych Point SINC; potential air quality effects from increased traffic in completed scheme (particular relevance for sites with ancient woodland); negligible effect on marine SINCs from coastal processes)

Key Receptor	Value	Residual effect
Invertebrate assemblage (in vicinity of sand dunes)	County	Minor impact (majority of sand dune habitat retained by design; CEMP; translocation of small areas of affected sand dune habitat; recreational pressure on sand dunes ameliorated by raised boardwalks along specific routes; potential air quality effects from on associated sand dune habitat from increased traffic in completed scheme; phased removal of sea buckthorn from sand dunes as benefit; losses of sandy grassland north of dunes, though some relocated by spreading in other parts of site; Habitat Management Plan including sand dunes and Rhych Point maritime grassland; negligible effect from coastal processes)
Other neutral grassland (maritime grassland near sand dunes)	Parish	Moderate impact (significant habitat loss around Sandy Bay Bowl; spreading of best / most species-rich substrates to colonise elsewhere, including within green corridor; CEMP; Habitat Management Plan; increases in recreational pressure on retained habitat; potential air quality effects from increased traffic in completed scheme)
Rare bat species (activity)	Parish	Minor impact (loss of woodland, scrub & pond habitat; green corridor & SUDS creation in completed scheme; potential temporary impacts from lighting during construction phase; sensitive lighting scheme and dark corridors to minimise lighting impacts; new bat boxes)
Bats (activity)	Immediate Local	Minor impact (loss of woodland, scrub & pond habitat; green corridor & SUDS creation in completed scheme; potential temporary impacts from lighting during construction phase; sensitive lighting scheme and dark corridors to minimise lighting impacts; new bat boxes)
Bats (roosting)	Immediate Local	No effect (potential bat roosting features avoided by design).

Key Receptor	Value	Residual effect
Reptiles	Immediate Local	Moderate impact (removal of grassland habitat in Sandy Bay East and Monster Park; reptile mitigation strategy incorporating dedicated retained habitat areas, hibernacula to increase carrying capacity & connectivity; CEMP; recreational pressures on grassland areas; Habitat Management Plan)
Breeding Birds	Immediate Local	Minor impact (loss of woodland, scrub and grassland habitat, construction phase disturbance, vegetation clearance outside nesting season, recreational disturbance, new green corridor, new bird boxes)
Wintering Birds	Immediate Local	Minor impact (loss of woodland, scrub and grassland habitat, construction phase disturbance, recreational disturbance, new green corridor)
Invasive non-native species (negative feature)	Immediate Local	Minor positive effect (phased removal of sea buckthorn, and removal of cotoneaster, Japanese knotweed and Virginia Creeper)
Biodiversity	N/A	Minor positive effect (losses of grassland, woodland and scrub; new green corridor; spreading of soils from impacted species-rich maritime grassland areas to other parts of site; Habitat Management Plan; working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present in order to make up overall biodiversity losses within the application site and provide a net benefit to biodiversity)

9.4.51. For ease of reference, the residual effects shown by the above table are also displayed using the Typical Assessment Matrix below:

Table 9.21. Residual Effects (displayed using Typical Assessment Matrix)

Key Receptor	Sensitivity	Description of Residual Effects	Magnitude of Impact	Significance of Impact
Kenfig SAC	Very High (International value)	Working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present; no significant adverse effects expected from increased recreational pressure; air quality effects from increased NH3 and nitrogen deposition close to M4; negligible effect from coastal processes.	Medium (overall positive effect)	Major (positive effect)
Cefn Cribwr Grasslands SAC	Very High (International value)	No marsh fritillary butterflies in application site, no recreational impacts expected, negligible air quality impacts.	No change	No change
Dunraven Bay SAC	Very High (International value)	No significant adverse effects expected from increased recreational pressure; negligible effect from coastal processes.	No change	No change
Merthyr Mawr SSSI	High (UK/National value)	Working with NRW on the ongoing management of Merthyr Mawr SSSI to enhance the quality of habitats present; no significant adverse effects expected from increased recreational pressure; negligible effect from coastal processes.	Medium (overall positive effect)	Moderate (positive effect)
Dung beetle *Psammodius asper*	High (UK/National value)	Translocation of patch of bare sand to enable species retention as part of the scheme.	No change to negligible	No change to minor
Coastal Sand Dunes Priority Habitat (onsite)	Medium (County value)	Majority retained by design; CEMP; translocation of small areas of affected habitat; recreational pressure ameliorated by raised boardwalks along specific routes; potential air quality effects from increased traffic in completed scheme; phased removal of sea buckthorn as benefit; Habitat Management Plan; negligible effect from coastal processes.	Low	Minor

Key Receptor	Sensitivity	Description of Residual Effects	Magnitude of Impact	Significance of Impact
NRW Priority Habitat (Coastal Sand Dune) (Kenfig)	Medium (County value)	Working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present; no significant adverse effects expected from increased recreational pressure; negligible effect from coastal processes.	Medium (overall positive effect)	Moderate (positive effect)
Important Plant Area (Kenfig)	Medium (County value)	Working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present; no significant adverse effects expected from increased recreational pressure; negligible effect from coastal processes.	Medium (overall positive effect)	Moderate (positive effect)
Various SINCs (Rhych Point, Pwll-y-Waun, The Wilderness, Newton Point, Trafalgar Wood, Newton Burrows, Manor Farm Fields, Lock's Common (also LNR), Nottage Court Wood, Black Rocks, Coedargraig, Graig Wood and Pant-y-Hyl). Several SINCs including ancient woodland.	Medium (County value)	Minor increases in recreational pressure likely for closest SINCs, though ameliorated by Sandy Bay, Griffin Park and recreational facilities provided by scheme, and urban SINCs expected to already be well used to managing visitor pressures; no recreational effects expected for rocky shoreline SINCs, including the closest: Rhych Point SINC; potential air quality effects from increased traffic in completed scheme (particular relevance for sites with ancient woodland); negligible effect on marine SINCs from coastal processes).	Negligible to low	Negligible to minor

