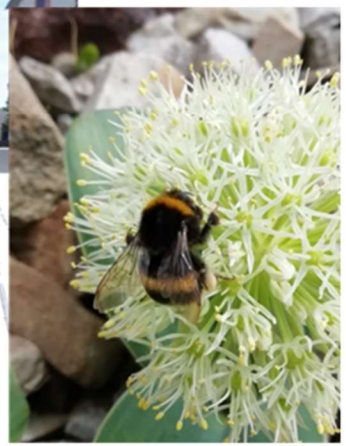
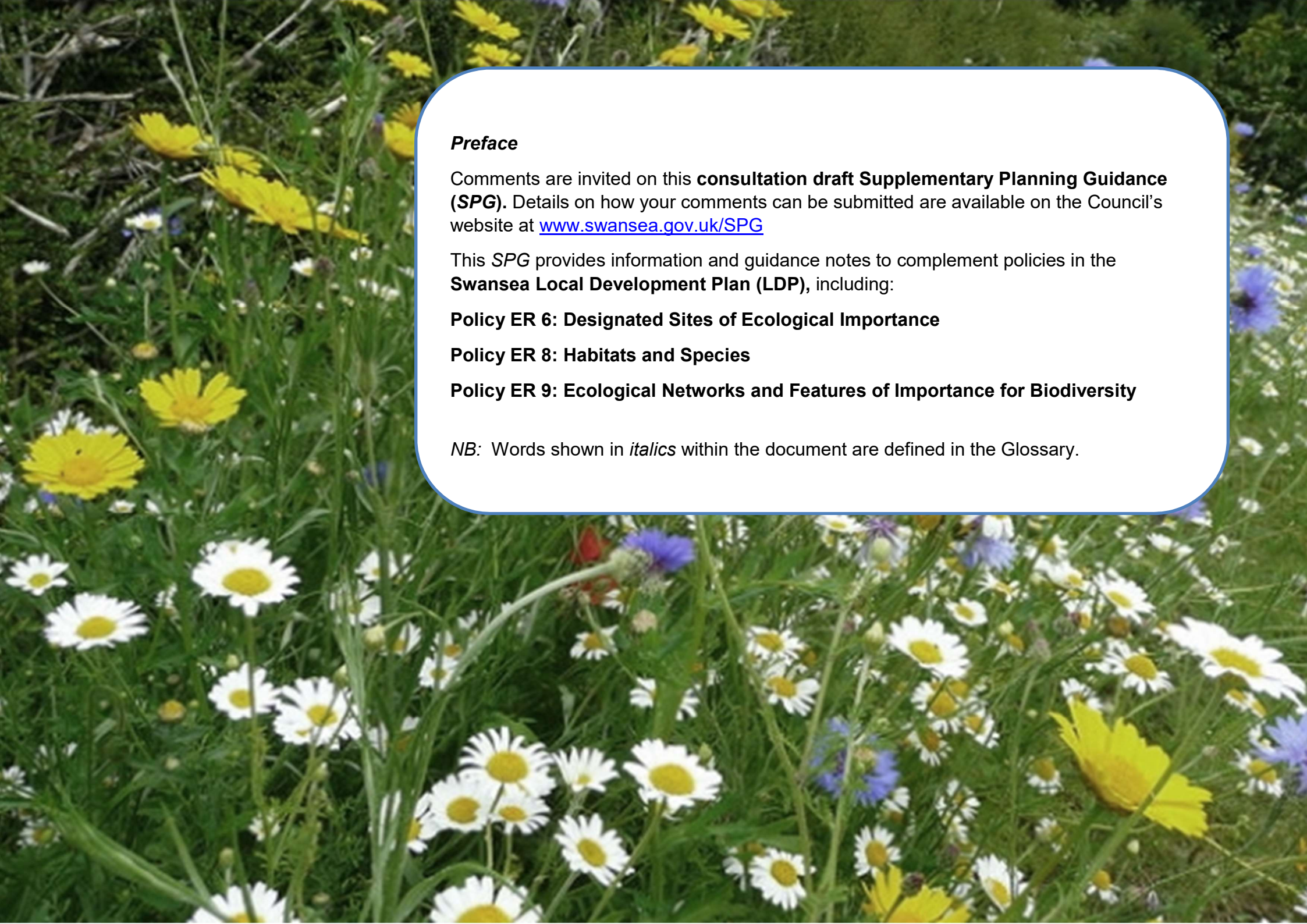
SUPPLEMENTARY PLANNING GUIDANCE

DEVELOPMENT AND BIODIVERSITY



CONSULTATION DRAFT JULY 2020



Preface

Comments are invited on this **consultation draft Supplementary Planning Guidance (*SPG*).** Details on how your comments can be submitted are available on the Council's website at www.swansea.gov.uk/SPG

This *SPG* provides information and guidance notes to complement policies in the **Swansea Local Development Plan (LDP),** including:

Policy ER 6: Designated Sites of Ecological Importance

Policy ER 8: Habitats and Species

Policy ER 9: Ecological Networks and Features of Importance for Biodiversity

NB: Words shown in *italics* within the document are defined in the Glossary.

Contents

1 Introduction

SPG Aims and Purpose

1.1 This Supplementary Planning Guidance (*SPG*) sets out how the Council will seek to ensure ***development within Swansea maintains and enhances the County's biodiversity and delivers long term ecosystem resilience.*** This aim is in line with the Council's duties under Part 1, Section 6 of the *Environment (Wales) Act 2016* (hereafter *'the S6 duty')* and the Resilient Wales Goal of the *Well Being of Future Generations (WBFG) Act 2015*. Figure 1.1 provides a summary of these duties.

1.2 The SPG will be taken into account as a material consideration in the determination of planning applications submitted to the Local Planning Authority.

1.3 Planning Policy Wales (PPW) recognises that delivering *the S6 duty* is a key influence on planning decision making in Wales, with the potential to provide multiple environmental, cultural and economic benefits for both people and wildlife[1]. PPW also recognises the importance of applying an *ecosystem approach,* as part of the wider objective of achieving *sustainable development* and delivering on the goals of the *WBFG Act.* Specific guidance is set out in PPW on how *the S6 Duty* can be delivered through the planning system and how it should be considered alongside other key principles at plan making and application stages.

Figure 1.1: "The S6 duty"

The **Environment (Wales) Act 2016** sets out the requirement for the sustainable management of natural resources. It includes (Part 1 section 6) a new Biodiversity and Resilience of Ecosystems Duty (strengthening the NERC Act duty).

The duty requires that public authorities, including Swansea Council, **"must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems.**

In exercising this duty Swansea Council **"must take account of the resilience of ecosystems**, [see Figure 1.3 below]. The S6 Duty provides a statutory basis in Wales for the implementation of the Ecosystems Approach advocated in international policy.

1.4 At the local level, the Council's commitment to delivering *the S6 Duty* is embedded within the *Local Well Being Plan*[2]*,* and it is also identified as one of the Council's corporate priorities[3].

[1]PPW 10 2018, Para 6.4.21: *to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimised, mitigated and as a last resort compensated for. Enhancement must be secured wherever possible".*

[2] Swansea Public Services Board Local Well-being Plan

[3] Swansea Corporate Plan – Objective 5

1.5 The purpose of this *SPG* is to confirm how national guidance and legislation requirements should be considered at the local level, specifically by explaining how the policies of the *Swansea Local Development Plan (LDP)* will be applied. The *SPG* highlights how the *biodiversity* impact of development proposals should be assessed, and sets out the steps to be taken to ensure biodiversity and *ecosystem resilience* is maintained and enhanced. It also sets out how the Council will seek to ensure that development does not cause any significant loss of habitats or species, and provides for a net benefit for *biodiversity*.

1.6 The *SPG* aims to ensure applicants, statutory consultees, local residents and all other stakeholders involved in the development process have access to clear and consistent advice and guidance. It signposts applicants and their appointed ecologists to other guidance and codes of practice[4].

1.7 The guidance emphasises that matters relating to *biodiversity* should not be considered in isolation, and instead should be recognised as a key component of providing and sustaining *'Green Infrastructure'*, which is integral to good placemaking. Further details on matters relating to Green Infrastructure are set out in the Key Terms and Definitions Section below.

1.8 The *SPG* will help applicants to understand how best to identify and assess the biodiversity and ecological resilience of a planning application site. It sets out how to follow the *'Stepwise approach'* to maintaining and enhancing *biodiversity* required by planning policy, and ensures that this approach is embedded into each stage of the development management process. Specifically, the *SPG* will support applicants by setting out the means by which the requirements of legislation and LDP policy relating to maintaining and enhancing *biodiversity* can be met. It provides the framework to enable applicants to demonstrate that all reasonable steps have been taken to avoid development resulting in adverse effects on *biodiversity.* Where avoidance is not possible, the *SPG* will guide the process of demonstrating that all opportunities have been explored to minimise, mitigate and/or compensate for any identified harm. This includes the requirement to demonstrate that there is no alternative location for the development. It also provides guidance on how to achieve biodiversity enhancement.

Burry Inlet Ramsar/Carmarthen Bay and Estuaries European Marine Site (CBEEMS

[4] BS 42020:2013 British standard for Biodiversity – Code of Practice for Planning and development. (BSI, 2013); Ecological Impact Assessment (EcIA) Checklist https://cieem.net/resource/ecological-impact-assessment-ecia-checklist The checklist ensures that decisions adequate information in accordance with Clauses 6.2 and 8.1 of BS 42020

Importance of the Natural Environment in Swansea

1.9 The natural environment of the City and County of Swansea is of outstanding quality and beauty. It makes up over 80% of the County's total land area. Its diversity of landscapes and habitats, including upland moorlands, coastal cliffs, sandy beaches, woodlands, wetlands, river valleys and estuaries, all combine to make it one of the most attractive and ecologically rich counties in the UK.

1.10 Given this diversity, it is unsurprising that over half the County's area is of significant ecological importance, with a number of areas protected by International or National Designations. These include:

- *2 Ramsar Wetlands of International Importance*
- *9 Natura 2000 Sites*
- *35 Sites of Special Scientific Interest (SSSI)*
- *Gower AONB – IUCN Category V protected landscape*

1.11 These International and National designations represent some of our very best ecological assets, but they do not encompass all that is irreplaceable within the County. Furthermore, the designated sites by themselves cannot maintain biodiversity and ecosystem resilience. The County's 6 *Local Nature Reserves (LNRs)* and numerous *Sites of Importance for Nature Conservation (SINCs)* combine with more common habitats, urban wildlife sites, residential gardens, churchyards, green pockets and spaces, to provide an important network of semi-natural sites that the Council will seek to maintain and enhance. Together these areas make a cumulative contribution to the quality and extent of the County's biodiversity and ecosystem resilience. Further details on the statutory and non-statutory designated sites of ecological importance within Swansea are set out in Chapter 2.

Crymlyn Bog - RAMSAR

Key Terms and Definitions

1.12 There are a wide range of terms associated with biodiversity and its related concepts. A number of these are set out below and those shown in *italics* within the *SPG* are further detailed in the **Glossary**.

1.13 *Biodiversity* underpins the structure and functioning of ecosystems. The term *biodiversity* refers to the diversity of living organisms, whether at the genetic, species or ecosystem level. An *ecosystem* is made up of living organisms, plants, animals and micro-organisms in conjunction with their non-living environment, air, water, minerals and soil, and all the diverse and complex interactions that take place between them.[5]

1.14 Our economy, health and well-being are dependent on the extent to which ecosystems are able to provide us with our food, clean water and air, and the raw materials and energy for our industries, as well as protecting us against hazards such as flooding and climate change. These are referred to as *ecosystem services (See Figure 1.2).* Changes in the distribution and abundance of plants, animals, and microbes affect ecosystem functions and the capacity of those functions to deliver ecosystem services. Loss of species from ecosystems affect their ability to resist invasion by other species, affect production and nutrient cycling, and affect the resilience, reliability and stability of ecosystems. Therefore, *biodiversity* is essential to sustaining healthy, functioning ecosystems that provide the vital services our lives depend on.

Figure 1.2: Ecosystem services diagram
source:metrovancouver.org

1.15 *Ecosystems* that are more biodiverse are generally more resilient and better able to adapt to pressures and changes, such as impacts from development and climate change. This aspect is referred to as

[5] PPW 10 2018, Para 6.4.1

ecosystem resilience and is a key element of sustainable *placemaking.* Indeed, humans can be considered as species within their own *ecosystem, and placemaking* therefore serves to create resilient human habitats as well as wildlife habitats.

1.16 The five principles[6] set out in Figure 1.3 below provides a broad framework for maintaining and enhancing biodiversity and building resilience through the planning system[7].

Figure 1.3: The 5 Attributes of Ecosystem Resilience (DECCA)

D **Diversity** between and within ecosystems;

E **Extent** and scale of ecosystems;

C **Connectivity** between and within ecosystems;

C **Condition** of ecosystems including their structure and functioning; and

A **Adaptability** to change of ecosystems.

1.17 Taking this holistic and integrated *ecosystem approach* facilitates a broader consideration of compliance with LDP policies and national legislation, including a wide range of related issues such as air and water pollution, climate change, drainage and trees.

1.18 There is a particularly close and symbiotic relationship between biodiversity, ecosystem resilience and Green Infrastructure (GI) i.e. the network of natural/semi-natural features, green spaces and green corridors. This *SPG* supports the delivery of green infrastructure as being a central facet of placemaking. Good quality GI enables the greatest multi-functionality and enhanced connectivity of the GI network, in order to maximise the number, quality and intensity of benefits.

1.19 This approach to the provision of GI is inextricably linked with the ecosystem approach. Both involve implementation of a holistic and integrated approach to the sustainable management of natural resources (SMNR). It is important therefore that development decisions take into account the needs of biodiversity alongside the needs of other GI benefits and ecosystem services (such as open space provision and surface water management) and vice versa.

1.20 Figure 1.4 sets out the key ecological features which should be maintained and enhanced in order to contribute to the resilience of local biodiversity in Swansea. Each is considered a highly significant green infrastructure asset, and together they comprise Swansea's Green Infrastructure Network.

[6] Principles of resilience as set out in the Environment (Wales) Act 2016

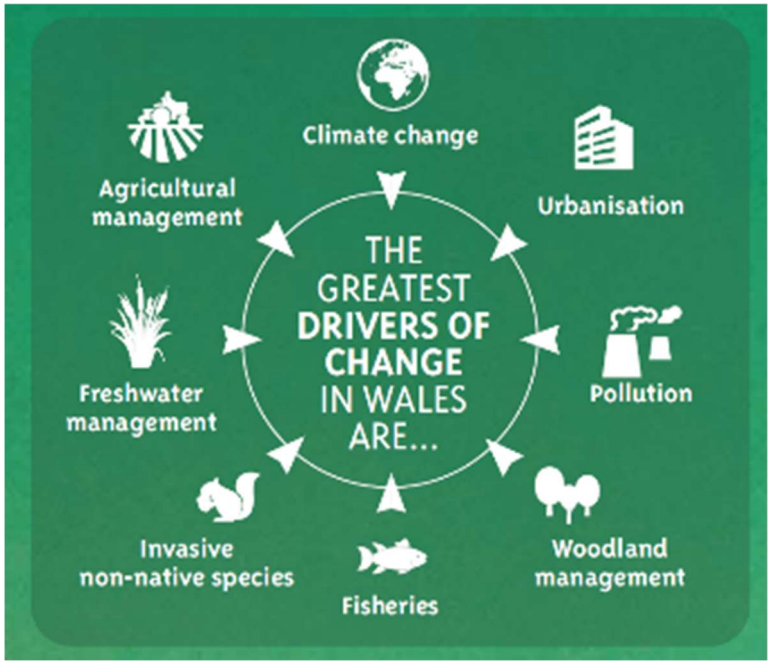
[7] Planning Policy Wales (Edition 10) Para 6.4.9.

Figure 1.4: Key Ecological Features

- ♣ **International and National Designated Sites** SSSIs, SACs, SPAs, Ramsars, NNRs
- ♣ **Priority habitats and Priority species** (section 7 of the **Environment** (Wales) Act 2016) (the S7 list)
- ♣ **Habitats** that provide **green corridors** or **stepping-stones** across the landscape and urban area, such as pocket woodlands, hedgerows or networks of ponds. Ecological connectivity allows species to forage, migrate, colonise new areas and respond to habitat and climate change.
- ♣ **Locally designated sites** designated for their nature conservation importance (SINCs/LNRs)
- ♣ **The wider landscape**, that can provide important complementary habitat and act as a buffer protecting priority habitats from the adverse impacts of developed areas and associated activities and have potential for biodiversity enhancement or habitat creation. They are also important in maintaining habitat connectivity.
- ♣ **Trees, Hedgerows and Woodland** (See Trees, Hedgerows and Woodland on Development Sites SPG)

1.21 At the national level, the 2019 State of Natural Resources Report Wales (SoNaRR) sets out what are considered the greatest drivers of change in Wales, as illustrated in Figure 1.5 below:[8] Invasive *Non-Native Species (INNS*) are identified as one of these drivers, and as such their management on planning application sites is an important way to maintain and enhance ecosystem resilience. *INNS* are a major threat to biodiversity at the global level and represent a serious impediment to conservation and sustainable use of global, regional and local biodiversity, as well as having a significant adverse impact on *ecosystem services*[9].

Figure 1.5: SoNaRR, Greatest Drivers of Change



[8] nbn.org.uk/wp-content/uploads/2019/09/State-of-Nature-2019-Wales-English-version-27-09-19.pdf

[9] See Assessment of the impacts of Invasive Alien Species (IAS) in Europe and the EU (Institute for European Environmental Policy (IEEP), Technical Support to EU Strategy on IAS.

Document Structure

1.22 Following this introductory Chapter, the remaining document is structured as follows:

1.23 ***Chapter 2:*** **Provides an outline of the duties and requirements of applicants and the Council itself**, having regard to the relevant legislative and policy framework. Further details and extracts relating to these are provided on the Council's website[10]. Chapter 2 explains how adopted *LDP* policies will be implemented and outlines how compliance with these policies will assist in demonstrating how development proposals accord with *the S6 Duty and other relevant legislation.* It provides specific guidance in relation to designated sites, including international, national and local designations. The full extent of protected sites, habitats and species in the County is listed in Appendix 1.

1.24 ***Chapter 3:*** **Provides a step-by-step guide to how the Council will administer the development management process in order to ensure that *biodiversity* is maintained and enhanced in all planning decisions.** The Chapter introduces the *'Stepwise approach'* advocated by PPW[11] which aims to build the consideration of *biodiversity* into the development management process at the earliest possible stage, in order to achieve the best possible outcome for biodiversity and minimise delays and costs to applicants. The focus of Chapter 3 is to provide guidance on how *biodiversity* requirements will be implemented on all scales of development from minor householder applications, through to large scale major developments. This Chapter provides best practice guidance on the timing, scale, nature and content of ecological surveys and assessments of habitats, sites and species. It is supported by Appendix 1 which provides Ecological *Survey Checklists and details of Survey Seasons.* Detailed information and guidance on the process of *Environmental Impact Assessment (EIA), Habitats Regulations Assessment (HRA), Protected Species and Development Licences, Preliminary Ecological Assessment (PEA)* is provided on the Council's website.

1.25 ***Chapter 4*** **explains in more detail the principles of the *Stepwise Approach,*** and sets out how the Council will ensure that any adverse environmental effects are firstly avoided, then minimised, mitigated and as a last resort compensated for. Guidance is also provided on how the requirement in national guidance to secure enhancement "wherever possible" will be implemented through the planning system, having particular regard to the extent to which enhancement is proportionate to the scale of the proposals. The Chapter also provides guidance on how the relevant ecological survey information will support this process.

1.26 ***Chapter 5*** **provides a glossary of key terms** and a link to a separate document of **Appendices is provided at *Chapter 6.***

[10] See Guidance re Environmental Legislation www.swansea.gov.uk

[11] PPW Para 6.4.21*: "to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimised, mitigated and as a last resort compensated for. Enhancement must be secured wherever possible". ."*

2 Legislation and Policy Context

International and National

2.1 Local policy and guidance relating to *biodiversity* is derived from International, UK and Welsh Government policy, guidance and legal requirements. International *biodiversity* policies provide the context for Wales' national *biodiversity* policies, which in turn are reflected in Swansea's own local strategies and adopted policies.

2.2 Infringement of legislation invariably results in delays, additional costs and in many cases prosecution. By following the guidance in this *SPG,* (as well as the best practice guidance signposted within it and any additional advice from a suitably qualified ecologist), applicants can be more confident that proposals will be in accordance with national and international legislation and policy requirements. Ultimately this will serve to reduce delays to the planning process and reduce the likelihood of unexpected costs being incurred.

2.3 Applicants should be aware that legislation is independent of the planning system and that they (and in some instances any contractors/third parties working with them) remain responsible for compliance with the legislation, both outside of the planning system and once planning permission has been granted.

2.4 Appendix 1 of this *SPG* provides an outline of the relationship between international, UK, Wales and local legislation and policy. Tables are also included giving examples of how the policy framework relates to the *biodiversity* assets found in Swansea, and the implications for development.

2.5 This *SPG* does not seek to repeat all the national legislation and policy that applies to the consideration of *biodiversity* matters in relation to development. Extracts and summaries of the range of relevant policies and legislation are provided on the Council's website[12]. They give rise to various obligations, requirements and principles relating to biodiversity and sustainable management of the natural environment.

2.6 **In order to comply with the relevant legislation and policy, planning decisions made by the Council must:**

- ♣ Protect and promote the long-term conservation of protected habitats, species and designated sites. *(See Appendix 1)*
- ♣ Comply with the Council's S6 duty under the Environment (Wales) Act 2016 to seek to maintain and enhance biodiversity.
- ♣ Apply the ecosystem approach. Integrate management of land, water, air and living resources into development design and layout. Balance maintaining and enhancing biodiversity against, sustainable use and the equitable utilisation of ecosystem services[13].

[12] See Guidance re Environmental Legislation www.swansea.gov.uk

[13] Environment (Wales) Act 2016

- ♣ Take account of all relevant information relating to the sustainable management of natural resources, including having regard to the SMNR Framework (SoNaRR, Natural Resource Policy, Nature Recovery Action Plan for Wales, Area Statements).
- ♣ Ensure measures are in place to address the presence of invasive non-native species (INNS) on the planning application site
- ♣ Consider how development contributes to achievement of the "Resilient Wales" Well Being Goal in the Well Being of Future Generations Act.

2.7 When considering planning applications, the Council will have specific regard to how the proposal complies with the requirements set out in PPW, including the need to follow the stepwise approach.

2.8 By following a stepwise approach to maintaining and enhancing biodiversity, development can build and sustain resilient ecological networks by:

- ♣ Avoiding any significant loss of habitats or populations of species, locally or nationally
- ♣ Putting appropriate mechanisms in place to avoid loss, mitigate and/or compensate negative effects and secure enhancement wherever possible.
- ♣ Providing a net benefit for biodiversity [14]
- ♣ Creating ecosystem resilience by applying the 5 principles of ecosystem resilience. (See DECCA figure 1.3).

2.10 Consideration of how biodiversity and the wider GI benefits are integrated into new developments is key to demonstrating compliance with national and local policy and guidance. This process is supported by the checklists provided at Appendix 1.

2.11 PPW makes clear that all reasonable steps must be taken to maintain and enhance biodiversity and promote the resilience of ecosystems, and that these should be balanced with the wider economic and social needs of business and local communities. It also emphasises that planning permission should be refused where adverse effects on the environment cannot be avoided or mitigated[15].

2.12 As well as the above, the following legislation has a particular bearing on the requirement for development to ensure biodiversity is maintained and enhanced:

2.13 The **Well-being and Future Generations Act, 2015** provides an obvious link to the resilient Wales and globally responsible Wales wellbeing goals. There are also clear and proven links between the impacts of exposure to the natural environment on physical and mental health. Maintaining and enhancing biodiversity

[14] PPW, para 6.4.5 *Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. 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. In doing so planning authorities must also take account of and promote the resilience of ecosystems.*

[15] *PPW, para 6.4.4*

in development is an important way to demonstrate how a development has considered and addressed the "healthier Wales well-being goal.

2.14 The importance of **Sustainable Drainage Systems (SuDS)** in providing opportunities to achieve biodiversity net gain and ecosystem resilience is recognised in the Flood and Water Management Act and supporting SUDS Wales Standards. Further guidance on achieving biodiversity in SUDS is provided on the Council's website[16].

2.15 There is a wide range of legislation, plans and guidance that applies to the sustainable management of the **Marine, Coastal and Estuarine areas of Wales.** Applicants proposing development within or adjacent to marine, coastal or estuarine areas should refer to the survey checklists at Appendix 1. See also guidance on the Marine Planning process on the Council's website[17].

Local Policy and Strategies

2.16 **The adopted *Swansea LDP*** provides the statutory local policy framework against which all planning applications must be determined. The *LDP* provides a detailed, evidence based framework for making effective and consistent planning decisions in the public interest. The policies have been formulated to recognise that biodiversity is a key part of achieving *sustainable development* through placemaking. LDP policies aim to reconcile the benefits of development and investment with the need to maintain and enhance biodiversity and ecosystem resilience.

2.17 The key *LDP policies* supported by this *SPG* are;

***ER 6 Designated Sites of Ecological Importance**, regarding the effects of development upon sites of international, national and local nature conservation interest.*

***ER 8 Habitats and Species**, regarding the effects of development on the resilience of protected habitats and species.*

***ER 9 Ecological Networks and Features of Importance for Biodiversity**, regarding the effects of development on the connectivity of ecological networks and features of importance for biodiversity.*

2.18 These policies are supported, and complemented, by a range of other strategic and topic specific polices. These include:

ER 1: Climate Change
ER 3: Strategic Green Infrastructure Network
ER 4 Gower AONB
ER 7 Undeveloped Coast
PS 1: Sustainable Places
PS 2: Placemaking and Place Management
SI 1 Health and Well Being
SI 5 Protection of Open Space

[16] See Guidance re SuDS and Biodiversity www.swansea.gov.uk

[17] See Guidance re SuDS and Biodiversity www.swansea.gov.uk

ER 11: Trees, Hedgerows and Development

RP 1: Safeguarding Public Health and Natural Resources

RP 2: Noise Pollution

SI 6 Provision of New Open Space

RP 3 Air and Light Pollution

RP 4 Water Pollution and the Protection of Water Resources

2.19 The range of LDP policies that apply clearly demonstrates that the impacts of development on biodiversity cannot be considered in isolation. Appendix 5 provides relevant extracts from LDP policies. The policies can be read in full at www.swansea.gov.uk/ldp

2.20 This *SPG* provides details of the County's designated sites and protected habitats and species, and augments the information in the *LDP (see LDP Appendix 7).* Reference to the *SPG* will enable a more informed consideration of sites, and help applicants identify early on the extent to which Policies ER 6 and ER 8 apply to a planning application site. It will also assist in identifying opportunities to maintain and enhance ecological networks and features of importance for *biodiversity* (Policy ER 9), including on non-statutory, locally designated sites.

2.21 Locally designated sites of importance for biodiversity are a significant element of Swansea's biodiversity.

PPW recognises that such sites can make a vital contribution to delivering an ecological connectivity network for protected species and habitats between designated sites and can help to ensure the resilience of ecosystems. It is important to recognise that a non-statutory designation will support protected and /or priority habitats and species which need to be given appropriate protection in accordance with S7 of the Environment (Wales) Act 2016[18].

2.22 Within Swansea there are two types of locally designated sites, both of which are shown on the LDP Constraints and Issues Map[19]. These are:

- ***Sites of Importance for Nature Conservation (SINCs), and***
- ***Local Nature Reserves (LNR)***

2.23 ***SINCs:*** A SINC is designated because of its significant nature conservation value. TAN 5 requires the selection of such sites to be based upon rigorous national criteria[20], but recognises that some local amendments may be necessary to reflect the local biodiversity resource. The process of designation of SINCs in Swansea has followed this approach.

2.24 All sites identified as SINCs in Swansea are shown on the LDP Constraints and Issues Map[21] and will be subject to Policy ER 6. The Constraints and Issues Map does not form part of the statutorily adopted LDP and is permitted to be updated at intervals throughout

[18] Planning Policy Wales (Edition 10) 6.4.20.
[19] Weblink to Constraints and Issues Map
[20] Wildlife Sites Guidance Wales: A guide to develop local wildlife systems in Wales.
[21] https://www.swansea.gov.uk/ldp

the Plan period. The SINC boundaries defined on the Map may therefore be subject to change during this period. Any changes to the boundaries will be based on the latest available evidence base and survey data, and will follow appropriate stakeholder consultation.

2.25 There may be other sites that meet SINC criteria but are not shown on the LDP Constraints and Issues Map which will still support priority habitats and/or species, which will need to be given appropriate protection, having regard to the provisions of S7 of the Environment Act (and the Local Biodiversity Action Plan). Additionally, or alternatively, these sites may address gaps in connectivity, which PPW advises should be taken into account. Conversely, the Council will consider whether evidence submitted as part of an application demonstrates a site no longer meets SINC criteria. Such evidence will be taken into account as part of the process undertaken to review designated SINC boundaries on the LDP Constraints and Issues Map.

2.26 ***LNR:*** There are 6 LNRs in Swansea, all of which are situated within, or near, urban areas. These were established following consultation with Natural Resources Wales (NRW) under the National Parks and Access to the Countryside Act 1949. For a site to become an LNR it must have natural features of special interest to the local area, and be accessible to local people. The local authority must either have a legal interest in the land or have an agreement with the owner to manage the land as a reserve. The Council considers LNR designations useful not only as part of its responsibilities to protect habitats and wildlife but also to increase people's awareness of their environment and identify places where children can learn about nature.

2.27 LDP policies also refer to the requirements for applicants to undertake appropriate ecological surveys, in order to inform and support development proposals (Policy ER6). This *SPG pr*ovides guidance on the nature, content and timing of such surveys to assist in the process of assessing the impact of development. Where avoidance of harm is not possible, this *SPG* provides guidance on the information required to inform the early design of the proposal, the opportunities for creating connections to the wider *GI/ecological network,* and the need for and nature of any conditions or planning obligations necessary to secure *biodiversity* mitigation, compensation and enhancement. Where mitigation or compensation is required, the *SPG* provides further guidance on the steps that the Council will take throughout the planning application process to determine appropriate measures, in order to meet the requirement to secure net benefit.

2.28 The LDP has been informed by an assessment of ecological connectivity across the whole of the County. As well as mapping the existing ecological connectivity network in Swansea, this assessment also identifies locations where ecological connectivity has the potential to be enhanced. The latest version of the Swansea Ecological Connectivity Assessment will

inform the implementation of LDP policies and should be referenced where relevant in the application of this SPG[22].

Supporting Supplementary Planning Guidance

2.29 LDP Policy is supported by a suite of SPG that are material considerations for decision making on planning applications[23]. A number of these have direct relevance to biodiversity matters, including the following:

- *Residential Design Guide*
- *Householder Design Guide*
- *Infill and Backland Development Design Guide*
- *Trees, Woodlands and Hedgerows on Development Sites*
- *Gower AONB Design Guide*

2.30 The *Residential Design Guide SPG* provides important additional detail about how consideration of biodiversity and ecosystem resilience will form part of the wider design process. The main focus of the guidance is on schemes of ten or more dwellings or proposals on sites of 0.5 ha or more, however it is relevant as a material consideration for all proposals for new residential development.

2.31 The *Householder Design Guide SPG* and *Infill & Backland Development Design Guide SPG* sets out how net benefit for biodiversity will be secured on small scale and householder applications. These Design Guides support the approach of securing appropriate measures or interventions wherever possible, including on minor applications, as part of a cumulative approach to ensuring that planning decisions contribute to the wider *green infrastructure network and biodiversity gain.*

2.32 The *Trees, Hedgerows & Woodlands on Development Site SPG* provides specific advice on the role of trees, hedgerows and woodlands in enhancing biodiversity, both in their own right and as part of the wider green infrastructure network, and their role in contributing to *ecosystem resilience.* It is supported, and complemented, by the Council's '*County Tree Strategy'* which a material consideration for decision making in relation to proposals affecting trees on land owned by the Council.

2.33 The Council is preparing a County-wide *Green Infrastructure Strategy and Green Infrastructure (GI) SPG.* The *Green Infrastructure SPG* brings together a series of issues relating to specific GI benefits and ecosystem services, and enables *their* consideration by the LPA in a comprehensive and coordinated way.

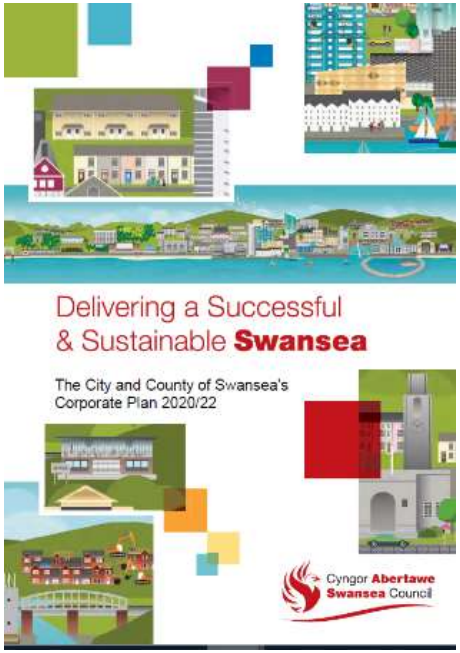
[22] Swansea Ecological Connectivity Assessment www.swansea.gov.uk

[23] www.swansea.gov.uk/spg

Other Local Strategies and Plans

2.34 The Council will also have regard to a range of local Strategies and Plans when considering how proposals deliver on the requirement for maintaining and enhancing biodiversity.

- **Swansea Public Service Board's (PSB) Well Being Plan:** The partners of the Swansea PSB have a set of 4 objectives, one of which is *"working with nature to improve health, enhance biodiversity and reduce our carbon footprint".*
- The Council has a set of 8 **Corporate Objectives**, one of which is *"maintaining and enhancing Swansea's natural resources and biodiversity".*[24]
- **Local Biodiversity Action Plan (LBAP**) and emerging **Nature Recovery Action Plan (NRAP**) - These documents provide the local tier of the SMNR policy framework.
- **Gower AONB Management Plan:** Produced by the Gower AONB partnership this 5 year plan for the management of the AONB recognises Biodiversity special qualities of the AONB and sets out a specific vision, policies and objectives relating to conserving and enhancing the biodiversity within the AONB designation.



[24] www.swansea.gov.uk/corporateimprovementplan

3 The Stepwise Approach

Overview

3.1 PPW makes clear that, when making planning decisions, the Local Planning Authority must follow a *stepwise approach*. Such an approach ensures that planning decisions maintain and enhance biodiversity and build resilient ecological networks. This approach also serves to ensure adverse environmental effects of development are first avoided, then minimised, mitigated and, as a last resort, compensated for25. The same National Guidance states that enhancement of biodiversity must be secured wherever possible.

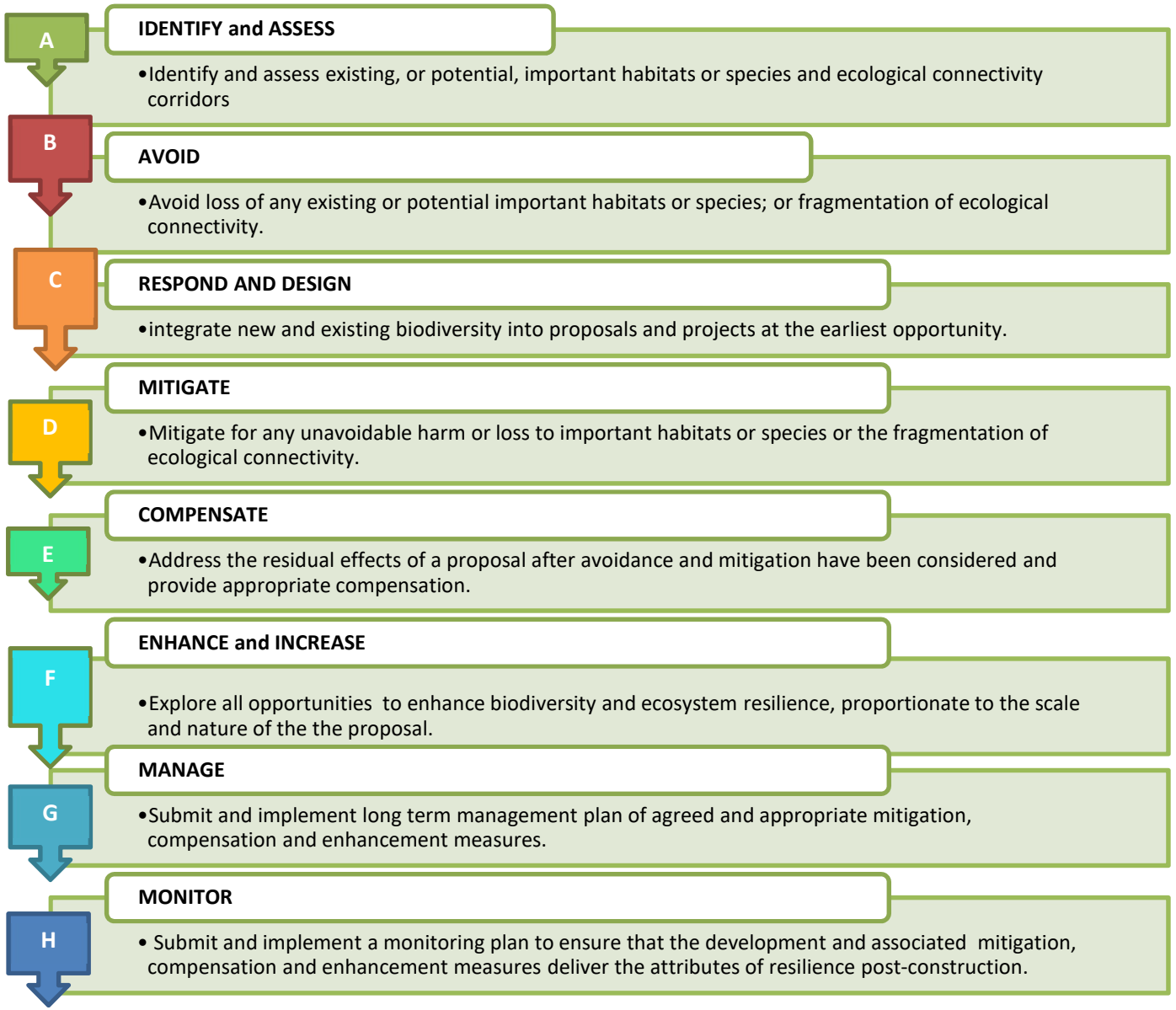
3.2 Figure 3.1 (overpage) provides a simple guide to the stepwise approach. The figure identifies the key steps outlined in PPW and explains how the Council will consider biodiversity throughout the lifespan of a planning application. The figure also provides a guide to how, and when, applicants should consider biodiversity. Further explanation of each step of the process is provided later in this Chapter.

3.3 The S6 duty seeks to maintain and enhance <u>all</u> biodiversity, therefore where the stepwise approach refers to “important” species or habitats this means that the Council will follow a process to reach a judgement about the biodiversity present on the site, having regard to legal protections, statutory and non-statutory designations and all the other relevant considerations to determine ecological value (see figure 3.1 below).

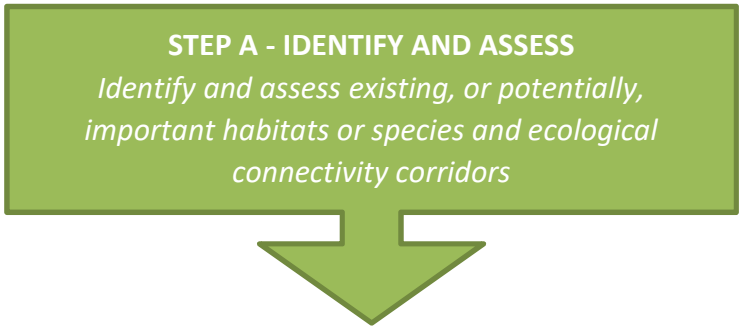
3.4 Chapter 4 explains how the stepwise approach is integrated throughout the relevant stages of the Council’s Development Management processes. This is illustrated in the diagram at Figure 4.1.

[25] PPW 10, Para 6.4.21

Figure 3.1 Guide to the stepwise approach.



Steps A – H of the Stepwise Process



3.5 The early and accurate identification of designated sites, and/or protected habitats and species that are present on a site and/or wider area, and the site's location in relation to ecological connectivity corridors is the essential first step in understanding the significance of biodiversity issues, and for ascertaining the potential ecological impacts of a development proposal.

3.6 Ecological survey data, together with information provided relating to the resilience of ecosystems on and around a site, will be critical in informing the extent and nature of mitigation, compensation and enhancements that will be sought in each application. The attributes of *ecosystem resilience* should be used to assess the current resilience of a site[26].

3.7 The Council supports the best practice approach of sharing of ecological survey data with the Local Environmental Records Centre. Further detail of how the Council will work with Applicants to achieve this is set out in Chapter 4.

3.8 In the case where surveys and assessments do not identify a requirement for compensation/mitigation, the Council still has a duty to maintain and enhance the biodiversity and ecosystem resilience of the site. The Council will therefore seek to secure biodiversity enhancements/net benefits in all developments where possible, having regard to the scale and nature of the development and the biodiversity and ecosystem resilience value of the site.

3.9 **In circumstances where the necessary biodiversity enhancement cannot be achieved as part of a planning application, it may be necessary to refuse permission.** The Welsh Government emphasise that "*where biodiversity enhancement is not proposed as part of an application, significant weight will be given to its absence, and unless significant material considerations indicate otherwise it will be necessary to refuse permission* [27]. This re-enforces the importance of being able to demonstrate how biodiversity and ecosystem resilience considerations have been taken into account and that a scheme is based upon a full ecological understanding of the site.

3.10 In complying with the S6 duty to seek to protect and enhance biodiversity, appropriate regard will be given to

[26] PPW 10, Para 6.4.9

[27] Biodiversity enhancements: guidance for heads of planning https://gov.wales/biodiversity-enhancements-guidance-heads-planning

the protection and enhancement of SINCs in the determination of planning applications. Where a planning application site contains a designated SINC, applicants will be:

- encouraged to consult the Council's planning ecologist to establish the features and values for which the site was designated[28]
- required to make an assessment, undertaken by a suitably qualified ecologist, of the biodiversity impacts of the proposal on their site against the features and values of the SINC.

3.11 Appendix 1 provides checklists to support the process of identification and survey of sites, species and habitats and connectivity networks.

John Hooper Bat Conservation Trust

STEP B: AVOID

Avoid loss of any existing or potentially important habitats or species; or fragmentation of ecological connectivity

3.12 The primary biodiversity objective in the early stages of the development design process should be to avoid negative impacts, by designing a site around the retention of ecological features. For example, if a planning application site includes a pond, wildflower meadow, woodland, hedgerow or veteran tree[29], every effort should be made to incorporate these features into the layout. Priority should be given to the retention and/or integration of habitats and features which are most difficult or impossible to recreate, such as ancient woodlands, which are irreplaceable and cannot be compensated for. A list of S7 protected and priority species and habitats found in Swansea is provided on the Council's website.[30]

3.13 Where negative impacts have been identified, the *Preliminary Ecological Appraisal (PEA)* will be a key supporting document to demonstrate how the applicant has worked through the stepwise approach.

[28] Information on SINC citations www.swansea.gov.uk

[29] Further information is provided in the Council's *SPG* re Trees, Hedgerows and Woodland on Development Sites

[30] See Guidance on Swansea's s7 List www.swansea.gov.uk

3.14 Where it has been concluded that residual biodiversity loss will be inevitable, the *PEA* should clearly explain why loss cannot be avoided, the process of considering alternative sites and reasons why alternative sites cannot be found. The *PEA* should also provide full justification for, and details of, proposed biodiversity offsetting/compensation and enhancement measures and must have regard to how the proposed mitigation and compensation measures will deliver the 5 principles of ecosystem resilience (See DECCA Figure 1.3). See also Guidance on PEA requirements on the Council's website.

3.15 Where there is no loss, or where loss has been avoided, then planning law is clear that it is not reasonable to secure enhancements as a condition of development. However, no site is devoid of opportunities for ecological enhancements. The Council will therefore explore with the developer opportunities to achieve ecological enhancements within the design and layout of a site, or a contribution to off-site enhancements, which address evidenced opportunities to improve of the diversity, connectivity, scale, condition or adaptability of local ecosystems. (see DECCA Figure 1.3)

3.16 Applicants are advised to refer to the County Ecological Connectivity Assessment[31] which identifies locations where fragmentation of existing connectivity should be avoided and where ecological connectivity has the potential to be enhanced.

3.17 SINCs play an important role in local ecological connectivity. Development affecting SINCs will be considered against Policy ER 6 which follows the stepwise approach. It should be noted that for sites allocated for development in the LDP that contain SINCs, the process of establishing appropriate need and considering alternative locations was undertaken as an integral part of LDP preparation. **Therefore, development proposals on allocated LDP sites that contain SINCs are not required to undertake the specific task of identifying appropriate need or justifying why alternative locations are not available.** Whilst the need for the development and justification of its location has been established for LDP allocated sites by virtue of the Plan's adoption by the Council, efforts should be made to avoid and minimise loss of biodiversity through sensitive site layout and design and compensate for any residual loss. Stages A to F of the Stepwise Approach will still therefore apply in order to ensure that there is no net loss of biodiversity, and that appropriate mitigation, compensation and enhancement measures are secured and successfully implemented.

3.18 Gaining a detailed understanding of the biodiversity and GI qualities of a site at an early stage will enable development to be designed with biodiversity benefits as an integral part. This will embed such matters into the placemaking approach that is advocated by the Council, as described in the adopted LDP. Wherever possible natural assets should be retained on a site and enhanced or further created. Examples of new

[31] Swansea Ecological Connectivity Assessment www.swansea.gov.uk

biodiversity features that could be provided through site design are, landscaping, habitat creation/enhancement, SuDs, and green infrastructure, living roofs and facades. Retention and integration of existing features is addressed in Step B above.

3.19 Ongoing dialogue with the Council will ensure that modifications to proposals take appropriate account of additional biodiversity and ecosystem resilience information, as it emerges, throughout the development process. As stated above, the Council will seek to secure net benefit/biodiversity enhancements through the design of a site as outlined in Step F.

[32] . See links to site, species and habitat specific guidance provided at Section 6

STEP D - MITIGATE

For any unavoidable harm or loss to important habitats or species or the fragmentation of ecological connectivity.

3.20 Where avoidance is not possible, then the design should aim to mitigate any detrimental effects by minimising, as far as possible, the negative impacts on biodiversity. This could include amending the design or timing of operations. Enhancements will be sought over and above the mitigation specified. CIEEM guidance recommends that wherever possible mitigation should be "by design", i.e. embedded into the design and layout of a proposal. This is often a more beneficial approach than developers responding to LPA requests at a later stage and can provide greater certainty for the LPA that the mitigation will be delivered. For many species, particularly those with legal protection, there is published guidance that describes appropriate approaches to mitigation[32]. In some cases, it will be necessary to design new approaches to mitigate an effect, and the advice of relevant experts and statutory and non-statutory consultees should be sought. If standard methods are not being used, this will need to be explained and justified. Examples of the types of mitigation measures that may be appropriate to address the specific effects of a range of development types and locations are provided on the Council's website[33].

[33] GUIDANCE on Council Website– Examples of Mitigation, Compensation and Enhancement Measures

STEP E- COMPENSATE

Addressing the residual effects of a proposal after avoidance and mitigation have been considered.

3.21 Compensation should always be regarded as the last resort, after all other stages of the stepwise approach have been considered.

3.22 In some circumstances, it will not be possible to fully avoid, compensate or mitigate for certain ecological features on a site. Where all other options have been exhausted, off-site compensation for unavoidable damage will be sought.

3.23 Compensation describes measures taken to offset residual effects resulting in the loss of, or permanent damage to, ecological features, despite mitigation. Compensation must first be proposed on site. Off-site measures will only be considered where they are supported by evidence that there are no appropriate opportunities for on-site measures to be achieved.

3.24 Compensation either restores or recreates the ecological feature/s damaged by development, ensuring no net loss. It is also important to note that compensation is related solely to ensuring there is no net loss. It is not a substitute for enhancement or *net benefit for biodiversity.*

3.25 Wherever possible compensation should be focused on replacing similar types of ecological features as those affected and equivalent levels of ecological resilience. The extent or size of any replacement area should be similar in terms of ecological features and ecological functions that have been lost or damaged, or with appropriate long term management have the ability to reproduce the functions, diversity and condition of those original ecological features.

3.26 Compensation should be provided as close as possible to the location where losses have occurred and benefit the same habitats and species as those affected[34].

3.27 Replacement ratios of compensatory habitat greater than one-to-one will be required. This is because of the uncertainty inherent in compensation, (particularly in cases which require ecological restoration, habitat creation or translocation of species or habitats) including the length of time needed for replacement habitat to provide the same level of ecosystem services as those lost. The scientific basis for deriving appropriate ratios is not exact and will vary depending on the habitat or species concerned. Increased replacement ratios can also help take account of the time lag in delivering compensation.

[34] *PPW 10, para 6.4.21 4c "* Where compensation for specific species is being sought the focus should be on maintaining or enhancing the population of the species within its natural range. This approach might also identify locations for providing species-specific compensation further away from the site."

3.28 An ecosystem approach should be adopted when considering compensation proposals and applicants should be able to demonstrate how the five key ecosystem resilience attributes have been taken into account. (See DECCA Figure 1.3). This approach ensures that the compensation is appropriate in terms of the wider ecological functions/ecosystem services it will provide.

3.29 The Council will take a pragmatic approach to considering the scale and nature of compensation appropriate to be considered to provide a net benefit. The identification and assessment of biodiversity features and assets at Stage A will be essential in understanding the opportunities for securing net benefit. Further details of the principles of enhancement together with examples of enhancement measures are provided on the Council's website.[35]

STEP F- ENHANCE AND INCREASE

Explore all opportunities to enhance and increase biodiversity and ecosystem resilience proportionate to the scale and nature of the proposal

3.30 The identification and assessment of biodiversity features and assets at Stage A will be essential in understanding the opportunities for securing enhancements which deliver a net benefit. The attributes of ecosystem resilience identified at this stage and those of the proposed enhancement should be used as a guiding principle in considering whether a net benefit will be achieved. Wherever possible the Council will seek to secure enhancements by applying the principles of good placemaking and GI. Where on-site enhancements are not feasible/cannot be incorporated into the site design the Council may seek a contribution from the developer to off-site measures. For example, to support identified projects for maintaining or creating habitats. This could be secured through an appropriate legal mechanism.

3.31 The ways in which enhancement can be achieved will vary from site to site and should be proportionate to the scale, nature and location of the development involved and have regard to evidence submitted relating to the

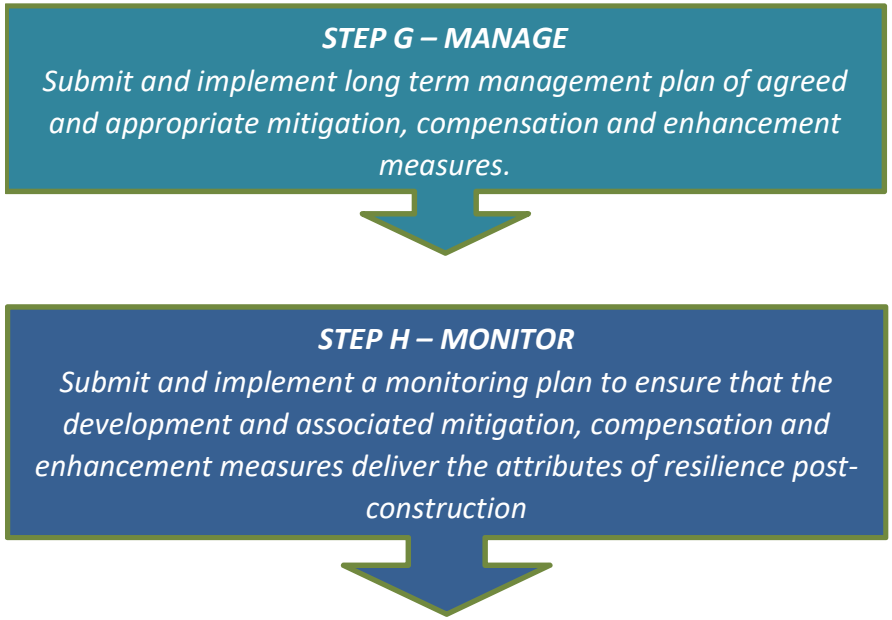
[35] See Guidance re Enhancement Measures www.swansea.gov.uk

biodiversity and resilience of ecosystems on and dependant/interrelated ecosystems adjacent to the site.

3.32 The Council will determine whether it is appropriate, reasonable and necessary to use a planning condition to secure biodiversity enhancement, with reference to the tests set out in the Welsh Government Circular 'The Use of Planning Conditions for Development Management' (Circular 016/2014). The Council's general approach is to require that biodiversity enhancements are shown on proposed plans, and that an appropriate condition be applied to the permission to approve the development in accordance with the submitted plans. Further suggestions for biodiversity enhancements will be included as an informative within the ecological consultation response. The Community Infrastructure Levy Regulations 2010 also state that it is not reasonable to include a Planning Obligation on as part of a development on the basis of contributions which are not directly related to the development.

3.33 Enhancement should not be confused with mitigation and/or compensation. Where there is evidence that a proposal will cause a negative effect on biodiversity or ecosystem resilience, mitigation and/or compensation will be required to ensure there is no net loss. Enhancement will be sought over and above mitigation and compensation to achieve biodiversity net benefit. Achieving net benefits for the wider ecosystem resilience of the area cannot be accepted in lieu of mitigation and/or compensation for the impacts of development on protected sites or irreplaceable habitats.