Key Receptor	Sensitivity	Description of Residual Effects	Magnitude of Impact	Significance of Impact
Invertebrate assemblage (in vicinity of sand dunes)	Medium (County value)	Majority of sand dune habitat retained by design; CEMP; translocation of small areas of affected sand dune habitat; recreational pressure on sand dunes ameliorated by raised boardwalks along specific routes; potential air quality effects from on associated sand dune habitat from increased traffic in completed scheme; phased removal of sea buckthorn from sand dunes as benefit; losses of sandy grassland north of dunes, though some relocated by spreading in other parts of site; Habitat Management Plan including sand dunes and Rhych Point maritime grassland; negligible effect from coastal processes.	Low	Minor
Other neutral grassland (maritime grassland near sand dunes)	Low (Parish value)	Significant habitat loss around Sandy Bay Bowl; spreading of best / most species-rich substrates to colonise elsewhere, including within green corridor; CEMP; Habitat Management Plan; increases in recreational pressure on retained habitat; potential air quality effects from increased traffic in completed scheme.	Medium	Minor
Rare bat species (activity)	Low (Parish value)	Loss of woodland, scrub & pond habitat; green corridor & SUDS creation in completed scheme; potential temporary impacts from lighting during construction phase; sensitive lighting scheme and dark corridors to minimise lighting impacts; new bat boxes.	Low	Minor
Bats (activity)	Low (Local value)	Loss of woodland, scrub & pond habitat; green corridor & SUDS creation in completed scheme; potential temporary impacts from lighting during construction phase; sensitive lighting scheme and dark corridors to minimise lighting impacts; new bat boxes.	Low	Minor
Bats (roosting)	Low (Local value)	Potential bat roosting features avoided by design.	No change	No change

Key Receptor	Sensitivity	Description of Residual Effects	Magnitude of Impact	Significance of Impact
Reptiles	Low (Local value)	Removal of grassland habitat in Sandy Bay East and Monster Park; reptile mitigation strategy incorporating dedicated retained habitat areas, hibernacula to increase carrying capacity & connectivity; CEMP; recreational pressures on grassland areas; Habitat Management Plan.	Medium	Minor
Breeding Birds	Low (Local value)	Loss of woodland, scrub and grassland habitat, construction phase disturbance, vegetation clearance outside nesting season, recreational disturbance, new green corridor, new bird boxes.	Low	Minor
Wintering Birds	Low (Local value)	Loss of woodland, scrub and grassland habitat, construction phase disturbance, recreational disturbance, new green corridor.	Low	Minor
Invasive non-native species (negative feature)	Low (Local value)	Phased removal of sea buckthorn, and removal of cotoneaster, Japanese knotweed and Virginia Creeper.	Low (positive effect)	Minor (positive effect)
Biodiversity	N/A	Losses of grassland, woodland and scrub; new green corridor; spreading of soils from impacted species-rich maritime grassland areas to other parts of site; Habitat Management Plan; working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present in order to make up overall biodiversity losses within the application site and provide a net benefit to biodiversity.	Low (overall positive effect)	Minor (positive effect)

Cumulative Effects

9.4.52. A scoping request was submitted to Bridgend County Borough Council on 28th July 2025. The scoping response stated the following with respect to cumulative effects:

9.4.53. "The SA proposes to scope out cumulative effects from the Environmental Statement, as the screening opinion identified no existing development, and / or approved development that was deemed likely to have cumulative effect alongside the proposed development as such agree with that this can be scoped out."

9.4.54. On the basis of the above, cumulative effects are scoped out of this assessment.

9.5. Conclusions

9.5.1. As can be seen from the Residual Effects section above, the net residual effect of the proposed development in terms of the key ecological receptors is anticipated to constitute only moderate impacts on Parish and Local level receptors (other neutral grassland and reptiles), and up to minor impacts on County, Parish and Local level receptors (coastal sand dunes priority habitat, SINCs / ancient woodland, invertebrate assemblage, bats & rare bats (activity), breeding birds and wintering birds. The certainty attached to this assessment is high, though subject to review at the detailed design stage.

9.5.2. To balance this, overall moderate positive effects are anticipated on Kenfig SAC and Merthyr Mawr SSSI (International and UK/National level receptors respectively) from working with NRW on the ongoing management to enhance the quality of habitats present, as well as the positive effect of removing non-native species from the site (including sea buckthorn from the sand dunes).

9.5.3. Biodiversity losses will be compensated for as far as possible onsite (in the new green areas, by spreading species-rich topsoils sourced from impacted areas near the dunes, and through appropriate management), with working with NRW on the ongoing management at Kenfig SAC to enhance the quality of the habitats present intended to provide an overall net benefit to biodiversity at this highly important site.

9.5.4. The scheme is assessed to be policy compliant in ecological terms, in particular with PLA1 in the Bridgend Local Development Plan which is specific to this scheme. A green strip (including a SUDs basin) acts as a buffer to the sand dunes.

9.5.5. Cumulative impacts are scoped out of the assessment.

9.5.6. The losses are considered relatively minor in contrast to the scale of the scheme, as a result of careful design and collaboration on ecology. These losses are assessed to be greatly outweighed by the significant community benefits offered by the waterfront regeneration scheme, and the benefits arising from working with NRW on the ongoing management of Kenfig SAC to enhance the quality of habitats present.

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