3.34 Smaller scale developments could enhance local biodiversity through simple measures. For example, the installation of bird or bat boxes, or the improvement of existing *green corridors* through planting of native species. Larger scale developments could consider the creation and management of a woodland, wildflower meadow, wetland or other specific habitat of value to wildlife, or filling gaps in connectivity corridors as part of the development, or off site if there is limited scope within the development site. Chapter 4 provides further detail on how the requirement for enhancement will be implemented for different types of development.



3.35 On sites where ecological features are retained and/or new habitats and features are created, appropriate ongoing management must be put in place to ensure long lasting benefits. Applicants are strongly advised to consider management proposals at an early stage and integrate management requirements into the design of mitigation, compensation and enhancement schemes. Management and monitoring needs will vary from site to site. The guiding principle will be to ensure that management and monitoring proposed is proportionate both to the scale and impact of the project. In these cases, the appropriate monitoring and management plans will need to be produced and submitted to the Council. Depending on the size of the development these may be part of the overall ecological report or a stand-alone management and monitoring plan, for example a *Construction Environment management Plan (CEMP), Landscape and Ecological Management Plan (LEMP), Environmental Management Plan (EMP) or Adaptive Environmental Management Plan.* Where a CEMP is required the Council will be particularly concerned with pollution control measures especially where wetland habitats are linked to a SAC.

3.36 Criteria should be included in the management and monitoring plan to measure success, such as a population of an indicator species reaching a certain size. It should identify specific actions required for good management and include phasing where necessary. The organisations and personnel responsible for implementing the plan should be clearly identified. The implementation will be overseen by a suitably qualified and experienced ecologist/*Ecological Clerk of Works (ECOW)* who will be required to liaise with the Council's Planning Ecology Officer and submit relevant *ecological monitoring reports* to the LPA.

3.37 Duration of monitoring should be specified in the relevant management plan. The time frame will be proportionate to the scale of the proposal, the species and habitats involved and the extent of the impact of the development. In some cases, particularly where relocation/translocation of species is involved, a longer timeframe may be required so that the species and habitats become established and to ensure that the long

term management objectives for the site have been achieved.

3.38 For larger developments and those that affect European Protected Species, applicants may also be required to provide a monitoring strategy and a mechanism for remediation measures in the event that it becomes apparent that mitigation, compensation and enhancement measures are not working. This will also be required by NRW as part of a European Protected Species (development) licence. The management and monitoring plan should also include a forward projection of costs, and the means by which these costs will be secured for the future.

3.39 For small scale development it may not be necessary for long term monitoring to be undertaken, rather just confirmation that the necessary avoidance / mitigation / compensation or enhancement measures have been delivered (e.g. the provision of bird or bat boxes). As suggested in the British Standard, a brief statement confirming that the agreed measures have been implemented, and signed by a competent ecologist, may be all that is necessary in such cases to demonstrate compliance with the planning consent.

4 The Development Management Process

Overview

4.1 This Chapter provides step-by-step guidance on how the *stepwise approach* set out in Chapter 3 applies to each stage of the Council's Development Management (DM) decision making process. **Figure 4.1** overpage, illustrates the interrelationships that exist between the two processes.

4.2 The stepwise approach is applicable to all types and scales of development, from minor applications and householder development through to major applications. However, this guidance makes clear that the actions required to be undertaken should be proportionate to the scale, nature and location of the proposal and the potential impact of the development on biodiversity and ecosystem resilience.

4.3 This Chapter provides a general outline of the DM process which applies a broad framework to be followed for all development. Detailed guidance on how the process should be applied for specific scales and types of development is provided in the Appendices, namely:

Stepwise for Major Development [see Appendix 2]

4.4 Major development is defined as any application that involves:

- mineral extraction
- waste development
- floorspace over 1000sqm/an area of 1 ha or
- a residential site providing 10+ dwellings/over 0.5 ha. In the case of residential applications, Appendix A should also be read together with the Residential Design Guide SPG.

Stepwise for Minor Development [see Appendix 3]

4.5 Minor development refers to applications which do not meet the criteria for major development, or proposals that are classed as 'other development'.

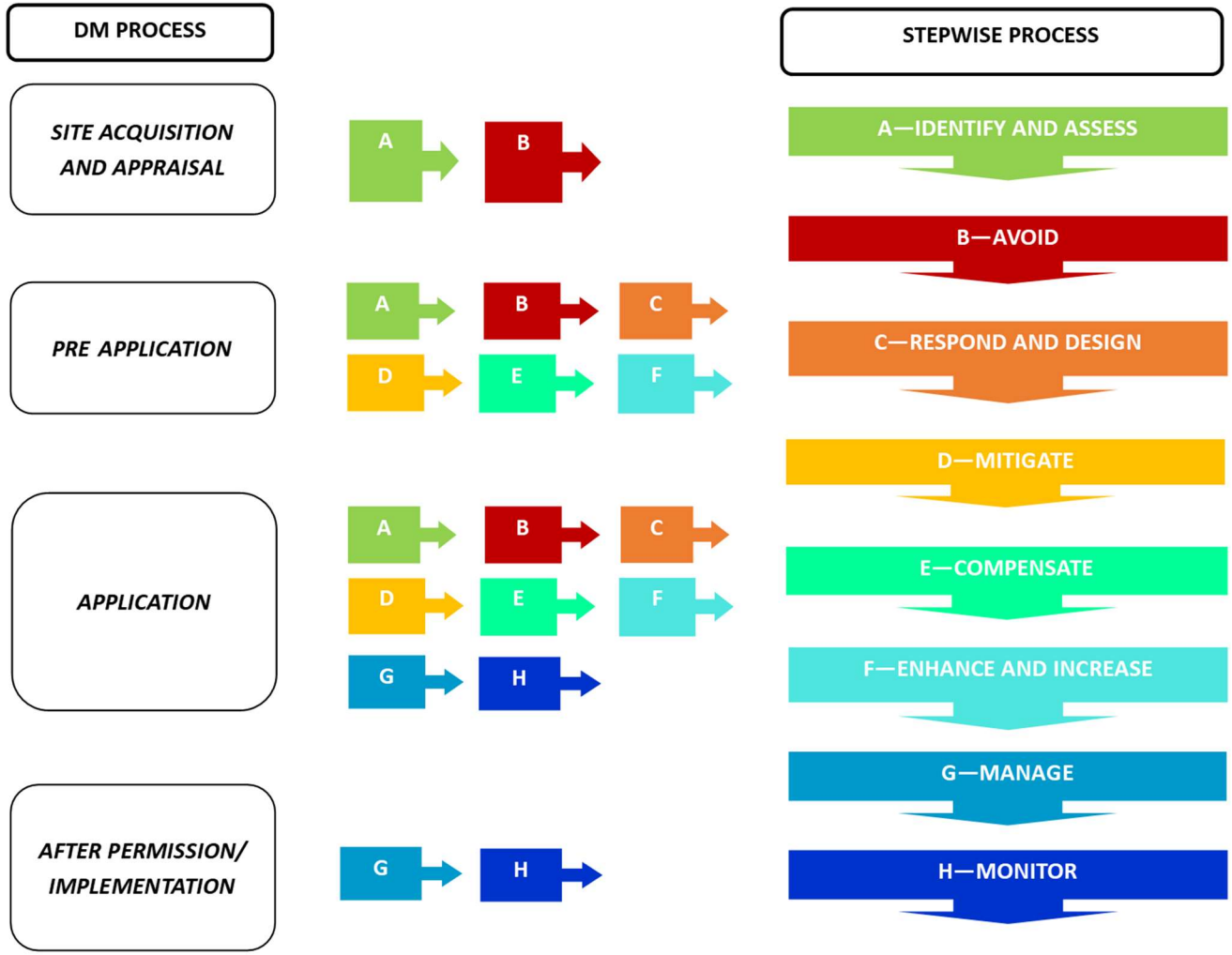
4.6 Other development includes changes of use, householder development, advertisements, listed building and conservation area consents, and certificates of existing or proposed lawful development.

Marine and Coastal Development

4.7 All development affecting marine, coastal or estuarine areas should refer to the Survey checklists in Appendix 1[36].

[36] See Guidance re Marine Planning www.swansea.gov.uk

Figure 4.1: Relationship between Development Management Process and the Stepwise approach



4.8 This Chapter signposts best practice contained in the **British Standard for Biodiversity (BS 42020:2013**) [37] and supporting **CIEEM Guidance**[38]. These provide detailed guidance on ecological appraisal and the information that should be submitted as part of a planning application (including methodology and timing of any ecological surveys and assessments required). Site survey and assessment data is essential to effectively establish the potential impact of a proposal, provide evidence to guide the reasonable implementation of the stepwise approach, and identify the opportunities to achieve biodiversity enhancements which deliver a net benefit to ecosystem resilience. The Council may also refer to relevant sections of the emerging British Standards Institution best practice the process of designing and implementing biodiversity net benefit as it evolves.[39]

4.9 The key overarching principles set out in this Chapter, in terms of the Council's approach to biodiversity and development management are:

- Applicants are strongly advised that **biodiversity and ecosystem resilience should be considered at the earliest possible stage of a development**, as part of an integrated and holistic approach to design of the development, to demonstrate a full understanding of the biodiversity value of a site, its ecosystem resilience and its function within the wider green infrastructure network.
- Integration of biodiversity and ecosystem resilience measures within a development are part of good placemaking and green infrastructure principles and are essential for the creation of locally responsive, healthy and well connected places.
- Submission of timely and appropriate ecological information is essential. In particular, where the Council's Planning Ecologist has identified that a *Preliminary Ecological Assessment (PEA*) and any additional species surveys are required, these must be submitted with an application. Failure to submit the required information could lead to the application being refused. The Council will refer to the relevant CIEEM guidance in determining whether submitted ecological information has been carried out by an appropriate ecological consultant following the appropriate ecological reporting methodologies.
- All applicants should consider where Invasive Non-native Species (INNS) surveys and assessments are required.
- Survey information is essential to inform the avoidance or minimisation of impact or loss of

[37] BS 42020:2013 British standard for Biodiversity – Code of Practice for Planning and development. (BSI, 2013)

[38] Ecological Impact Assessment (EcIA) Checklist https://cieem.net/resource/ecological-impact-assessment-ecia-checklist The checklist ensures that decisions adequate information in accordance with Clauses 6.2 and 8.1 of BS 42020

[39] BS 8683 Process for designing and implementing Biodiversity Net Gain – Specification https://standardsdevelopment.bsigroup.com/projects/2018-02413#/section

protected species or habitats, and the negotiation of appropriate mitigation. Applicants are required to demonstrate how the proposal and associated biodiversity measures has responded to the ecological information.

- The Council will only consider negotiating compensation measures where it has been clearly and robustly demonstrated that avoidance and mitigation cannot be achieved.
- Compensation will not be acceptable for irreplaceable habitats (e.g. ancient woodlands).
- The Council will seek to achieve a net benefit for biodiversity in all developments, proportionate to the scale of the development and having regard to the submitted evidence regarding biodiversity and resilience of ecosystems both within and adjacent the site.
- Where approval from the SuDS Approval Body (SAB) is required,[40] early and parallel engagement with the SAB process is strongly advised in order to maximise opportunities to achieve an integrated and multifunctional design and layout of all elements of green infrastructure within a site to meet national and local planning policies and the WG Sustainable Drainage Standards for Wales[41] which require the design of SuDS to take into consideration water quality and biodiversity. However, receipt of SAB approval in compliance with these standards should not be taken to imply that a proposed drainage scheme would necessarily satisfy the requirements of the planning process or meet the requirements of the Environment (Wales) Act 2016. Conversely, ecological measures agreed through the planning process, will not necessarily meet the requirements of the SAB process. The Council's Planning Ecologist is a consultee on all SAB applications and can provide advice on ecological measures required. The Planning Ecologist is also a consultee on planning applications and will advise on the information required from applicants to demonstrate how the planting and maintenance of Sustainable Drainage Systems (SuDS) proposals will maintain and enhance biodiversity and ecosystem resilience. Evidence will also be required of the impact of the proposal on the existing connectivity of ecosystems and opportunities to provide enhancements. See also Council Website re examples of biodiverse SuDS measures.[42]

[40] See https://swansea.gov.uk/sustainabledrainage for further information on SAB process.

[41] https://gov.wales/sites/default/files/publications/2019-06/statutory-national-standards-for-sustainable-drainage-systems.pdf

[42] See Guidance re Enhancement Measures and also re SuDS and Biodiversity www.swansea.gov.uk

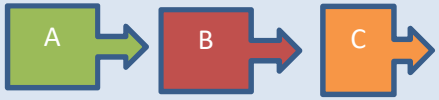
Integration of Stepwise Approach into the DM Process

DM STAGE 1: PRE-APPLICATION	RELEVANT STEPWISE STEPS	
Site Assembly and Assessment	A	B
	Assess	**Avoid**

4.10 The potential for biodiversity and ecological features to be affected by a development must be considered at the earliest stage of any proposal. **Failure to do so may lead to delays in the planning process or refusal of an application.** It is therefore advisable to gain a clear understanding of the biodiversity features and GI assets and ecosystem resilience of a site at the earliest possible stage of any development project. This will improve the quality of initial site designs, provide valuable information to guide initial discussions with the Council and ensure that issues are considered and addressed from the outset, to achieve the best outcome for biodiversity and avoid additional costs or delays to a development. This advice is applicable to all types and scales of development.

4.11 The following steps can provide an early indication of the potential impacts and opportunities presented by a site, and ensure that proposals have appropriate regard to the relevant environmental and legislative context (See Chapter 1 and Appendix 1. See section 4.13 below for relevant sources of information.

- Assess the site to identify any international, national or local designations.
- Assess the site to identify the presence of a habitat and or species protected under International, UK or Welsh Gov legislation (e.g. the list of protected species in *S7 of the Environment Wales Act).* **Presence of a protected species is a material planning consideration** when a planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat, and will seek to ensure that the range and population of the species is sustained (see 6.4.22 PPW 10 for further guidance on protected species).
- Assess the site to identify the presence of any Invasive Non-native Species *(INNS)* of flora listed in Schedule 9 Part II section 14(2) of the Wildlife and Countryside Act 1981 (as amended).
- Assess the site to identify sites of importance in terms of habitat and/or connectivity.

DM STAGE 1: PRE-APPLICATION	RELEVANT STEPWISE STEPS
PRE-APPLICATION – Understanding your site	 **Assess Avoid Design**

4.12 Ideally, a baseline understanding of the impacts and opportunities presented by a development will have been undertaken at Stage 1. Any proposal presented to the Council at the pre-application stage should therefore be informed by a basic ecological knowledge of the site.

Sources of initial survey and assessment data

4.13 **SEWBReC:** Screening to determine the presence of protected species and habitats should be carried out on the basis of data provided by the South East Wales Biodiversity Record Centre (SEWBReC)[43]. SEWBReC provides detailed and confidential data to inform surveys carried out by competent ecologists at cost.

4.14 **LDP Constraints and Issues Map:** provides overview of the spatial location of the County's statutory and non-statutory designated sites. LDP appendix 7: lists all protected sites.

4.15 **Connectivity Mapping –** See Swansea Ecological Connectivity Assessment[44].

4.16 **Appendix 1:** provides a list of sites, habitats and species in the County in relation to the policy context; and a Survey checklist of species and habitats most likely to be affected by specific types of development, surveys required and the appropriate survey seasons.

4.17 The LPA will co-ordinate appropriate engagement of the Council's planning ecologist on biodiversity issues at the pre-application stage. There are considerable benefits in seeking professional ecological advice before making an application:

- *It gives you the opportunity to understand how policies and guidance will be applied to your proposed development,*
- *It can identify at an early stage where there is need biodiversity surveys and assessments, It will ensure that project timescales have appropriate regard to the **seasonal nature** of the ecological surveying and avoid lengthy delays[45].*
- *Where there is a need for specialist input, (ecologists, landscape architects, sustainable drainage engineers)*
- *It can avoid potential breaches of environmental protection legislation.*

[43] www.sewbrec.org.uk

[44] www.swansea.gov.uk

[45] See Appendix 1 re guidance on Survey Seasons

- *It may lead to a reduction in time spent by your professional advisors in working up proposals, identifying issues to be addressed and opportunities to be explored for biodiversity protection and enhancement to be integrated into wider green infrastructure designs at the earliest possible stages, before an application is submitted.*
- *It may indicate that a proposal is completely unacceptable, saving you the cost of pursuing a formal application*
- *Provides opportunities to identify shared solutions for SuDS and biodiversity*
- *It will ensure that you provide all the necessary information and drawings to enable the application to be registered and validated.*
- *It will ensure that all ecological surveys required in support of a planning application are valid at the time of submission.* ***Ecological Surveys are generally considered to be valid for a period of 2 years*** *after which time, updated surveys will be required.*[46]

4.18 The range of impacts of development on biodiversity and ecosystem resilience will vary in both scale and nature. For example, a development could result in:

- direct loss of habitats or important species on site;
- fragmentation or loss of connectivity between habitats or species populations either on site, or off-site connectivity to the wider ecological network;
- alteration of regimes such as hydrology that an ecosystem is reliant upon.
- air, noise and light pollution
- disturbance from recreation and or predation for pets.

4.19 Understanding the specific issues relating to both the type of development and its location is therefore essential.

4.20 Early engagement with the Council's planning ecologist will identify the need for and potential content of a **Preliminary Ecological Appraisal (PEA)**[47]**.** A PEA of a proposed development should identify any biodiversity features which may be affected by a proposed development, and should identify any further surveys which will need to be undertaken. Applications likely to affect any designated sites or priority habitats or species must include a survey and assessment for the relevant habitats and species. The initial survey and any additional detailed surveys form constituent parts of the PEA, in accordance with guidelines for ecological reports set out in the British Standard 42020 and in

[46] CIEEM Advice Note – On the lifespan of ecological reports and surveys https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf

[47] **CIEEM Guidelines for Ecological Impact Assessment** in the UK and Ireland: Terrestrial, Freshwater and Coastal, (Updated Sept 2019)

Further information CIEEM Technical Guidance Series Guidance for Preliminary Ecological Appraisals (Chartered Institute for Ecology and Environmental Appraisals, 2013)

the CIEEM guidelines. See also Guidance on Councils website re PEA process.[48]

4.21 Appendix 1 of this SPG provides a Survey Checklist. This assists in identifying applications that will need survey work, and details of the information that will need to be considered during the design stage and submitted with the planning application. Applications that involve one or more of the development types listed in column 1 of the Survey Checklist must include the relevant species survey(s) as indicated in the table.

4.22 Applicants should also be aware that additional information may be requested. The Council can direct the applicant to supply any further information which is considered reasonably necessary for the purpose of determining the planning application.

4.23 Applicants required to submit ecological information with their planning application, will need to employ a suitably qualified ecological consultant[49]. The Council supports the best practice approach of sharing ecological information with SEWBReC. This approach improves the quality of information for future applications. Applicants are therefore strongly advised to discuss with their ecological consultant the inclusion into their contracts the clause provided at Figure 4.2 below.

Figure 4.2 – Suggested draft contract clause re Ecological Survey Data

"Applicants or their consultants agree to proactively share with South East Wales Biodiversity Records Centre (SEWBReC) any biological records made during the process of ecological appraisal at the same time as report submission to the LPA (advice on preferred data formats is available via the SEWBReC website

The Council considers all parts of ecological reports submitted to it as part of the planning process which are not specifically marked as sensitive, to be in the public domain. "

4.24 Applicants should also include within survey and assessment specifications identification of the presence of any Invasive Non-native Species *(INNS)* of flora listed in Schedule 9 Part II section 14(2) of the Wildlife and Countryside Act 1981 (as amended).

4.25 In some cases, there may not be a reasonable likelihood for a wildlife feature to be affected by development and survey work will not be needed.

4.26 Impacts on biodiversity can extend beyond site boundaries in unexpected ways, for instance through noise or light pollution, surface water run-off, or predatory behaviour of domestic pets. Relatively small developments can also have larger impacts on the wider landscape, for example, removing a

[48] See Guidance re Survey and Assessment Process www.swansea.gov.uk

[49] See Chapter 6 Glossary for links to CIEEM Guidance

hedgerow or line of trees could break up a bat-foraging or commuting route, negatively affecting a breeding colony some distance from the planning application site.

4.27 A development may also have an adverse impact on biodiversity either during the construction phase or during the operational phase, or both, and the survey work needs to fully consider the possible impacts of both.

4.28 Additional surveys, assessments or licences may be legally required. When undertaking surveys and assessments for a planning application, the applicant should also determine whether the following are required[50]:

a. **Environmental Impact Assessment (EIA)** the proposal would trigger the need for an EIA and if the submission of a 'screening opinion' is necessary;

b. ***Habitat Regulations Assessment (HRA)*** the development proposed would contravene the protection afforded to a European Protected Site (EPS) and whether there is therefore a need to submit a report to inform an HRA under the Habitats Directive[51]. (It is important to note that legislation covering EPS may apply even where an EPS has been detected outside the boundary of the site) and/or;

c. ***NRW Protected Species Licence*** the proposals triggers the need to apply to Natural Resources Wales for the below licences. The consideration and granting of licences is separate from the process of applying for planning permission. However the LPA must take account of the legislation throughout the development management process.

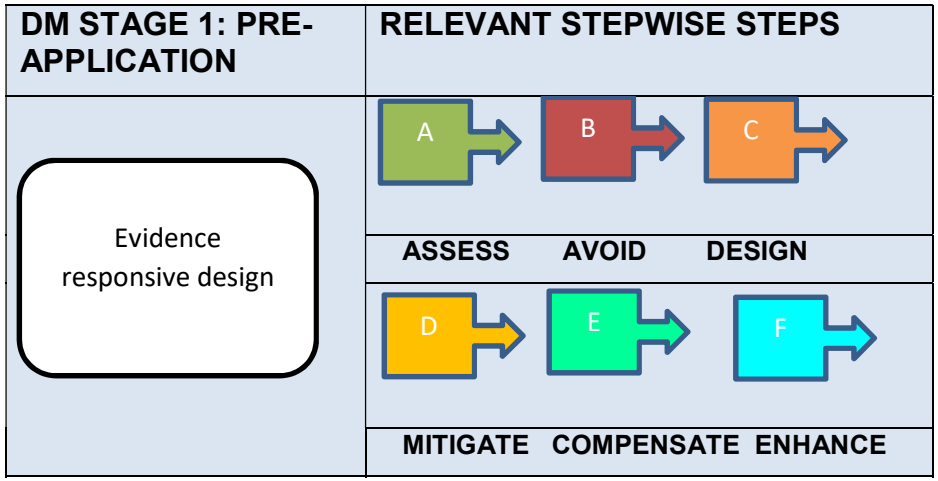
- ***European Protected Species (EPS) Development Licence to disturb*** NRW issues Protected Species licences for any development that would affect a EPS protected under the Conservation of Habitats and Species Regulations 2017;or
- ***UK Protected Species Licence***: NRW issues development licences for species protected under the Wildlife and Countryside Act 1981, for example, Reptiles (all UK species) and Water Voles. NRW is also responsible for issuing licences under the Protection of Badgers Act 1992 where it is necessary to interfere with badger and/or their setts in the course of development.

4.29 Applicants and their consultants are also advised to consider the policy framework for the *Sustainable Management of Natural Resources in Wales* for an indication of potential issues and opportunities. The framework includes:

[50] See Guidance re Survey and Assessment Process www.swansea.gov.uk

[51] See PPW 10 para 6.4.23 which advises on the process relating to proposals for which development works would contravene the protection afforded to EPS,

- *NRW SoNaRR Report,*
- *NRW Area Statements,*
- *Section 7 List of Habitats and Species in Wales (Env Act 2016),*
- *Swansea's Local Biodiversity Action Plan (LBAP)*
- *Nature Recovery Action Plan (NRAP) (under preparation).*



4.30 The pre-application stage is the most appropriate stage to consider how the proposal will address the impacts identified in the PEA and any additional species surveys carried out.

4.31 Specifically, the applicant should seek to establish at the pre-application stage how the proposal will avoid or minimise the occurrence of the fragmentation of ecological connectivity and any avoidable harm or net loss of important habitats or species.

4.32 It is therefore important that the findings of any survey work are taken into careful consideration during the design stage to ensure that biodiversity and ecosystem resilience are fully integrated into the early designs of proposals as part of the wider placemaking approach.

4.33 For major applications, a multi-disciplinary design team should be engaged at the earliest possible stage and include a suitably qualified ecologist. The design team should have a sound understanding of the ecological survey work and produce design solutions which respond to the identified opportunities to secure biodiversity enhancements and integrate ecosystem resilience into the development having regard to the 5 principles of resilience. Best practice principles of placemaking and green infrastructure demand that these issues are no longer retrofitted into the established/standard designs and layouts of development companies, but are a driving influence from an early stage.

'Ecological Constraints and Opportunities Plan' ECOP

4.34 It is strongly recommended that design teams provide an 'Ecological Constraints and Opportunities Plan' (ECOP), as set out in the British Standard. The ECOP is an efficient and effective way to communicate the key issues raised in the detailed technical ecological reports. This can be a simple

traffic light plan which communicates the location of issues and design responses. Where appropriate it can signpost to detailed sections of survey reports. If prepared at an early stage, the ECOP is a useful tool to inform both pre-app discussions and updated designs at subsequent stages of the development design and planning process. It provides a useful way to demonstrate how the design process has taken into account the most valuable natural assets and that developments result in biodiversity net benefit.

4.35 Information from the ECOP may usefully be incorporated into green infrastructure (GI) and SuDS proposals plans to evidence delivery of biodiversity and connectivity as part of GI and GI strategies in accordance with LDP Policies ER2 re Green Infrastructure and RP4 re SUDS.

4.36 The LDP promotes a holistic approach to placemaking, and the creation of places which maintain and enhance biodiversity forms part of the plan's wider placemaking approach (see LDP Policy PS 2 (xiv, xv). The Council will therefore expect proposals to demonstrate how designs:

- *respond to all available evidence relating to identified biodiversity and green infrastructure qualities: and*
- *have evolved in line with the stepwise approach.*

4.37 Where no biodiversity issues have been identified, the Design and Access Statement (DAS) should contain a clear statement of the steps taken to establish biodiversity and ecosystem resilience of the site and an explanation of why no further measures are considered necessary. For example, the applicant should provide evidence of completion of a SEWBREC desktop search by provision of the relevant case reference number or correspondence evidencing consultation with either privately engaged ecologists or the Council's ecologist.

4.38 Where avoidance is not feasible, then the design should aim to mitigate any detrimental effects by minimising them as far as possible. For example, if the development is designed to include an existing pond, a certain amount of mitigation for the developed area would be achieved by ensuring that the pond is physically connected to terrestrial habitat and not isolated by the development.

4.39 Ongoing dialogue with the Council throughout the design process will ensure that modifications to proposals take appropriate account of biodiversity information as it emerges throughout the development process.

Other recommended Pre-application discussions

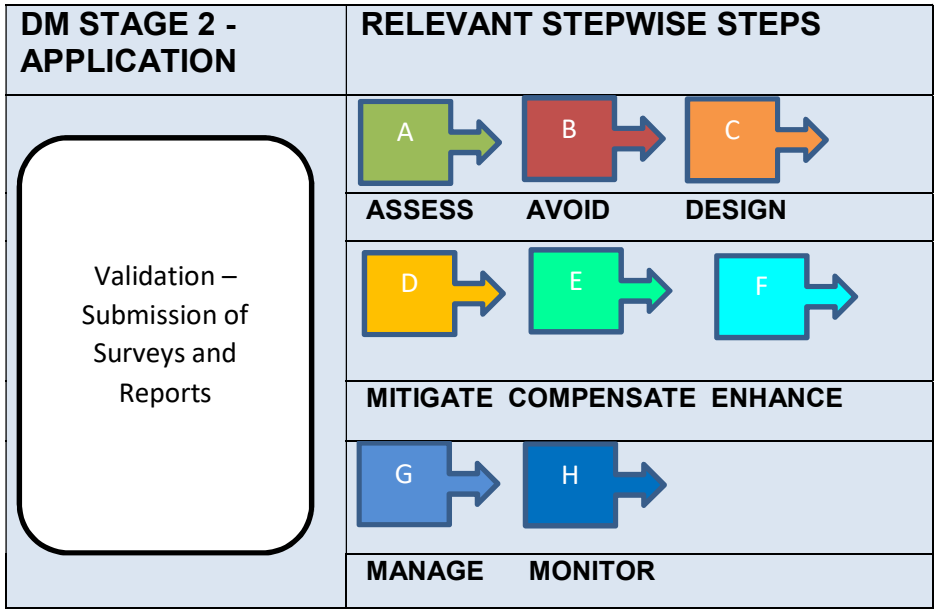
4.40 Pre-application discussion with statutory consultees such as NRW is also recommended, together with non-statutory consultees, where appropriate.

4.41 **NRW:** have an environmental regulatory function and information on the NRW website provides details of consents, licences and permissions which applicants may need to obtain[52].

4.42 **SAB Pre-Application:** Where a pre-application submission is made under the SAB process, it is advisable to carry this out in parallel with the planning pre-app process in order that all opportunities for achieving biodiverse SuDS solutions can be fully explored. Applicants should seek to establish separately that the biodiversity requirements of both the SuDS legislation and Planning Legislation are satisfied. Approval of biodiversity measures under one regime, should not be assumed to imply that these measures are satisfactory under the other. It is also important to establish that measures, for example approved through the planning process, do not conflict with the requirements of the SAB process and vice versa.

Above - Pond and grassland habitat mosaic. Below SuDS pond: Source: https://www.susdrain.org/case-studies

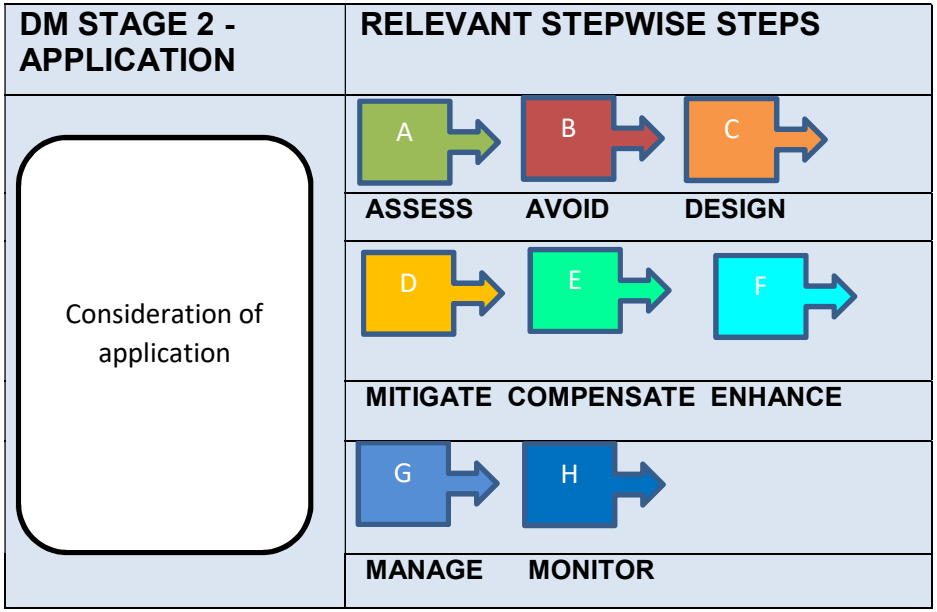
[52] https://naturalresourceswales.gov.uk/permits-and-permissions/



4.43 By the time a planning application is ready for submission the ecological features present on the site should have been fully considered and the stages of the Stepwise approach carefully followed. Any identified impacts should have been avoided, minimised or mitigated in the design of the proposal presented and fully justified in the application.

4.44 Any relevant ecological survey or assessments required should be submitted along with the application. The ecologist employed by the applicant or their agent should always work to the relevant recognised survey and mitigation guidelines and industry standards, and should give an evidence-based justification for any deviation from these guidelines.[53]

4.45 Where applications are submitted without ecological information, they may be validated but cannot be determined until any necessary ecological reports have been submitted to, and approved by, the Local Planning Authority (LPA). Where surveys and reports are submitted which recommend further survey work is carried out, and this is not submitted to the LPA, the LPA may refuse the application.



[53] See Appendix 1 and Appendix 6 re guidance on Surveys and Assessments

4.46 The Ecological report submitted to support an application will be assessed to ensure that it:

- **Is up to date** – *see CIEEM advice note re valid timeframes for survey reports*[54] *Ecological Surveys submitted in support of planning applications are generally considered to be* ***valid for a period of 2 years****, after which time, updated surveys are likely to be required.*
- **Is clear enough to allow the Council:**
  - to assess the biodiversity and ecosystem resilience of the proposed development before making a planning decision.
  - to understand the particular avoidance, mitigation and compensation measures proposed as part of the development scheme.
- **Provides full and clear justification of the implementation of the stepwise approach**, and specifically that any compensation proposed is residual, having first fully considered avoidance, minimisation and mitigation of identified negative effects.
- **Describes how the proposed biodiversity enhancements will achieve ecosystem resilience** in accordance with the 5 attributes of resilience (See DECCA Fig 1.3).

4.47 To ensure decisions are based upon adequate information in accordance with BS42020 the Council will consider the information submitted against the Ecological Impact Assessment (EcIA) checklist[55]. The checklist signposts to all relevant CIEEM and NRW guidance relating to carrying out surveys.

4.48 The Council will also assess the application and supporting information submitted to establish:

- compliance with the relevant legislation and policy with reference to this *SPG*.
- the current ecosystem resilience of the site which PPW requires must be maintained and enhanced post development[56]
- the appropriateness of mitigation and compensation measures proposed.
- the appropriateness of enhancement measures proposed. Effective use of the pre-application process should have established by this stage what enhancement measures will be required.
- the integration of biodiversity measures as part of good placemaking and the provision of quality GI.

[54] CIEEM Advice Note – On the lifespan of ecological reports and surveys https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf

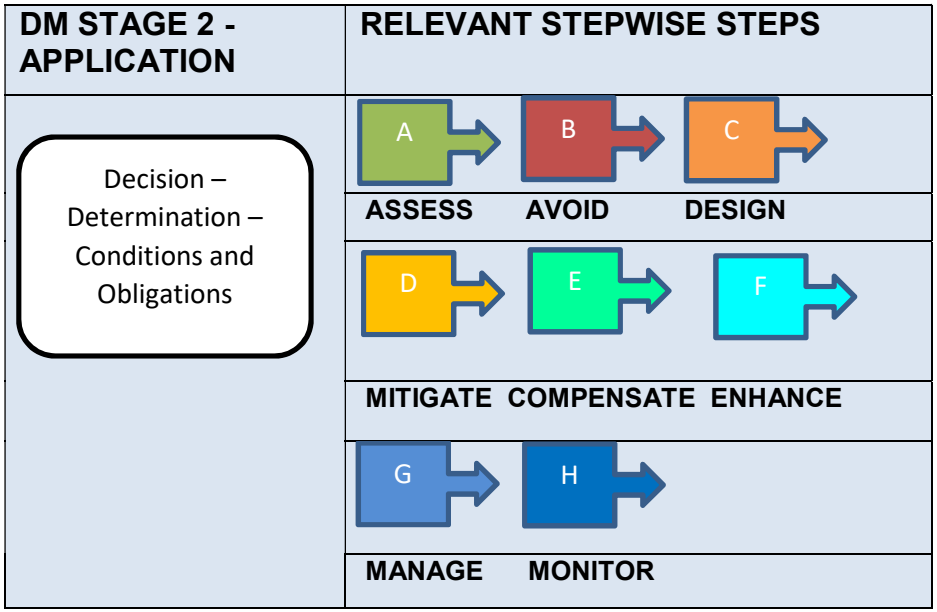
[55] https://cieem.net/resource/ecological-impact-assessment-ecia-checklist/

[56] PPW paras 6.4.9 and 6.420 4d

- the need for *Planning Obligations* to secure biodiversity measures and interventions (further detail below).
- the need to attach conditions to a consent in order to make the development acceptable. These might include for example, restrictions on certain operations at particular times of year, good practice during construction, or appropriate future management and maintenance.
- The need to attach informatives to a consent[57].

Sustainable Drainage Systems Approval

4.49 The details of any parallel SAB approval will be taken into account. It should be noted that compliance with all requirements of a SAB approval does not necessarily indicate that the development will provide all biodiversity measures required to make the development acceptable in planning terms. The converse is also the case, granting of planning permission does not imply that the biodiversity measures required in the planning consent will meet the SAB requirements.



4.50 As stated above in Chapter 3, any biodiversity measures agreed should be incorporated into the design of the development at the earliest stage and shown on all plans submitted for approval. Consent will be conditional upon approval in accordance with approved plans. Delivery of enhancements will not be secured through separate conditions on the consent as this is not compliant with the relevant CIL regulations.

4.51 Welsh Government have clarified that where biodiversity enhancement is not proposed as part of

[57] Standard list of informatives www.swansea.gov.uk/planning

an application, significant weight will be given to its absence, and unless other significant material considerations indicate otherwise, it will be necessary to refuse permission[58]. **The Council considers that the lack of ecological evidence of a negative effect on biodiversity or ecosystem resilience which is directly related to the development to be a significant material consideration in this respect.**

4.52 Where the Council concludes that it is reasonable, proportionate, or feasible to require mitigation, compensation, or enhancement measures, and this cannot be integrated into the design of the development or created on site, it may still seek to secure these measures **off-site** (this is generally more likely to occur on major sites).

4.53 **Enhancement:** In accordance with PPW (6.4.5), and the S6 duty, the Council will seek to ensure that development provides a net benefit for biodiversity. The Council will therefore explore with the applicant what opportunities exist within or outside the development to provide enhancements to biodiversity and ecosystem resilience, having regard to the SMNR framework and any up to date ecological surveys submitted with the application. Enhancements may be expressed through advisories or informatives attached to a consent which provide guidance on potential steps that can be taken to increase local biodiversity and ecosystem resilience and contribute to the Council's wider strategic aspirations to green the County and make positive steps to mitigate for and adapt to climate change. This will particularly be the case in smaller scale developments and is in line with the wider principle that all developments at all scales will present opportunities to reverse biodiversity loss and mitigate against the impacts of climate change. Though such interventions may be minor, they will have a significant cumulative effect.

S106 Agreements and Conditions

4.54 The Council may recommend approval subject to section 106 Agreement/planning obligations. Planning Obligations are legally binding agreements between the developer and the Planning Authority or a unilateral agreement by the developer enforced by the Planning authority under S106 of the Planning Act 1990, which involve a commitment to address the impacts of a development that will make it acceptable in planning terms, where otherwise it might be refused. Such obligations will normally be required where off-site compensation provisions are necessary or financial contributions are needed to ensure that there are no detrimental impacts on biodiversity.

4.55 Swansea Council does not condition protected species surveys and would not consider doing so for any scheduled development works. In accordance with the stepwise approach, survey work should be undertaken at the earliest possible stage in order that

[58] Biodiversity enhancements: guidance for heads of planning
https://gov.wales/biodiversity-enhancements-guidance-heads-planning

measures to maintain and enhance biodiversity are integrated into the design of the development.

4.56 Where an invasive non-native species *(INNS)* of flora listed in Schedule 9 Part II section 14(2) of the Wildlife and Countryside Act 1981 (as amended) is present on a planning application site, (e.g. Japanese Knotweed) an invasive non-native species *INNS* (flora) condition will be placed upon that application.

4.57 See also Appendix 4 for further guidance on s106 Agreements and Conditions.

DM STAGE 2 - APPLICATION	RELEVANT STEPWISE STEPS
Management and monitoring during construction and aftercare	G H MANAGE MONITOR

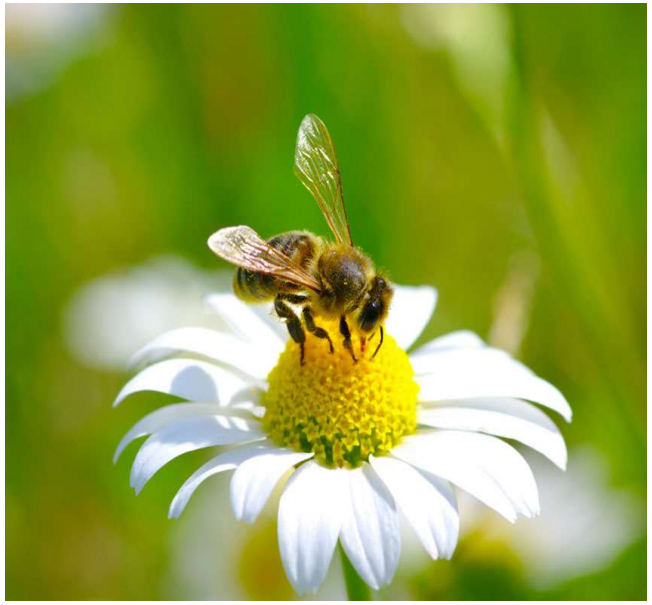
4.58 By this stage, the planning consent and associated conditions will have established the management and monitoring measures required following consent, before during and after construction. The preparation and implementation of the appropriate management and monitoring plan will usually be agreed as part of the plans required to be submitted to grant consent. However, in some cases, it may be appropriate to condition the preparation and implementation of a management and monitoring plan after consent.

4.59 The plan will detail management objectives for habitats and species present, both retained and created, and will include details for ongoing management and monitoring prescriptions as required. The plan will often include an 'Ecological Constraints and Parameters Plan' (ECOPP) which will demonstrate that appropriate ecological features are integrated into the development. Applicants should note that larger developments, particularly those subject to an Environmental Impact Assessment, will require a *CEMP*. 'Construction Industry Research and Information Association' set out guidance for

methods and measures of working a development site where biodiversity is present, including suggested contents for 'Construction Environmental Management Plans' and 'Risk Assessments', details on setting out no-go zones, protective fencing and other practical measures.[59]

4.60 Monitoring is intended to both check compliance with conditions or planning obligations and to establish whether the measures undertaken are effective and are successfully delivering the intended outcomes. The Council will either request a monitoring fee as part of a s106 Agreement and monitor in-house, or include within planning conditions a requirement for the applicant to cover the cost for ongoing monitoring.

4.61 During construction, the management of the site should follow appropriate guidelines for protection of habitats and species60, including trees and ecological features to be retained on site which will form part of the overall management and monitoring plan. Where appropriate, protection will be in the form of development licences granted by NRW.



[59] https://www.ciria.org/CIRIA/Topics/environmental_management

[60] See Chapter 6

5. Glossary of Terms

Adaptive Environmental Management Plan	An AEMP sets out the management strategy where an adaptive environmental management approach is considered to be appropriate. The aim of adaptive management must be to avoid unacceptable effects. It is a systematic and iterative approach of "learning by doing and adapting as you learn". Adaptive management should only be used to allow projects to proceed where there is still uncertainty despite having completed a robust environmental assessment, or where the environmental baseline is likely to change.
Biodiversity	The whole range of living things and systems on this earth, it includes animals, plants, microbes and their genetic variations and underpins the health and resilience of all of our ecosystems. In turn, these ecosystems support all life on Earth. This means that taking positive action for biodiversity and ecosystem resilience in Swansea will enhance the natural resources the public utilise such as clean water, air and food production including pollination services. The natural environment is also a vital resource to enhance mental and physical health and well-being.
Biodiverse	Having a high level of biodiversity.
Conserve	Has the same meaning as maintain, to protect from harm or destruction.
Construction Environmental Management Plan (CEMP)	Provides details and specifications for practical measures intended to avoid or minimise adverse effects on biodiversity during the construction process. Normally such reports are prepared in support of a planning application where the LPA requires management as a formal requirement e.g. for biodiversity mitigation, compensation or enhancement purposes. The CEMP may form a part of the information originally submitted with the application (e.g. as part of the EcIA) or its provision and delivery may be secured through planning conditions or obligations. Preparation of the CEMP should, where appropriate, follow the general guidance set out in Section below. The appropriate content of such a report is set out in BS42020 clause 10.2.

Compensation	Offsetting unavoidable harm caused by development.
Ecology	The interrelationship between organisms and between organisms and their environment.
Ecological feature	An element of the environment that is of biodiversity value, including sites designated for their nature conservation importance; priority habitats; priority species; habitats that provide corridors or stepping-stones across the landscape and urban area; and the wider landscape.
Ecosystem	A community made up of living organisms and non-living components such as air, water, and mineral soil.
Ecosystem Resilience	The ability of ecosystems to cope with pressures, disturbances and change – either by resisting them, recovering from them or adapting to them. Achieving *ecosystem resilience* is about working at larger scales, promoting functional connections between natural places, ensuring they have high natural diversity, are in good condition and increasing their extent. Biodiversity is an essential underpinning element of all resilient ecosystems. All functioning and resilient ecosystems have a characteristic healthy and often rich biodiversity.
Ecosystem Services	The multitude of resources and processes that are provided by natural ecosystems and utilised by humans. These include clean air and water provision, flood control, carbon sequestration, food production including pollination services and recreational and cultural benefits such as enhancing mental and physical health and well-being.
Ecosystems approach	The ecosystem approach provides a framework for the integrated management of land, water and living resources that promotes conservation and sustainable land use in an equitable way. **National Legislation requires that the ecosystem approach must be applied to the consideration of all new development.** The Environment (Wales) Act 2016, together with the Well-being of Future Generations Act 2015, ensures that the Ecosystem Approach (advocated in international policy) is given a statutory basis in Wales. The ecosystem approach must therefore be applied to the consideration of all new

	development. The approach integrates the management of land, water, air and living resources and aims to reach a balance between the maintaining and enhancing biodiversity, sustainable use and the equitable utilisation of ecosystem services. Under S6 of the Environment (Wales) Act 2016, the Council has a duty to seek to maintain and enhance biodiversity and in so doing promote the resilience of ecosystems. This is often referred to as the S6 Duty.
Ecological Monitoring Plan	(Effectiveness or Early Warning Monitoring) (As distinct from a monitoring report – see above) Provides detailed and structured proposals for the preparation of a monitoring strategy, in advance of the commencement of development, which will be used to establish whether proposed mitigation, compensation and enhancement measures have been effective over a specified period. The strategy may also be used to provide early warning of when contingencies and/or remedial measures will be 'triggered' in the event that ecological objectives are not being achieved. Implementation of the strategy over time will be informed by periodic 'Ecological Monitoring Reports' (see above under 'Survey and Research Reports'). The strategy may form a part of the information originally submitted with the application (e.g. as part of the EcIA) or its provision and implementation may be secured through planning conditions or obligations. Preparation of the strategy should, where appropriate, follow the general guidance set out in Section 5 below. The appropriate content of such a report is set out in BS42020 clause 11.2.3.4
Ecological Monitoring Report	(As distinct from a monitoring plan – see below) Provides the results of post-construction monitoring for a development project as a 'snap shot' at a particular period in time, as required by a planning condition/obligation or by a protected species licence. The report will include a description of the methods used as well as the detailed results of the survey, and

	interpretation/ assessment of the results. Preparation of the monitoring report should, where appropriate, follow the guidance on report structure set out in Section 5 below. The appropriate content of such a report is set out in BS42020 clause 11.2.3.4. A monitoring 'report' is distinct from an ecological monitoring 'plan'. The former provides only the methods and results of monitoring, along with their interpretation (often collected at prescribed periods after the completion of works). Whereas, the full strategy provides an agreed set of aims and objectives for monitoring and comprehensive details about how monitoring will be undertaken and reviewed (see 'Ecological Monitoring Strategy' below under 'Other Common Types of Ecological Report').
Enhancement	Improved management of ecological features or provision of new ecological features, resulting in a net benefit to biodiversity, which is unrelated to a negative impact or is "over and above" that required to mitigate/compensate for an impact. (CIEEM 2018)
Green Infrastructure	The network of multi-functional green space, encompassing both land and water (blue space). The Green Infrastructure areas include existing and new (created) features in both rural and urban areas. The Green Infrastructure network delivers a wide range of Ecosystem Services including environmental and quality of life benefits for local communities.
Habitat	The place where an organism or a community of organisms live, including all living and non-living factors or conditions of the surrounding environment.
Invasive Non-Native Species	Any non-native animal or plant that has the ability to spread causing damage to the environment, the economy, health and the way people live. A list of INNS is provided in schedule 9 of the Wildlife and Countryside Act 1981.
"important" species or habitats/biodiversity	Where the stepwise approach refers to "important" species or habitats this means that the Council will follow a process to reach a judgement about the biodiversity present on the site, having regard to legal protections, statutory and non-statutory

	designations and all the other relevant considerations to determine ecological value (see figure 3.1 below).
Landscape and Ecological Management Plan (LEMP)	Provides details and specifications for the management of habitats and other features of biodiversity interest. Normally such reports are prepared in support of a planning application where the LPA requires management as a formal requirement e.g. for biodiversity mitigation, compensation or enhancement purposes. The LEMP may form a part of the information originally submitted with the application (e.g. as part of the EcIA) or its provision and delivery may be secured through planning conditions or obligations. Preparation of the LEMP should, where appropriate, follow the general guidance set out in Section 5 below. The appropriate content of such a report is set out in BS42020 clause 11.1
Maintain	No net biodiversity loss.
Mitigation	Action taken which minimises potential impacts on any wildlife features.

Natura 2000 site	A network of protected areas covering Europe's most valuable and threatened species and habitats. It is the largest coordinated network of protected areas in the world, extending across all 28 EU countries, both on land and at sea. The sites within Natura 2000 are designated under the Birds and the Habitats Directives and Ramsar Convention
Natural heritage	In the context of this SPG, natural heritage refers to biodiversity, natural beauty and amenity. It embraces the relationships between landform and landscape, habitat and wildlife, and their capacity to sustain economic activity and to provide enjoyment and inspiration. It includes statutorily designated sites, urban areas, the countryside, the coast and open water features.
SMNR	Management of land, water, soil, plants and animals, with a particular focus on providing nature based solutions which deliver improved quality of life for both present and future generations by maintaining biodiversity value and ecological resilience (stewardship).

Placemaking	Is both a process and a tool to collectively design and manage the public realm to create quality places that people want to live and work in, that are appealing, accessible, safe and support social interaction and amenities.
Priority habitats and species	Those included in the list of habitat and species identified under section 7 of the Environment (Wales) Act 2016
The Council	Swansea Council
Suitably qualified ecological consultant	This guidance is unable to make individual recommendations on ecological consultants. The **Chartered Institute of Ecology and Environmental Management (CIEEM,** www.cieem.net**)** is one of the main bodies in the UK to promote good practice and professionalism in ecology and membership of this organisation is a good indication that the person is suitably qualified to carry out ecological surveys to a high standard of competence. The website has a directory of members that can be searched by region and specialism and also provides Guidelines for Ecological Report Writing https://cieem.net/i-need/finding-an-eem/
	CIEEM (2017) *Guidelines for Ecological Report Writing*. https://cieem.net/resource/guidelines-for-ecological-report-writing/ CIEEM (2018) *Guidelines for Ecological Impact Assessment. Updated 2019* https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/
Sustainable Development	Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.

6. Appendices

See Development and Biodiversity SPG Appendices at www.swansea.gov.uk/spg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BIODIVERSITY AND DEVELOPMENT SPG

Consultation Draft July 2020

Chapter 6
APPENDICES

Contents

Appendix 1: Protected Sites, Habitats And Species In Swansea

A.1.1 This Appendix supports Step A: of the Stepwise Process which requires that the Applicant gains a good /sound understanding of the ecological constraints and opportunities of a site at the earliest stage in the application process. A Development Checklist provides applicants with guidance on the type and timing of habitat and species of surveys and ecological assessments that are likely to be required to be submitted in support of a planning application. (See Figures A1.1, A1.2 and A1.3) Guidance is also provided on the implications of development on areas supporting priority species, and /or habitats and on protected sites in the context of the relevant framework of environmental legislation and policy. (See Figures A1.4, A1.5, A1.6, A1.7)

A.1.2 All information is correct at the time of publication. Further legislation and policy will be produced in response to increased understanding of the natural environment and changing circumstances, not least Britain's departure from the European Union. It is therefore intended that the Head of Planning and City Regeneration, or an appropriate delegated officer, will been authorised (add relevant minute reference) to make factual updates to the legislation and policy information outlined in this SPG. It is the responsibility of the developer to ensure that their proposals meet current legislative and policy requirements.

Figure A1.1: Checklist for Protected/Priority Species Surveys likely to be required for terrestrial development sites

Development Types	Type of Species Survey likely to be Required	Checklist
1. Conversion, modification, demolition or removal of buildings –		
1.a agricultural buildings (e.g. farmhouses, barns and outbuildings) of traditional brick or stone construction and/or with exposed wooden beams*	Barn owls Bats Breeding Birds	❑ ❑ ❑
1.b buildings and structures with weather boarding and/or hanging tiles; or	Bats	❑
1.c pre-1960 detached buildings and structures that are within **200m** of woodland and/or water 1.d pre-1914 buildings and structures – that are within **400m** of woodland and/or water*	Amphibians Barn owls Great crested newts Nesting birds Otters	❑ ❑ ❑ ❑ ❑ ❑
1.e pre-1914 buildings and structures with gable ends or slate roofs, regardless of location	Bats Nesting birds	❑ ❑
2. Development affecting built structures:		
2.a. tunnels, mines, kilns, ice-houses, military fortifications, air raid shelters, cellars and similar underground ducts and structures	Bats	❑
2.b. bridge structures, aqueducts and viaducts (especially over water and wet ground)	Bats Breeding birds Otters Water voles	❑ ❑ ❑ ❑






3.	**Illumination/floodlighting of:**	
3.a	churches and listed buildings, green space (e.g. sports pitches) within 50m of woodland, water, field hedgerows or lines of trees with connectivity to woodland or water	Bats ❑ Badgers ❑ Barn owls ❑ Breeding birds ❑ Otters ❑
3.b.	agricultural buildings (e.g. farmhouses, barns and outbuildings) of traditional brick or stone construction and/or with exposed wooden beams	Bats ❑ Barn owls ❑ Breeding birds ❑
3.c.	rivers, streams, canals, lakes, ponds or other aquatic habitats (water bodies)	Amphibians ❑ Bats ❑ Breeding birds ❑ Otters ❑ Water voles ❑
3.d.	areas of scrub or woodland	Barn owls ❑ Bats ❑ Breeding birds ❑ Dormouse ❑ Otters ❑

4.	**Felling, removal or lopping of:**		
4.a. 4.b	woodland hedgerows and/or lines of trees with connectivity to woodland or water bodies	Bats Badgers Dormouse Otters Plants Breeding Birds	❑ ❑ ❑ ❑ ❑ ❑
4.c. 4.d.	old and veteran trees that are older than 100 years mature trees with obvious holes, cracks or cavities (and also large dead trees)	Bats Barn owls Breeding birds Plants Invertebrates	❑ ❑ ❑ ❑ ❑
4.e.	removal of mature/semi-mature trees on river banks	Bats Breeding birds Otters	❑ ❑ ❑
5.	**Proposals affecting ponds with respect to:**		
5.a. 5.b.	applications within 500m of a pond marked on an OS map applications which directly impact on any pond	Great crested newts Amphibians Invertebrates Water voles Otters	❑ ❑ ❑ ❑ ❑
6.	**Proposals affecting water bodies:**		
6.a.	in or within 200m of rivers, streams, canals, lakes, reedbeds or other aquatic habitats (water bodies)	Bats Otters Great crested newts Amphibians Breeding Birds Plants Reptiles Water Voles	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑

7. Proposals located in or immediately adjacent to:		
7.a. quarries 7.b. natural cliff faces and rock outcrops with crevices or caves (see also specific guidance on marine/coastal developments).	Bats Breeding birds	❑ ❑
7.c. derelict land (brown field sites), allotments and railway land 7.d arable or pasture land 7.e apparently unmanaged habitats (e.g. scrub, rank grassland)	Bats Badgers Breeding Birds Brown hare Plants Reptiles	❑ ❑ ❑ ❑ ❑ ❑
8. Renewable Energy[1]		
8.a. Multiple wind turbines 8.b. Single wind turbines https://www.gov.uk/guidance/wild-birds-surveys-and-monitoring-for-onshore-wind-farms 8.c. Solar arrays	Bats Breeding birds Nesting birds Vantage point bird surveys	❑ ❑ ❑ ❑ ❑
8. Householder Development		
See also Householder Design Guide SPG www.swansea.gov.uk/ldp/spg	Bats, Barn owls, Breeding birds Great crested newts	❑ ❑ ❑ ❑

[1] for offshore energy see effects of marine development in Swansea Marine Planning Guide on Council's website www.swansea.gov.uk

Figure A1.2 Ecological Survey Seasons – Terrestrial Species

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Badgers												
Bats (Hibernation Roosts)												
Bats (Summer Roosts)												
Bats (Foraging/Commuting)												
Birds (Breeding)												
Birds (Over-Wintering)												
Dormice												
Great Crested-Newts Terrestrial												
Great Crested Newts Aquatic												
Other amphibians												
Invertebrates												
Otters												
Reptiles												
Water Voles												
Habitats/Vegetation												

KEY: Optimal Survey Time **Sub Optimal**

Figure A1.3 Section 7 Species and Habitats likely to be found in Swansea's Marine/Coastal/Estuarine locations

TYPE OF CONSENT	S7/ EPS SPECIES				S7 HABITATS	
Marine/Estuarine: Marine works where the LPA jurisdiction extends into main rivers and estuaries						
Planning Permission may be required		Allis and twaite shad	☐		Blue mussel beds	☐
		European eel	☐		Coastal saltmarsh	☐
		Otter	☐		Intertidal mudflats	☐
		River and sea lamprey	☐		Seagrass beds	☐
		Sea trout	☐		Sheltered muddy gravels	☐
Coastal: Works below Mean High Water Springs (MHWS)						
Marine Licence	*Overwintering birds such as*		*Coastal plant species including:*			
		Eurasian curlew	☐	Sea stock		Coastal saltmarsh ☐
		Ringed plover	☐	Small flowered catchfly	☐	Coastal vegetated sand ☐
		Sanderling	☐	Prickly saltwort	☐	dunes ☐
		and other species such as	☐	Shore dock	☐	Coastal vegetated shingle ☐
		Bar-tailed godwit	☐	Burnt orchid	☐	Maritime cliff and slopes
		Black-headed gull	☐	Fen orchid	☐	
		Chough	☐	Basil thyme	☐	
		Herring gull	☐	Juniper	☐	
			☐		☐	
Intertidal: Developments taking place in the intertidal zone or across the land/sea boundary, for example a slipway						
Planning permission Marine Licence		Native oyster	☐		Blue mussel beds	☐
		Sand eel	☐		Intertidal boulder communities	☐
					Intertidal mudflats	☐
					Peat and clay exposures	☐
					Sabellaria alveolata reefs *(honeycomb worm reefs)*	

Above MLWM: Works to infrastructure up to the boundary jurisdiction of the local planning authority (LPA) (generally above the Mean Low Water Mark (MLWM)) will need Planning permission

Figure A1.4: Protection of Species In Swansea - Legal and Policy Framework

	LDP Policy	Feature	Legislation and Policy	Examples in Swansea	Implications for Development / Legal Requirements
Species of International Importance	**Policy ER 8**	European Protected Species (EPS)	**Species list on Schedule 2** (fauna) and **Schedule 4 (flora)** of the Conservation of Habitats and Species Regulations 2017 (as amended) (The Habitat Regulations)	**Bats (all species), Dormouse European otter Great crested newt. Harbour porpoise Shore dock Fen orchid**	**Schedule 2 and 4 EPS are protected from:** intentional or reckless killing, injury, disturbance or capture, as are their breeding and resting places. The Council as the Local Planning Authority has a duty to have regard to the *EC Habitats Directive and Wild Birds Directive* as part of the planning process.
		Wild Birds of international importance *Habitats Directive Annex 2* *Birds Directives Annex 1 - Species*	The Conservation of Habitats and Species Regulations 2017 (as amended) (The Habitat Regulations)	**See SAC and SPA Sites in Table A1.6 below.**	Protected through the designation of SAC/SPA sites OR a site of sufficient diversity and area of habitat for wild birds. As a competent authority, the LPA have a duty to undertake a HRA.

	LDP Policy	Feature	Legislation and Policy	Examples in Swansea	Implications for Development / Legal Requirements
***Species of National or Local Importance* (continued)**	**Policy ER 8**	Badger	Protection of Badgers Act (1992)	**Badgers**	**This Act protects badgers and their setts, and makes it illegal to:** • *Wilfully capture, injure or kill a wild badger* • *Be in possession of a live or dead badger* • *Destroy or obstruct access to an active badger sett* **NRW Licence may be required to:** close or to interfere with a Badger sett; cause disturbance to Badgers. Badger setts are protected from intentional or reckless interference.
		Wild Mammals	Wild Mammals (Protection) Act 1996	**Hedgehog** **Badger**	This Act **makes it an offence to inflict unnecessary suffering on wild mammals. The Act** provides an animal welfare protection to all wild species of mammals.
		All Wild Birds	Wildlife and Countryside Act (1981) (as amended) Schedule 1	**All wild birds**	**All wild birds, their nests and their eggs are protected under the Act. It is an offence intentionally to:** • Kill, injure or take any wild bird, • Take, damage or destroy the nest of a Golden Eagle, White-tailed Eagle or Osprey (even if disused), • Take, damage or destroy the nest of any wild bird whilst it is in use or being built, • Take, damage or destroy an egg or any wild bird, Or to possess any live or dead wild bird or the egg of any wild bird, or any derivative
		Schedule 1: Birds	Wildlife and Countryside Act (1981) (as amended) Schedule 1	**Barn Owl** **Peregrine Falcon** **Red Kite** **Chough** **Kingfisher** **Bittern** **Common scoter**	**Many rare birds are listed on Schedule 1, which makes it an offence intentionally or recklessly to:** • *Disturb a Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young; or* • *Disturb dependent young of such a bird*

	LDP Policy	Feature	Legislation and Policy	Examples in Swansea	Implications for Development / Legal Requirements
***Species of National or Local Importance* (continued)**	**Policy ER 8**	Schedule 5 Protected Animals (not including Birds)	Wildlife and Countryside Act (1981) (as amended) Schedule 5	**Water vole** **Marsh fritillary** **Small blue butterfly** **Fen raft spider** **Slow worm** **Grass snake** **Adder** **Common toad** **Smooth newt** **Allis and Twaite shad.**	Species have different levels of protection, including protected from intentional killing, injury or taking, or destruction; protected from harm at all times; or whilst nesting. Species should be protected and enhanced.
		Schedule 8: Protected Plants	Wildlife and Countryside Act (1981) (as amended) Schedule 8	**Sea stock** **Small-flowered catchfly** **Native bluebell** **Deptford pink** **Pennyroyal** **Dune gentian**	**Species have varying levels of protection.** **Plants which are protected:** Schedule 8 lists plant species that are protected under Section 13. Section 13 protects plants from picking and sale of plants or parts of plants listed in Schedule 8. • intentional picking, uprooting or destruction (Section 13 1a) • selling, offering for sale, possessing or transporting for the purpose of sale (live or dead, part or derivative) (Section 13 2a); • advertising (any of these) for buying or selling (Section 13 2b)
		Section 7: Species of principal importance	Environment (Wales) Act 2016	**See S7 list.**	Material planning consideration Link to Section 7 Priority species (pdf) See Council Website for List of S7 Species in Swansea.
		Invasive Non-Native Species	Wildlife and Countryside Act 1981, NERC Act 2006 CROW Act 2000.	**Himalayan balsam** **Japanese knotweed** **Cotoneaster**	Material planning consideration

Figure A1.5: PROTECTED SITES in Swansea - Environmental Legislation and Policy Framework

	LDP Policy	Feature	Sites in Swansea	Legislation and Policy	Implications for Development / Legal Requirements
Protected Sites of INTERNATIONAL Importance	***Policy ER 4*** ***Policy ER 8*** ***Constraints & Issues Map*** ***LDP Appendix 7***	IUCN Category V Protected Landscape	♣ Gower Area of Outstanding Natural Beauty (AONB)	Countryside and Rights of Way Act 2000	Development must have regard to the purpose of the designation to conserve and enhance the natural beauty of the area. (See LDP Policy ER 4)
		Ramsar 'Wetland of International Importance'	♣ Burry Inlet[1 2] ♣ Crymlyn Bog [1 2]	United Nations Ramsar Convention (1971) The Conservation of Habitats and Species Regulations 2017 (as amended) (The Habitat Regulations)	Sites are protected against potentially damaging operations. Strong Presumption against damaging development **EIA:** Development may require Environmental Impact Assessment (See **HRA**: For Natura 2000 sites Habitats Regulations Assessment (HRA) to be undertaken prior to determination of planning.[2] See Council website for further guidance on EIA and HRA process.
		Special Protection Area (SPA)	♣ Burry Inlet [1 2] ♣ Carmarthen Bay [1 2]		
		Special Area of Conservation (SAC) ** SAC and SPA are collectively known as 'Natura 2000' sites*	♣ Bristol Channel Approaches (Harbour porpoises) [1 2] ♣ Carmarthen Bay Dunes [1 2] ♣ Carmarthen Bay and Estuary [1 2] ♣ Crymlyn Bog [1 2]		
			♣ Gower Ash Woods [2] ♣ Gower Commons [2] ♣ Limestone Coast of South and West Wales [2]		

Notes

1 **Marine, Coastal and Estuarine Designations**: Typical effects which may arise from development along the foreshore and which may impact upon these designations include (but are not limited to):-

- Direct loss of habitat such as vegetated shingle or saltmarsh
- Visual or noise disturbance to overwintering and migratory birds and marine mammals
- Direct impacts upon overwintering and migratory birds by features such as wind turbines
- Mobilisation of existing ground contaminants by works such as piling etc. which may then leach into the estuary
- Deposition of airborne contaminants arising from traffic and industrial processes

2 Potential HRA effects – see Figure A1.7

	LDP Policy	Feature	Sites in Swansea		Legislation and Policy	Implications for Development / Legal Requirements
Protected Sites of NATIONAL Importance	***Policy ER 8*** ***Constraints & Issues Map*** ***LDP Appendix 7***	Site of Special Scientific Importance (SSSI)	♣ Barlands Common Stream Section (Bishopston SSSI) ♣ Berry Wood ♣ Bishop's Wood ♣ Blackpill ♣ Bracelet Bay ♣ Burry Inlet and Loughor Estuary ♣ Caswell Bay ♣ Cefn Bryn Common ♣ Courthouse Grassland ♣ Crymlyn Bog ♣ Cwm Ivy Marsh and Tor ♣ Fairwood, Pengwern and Welshmoor ♣ Glais Morain ♣ Gower Coast: Rhossili to Port Eynon ♣ Graig Fawr ♣ Great Tor (Three Cliffs Bay) ♣ Horton, Eastern and Western Slade ♣ Ilston Quarry	♣ Langland Bay (Rotherslade) ♣ Minchin Hole ♣ Nicholaston Wood ♣ Nant y Crimp ♣ Oystermouth Old Quarry ♣ Oxwich Bay ♣ Parkmill Woodlands and Llethrid Valley ♣ Pennard Valley ♣ Penllegaer Railway Cutting ♣ Penplas Grassland ♣ Penrice Stables and Underhill Cottage ♣ Pwll Du Head and Bishopston Valley ♣ Rhossili Down ♣ Rose Cottage, Llethrid ♣ Six Pit, Swansea Vale and White Rock ♣ Sluxton Marsh, Whitemoor ♣ Whiteford Burrows, Landimore Marsh and Broughton Bay	Wildlife and Countryside Act (1981) (as amended) by the Countryside and Rights Of Way Act (2000)	Sites are protected against potentially damaging operations. Strong presumption against damaging development. Works may require consent from Natural Resources Wales (NRW)
		National Nature Reserve (NNR) (NB – All NNRs are also SSSI)	♣ Oxwich ♣ Gower Coast ♣ Whiteford ♣ Crymlyn Bog and Pant y Sais		NNR's are declared by NRW under ***National Parks & Access to the Countryside Act (1949)*** OR ***Wildlife and Countryside Act 1981 (As amended)***	NNR's are a material planning consideration Each reserve has a programme of work to manage the site's special features. Some reserves require permits to gain access to them.

/	LDP Policy	Feature	Sites in Swansea	Legislation and Policy	Implications for Development / Legal Requirements
Protected Sites of LOCAL importance	***Policy ER 6*** ***Policy ER 11*** ***Constraints & Issues Map*** ***LDP Appendix 7***	Local Nature Reserve (LNR)	♣ Bishops Wood ♣ Cwm Llwyd Wood ♣ Killay Marsh ♣ Mumbles Hill ♣ Pwll Du Cliffs ♣ Cadle Heath	National Parks and Access to the Countryside Act (1949) OR Wildlife and Countryside Act 1981 (as amended)	Have regard to contribution to ecological connectivity and resilience of ecosystems. Check for presence of priority habitats and species to be given appropriate protection in accordance with Section 7 of the Environment (Wales) Act 2016. Link to Section 7 Priority habitats (pdf) Maintain public access where relevant.
		Site of Importance for Nature Conservation (SINC)	At Numerous locations – See LDP Constraints and Issues Map. Includes all ♣ Ancient woodlands, ♣ Wildlife Trust, RSPB, and Woodland Trust Reserves	Planning Policy Wales (Edition 10) Environment (Wales) Act 2016	Have regard to contribution to ecological connectivity and resilience of ecosystems. Check for presence of priority habitats and species to be given appropriate protection in accordance with Section 7 of the Environment (Wales) Act 2016. Link to Section 7 Priority habitats (pdf)

Figure A1.6 PROTECTION OF HABITATS IN SWANSEA- Legal and Policy Framework

	LDP Policy	Feature	Legislation and Policy Development Implications/Legal/Policy Requirements
Protected Habitats of INTERNATI	Policy ER 8 Constraints & Issues Map LDP Appendix 7LDP:	Habitats of European Importance – 'Annex I Priority Habitats'	**The Conservation of Habitats and Species Regulations 2017 (as amended) (The Habitat Regulations)** • Habitat may be a designatory feature of a Natura 2000 site (see above)
Protected Habitats of NATIONAL Importance	Policy ER 11 Constraints & Issues Map (for Ancient Woodlands) Trees, Hedgerows and Woodlands on Development Sites SPG	Trees	**Tree Preservation Orders (Town and Country Planning Act 1990)** **Town and Country Planning (Trees) Regulations 1999:** Under the provisions of the Act, a number of TPOs have been made to protect specific trees, groups of trees and woodlands across the County. • Contact details for Council's Tree Officer available at https://swansea.gov.uk/treepreservationorders See also https://swansea.gov.uk/treesondevelopmentsites • The purpose of a TPO is to protect trees that make a significant impact on their local surroundings. • Special provisions also apply to trees within Conservation Areas. • In addition to their amenity value trees are an important natural asset and play an essential role in providing a wide range of ecosystem services. (drainage, carbon sequestration, air quality, food provision etc)
		Hedgerows	**HEDGEROW REGULATIONS (1997)** • Certain hedgerows are protected from removal. Outcome of Hedgerows Regulations Screening will advise on necessary protection, maintenance and enhancement of hedgerows. • Hedgerows may require screening for Hedgerow Regulations protection • Hedgerows may also contain species identified for protection, contribute to biodiversity and connectivity and may be part of important green infrastructure and ecological networks.
		Ancient Woodland Plantations on Ancient Woodland Sites (PAWs)	**Planning Policy Wales** Development not normally permitted on these sites.

	LDP Policy	Feature	Legislation and Policy Development Implications/Legal/Policy Requirements
Protected Habitats of NATIONAL/LOCAL Importance	**Policy ER 8** **Constraints & Issues Map**	**UKBAP Priority Habitat** **Section 7: Habitats of Principal Importance for Conservation**	**The Environment (Wales) Act 2016 (Section 7)** • Habitats that must be maintained and enhanced • Mitigation/compensation measures may be required
		LBAP/ Nature Recovery Action Plan Habitats	**Swansea Local Biodiversity Action Plan/Nature Recovery Action Pan** • Habitats of local importance and significance that must be maintained and enhanced
		Invasive Species	**Schedule 9 Part II section 14(2) of the Wildlife and Countryside Act 1981 (as amended)** • Assess the site to identify the presence of any invasive non-native species of flora listed
	Policy ER 9 **Swansea Connectivity Assessment**	**Ecological Networks and Corridors**	**The Environment (Wales) Act 2016 (Section 6)** **Well Being of Future Generations Act - resilient Wales Goal** **Planning Policy Wales (Chapter 6)** • Maintain and enhance ecological networks both within and outside the site

Figure A1.7: Overview of potential HRA considerations re Swansea designations

Site	Reason for designation	Key considerations for Developers include…	
Carmarthen Bay and Estuaries European Marine Site (comprising the Carmarthen Bay and Estuaries SAC, Carmarthen Bay SPA and the Burry Inlet SPA and Ramsar)	**Carmarthen Bay and Burry Inlet SPA:** designated due to their internationally important assemblage of wintering birds. **Carmarthen Bay and Estuaries SAC:** designated due to the estuarine habitat features, *Salicornia*, otters and migratory fish species e.g. sea lamprey and Allis shad. **The Burry Inlet** is also designated a **Ramsar 'Wetland of International Importance'.**	**Water Quality and Quantity:** Applicable to all designated sites. Ensuring that proposals do not adversely impact on water quality and quantity. Developers may be required to undertake some/all of the following assessments: *flood assessment; foul sewerage; land contamination; site waste management.*	❖ **Timing restrictions** may be placed on piling works and other activities which cause noise or disturbance to migratory fish and marine mammals. ❖ **Wintering and migratory bird surveys** may be required and restrictions (e.g. in relation to timing, scale, location of works) may be applied depending on potential impacts. ❖ **Otters**: Any works which may disturb otters may be subject to restricted working hours, and mitigation measures such as installation of artificial otter holts/appropriate planning etc. Survey and assessment requirements may include otter surveys, mitigation proposals and lighting assessments.
Carmarthen Bay Dunes SAC	Designated due to its dune habitat features including, whorl snail, petalwort and fen orchid.		**N/A**
Crymlyn Bog SAC and Ramsar site	**SAC:** designated due to its fen, bog and mire and alluvial forest habitat features, reed and tree species. **Ramsar 'Wetland Of International Importance'.**		❖ **Additional recreation pressure** arising from the new development.
Gower Ash Woods SAC	Designated due to Ash and Mixed woodland habitat features on base-rich soils associated with rocky slopes.		❖ **Air quality deterioration** resulting from the new development.
Gower Commons SAC	Designated due to heath and meadow habitat features, damselfly and marsh fritillary.		❖ **Timing restrictions** may be placed on activities which cause noise or disturbance to the *damselfly species* and *marsh fritillary*. ❖ Safeguarding of *devils bit scabious* habitat.

			❖ Changes to the water table
Limestone Coast of South West Wales SAC	The **Limestone Coast** is designated as a **SAC** due to vegetated sea cliff, fixed dune, heath, grassland, cave and sea case habitat features, greater horseshoe bat, petalwort and gentian. It is also designated a **SPA**, primarily due to the presence of Chough.		❖ **Timing restrictions** may be placed on activities which cause noise or disturbance to the *damselfly* and *marsh fritillary* and *greater horseshoe bat.*
River Tywi SAC	The River Tywi is designated a SAC due to its riparian features migratory fish and otter.		❖ Timing restrictions may be placed on activities which cause noise or disturbance to the *damselfly* and *marsh fritillary*.
River Usk SAC	The **River Usk** is designated a **SAC** due to its riparian habitat features, migratory fish and otter.		❖ **Timing restrictions** may be placed on activities which cause noise or disturbance to the **damselfly** and **marsh fritillary**.
Bristol Channel Approaches SAC	**Identified for the protection of harbour porpoise.** **Key site conservation objective**: to ensure that the integrity of the site is maintained, and that it makes an appropriate contribution to maintaining Favourable Conservation Status (FCS) for harbour porpoise in UK waters. **Site Location:** This site straddles the Bristol Channel from Carmarthen Bay in the north to the northern coasts of Devon and Cornwall in the south. ❖ Map boundary details: https://naturalresources.wales/media/675769/bristol-channel-approaches-sac-map-final.pdf See Conservation objectives and management details: ❖ http://jncc.defra.gov.uk/pdf/BristolChannelApproachesConservationObjectivesAndAdviceOnActivities.pdf in particular - see Table A2.		

Appendix 2: Biodiversity and Major Developments

This appendix relates to the consideration of biodiversity and ecosystem resilience in the types of major and large scale applications set out below.

I Housing (10+ houses or 0.5ha +

II Other built development (1000sqm floorspace or 1ha+

III Minerals development

IV Waste development

V Road or rail facilities

General Principles for all Major Applications

A2.2 The key points to be considered for all major proposals are listed below. Specific recommendations for each type of development are given in the subsequent pages.

A2.3 All major developments should consider the following principles.

- Follow the Stepwise Approach
- Assess the ecosystem resilience of proposals
- Have regard to SMNR framework
- Check whether the HRA process applies
- Check for INNS

A2.4 **Follow the Stepwise Approach**: The Council will consider all developments against the stepwise process. (See Fig A2.2 below and Chapter 3 of Main document). Applicants should be able to demonstrate in their submissions how the stepwise approach has been followed and how biodiversity has been considered as part of every stage of a development proposal Figure A2.1 below explains how the Council will apply the Stepwise Approach in the context of large scale developments. A key factor of this process is the consideration of biodiversity at the pre-application stage. This will also help to prevent delays that may otherwise be caused by the need for additional survey work and redesign.

Figure A2.1. MAJOR DEVELOPMENT AND THE STEPWISE PROCESS

STEP A - IDENTIFY AND ASSESS *Identify and assess existing, or potentially, important habitats, sites and/or species and ecological connectivity corridors*	• Ensure adequate survey data is available/obtained initially. The level of detail required will vary according to the size and nature of the development and the habitats and species concerned. • Some developments require an Environmental Impact Assessment under the Town & Country Planning Regulations 1999. Even permitted development can have a significant impact on conservation interests and may require an E.I.A. • Further advice can be obtained from the organisations listed in Appendix 6.
STEP B - AVOID *Avoid loss of any existing or potentially important habitats or species, or fragmentation of ecological connectivity*	Wherever possible, development should **avoid** detrimental impact on biodiversity, ecological resilience and on any *ecological feature.* • Avoid adverse impacts on designated sites (ER 8) • Avoid negative effects on statutorily protected habitats and species (ER 6) • Site layout and design should retain existing habitats, species and ecological features of benefit to wildlife. As part of this, an ecological landscaping scheme should be provided prior to the planning decision. • It is important to keep features in context rather than as an isolated fragment. Proposals must consider all opportunities to connect to wildlife corridors and link habitats (ER 9) and explore all opportunities to contribute to the county's multifunctional green infrastructure network (ER 2).
STEP C - RESPOND AND DESIGN *Integrate new and existing biodiversity into proposals and projects at the earliest opportunity*	• If avoidance is not possible, the developer should be able to justify why, and demonstrate how, the loss will be positively mitigated and/or compensated for. (See LDP Policy ER 6 re Sites, and Policy ER 8 re Habitats and Species). • The developer should show how their proposal has been designed in order to minimise any adverse effects on those habitats or species present. This may involve incorporating appropriate new features or habitats within development to maintain and enhance biodiversity.
STEP D – MITIGATE ***For any unavoidable harm or loss to important habitats or species or the fragmentation of ecological connectivity.***	• Minimise damage to habitats and species wherever possible. • The Council may use a planning condition to require a mitigation strategy. • Refer to guidance on the treatment of protected species. [2] • Consider if operations proposed require a licence[3] • The Council will use planning conditions to ensure works are carried out at the appropriate time of year to avoid disturbance to species. Any disturbance may be in contravention of national or European law. The nesting season generally extends between late February and early September inclusive. Appendix 1 provides information on relevant survey seasons for specific species.

[2] Appendix 1 and further guidance on Council's Website www.swansea.gov.uk

[3] See Guidance on Council's website.

STEP E- COMPENSATE *Addressing the residual effects of a proposal after avoidance and mitigation have been considered.*	• The Council will use appropriate legal mechanisms to ensure re-creation of habitat on or off-site, at the expense of the developer. • A financial contribution to management of nearby existing sites, through a commuted sum, can be requested. • This is especially relevant where the development could lead to increased pressure on those sites (e.g. noise and disturbance through increased amenity use of the site).
STEP F- ENHANCE AND INCREASE ***Explore all opportunities to enhance and increase biodiversity and ecosystem resilience proportionate to the scale and nature of the proposal***	• Enhancement will be proportionate to the scale, nature and location of the proposal, and opportunities to enhance biodiversity, in accordance with the five attributes of resilience. For details, see specific pages below for each development type.
STEP G – MANAGE and MONITOR *Submit and implement long term management plan of agreed and appropriate mitigation, compensation and enhancement measures.*	• Provision must be made for the appropriate management of retained features and of new or enhanced habitat. The management and monitoring should be proportionate to the scale and impact of the development and the biodiversity measures proposed. • The developer should monitor the site, during the construction phase to ascertain any effects on wildlife. This may require the appointment of an Ecological Clerk of Works. • The developer will also be required to monitor the effectiveness of any mitigation, compensation and or enhancement measures to ensure they have been successful in achieving biodiversity gain. If this is not the case they may be required to implement remedial action • The term of management required should be proportionate to the biodiversity measures proposed. Applicants should explore options to transfer long term management through including an agreement with appropriate local stakeholders and environmental organisations. Where a commuted sum for management/monitoring is required this will be secured through appropriate legal mechanisms, such as a planning obligation. See Appendix 5. • Planning agreements will also secure the preparation and implementation of a management plan, and long-term monitoring in accordance with the agreed management plan objectives.

A2.5 **Assess the impact of the proposals on Ecosystem Resilience:** All development will be assessed against the principles of ecosystem resilience (see DECCA Figure 1.3 of main document)). Figure A2.2 below presents the application of the DECCA principles in the context of Major developments.

Figure A2.2 – DECCA and Major development

D **Diversity** between and within ecosystems; development must not cause any significant loss of habitats or species; and must provide a net benefit for biodiversity.

E **Extent** and scale of ecosystems; planning decisions should incorporate measures which seek to retain the extent of habitats and green networks; through protection, creation, restoration and appropriate management.

C **Connectivity** between and within ecosystems; maintain and develop functional habitat and species connectivity and ecological networks within and between ecosystems and across landscapes;

C **Condition** of ecosystems including their structure and functioning; and planning decisions should not compromise the condition of ecosystems;

A **Adaptability** to change of ecosystems; protect the extent, condition and connectivity of habitats, features and ecological networks

A2.6 **Have regard to SMNR Framework:** Opportunities for enhancement should be considered within the Sustainable Management of Natural Resources (SMNR) Framework i.e. SoNaRR, Natural Resource Policy, Nature Recovery Action Plan for Wales, Area Statements.

A2.7 The extent of any biodiversity enhancement required will be proportionate to the size, nature and location of the proposal and assessment of the proposal against the five attributes of ecosystem resilience set out in PPW and detailed above.

A2.8 **Check if the HRA process applies:** Where the development may affect a European Designated Site, under the Habitat Regulations, the Council must be satisfied that the proposals will have no likely significant effect on the features of the site or an additional assessment will be required. Figure A1.7 above provides an overview of potential HRA considerations re designated sites in Swansea.

A2.9 **Check if an EIA is required:** Applicants should establish whether development will require an Environmental Impact Assessment (EIA) having regard to the descriptions of development set out in Schedules 1[4] and 2[5] of the Town and Country Planning (EIA) Regulations 2017.

A2.10 **Check for INNS:** Where an invasive non-native species of flora listed in Schedule 9 Part II section 14(2) of the Wildlife and Countryside Act 1981 (as amended) is present on a planning application site (for example Japanese Knotweed), a separate invasive non-native species (flora) condition will be placed upon that application.

[4] http://www.legislation.gov.uk/uksi/2017/571/schedule/1/made

[5] http://www.legislation.gov.uk/uksi/2017/571/schedule/2/made

GUIDANCE FOR SPECIFIC MAJOR DEVELOPMENT TYPES

HOUSING DEVELOPMENTS (10 OR MORE HOUSES, OR 0.5+ HA)

This part of the appendix should be read in conjunction with the Residential Design Guide SPG.

A2.11 Discussions between the LPA and the applicant at an early stage are vital, and ensure that ecological concerns are raised at the beginning of the process. Survey work can then be timetabled appropriately. Results of ecological surveys should be communicated via an Ecological Constraints and Opportunities Plan.

A2.12 The extent of any biodiversity mitigation, compensation and enhancement required will be proportionate to the size, nature and location of the proposal and assessment of the proposal against the five attributes of ecosystem resilience set out in PPW and detailed above in Fig A2.3.

A2.13 The Council will discuss any mitigation, compensation and enhancement requirements with the applicant at the pre-application stage in response to the information emerging from the ecological surveys. Where issues are identified through the PEA and any specific species surveys, the Council's Ecologist will recommend appropriate mitigation, compensation and enhancement measures and these will be communicated through the written pre-application response.

A2.15 This allows reasonable time for the applicant to respond to the issues raised and integrate any identified requirements into the design of the proposal.

A.2.16 Agreed enhancement measures must be included within the design of the scheme and shown on plans submitted to the Council. The Council's approach is not to routinely condition planning permission upon the provision of specific enhancements, but rather that permission will be granted in accordance with the approved plans, which should incorporate any biodiversity mitigation, compensation and enhancement measures required to address identified and evidenced biodiversity issues directly relating to the development. This approach is in accordance with the CIL regulations.

A2.17 A list of suggested general recommendations for improving biodiversity is provided on the Council's website, and can be incorporated into development as appropriate. Applicants will be required to demonstrate how the integration of both retained and newly created biodiversity features will be achieved **throughout the site.** This will require consideration of how biodiversity

features will deliver benefits at the landscape, neighbourhood and plot scales. Taking this approach will assist in demonstrating how biodiversity measures form part of the wider strategy to deliver quality placemaking and maintain and enhance the strategic and local green infrastructure network. A Green Infrastructure Strategy may be required where appropriate. This will also assist in demonstrating how the ecological connectivity of the site has been considered. (See Policy ER9 and point 3 of the Ecosystem Services Approach.

A2.18 For **new settlements**, as with other built developments, early discussions will highlight any biodiversity issues. These types of developments should employ an ecologist for the duration of the scheme who should form part of a multidisciplinary team, to ensure that biodiversity measures are fully integrated as part of the wider placemaking approach to sustainable development, particularly in relation to delivering multifunctional green infrastructure and sustainable drainage systems. A Green Infrastructure Strategy will be required which should set out how biodiversity measures proposed and shown on the ECOP will be integrated as part of a biodiverse GI network throughout the site. This will demonstrate how biodiversity will be integrated at all scales of placemaking, for example, landscaping measures should consider both connectivity with existing strategic ecological corridors outside of the site and maintaining and enhancing connectivity within the site. Biodiversity can also be maintained and enhanced at the neighbourhood or street level through the greening of highway/active travel routes and landscaping and planting of open space and recreation layouts. At the plot and building scale, native planting of front and back gardens can increase biodiversity of individual properties and curtilages.

Non Residential Development

i. Built development (1000 sq m floorspace or 1+ ha)

A2.19 The extent of any biodiversity mitigation, compensation and **enhancement** will be proportionate to the size and nature of the development and its location and assessment of the proposal against the five attributes of ecosystem resilience. (See Figure A2.3 above)

A2.20- A list of **general recommendations** for improving biodiversity is provided on the Council's website which can be used as appropriate. Habitat creation must fit with the ecological landscape character area. Additional consultation with relevant stakeholders and conservation organisations is advised.

A2.21 **Large developments**, should employ an ecologist for the duration of the scheme who should operate as part of a multidisciplinary project team.

ii. Minerals Development

A2.22 The Environment Act 1995 supports the use of restored mineral workings for biodiversity. The review of mineral planning conditions can also be imposed to secure nature conservation after use.

2.23 MTAN 1: Aggregates contains detailed recommendations for minimising damage to ecosystems during works.

A2.24 Old mineral workings are an ideal opportunity to promote large-scale habitat creation and restoration schemes. Bare ground /brown field sites can provide valuable habitats for a range of plant invertebrate and other species. Maintenance and or creation of bare ground should feature in restoration schemes where possible.

A2.25 After care conditions should stipulate a programme of management, including provision for public access and timing of development in order to avoid damage to existing habitats and species and to create new areas for wildlife.

A2.26 Monitoring and enforcement of the proposals is necessary to ensure maximum benefit for wildlife is achieved.

iii. Waste Development

- Hedgerows, shelterbelts and copses can all be planted on or around landfill and recycling sites for **landscaping and screening** during the lifetime of the site.
- Landfill sites should ideally be restored as **wildlife areas**. This could include wildflower meadows and or native woodlands.
- Surface drainage ditches should be maintained and enhanced and protected from pollution. Creation of new ditches should be considered having regard to the relevant SuDS legislation and guidance.
- Refer to NRAP and Area Statements to identify priorities for that location.

iv. Road and Rail Facilities

- Road or rail 'underpasses' and other structures such as warning signs for toads, badgers, otters and other animals may be required if these species are known to be in the area.
- Runways for otters and water voles may be needed under bridges if banks are to be disturbed.
- Use the verges as a space for habitat creation, particularly grassland appropriate to the area. Consider the use of grasses suited to low nutrient soils to minimise management and maintenance requirements. Refer to Guidance on road verge management[6]

[6] https://www.plantlife.org.uk/uk/our-work/publications/road-verge-management-guide

Appendix 3: Biodiversity and Minor & Other Development

This appendix relates to the consideration of biodiversity and ecosystem resilience in Minor and other applications

GUIDANCE FOR ALL MINOR DEVELOPMENT TYPES

A3.1 The first step in any application is to identify if any protected species or habitats are present on the site. Applicants are advised to follow the steps below to establish the biodiversity value of their site.

A3.2 **Refer to Development Checklists – Appendix 1: All applicants should refer to** Appendix 1 to establish the likelihood of any protected species or habitats being present on a site that might be affected the type the type and nature of development proposed. This will inform what ecological survey information applicants will need to submit with their application. For example, a proposal for a loft conversion will affect roofspace which is a potential habitat for bat roosting and bird nesting. The presence of trees and or hedgerows on or near the site may also be providing habitat for bats or nesting birds.

A3.3 **Where applicants are already aware that protected species are present:** Pre-application advice should be sought as early as possible in order to ensure that the proposed development complies with legislation and that necessary compensation and enhancement is planned for.

A3.4 **Where the applicant is <u>not</u> aware of any protected species on the site:** The Council will consult The South East Wales Biodiversity Records Centre [SEWBREC][7] Aderyn Database to carry out initial desk based research to establish the likely presence of protected habitats and species on a site and will advise the applicant accordingly on any surveys that will be required to be submitted with an application.

[7] Aderyn is the LERC Wales' Biodiversity Information & Reporting Database http://www.sewbrec.org.uk/

A3.5 **Carry out relevant surveys:** If a survey is needed, it must be carried out by a suitably qualified ecologist[8]. The required information should include the necessary survey data, impact assessment, method statements and mitigation/ enhancement strategies. This information will need to be included as part of the planning application. Ecological surveys are seasonal, so the required survey must be carried out at an appropriate month of the year, and time of day. (See Appendix 1).

A3.6 **Where there is no reasonable likelihood for biodiversity features to be affected:** In these cases, survey work will not be required. However, applicants should also be aware that additional information may be requested. The Council can direct the applicant to supply any further information reasonably necessary to determine any planning application.

A3.7 **INNS:** Applicants should consider whether INNs[9] are present on the site (for example Japanese Knotweed). The Council may place a condition on the application to control removal of INNs.

[8] The **Chartered Institute of Ecology and Environmental Management (CIEEM, www.cieem.net)** has a directory of members that can be searched by region and specialism[8] and also provides Guidelines for Ecological Report Writing[8]

[9] Invasive non-native species of flora listed in Schedule 9 Part II section 14(2) of the Wildlife and Countryside Act 1981 (as amended

Specific Guidance for HOUSEHOLDER PROPOSALS and LISTED BUILDING CONSENTS
Applications for householder development should be read in conjunction with the Householder Design Guide SPG.

A3.8 Most householder and Listed Building Consent applications involve only minor alterations. Further investigation is only likely to be required if the proposal involves:

- Roofing or roofing works
- Demolition (full or partial)
- Damage to or loss of habitat features such as ponds, hedgerows and trees.

A3.9 Where this type of development is proposed applicants should check for the following protected species and habitats:

- Bat roosts or nesting bird sites which will be affected (See Aderyn BARB Service)[10]
- Great crested newts in ponds
- TPOs, hedgerow regulations

A3.10 The species surveys most likely to be required in a householder application will be for

- Bats,
- Barn owls,
- Breeding birds
- Badgers
- Great crested newts

A3.11 Where no protected species or habitats are found on the site, the Council may require a simple statement setting out the steps taken to establish that the proposal will not have a negative ecological impact. (In line with the Council's s6 Duty to maintain and enhance biodiversity, the Council may attach advisory notes to a permission which signpost applicants to best practice and advice on measures and improvements that can be integrated into the development which benefit biodiversity.

A3.12 Where protected species and their habitats are found on a site and negative impact cannot be avoided, the Council will require the stepwise process to be followed to ensure that appropriate mitigation, compensation and enhancement measures are considered. (See chapters 3 and 4 of the SPG).

A3.13 If loss of habitat features is unavoidable, it is reasonable to request replacement habitats e.g. by including bird boxes or bat 'bricks' or increasing biodiversity of landscaping, in the new design. These should be identified measures should be included within any submitted plans for the design of the

[10] http://www.sewbrec.org.uk/content/attachments/How%20to%20use%20Aderyn%20(Commercial%20Enquiries%20BARB).pdf

development. Where appropriate, permission will be granted for the proposal with reference to the required detail shown on the submitted plans being approved.

A3.14 Any required survey, management, enhancement or development works must be carried out at the appropriate time of year to avoid disturbance to species. Any disturbance may be in contravention of national or European law. For example, it is illegal to disturb nesting birds under the Wildlife and Countryside Act 1981 (See Appendix 1). The breeding season generally lasts from late February to early September inclusive. It is illegal to undertake works within 30 Metres of an active badger Sett without a licence from NRW

A3.15 Specific guidance on biodiversity in householder developments is provided in the *Householder Design Guide SPG.* This sets out the process for the most commonly found species (Bats, Barn Owls, Nesting Birds and Hedgehogs and Badgers) and provides specific examples of appropriate biodiversity enhancements. Further guidance can be found on the Council's website[11].[12]

[11] Guidance on ecological survey requirements for homeowners ***A Householder's Guide to Engaging an Ecologist*** https://cieem.net/resource/a-householders-guide-to-engaging-an-ecologist/ ***What to Expect From a Bat Survey: A Guide for UK Homeowners*** –https://cieem.net/resource/what-to-expect-from-a-bat-survey-a-guide-for-uk-homeowners/

[12] www.hedgehogstreet.org/hedgehog-friendly- fencing/

Appendix 4: Planning Obligations and Planning Conditions

A4.1 **PLANNING OBLIGATIONS:** The Council will use **LDP Policy IO 1 - Infrastructure Provision** to secure the delivery of requirements to provide measures to maintain and enhance biodiversity considered necessary as part of the proposal. This may include measures to protect/avoid, mitigate, compensate, enhance, manage and monitor the impacts of the development. The Council's preference is to retain existing features and integrate newly created features within the design and layout of the site. Where this is not possible, the Council may seek either a financial contribution or the provision of land in order to achieve the measures required off-site.

A4.2 Contributions will be secured through planning obligations in accordance with the legislative and policy framework provided in ***PPW, Community Infrastructure Levy (CIL) Regulations 2010 (as amended) and Welsh Office Circular 13/97 'Planning Obligations' (or subsequent versions).***

A4.3 The Council expects that the costs relating to any biodiversity measures required to make the development viable and sustainable will be taken into account at an early stage of the development process (including land acquisition). This will ensure that realistic values and costs are achieved as part of the development appraisal.

A4.4 **PLANNING CONDITIONS:** Planning conditions may be attached to a planning permission where appropriate, to secure the delivery of the recommendations set out in the Ecological Survey Report to avoid, mitigate, compensate, enhance, manage and monitor the biodiversity impacts of the development.

A4.5 **VIABILITY:** Where a developer seeks to question the viability of a scheme to be delivered in accordance with the policy requirements, **the Council will request an independent development appraisal.** This may involve a full assessment if no viability appraisal has been undertaken. The Council will expect the costs of such an appraisal to be met by the applicant.

PLANNING OBLIGATIONS

Justification The Council has a duty to ensure that the County's biodiversity assets are protected and enhanced.
This includes Special Areas of Conservation (SAC), Special Protection Areas (SPA), RAMSAR sites, Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNRs), Sites of Importance for Nature Conservation (SINCs), European Protected Species (EPS), Section 7 Species and Habitats, non-statutory sites, and Ancient and Semi Natural Woodlands.

Developers should seek to avoid developing on biodiversity assets, however if this is not possible appropriate mitigation and enhancements should be undertaken.

Planning Obligations				
Requirement	**Nature of Contribution**	**Trigger for obligation**	**Payment types**	**Implementation**
There is no specific formula for contributions. Financial contributions will be calculated based on the recommendations in any Management Plan submitted.	• Mitigation measures. • Habitat protection, avoidance, enhancement, restoration and creation (off and on site), compensation, monitoring and maintenance • Landscaping. • Site management • Site interpretation • Financial	• All development which may have an impact on ecological, or landscape sensitive features. • Specific locations will need to be assessed individually. • An Ecological Mitigation and Management Plan (EMMP) is required for all appropriate developments. • CIL compliant enhancement	• **All capital costs** of implementation, mitigation or compensation measures; and • **Maintenance costs** for a period to be agreed (for example, up to 10 years). • Monitoring costs	• Developer to implement appropriate mitigation, enhancement, restoration or creation on site where agreed and delivery specified in the S106 agreement. • If the developer makes financial contributions, they are likely to be required either prior to the commencement of the development or before the practical completion of buildings on site, depending on both the nature of the development and type of contribution required. • If the developer makes financial contributions for offsite enhancements, restorations or creations, the appropriate trigger point for payment of contributions will be negotiated with the developer as part of the S106 agreement. The Council will be responsible for the delivery of the specified work within the agreed timescale

Appendix 5: LDP Policy Extracts

ER 6: Designated Sites of Ecological Importance

Development will not be permitted that would result in a likely significant adverse effect on the integrity of sites of international or national nature conservation importance, except in the circumstances specified in relevant legislation.

Development that would adversely affect locally designated sites of nature conservation importance should maintain and enhance the nature conservation interest of the site. Where this cannot be achieved development will only be permitted where it can be demonstrated that:

i. **The need for the development outweighs the need to protect the site for nature conservation purposes;**

ii. **There is no satisfactory alternative location for the development that avoids nature conservation impacts; and**

iii. **Any unacceptable harm is kept to a minimum by effective avoidance measures and mitigation, or where this is not feasible, compensatory measures must be put in place to ensure that there is no overall reduction in the nature conservation value of the area.**

2.9.38 This policy seeks to ensure that the nature conservation value of designated sites is protected from harmful development and that the Council fulfils its obligation to maintain and enhance *biodiversity* and *ecosystem resilience*. A Biodiversity and Development SPG will be produced to provide further information on how *biodiversity* should be conserved and enhanced through development. The policy will also play a significant role in achieving the Plan's *Vision* for Swansea as a County that 'capitalises on the distinctive relationship between its vibrant urban areas and outstanding rural and coastal environments' and 'conserves its unique *natural heritage*'. In addition, protection of designated sites will contribute to *climate change* resilience.

2.9.39 All designated sites are shown on Constraints and Issues Map and listed in the Appendix 7.

2.9.40 National Planning Policy and Guidance[52] provides for the protection of designated sites and sets a clear context for the relevant policy approach for their protection. Those of international and national importance are afforded more protection than those of local importance.

2.9.41 Sites of international importance are EU designated *Special Protection Areas (SPAs)* and *Special Areas of Conservation (SACs)*, known collectively as Natura 2000 sites, and UN designated *Ramsar sites*. As a matter of national policy *Ramsar sites* are afforded the same policy protection as the Natura 2000 sites. Natura 2000 sites are given protection under European Directives[53] that have been transposed into UK law through the Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations). Only development which demonstrates compliance with the Habitats Regulations will be permitted. In considering development proposals that affect sites of international importance full account must be taken of the core management plans prepared for each site.

[52] Planning Policy Wales and TAN 5: Nature Conservation and Planning.
[53] Birds Directive 1979 (79/409/EEC), Habitats Directive 1992 (92/43/EEC).

2.9.42 Sites of national importance are *National Nature Reserves (NNRs)* and *Sites of Special Scientific Interest (SSSIs)*. These are protected under the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way (CROW) Act 2000, the Natural Environment and Rural Communities (NERC) Act 2006 and the Environment (Wales) Act 2016.

2.9.43 Sites recognised for their local nature conservation value are *Local Nature Reserves (LNRs)*, and *Sites of Importance for Nature Conservation (SINCs)*. *SINCs* have been identified on the basis of guidelines outlined in national guidance[54] and taking account of local factors. All such designations are shown on the Constraints and Issues Map.

2.9.44 Criteria for assessing sites of international and national importance are based on standards set out in the relevant legislation (detailed above) and expanded upon in National Planning Policy and Guidance.[55] Sites of national importance will be treated in a similar way to international sites utilising the criteria outlined in the policy. These highly sensitive sites may be affected by development on, adjacent to, or some distance away from them.

2.9.45 Where development is proposed which may have an adverse effect on a site of international and national importance, or where nature conservation interests of locally important sites are likely to be disturbed or harmed by proposed development, developers will be expected to provide an ecological survey that includes an assessment of the likely impact of the proposal on the protected site and, where necessary, make appropriate provision for its safeguarding. In assessing the potential harm the Council will consider:

- The individual and cumulative effects which will include impacts during construction;
- The role of the site in the ecological connectivity network; and
- Whether effective mitigation and/or compensation measures have been provided.

[54] Wales Biodiversity Partnership – Legislation and Guidance. Wildlife Sites Guidance Wales: A Guide to Develop Local Wildlife Systems in Wales (2006).
[55] Planning Policy Wales and TAN 5: Nature Conservation and Planning.

ER 8: Habitats and Species

Development proposals that would have a significant adverse effect on the resilience of protected habitats and species will only be permitted where:

i. **The need for development outweighs the nature conservation importance of the site;**

ii. **The developer demonstrates that there is no satisfactory alternative location for the development which avoids nature conservation impacts; and**

iii. **Any unavoidable harm is minimised by effective mitigation to ensure that there is no reduction in the overall nature conservation value of the area. Where this is not feasible, compensation measures designed to conserve, enhance, manage and, where appropriate, restore natural habitats and species must be provided.**

2.9.56 Development proposals should aim to minimise detrimental impacts on protected habitats and species and *ecosystem resilience*. This policy should be implemented in conjunction with Policies ER 6 Designated Sites of Ecological Importance and ER 9 Ecological Networks and Features of Importance for Biodiversity to ensure no net loss in overall *biodiversity* as a result of development and where possible there should be *biodiversity* gains.

2.9.57 Protected habitats and species are those protected under European and UK legislation, as identified in TAN 5 Nature Conservation and Planning (2009). The legislation includes the Habitats Directive, Birds Directive, Wildlife and Countryside Act 1981, Environment (Wales) Act 2016. Protected habitat and species include priority habitats and species that are protected in Local Biodiversity Action Plans and emerging Nature Recovery Plans. A *biodiversity* and development SPG will be produced to provide further information on how *biodiversity* should be conserved and enhanced through development.

2.9.58 Factors to be taken into consideration in assessing the significant adverse effect development proposals are likely to have on habitats and species are:

- The current distribution and status of the protected habitat or species within the County;
- All likely effects, including cumulative effects and impacts during construction;
- The role of the habitats as connectivity pathways; and
- Whether effective mitigation and/or compensatory measures have been provided; and
- Maintaining and enhancing *ecosystem resilience*.

2.9.59 Where habitats and species are likely to be disturbed or harmed, development proposals will be assessed in accordance with National Planning Policy and Guidance.[58] Developers will be expected to provide: an ecological survey; an assessment of the likely impact of the proposal on the *protected species/* habitats; and, where necessary, make appropriate provision for their safeguarding, mitigation and/or compensatory measures. In addition measures to enhance *biodiversity*, such as through habitat creation, will be expected.

2.9.60 *Invasive Non-Native Species* are alien animals, plants or other organisms that have the ability to spread, causing damage to the environment, the economy, our health and the way we live. They are addressed by existing legislation. If *invasive non-native species* are present in and around a development site appropriate action should be taken to control or remove them prior to the commencement of any approved development. Where planning permission is granted it will be subject to appropriate planning conditions and obligations to secure control, monitoring, mitigation, compensation and management.

[58] Planning Policy Wales and TAN 5: Nature Conservation and Planning.

ER 9: Ecological Networks and Features of Importance for Biodiversity

Development proposals will be expected to maintain, protect and enhance ecological networks and features of importance for biodiversity. Particular importance will 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 could result in an adverse effect on the connectivity of ecological networks and features of importance for biodiversity will only be permitted where:

i. **The need for the development outweighs the nature conservation value of the site;**

ii. **It can be demonstrated that there is no satisfactory alternative location for the development;**

iii. **A functional connected element of the natural resource is retained as part of the design of the development; and**

iv. **Compensatory provision will be made of comparable or greater ecological value to that lost as a result of the development.**

2.9.61 There are a significant number of ecological habitats and features within the County, in addition to those that are legally protected, that lie outside the designated areas and make a significant contribution to the overall *biodiversity* resource. These include linear wildlife corridors such as rivers, hedgerows and cycle tracks; 'stepping stones' such as ponds and copses and *landscape* features such as stone walls, ornamental gardens, ruined buildings and dead trees, that provide valuable habitats and are of importance for wild fauna and flora.

2.9.62 The wildlife corridors, stepping stones and *landscape* features are a vital part of the ecological network. Whilst it is important to protect and enhance *biodiversity* sites and species of importance dispersed throughout the County this cannot be achieved without protecting and enhancing the intervening habitats and spaces that provide crucial links between the designated sites.

2.9.63 The protection, management and enhancement of ecological networks is recognised as being particularly important for nature conservation. Wildlife corridors allow species to move between fragmented habitats, to recolonise areas and to move in response to *climate change* and development that may have destroyed part of their habitat. For example, the water vole, which is a priority species will not travel through unvegetated ground. If its habitat becomes isolated through development and then the colony within this isolated habitat become endangered, for example through disease, it is likely that it will not survive.

2.9.64 The Plan has been informed by an assessment of ecological connectivity across the whole of the County. This assessment maps the existing ecological connectivity network and also identifies locations where ecological connectivity has the potential to be enhanced. The latest version of the Swansea Ecological Connectivity Assessment will inform the implementation of this policy.

2.9.65 Providing ecological connectivity is an important ecosystem service of the *Green Infrastructure network* and its protection and/or enhancement accords with Policy ER 2 Strategic Green Infrastructure Network.

Appendix 6: References

Sources of Further Information

Biodiversity assessment

1. Association for Local Environmental Record Centres (ALERC) www.alerc.org.uk
2. BS42020: 2013 - British standard for Biodiversity – Code of Practice for Planning and development. (BSI, 2013)
3. BS 8683 Process for designing and implementing Biodiversity Net Gain – Specification https://standardsdevelopment.bsigroup.com/projects/2018-02413#/section
4. B£ST – Benefits Estimation Tool (SusDrain) www.susdrain.org/resources/best.html
5. BRE Home Quality Mark (Building Research Establishment, 2015) www.homequalitymark.com
6. Building with Nature – benchmark for people and nature *(Gloucestershire Wildlife Trust and University of the West of England, 2017)* www.buildingwithnature.org.uk
7. Demystifying Series – Valuing Nature Network https://valuing-nature.net/demystifying-series
8. Environmental Impact Assessment Guide to Shaping Quality Development (IEMA , 2015) www.iema.net/assets/uploads/iema_guidance_documents_eia_guide_to_shaping_quality_development_v7.pdf
9. Environmental Information Regulations, Information Commissioner's Office; https://ico.org.uk/for-organisations/guide-to-the-environmental-information-regulations
10. MAGIC: geographic information across Great Britain https://magic.defra.gov.uk
11. Natural Capital Planning Tool http://ncptool.com
12. National Biodiversity Network https://nbn.org.uk
13. Registered ecological consultants directory (CIEEM) https://events.cieem.net/RegisteredPracticeDirectory/Registered-Practice-Directory.aspx
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20. State of Natural Resources Report (SoNaRR) https://naturalresources.wales/evidence-and-data/research-and-reports/state-of-natural-resources-interim-report-2019/sonarr-2020/?lang=en
21. NRW South West Wales Area Statement https://naturalresources.wales/about-us/area-statements/south-west-wales-area-statement/?lang=en

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24. Green Infrastructure and Biodiversity. PERFECT Fact Sheet (TCPA, 2017) www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1526374606.pdf
25. Guidance on Biodiversity Net Gain (CIRIA / CIEEM / IEMA, 2016 & 2019) www.ciria.org/Resources/Biodiversity_Net_Gain.aspx
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32. Draft Swansea Central Area Green Infrastructure Strategy – Regenerating our City for Wellbeing and Wildlife
33. Local Nature Partnerships (LNPs) https://www.biodiversitywales.org.uk/Local-to-You
34. National Wildlife Crime Unit www.nwcu.police.uk
35. Partnership for Action Against Wildlife Crime (PAW) www.gov.uk/government/groups/partnership-for-action-against-wildlife-crime

Biodiversity and Sustainable Drainage

36. WG Statutory National Standards for Sustainable Drainage https://gov.wales/sites/default/files/publications/2019-06/statutory-national-standards-for-sustainable-drainage-systems.pdf
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42. Environment (Wales) Act (Welsh Government, 2016) https://gweddill.gov.wales/topics/environmentcountryside/consmanagement/natural-resources-management/environment-act/?lang=en
43. Environmental (Principles and Governance) Bill (2019/2020) (England and Wales)
44. Natural Environment and Rural Communities (NERC) Act (2006) www.legislation.gov.uk/ukpga/2006/16/contents
45. The Árhus Convention (UN Economic Commission for Europe, 1998) www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf
46. Wildlife and Countryside Act 1981 (as amended) www.legislation.gov.uk/ukpga/1981/69
47. Conservation of Habitats and Species Regulations (HM Government, 2017) www.legislation.gov.uk/uksi/2017/1012/contents/made
48. Planning Policy Wales (Edition 10) Section 6- https://gov.wales/planning-policy-wales

49. Swansea Public Service Board Local Well-being Plan https://www.swansea.gov.uk/localwellbeingplan
50. Swansea Corporate Plan https://www.swansea.gov.uk/media/35686/Corporate-Plan-2020-22/pdf/Corporate_Plan_2020-22.pdf
51. Swansea LDP https://swansea.gov.uk/ldp

Biodiversity advice

52. Bats, planning and the law. (Bat Conservation Trust) www.bats.org.uk/our-work/buildings-planning-and-development/building-or-development-works/planning-and-the-law
53. Biodiversity in Wales guidance, including S6 duty biodiversity guidance and the Action Plan for Pollinators www.biodiversitywales.org.uk
54. Planning naturally: Spatial planning with nature in mind (RSPB, CIEEM and RTPI, 2013) www.rspb.org.uk/globalassets/downloads/documents/positions/planning/planning-naturally---spatial-planning-with-mature-in-mind.pdf
55. Planning for green and prosperous communities. Guide 7 Practical Guides for Creating Successful New Communities. INTERREG project. (TCPA, 2018) www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1518622468.pdf
56. Species and habitats guidance. (JNCC, 2013) http://jncc.defra.gov.uk/page-6297

Organisations working to promote biodiversity at national and local levels

National policy makers
• Welsh Government
National statutory bodies
• Natural Resources Wales • National Wildlife Crime Unit (UK)

Professional ecological and environmental institutes
• Association of Local Government Ecologists (ALGE) • Chartered Institute for Environmental Ecology and Management (CIEEM) • Construction Industry Research and Information Association (CIRIA) • Institute for Environmental Management and Assessment (IEMA)
Data sources and managers
Local Data Sources • The Local Environment Records Centre (LERC) for Swansea is the South East Wales Biodiversity Records Centre ((SEWBReC) • The Wildlife Trust of South & West Wales • Swansea Local Nature Partnership • Natural Resources Wales • Swansea Council **UK National Sources** • MAGIC • National Biodiversity Network Atlas
Species and habitat conservation groups
• Amphibian and Reptile Conservation (ARC) Trust • Badger Trust • Bat Conservation Trust • Buglife • Bumblebee Conservation Trust • Butterfly Conservation • Mammal Society • Plantlife • Protected, Threatened and Endangered Species (PTES) trust • RSPB Cymru • RSPCA • The Conservation Volunteers (TCV) • The Rivers Trust • Wildfowl and Wetland Trust (WWT) • Woodland Trust • National Trust


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SUPPLEMENTARY PLANNING GUIDANCE

Trees, Hedgerows and Woodland on Development Sites

CONSULTATION DRAFT

JULY 2020

Preface

Comments are invited on this consultation draft Supplementary Planning Guidance (SPG). Details on how your comments can be submitted are available on the Council's website at **www.swansea.gov.uk/spg**

The SPG provides information and guidance notes to complement Swansea Local Development Plan (LDP) Policy

ER 11: Trees, Hedgerows and Development

Contents

1.0 Introduction

SPG Aims and Purpose

1.1 This *Supplementary Planning Guidance (SPG)* will be taken into account as a *material consideration* in the determination of planning applications. It has been produced to give basic information on how trees hedgerows and woodlands are dealt with in the planning system. The document provides clear and consistent guidance to applicants on the requirements of the Local Planning Authority (LPA) with respect to trees and development. For the avoidance of doubt, the guidance set out in this document relates to all trees, hedgerows and woodland, not just those which are protected.

1.2 The SPG sets out the steps that need to be considered at various planning and design stages, as well as during construction, to ensure that all significant existing and proposed trees are kept healthy and become an asset to a new development.

1.3 The **references to 'trees' hereafter in the document should be considered an overarching term**, which generally encompasses the following:

- **trees**
- **woodlands**
- **hedges and hedgerows**

The Importance of Trees in the Development Process

1.4 Trees provide habitat for protected species such as birds and bats that require consideration in the planning process and are protected by other legislation.

1.5 Trees are of vital importance to the landscape. It is now widely accepted that trees in and around towns and cities have a vital role to play in promoting sustainable communities and make a significant contribution to the cultural and heritage value in the context of a historic park, garden or designed landscape. Trees make a positive contribution to the scenic character, local distinctiveness and diversity of the landscape and are important in the creation of 'place', provide vital habitat for dependent wildlife populations and substantial environmental benefits such as improving quality of life, attenuation of noise, flood alleviation and improving the climate and air quality.

1.6 Trees can also help protect buildings from the elements, provide shade and assist in energy conservation. Trees can enhance the setting of new development, its character, sense of maturity and overall quality thus helping with the saleability and profitability of properties. Their positive effect on the environment also helps to attract businesses and visitors to an area, thereby boosting the economy.

1.7 In addition to legislative protection of trees and wildlife the public's awareness of environmental issues and the health benefits of being near or seeing trees is also increasing. Developers are therefore under increasing pressure to focus attention on trees and their role in providing a more pleasant and healthier environment.

Example of the retention of existing and the planting of new trees © getmapping.com

Retention of existing trees and new planting in the creation of 'Place'.

1.8 A tree may take a century to reach maturity but it can be damaged or felled in a few minutes. Such damage is frequently caused unwittingly because of a failure to appreciate the value and vulnerability of trees, particularly the root system, and how easily they can be damaged. Where trees are damaged during development of a site and subsequently decline and die, or where inappropriate or poor design leads to conflict, trees become a constant source of complaint and ultimately, any positive benefits are lost. **Early erection of tree and landscape protection measures to form construction exclusion zones before work commences on site is essential (see Chapter 6).**

2.0 Legislation and Policy Context

2.1 **Section 197 of the Town and Country Planning Act 1990** places a duty on local planning authorities to ensure, wherever it is appropriate, that **in granting planning permission for a development, adequate provision is made by the imposition of conditions, for the preservation or planting of trees.** If it appears to a local planning authority that it is expedient in the interests of amenity to make provision for the preservation of trees or woodlands, **Section 198 of the Act provides the power to make a Tree Preservation Order (TPO) for that purpose**. Under Section 211 of the Act, trees in conservation areas are subject to similar controls as trees to which a TPO applies.

2.2 This guide has been prepared in accordance with guidance contained in Planning Policy Wales (PPW)[1], Technical Advice Notes issued by Welsh Government and the Swansea Local Development Plan[2].

2.3 PPW sets out the ecological value of trees and their importance for biodiversity, ecological connectivity and climate change adaptation.

> *"Trees, woodlands, copses and hedgerows are of great importance for biodiversity. They are important connecting habitats for resilient ecological networks and make a valuable wider contribution to landscape character, sense of place, air quality, recreation and local climate moderation. They also play a vital role in tackling climate change by locking up carbon, and can provide shade and shelter, a sustainable energy source and building materials. The particular role, siting and design requirements of urban trees in providing health and well-being benefits to communities, now and in the future should be promoted as part of plan making and decision taking." (para 6.4.24).*
>
> *Planning authorities should protect trees, hedgerows or groups of trees or areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial and identified green infrastructure function. Planning authorities should consider the importance of native woodland and valued trees, and should have regard, where appropriate, to local authority trees strategies or relevant SPG. Permanent removal of woodland should only be permitted where it would achieve significant and clearly defined public benefits. Development will not normally be permitted which would result in the loss of Ancient woodland, Ancient woodland sites or Veteran trees which are an irreplaceable resource. Where woodland or*

[1] https://gov.wales/planning-policy-wales

[2] www.swansea.gov.uk/ldp

trees are removed as part of a proposed scheme, developers will be expected to provide compensatory planting. (Para 6.4.25)

2.4 The protection and planting of trees and hedgerows should be delivered where appropriate, through locally-specific strategies and policies, through imposing conditions when granting planning permission, and/or by making Tree Preservation Orders (TPOs). They should also be incorporated in GI Assessments/Plans, and where appropriate in PEA's.

2.5 **Technical Advice Note (TAN) 10: Tree Preservation Orders[3].** TAN 10 supplements PPW and states that under the Town and Country Planning Act 1990 (section 198) LPA's are empowered, in the interests of amenity, to protect trees and woodlands by making TPOs. As such, any tree or woodland that has a TPO attached to it is legally protected from cutting down, uprooting, topping, lopping, willful damage or destruction without consent from the LPA.

2.6 **TPOs** should be considered where provision should be made for the preservation of trees or woodlands in the interest of amenity (TAN10; para 14). TPOs should be made where the removal of trees and woodlands would have a significant impact on the environment and its enjoyment by the public. TPOs cannot be made on bushes, shrubs or hedgerows (however they can be made on trees within hedgerows).

2.7 **The Draft City and County of Swansea Protected Tree Policy**[4] details the approach of the Council in protecting trees and how the guidance in TAN 10 is interpreted.

2.8 **Swansea Local Development Plan (LDP) Policy ER 11** states:

"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.

Ancient Woodland, Ancient Woodlands Sites, Ancient and Veteran Trees merit specific protection and development will not normally be permitted that would result in:

i. Fragmentation or loss of Ancient Woodland;

ii. The loss of an Ancient or Veteran Tree;

iii. Ground damage, loss of understorey or ground disturbance to an area of Ancient Woodland or Ancient or Veteran Tree's root protection area;

iv. A reduction in the area of other semi natural habitats adjoining Ancient Woodland;

v. Significant alteration to the land use adjoining the Ancient Woodland;

vi. An increase in the likely exposure of Ancient

[3] https://gov.wales/technical-advice-note-tan-10-tree-preservation-orders

[4] Emerging – to be published on www.swansea.gov.uk

Woodland, Ancient or Veteran Tree to air, water or light pollution from the surrounding area;

vii. Alteration of the hydrology in a way that might impact on Ancient Woodland, Ancient and Veteran Trees;

viii. Destruction of important connecting habitats relating to Ancient Woodland;

ix. Destruction of Plantations on Ancient Woodland Sites (PAWS); and/or

x. Development in close proximity to Ancient Woodland and Ancient and Veteran Trees.

Where necessary, planning applications for development proposals on sites containing, or adjacent to, trees will be required to provide: a tree survey; an arboricultural impact assessment; an arboricultural method statement; 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 detail of planting and aftercare."

Other legislation

2.9 Trees may provide important habitat to protected species, particularly bats and birds. Applicants should refer to the guidance in the Biodiversity SPG to establish the impact that development affecting trees will have on protected species and any relevant surveys, assessments or associated licences or permits may be required before commencing any works to trees. Particular regard should be had to the presence of **Bats**, which are a European Protected Species under Schedule 2 of the Habitats Regulations and all wild birds, their nests and eggs which are protected under Schedule 1 of Wildlife and Countryside Act (1981) (as amended) by CROW Act 2000.

2.10 An ecological survey for protected species may be required where development:

- Is residential development within 200m of a woodland, or listed buildings within 50m of woodland, field hedgerows or lines of trees with connectivity to woodland or involves the **felling, removal or** lopping of:
  - woodland;
  - hedgerows and/or lines of trees with connectivity to woodland or water bodies ;
  - old and veteran trees that are older than 100 years;
  - mature trees with obvious holes, cracks or cavities (and also large dead trees).

3.0 Preventing Damage during Construction

3.1 In addition to the obvious parts of the tree (canopy, branches and stem), the hidden roots can also be damaged during construction. In general terms tree roots are found in the upper 600mm of soil, although root distribution can be deeper dependent on site conditions and tree species. They consist of structural roots which anchor the tree and a network of smaller roots that uptake water and nutrients.

3.2 **Maintaining soil structure.** An ideal soil for root growth and development contains about 50 percent pore space for water and air movement. Heavy construction equipment and/or repeated pedestrian movements can compact topsoil and subsoil dramatically reducing pore space. Compaction inhibits root growth, limits water penetration, and decreases oxygen needed for root survival (see Chapter 4).

3.3 **Maintaining a healthy root structure.** Digging, grading, and trenching associated with construction and underground utility installation can be very damaging to roots. A tree's root system can extend horizontally a distance one to three times greater than the height of a tree. Excavation in a tree's root protection area (RPA) can reduce tree vitality leading to premature death of the tree(s). Cutting roots close to the trunk can severely damage a tree and cause it to fail in high winds (see Chapter 4).

3.4 **Maintaining original soil levels**. The majority of fine water-and- mineral-absorbing roots are in the upper 15 to 30 cm of soil where oxygen and moisture levels tend to be best suited for growth. Even a few centimeters of soil piled over the root system to change the grade can smother fine roots and eventually lead to larger root death and the loss of trees.

3.5 **Avoiding root / soil contamination.** Spillages of fuels, construction chemicals or uncontrolled cement run off can change soil pH or poison tree roots.

3.6 **Avoiding physical impact**. Construction equipment can injure the above-ground portion of a tree by breaking branches, tearing the bark, and wounding the trunk. These injuries are permanent and, if extensive, can be fatal.

3.7 **Avoiding exposure.** Trees in a group grow as a community, protecting each other from the elements. Trees can grow tall with long, straight trunks and high canopies; removing neighbouring trees during construction exposes the remaining trees to increased sunlight and wind which may lead to sunscald or breakage of limbs and stems and potentially windthrow of remaining trees.

4.0 Incorporating Trees into Developments

4.1 **British Standard 5837:2012 - Trees in relation to design, demolition and construction**[5] **– Recommendations**, will be regarded as the overriding document detailing the standard and guidance for a balanced approach on deciding:

- Which trees are appropriate for retention;
- The effct of trees on design considerations; and
- The means of protecting these trees during development.

4.2 Variation from the guidance in BS5837:2012, will require justification on a site specific basis. If BS 5837 is updated during the life of this SPG, the new guidance will be adopted.

4.3 **Design Stage:** A tree survey in accordance with BS5837:2012, provides important information to enable decisions to be made about which trees should remain and consequently the location of development on a site. For this reason **a tree survey should be commissioned as early as possible in the process to inform the design.** Early arboricultural advice in some cases will also highlight if a scheme is viable or not.

4.4 When identifying trees for retention regard should be taken of their quality and condition, their potential for future growth, longevity and where applicable, their value as a group.

[5] **BS 5837:2012** Trees in relation to design, demolition & construction Recommendations

4.5 **Category A and B (BS5837:2012) – high and moderate quality trees will usually be expected to be incorporated into a layout.** Category C trees should be retained where the proposals do not require their removal.

4.6 Category C and U trees should be retained where they have significant biodiversity features and their retention will not be hazardous.

4.7 A **Tree Constraints Plan** should be prepared to show the root protection areas (RPAs) and canopy spreads of the trees. The RPA is the **minimum** area that a tree requires to ensure that it can continue to survive. **For a single stem tree this area is a circle with a radius of 12 x the stem diameter, measured 1.5m above ground level**. The RPA should be modified from a circle if the topography dictates or if there is an obstruction preventing root growth in a particular direction. Tree roots can extend further than this area and at times should be protected beyond it (See 4.9).

4.8 Any development, excavation or access within a RPA will not usually be permitted unless measures are taken to prevent damage to the tree(s) and agreed in writing by the LPA prior to commencement of the development.

4.9 During the design and planning stages various factors must be taken into account. This should include, but is not limited to, the following:

i. Tree Preservation Orders (TPOs) / conservation area protection,
ii. Their biodiversity value including protected species. (See PPW and Biodiversity SPG)
iii. The effects of development proposals on the amenity value of trees (post design).
iv. Below ground constraints: root distribution, suitable RPAs taking into account root morphology.
v. Above ground constraints: overbearing and large trees close to buildings/proposed development, shading to rooms and gardens, positions of infrastructural provisions that could impact upon, and be impacted by trees. Future growth of existing and proposed trees should also be taken into account. Design guidance to reduce solar shading can be sought from BRE "*Site layout planning for daylight and sunlight: a guide to good practice (BR 209)*"[6]
vi. Change in hydrology – decreasing available water or waterlogging
vii. Design should minimise conflicts between highways, streetlights, advertisement and signage, kerbs/haunching, hard surfacing, soft landscaping treatments and existing trees.
viii. Secured by design requirements and CCTV provision
ix. Mitigating conflicts between finished levels and existing trees.
x. Where the site is affected by shrinkable/ expandable clay soils, attention shall be given to the design of building foundations, walls and pavements such that they are sufficient to avoid future problems of movement exacerbated by tree roots of existing trees and new tree planting.
xi. Routing of any underground services. It is unacceptable for underground services to be routed through the RPAs of existing trees.
xii. Soakaways should not be installed close to trees as tree roots may exploit such areas and feeder drains may become blocked.
xiii. The principle of balancing tree, shrub and hedge removal with the quality of the proposed landscaping requires careful consideration at the outset and should not be considered as an afterthought. There is likely to be ongoing protection of any proposed tree planting by TPO to mitigate the loss of trees that may have been removed as part of the development process and in the creation of place. (See 8.6)
xiv. Wherever possible retained trees should be included in public areas rather than private gardens.
xv. Trees and hedgerows should not be landlocked between residential properties and fenced off into unmanaged areas.

[6] Site layout planning for daylight and sunlight: a guide to good practice (BR 209)' BRE. P. Littlefair

Ancient and Veteran Trees

4.10 Ancient trees are trees in their third or final stages of life for the given species and are 'old' in comparison to trees of the same species.

4.11 A Veteran Tree may not be old but because of its environment or life experiences has developed the valuable features of an ancient tree.

4.12 Both classifications of trees are less capable of surviving tree surgery or root disturbance. Ancient trees are of historic interest and a valuable part of our cultural heritage. Each individual tree is a survivor from the past and a relic of a former landscape. They are a living document of past management practices and ways of life, provide important ecosystem services and support important lichens, mosses, funghi and invertebrates. Britain has some 80% of Europe's 'ancient' trees. If veteran or ancient trees / woodland are identified on site they must be considered carefully in relation to a development proposal and every attempt must be made to integrate the tree into a development proposal from an early stage to secure its long-term survival and retention. Ideally ancient trees would be retained within public open space to minimise future pressure from residents requiring the removal of the tree from within their curtilage. Veteran and ancient trees are given special consideration in the LDP[4].

4.13 The RPA for ancient trees will be considered in favourable site conditions to be a circle with a radius 15 x the diameter of the stem at 1.5m from ground level (*Veteran Trees: A guide to good management*[7]). This is to take into account their intolerance of root disturbance.

4.14 Whilst the tree survey shall inform the design process and ultimately the site layout, the LPA recognises the competing needs of development and that trees are only one factor requiring consideration. However, certain trees, woodlands and hedgerows are of such importance and sensitivity as to prevent development

[7] Veteran Trees: A guide to good management'. Helen Read. (2000). All ancient / veteran tree books are available from www.woodlandtrust.org.uk as a free download.

occurring or substantially modify its design and layout.

4.15 Care shall also be taken to avoid misplaced tree retention; attempting to retain too many low quality trees, unsuitable trees or trees that are unlikely to survive the development process on a site may result in excessive pressure during and after the development work and subsequent demands for their removal. The end result may be a poor design with fewer trees or less suitable and sustainable tree cover than would be the case if careful planning and expert arboricultural and/or landscape advice had been employed from the outset.

4.16 Trees can impinge on many aspects of site development. Throughout the development process all members of the applicant's design team should give adequate consideration to the requirements of trees.

Even if trees are not present within the site, off site trees and areas for planting trees, where potentially affected, should be identified and plotted on the Tree Constraints Plan and protected from damage or compaction.[8] [9]

Hedgerows

4.17 Hedgerows on site should be assessed for their contribution to current and future amenity as well as 'historic importance', connectivity, biodiversity and contribution to navigation for protected species.

4.18 Hedgerows should undergo an assessment using the criteria set out in the Hedgerow Regulations 1997 to see if the hedgerow is 'important'.

4.19 The biodiversity that a hedgerow provides is also a key consideration. Further detail on how these matters should be considered is provided in separate SPG on **Biodiversity and Development** (available at www.swansea.gov.uk/spg).

[8] Planner's manual for ancient woodland and veteran trees: https://www.woodlandtrust.org.uk/publications/2019/06/planners-manual-for-ancient-woodland/

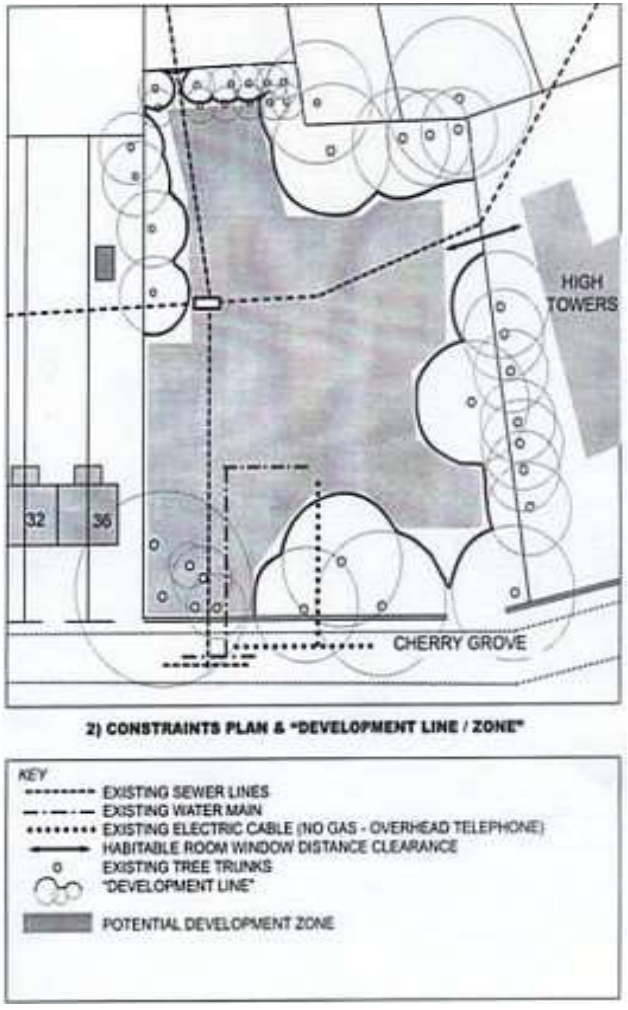
[9] Natural England standing advice: https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

5.0 Application Requirements

5.1 Whilst building works carried out as **permitted development** do not require any documentation to be submitted to the LPA, it will be generally in the best interests of a householder to consider trees using the guidance in this document. Permitted development rights do not allow damage to protected trees (including qualifying trees within a Conservation Area[10]) and a tree works application will be required if work is likely to affect protected trees. Construction will need to comply with building regulations and foundation design should follow guidance in NHBC Standards, Building near trees, (See 4.2)[11]

5.2 Trees on neighbouring land potentially affected by permitted development should also be considered as action can be taken under common law if damage causes the death of the tree or harm to the neighbouring people or property. (See also 4.11)

5.3 **For householder applications** (e.g. all works to a single dwelling, except house construction) all trees (stems and canopy spreads) and hedges on site or within influencing distance (i.e. off-site) should be accurately plotted on a block plan. Details of which trees are to be retained, removed and pruned should be shown.



5.4 The illustration in Figure 5.1 provides an example of a Householder Constraints Plan that highlights how the potential 'development zone' should be informed by an accurate appraisal of the constraints associated with trees and any other relevant issues on the site.

Figure 5.1 Example of Householder Constraints Plan

5.5 Where the block plan

[10] City and County of Swansea Draft Protected Tree Policy

[11] https://nhbc-standards.co.uk/4-foundations/4-2-building-near-trees/

shows a conflict between the proposals and trees then a more detailed Arboricultural Impact Assessment may be required after consultation with the Councils Arboriculturalist /Tree Officer. Submitting this at the outset may reduce delays in processing the application.

5.6 **For larger scale development** (e.g. new build, mineral workings and waste development proposals) where trees are on or within influencing distance (i.e. off-site) of the proposed development site, a land survey, a BS 5837 tree survey and an Arboricultural Impact Assessment is likely to be required.

5.7 A Tree Protection Plan, an Arboricultural Method Statement and/or a Landscape Plan may be required to demonstrate that development is feasible prior to approval.

5.8 An application for **outline permission** will normally only require a tree survey, however if the indicative layout or density shows development close to trees then an Arboricultural Impact Assessment is likely to be required / should also be submitted. This will evaluate future potential conflicts between the development and the final size of adjacent trees and hedgerows that are to remain. If the impacts are considered a threat to the trees then a Tree Protection Plan and an Arboricultural Method Statement may also be required.

	Householder Applications	Outline Applications	Full Applications
Trees & Hedges Plotted on Block and Site Layout Plans	✔	✓	✓
Indication of Services and Drainage	✳ (maybe required)	✳ (maybe required)	✔
Land Survey	✗	✔	✔
BS 5837 Tree Survey	✳ (maybe required)	✔	✔
Arboricultural Impact Assessment (AIA)	✳ (maybe required)	✔ (if impacts to trees are foreseeable)	✔
Tree Protection Plan (TPP)	✳ (maybe required)	✔ (maybe required to show development is feasible or will be a reserved matter)	✔ (can be conditioned)
Arboricultural Method Statement (AMS)	✳ (maybe required)	✔ (maybe required to show development is feasible or will be a reserved matter)	✔ (can be conditioned)
Preliminary Ecological Assessment	✔	✔	✔

Figure 5.2: Documentation required with different types of application.

6.0 Planning Conditions

6.1 A tree protection scheme is more likely to be successfully implemented if submitted and approved as part of the planning application.

6.2 Conditions will be attached to a planning permission to ensure that that the Root Protection Areas (RPAs) of retained trees are adequately fenced off for the duration of the demolition/construction phase of the development.

6.3 Developers will be required to notify the LPA prior to commencement of any works on site, including demolition or vegetation clearance. At this stage the Council Officers may inspect the measures that have been put in place to protect trees during construction. Ad-hoc visits will be made throughout the construction phase to check that tree protection measures are still in place. The LPA will exercise its powers of enforcement, where necessary, to ensure compliance.

6.4 The LPA will not only expect developers to obtain the appropriate professional advice during the application stage but may also attach a condition to ensure adequate supervision of the construction phase by the developer's own Arboriculturist.

6.5 If difficulties are experienced at any time during the construction process in complying with conditions relating to trees (e.g. in maintaining the distances of protective fencing in accordance with the Tree Protection Plan) and it is desired that the terms of any conditions be modified, it will be necessary to consult with and get written approval of the LPA prior to carrying out any changes.

6.6 **Failure to comply with Planning Conditions:** Where a breach of any tree protection related planning condition is identified, the LPA will take appropriate enforcement action. This may include serving a ‘Stop Work Notice’ on a construction site where a contravention has occurred, or the instigation of legal proceedings under Section 210 of The Town & Country Planning Act 1990.

7.0 Tree Protection Plan and Arboricultural Method Statement

7.1 **Tree protective fencing must be in place before any aspect of development starts** and maintained in this position throughout the lifetime of the development. The fencing must be in position prior to demolition, commencement of ground works, materials being brought onto site etc. The majority of damage to soil and trees on development sites occurs during these activities. If alternative fencing layouts are needed for the various stages of demolition and construction these must be detailed on the Tree Protection Plan with a clear definition between layouts and 'phases'. See figure 5.3.

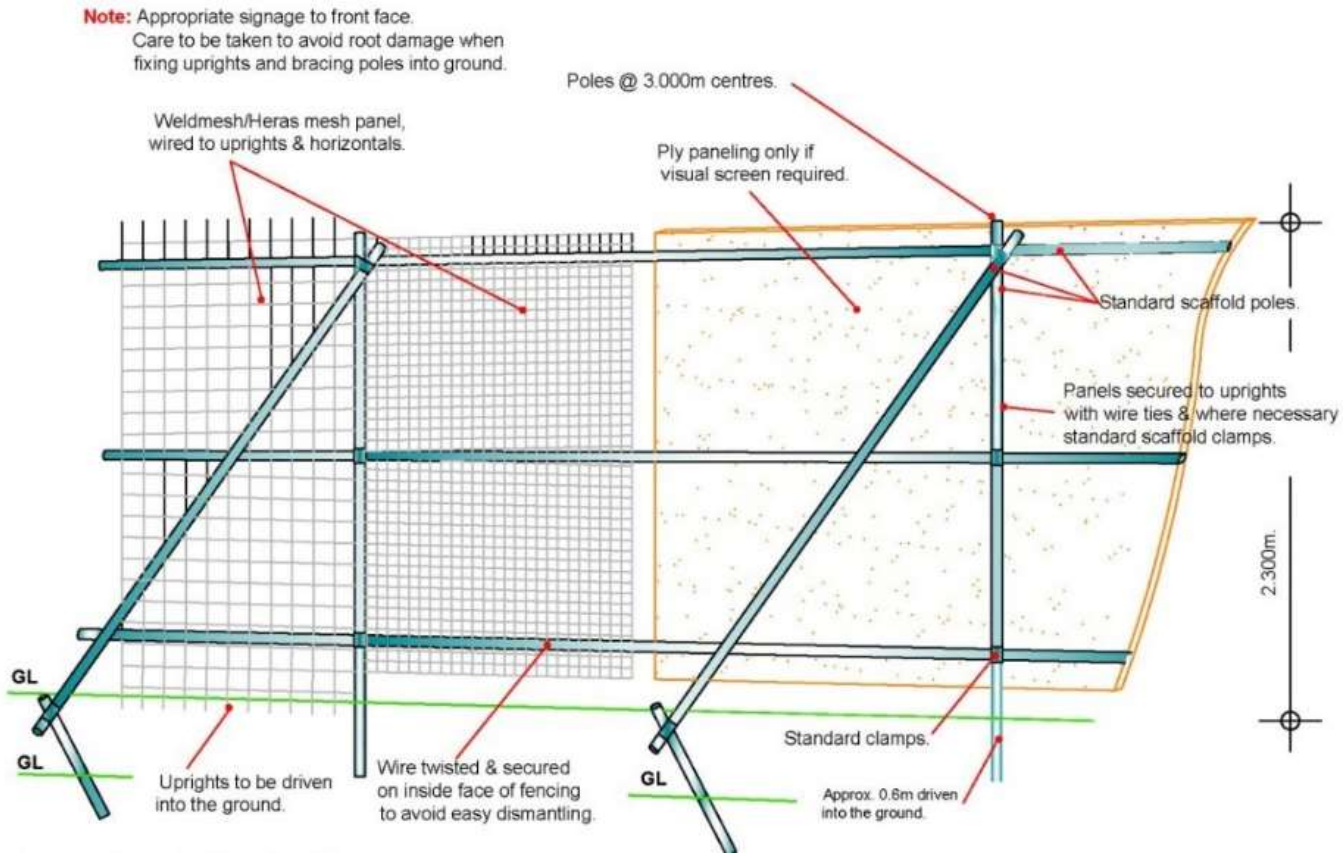


Figure 5.3 – Typical Detail: Tree Protection Fence to BS5837.

7.2 All operatives should be aware of all tree protection measures and a copy of the approved Tree Protection Plan, any Arboricultural Method Statements and a copy of the planning consent with conditions **should be available for inspection on the site.** The following simple rules **MUST** be adhered to throughout the demolition and construction phases of the development:

- Do not remove the protective fencing around a RPA for any reason without prior approval.
- Repair any damage to the protective fencing around a RPA immediately.
- Do not park or operate machinery and equipment near trees.
- Do not store materials within the RPA. Contaminants (fuel, oil and chemicals) must be stored at least 10m away from the protected area.
- Do not mix cement near trees (See also 7.6)
- Do not light fires within 10m of any tree and beware of flames drifting towards branches.
- Do not secure temporary overhead cables or floodlights to trees.
- Do not change the ground level or excavate within the branch spread of existing trees.

7.3 The purpose of the Tree Protection Plan is to provide the precise location and physical protection measures, including ground protection, for trees woodlands or hedges present on or immediately adjacent to the development site that are identified for retention and are likely to be affected either directly or indirectly by the development. The plan must be fit for purpose and have enough detail so that a contractor can install the measures.

7.4 The Tree Protection Plan shall take account of the RPA, areas of proposed structural landscaping, trees to be retained and removed and the precise location of protective barriers and their signage. Barriers shall be fit for the purpose of excluding construction activity and appropriate to the intensity and proximity of work taking place around trees selected for retention. In certain circumstances standard Heras, chestnut pale or orange barrier mesh fencing may be appropriate. However, deviation from the default British Standard will require justification;

7.5 **The Tree Protection Plan** shall give details of:

- The physical means of tree protection on site, indicated through drawings and/or descriptive text.
- The position of the tree protection fencing and any ground protection showing the actual position with dimensions from a fixed point.
- Dimensions of the exclusion zone and position and type of signage identifying them as an exclusion zone shall be noted on the Tree Protection Plan.
- The protective fencing requirements appropriate for the development should be identified within the Tree Protection Plan and approved in writing by the LPA prior to the commencement of work on site.
- Where approved work is detailed to occur within the RPA, details of the re-aligned position of fencing, along with specific ground protection details shall be supplied.
- The plan must be to a suitable scale, with a north point and scale bar.
- See sample plan at figure 5.4.

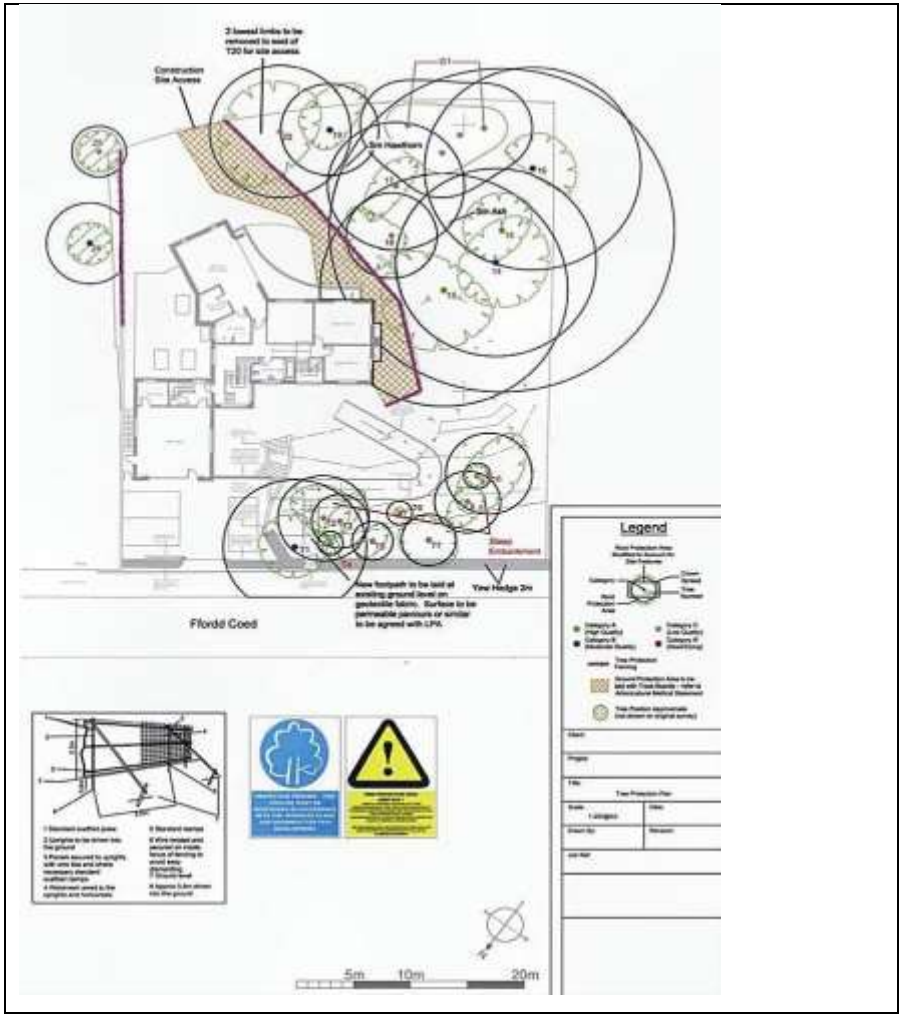


Figure 5.4 Sample Tree Protection Plan

7.6 An **Arboricultural Method Statement** shall describe construction operations to be undertaken in proximity to trees as highlighted in the arboricultural impact assessment. The Arboricultural Method Statement shall make allowance for, and plan, all construction operations to be undertaken in proximity to trees. This shall include, but is not limited to, the following aspects;

- Site construction access;
- The intensity and nature of the construction activity;
- Special engineering solutions (foundations etc.) to protect trees;
- Specification of no-dig surfacing details within tree RPAs and method statement;
- Method for approved excavation in RPA's;
- Contractors car parking and phasing of construction works;
- Space required for foundation excavations and construction works;
- The location and space required for any service runs, both underground and overhead, including: foul and surface water drains, land drains, soakaways, gas, oil, water, ground source heat systems, electricity, telephone, television or other communication cables;
- All changes in ground levels including the location of retaining walls and steps, making adequate allowance for the foundations of such structures, drainage and back filling;
- Space for cranes, plant, scaffolding and access during works;
- Space for site huts, temporary toilets (including their drainage) and other temporary structures;
- The type and extent of landscape works which will be needed within the protected area, and the affect these will have on the root systems
- Space for storage (whether temporary or long-term) materials, spoil and fuel and the mixing of cement and concrete (including storage);
- The effect of slope on the movement of potential harmful liquid spillages towards or into protected areas.
- Particular attention, where applicable, to be given to the height of storage of topsoils and subsoils that is to be reused and should be dealt with as per BS 3882:2015[12] and BS 8601:2013[13]
- Measures for dealing with Japanese Knotweed / Himalayan Balsam etc.
- Any proposed arboricultural watching brief to monitor and confirm the implementation and maintenance of tree protection measures.
- Tree surgery specification (in accordance with BS3998:2010 Tree work[14]– Recommendations)

[12] BS 3882:2015 - TC. Tracked Changes. Specification for topsoil.
[13] BS 8601:2013. Specification for subsoil and requirements for use.
[14] BS 3998:2010. Tree work. Recommendations.

- Method for mitigating any accidents or contravention of the Tree Protection Plan.
- Method for avoiding negative impacts on biodiversity

7.7 Note that excavation within the RPA of tree(s) will need justification and the guidance contained in the National Joint Utilities Group Volume 4: Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. Issue 2 (NJUG4) is not considered adequate where planning control applies.

7.8 On sites where site clearance prior to construction will be on a large scale the method for the protection of trees will be required to cover this phase of works.

8.0 Tree and Shrub Planting

8.1 Appropriate new tree, shrub and hedgerow planting, amongst other landscaping proposals, may be required on development sites to enhance amenity, mitigate for any loss of tree canopy cover and to provide a sense of 'place'. It may also be to mitigate for a loss of biodiversity due to tree felling.

8.2 Wherever possible large growing tree species should be planted in mitigation of loss of trees on site. The layout should consider replacement planting including large growing species as part of the design layout and not just an afterthought with trees chosen for any space left over.

8.3 Planting should be carried out in accordance with British Standard BS8545 *'Trees: from nursery to independence in the landscape – Recommendations'*[15].

8.4 The choice of trees to be planted should consider the layout and design of the site, future use, soil and climatic conditions, biodiversity, local landscape character and contextual surroundings. Sufficient space must be planned within the layout to allow trees to reach their mature size.

8.5 Planted trees should be of a species that at maturity achieve a size and form compatible with the scale and structure of the development.

8.6 Where tree planting is proposed within hard surfaced areas (e.g. parking areas and footpaths) details of the drainage / irrigation (where necessary) and size of planting pits must be sufficient to provide an adequate volume of soil to support the eventual size of the planted tree(s). (Further advice on tree rooting volumes can be found in the titles marked ✻in the Reference section.)

8.7 Layouts should consider how trees can be integrated into the development taking into account other factors such as Sustainable Drainage Systems (SuDS) and Green Infrastructure (GI) requirements. Guidance on tree integration can be found in *"Trees in the Townscape: A Guide for Decision Makers*" and be delivered using guidance in *"Trees in Hard Landscapes: A Guide for Delivery"*[16]

8.8 Where urban trees are proposed as part of a SUDs scheme, the specification of the tree pit (i.e. crate system, Stockholm pit etc) must be provided in the landscape plan. It is intended that the emerging GI SPG will provide further details on the role of trees in reducing surface water run off as part of green infrastructure provision.

[15] BS 8545:2014. Trees: from nursery to independence in the landscape. Recommendations.

[16] "Trees in the Townscape: A Guide for Decision Makers'. 2012. TDAG" and "'Trees in Hard Landscapes: A Guide for Delivery'. 2014. TDAG" Both TDAG books are available as a free download at http://www.tdag.org.uk

8.9 Further guidance on the role of Trees in relation to Green infrastructure and Biodiversity can be found in

Sustainable Drainage Systems - Maximising the Potential for people and wildlife. A Guide for Local Authorities and Developers. RSPB.

8.10 **Protection of trees after the development is complete.** Both newly planted trees and existing ones retained within a development should be cared for after the development is complete. Conditions will normally be placed on planning consents to ensure that if any new tree included in a landscaping scheme of a development becomes unhealthy, or dies within 5 years of the completion of the development (or other conditioned period of time for the replacement of tree and shrub failures), it will be replaced by a new tree of like species, similar in age and size to the tree to be removed and at the same location. After 5 years (or other conditioned period of time for the replacement of tree and shrub failures) have elapsed following the completion of the development the LPA may consider making TPOs on the trees protected previously by condition.

9.0 Professional Advice

9.1 It is important to ensure that decision making in relation to trees, hedgerows and woodland on development sites is done having regard to full understanding of the legal and planning requirements that apply. In some instances seeking professional advice will be necessary to inform the process.

9.2 **Fundamentally it is important to establish who you need to employ.** For example, is it a **Tree Consultant, Landscape Architect** or **Tree Surgeon / Contractor?**

- ***A Tree consultant*** will give professional advice on the health and/or safety of a tree; relationships with proposed or existing buildings and development sites or any other tree issue requiring a report.
- ***A suitably qualified, experienced and resourced Landscape Architect*** will give comprehensive advice on working with and the protection of the existing landscape, will design and 'make' great places and may give advice on existing tree issues. See links to the Landscape Institute (LI) in the Contacts page to see what a Landscape Architect can offer, the categories of membership of the LI and find a Practice with the skills and expertise you need.
- ***A qualified, competent and experienced tree surgeon / contractor*** will give a professional service including pruning, and removal and may give basic advice on tree condition and tree management operations as required.
- ***A suitably qualified ecologist***- if advice is needed on protected species

Please note that the LPA is unable to recommend who to employ but further guidance is set out below to help inform the process of identifying a suitable candidate.

9.3 **Tree Consultant.** A tree survey should be undertaken by a suitably qualified and experienced arboriculturist (as required by BS5837). All reports must specify the qualifications held by the arboriculturist and all surveyors. A professional providing this type of service **should hold Professional Indemnity Insurance** and one of the following qualifications or industry recognised standards:

- Certificate in Arboriculture level 3/4 (Tech Arbor A).
- Diploma in Arboriculture level 6 Dip Arb (RFS)
- BSc or MSc (Degree or Masters) in arboriculture.
- Professional Member or Fellow of the Institute of Chartered Foresters] attained by an arboricultural route / Chartered Arboriculturist (MICFor / FICFor)
- Fellow of the Arboricultural Association Arboricultural Association Registered Consultant

9.4 **Tree surgeon / contractor:** Picking the wrong contractor could lead to:

- Injury to people,
- Damage to property,
- Irrevocable damage to trees that have taken many years to grow.

Tree work operations (arboriculture) require a high degree of technical competence, supported by training and experience. For these reasons tree work should only be undertaken by well trained, suitably resourced, competent contractors who hold adequate insurance.

Look for:

- Employers Liability and Public Liability Insurance (recommended min £5 million)
- NPTC Certificates of Competence
- Written quotations
- Membership of a professional organisation. (Membership does not guarantee work standards but does show a degree of commitment)
- References for similar work

9.5 **An arboriculturist** (e.g. an arboricultural Consultant) can help you prepare the necessary documentation required by the LPA in support of a planning application.

10.0 References

1. **Planning Policy Wales** (Edition 10)
2. **City and County of Swansea Local Development Plan**. Adopted February 2019.
3. **Technical Advice Note (TAN) 10**: Tree Preservation Orders (1997)
4. City and County of Swansea Draft Protected Tree Policy
5. British Standard BS5837:2012 Trees in relation to design, demolition and construction – Recommendations
6. Site layout planning for daylight and sunlight: a guide to good practice (BR 209)' BRE. P. Littlefair.
7. Veteran Trees: A guide to good management'. Helen Read. (2000). All ancient / veteran tree books are available from www.woodlandtrust.org.uk as a free download.
8. Planner's manual for ancient woodland and veteran trees:https://www.woodlandtrust.org.uk/publications/2019/06/planners-manual-for-ancient-woodland/
9. Natural England standing advice: https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences
10. draft tree strategy
11. NHBC Standards, Chapter 4.2, Building Near Trees https://nhbc-standards.co.uk/4-foundations/4-2-building-near-trees/
12. British Standard BS3882:2015 Specification for topsoil
13.
14. British Standard BS8601:2013 Specification for subsoil and requirements for use
15. British Standard BS3998:2010 Tree Work – Recommendations
16. British Standard BS8545:2014 Trees: from nursery to independence in the landscape – Recommendations
17. Trees in the Townscape: A Guide for Decision Makers'. 2012. TDAG; Trees in Hard Landscapes: A Guide for Delivery'. 2014. TDAG. Both TDAG books are available as a free download at http://www.tdag.org.uk

Further references

- 'Tree Roots in the Built Environment'. (2006). Department for Communities and Local Government (DCLG)
- 'Up by Roots' - Healthy Soils and Trees in the Built Environment. James Urban. (ISA) (2008).
- 'Urban Trees: A Practical Management Guide'. Steve Cox. (2011)
- 'Ancient Tree Guides No. 3: Trees and Development.'
- 'Ancient and other veteran trees: further guidance on management'. Lonsdale (2013)
- Sustainable Drainage Systems - Maximising the Potential for people and wildlife. A Guide for Local Authorities and Developers. RSPB.

11.0 Appendices

Useful Contact Information

- **Arboricultural Association (AA)**
  The Malthouse, Stroud Green, Standish, Stonehouse, Gloucestershire, G40 3DL
  Tel: 01242 522152
  Email: admin@trees.org.uk
  Web: www.trees.org.uk
  Advice on trees and produces an annual directory of AA Registered Consultants

- **Consulting Arborist Society (CAS)**
  Email: chairman@consultingarboristsociety.co.uk
  Web: www.consultingarboristsociety.co.uk
  Provides a list of CAS approved arboriculturalists

- **British Standards Institute**
  Customer Services, 389 Chiswick High Road,W4 4AL
  Tel: 020 8996 9001
  Email: cservices@bsigroup.com
  Web: www.bsi-global.com
  Provision of British Standards

- **Chartered Institute of Ecology and Environmental Management (CIEEM)**
  43 Southgate Street, Winchester. SO23 9EH
  Tel: +44 (0)1962 868626
  Web: https://cieem.net
  Advice/guidance on ecological surveys and appt of qualified ecologists/ecological consultants.

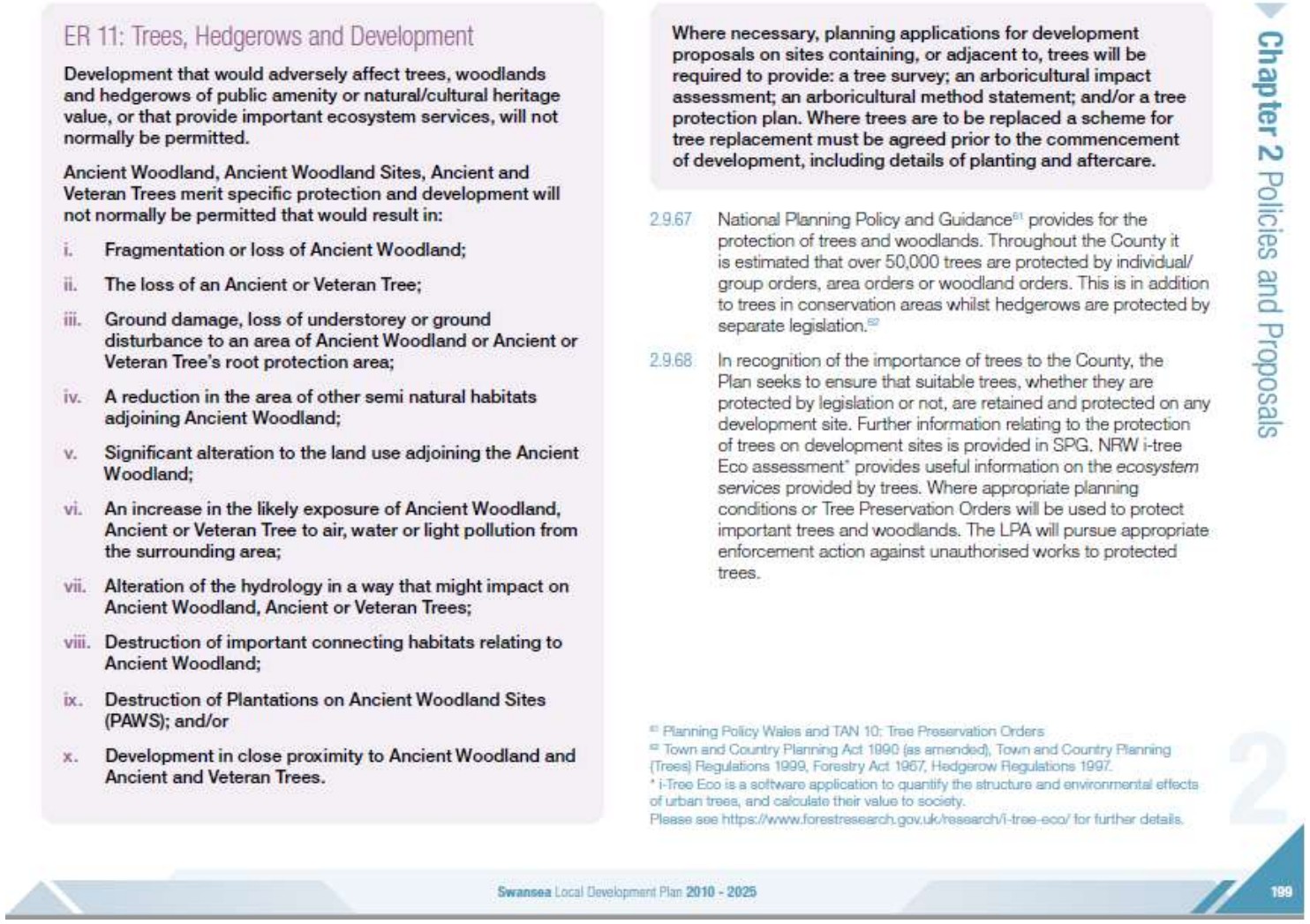
- **Landscape Institute (LI)**
  107 Grays Inn Road, London, WC1X 8TX
  Tel: 020 7685 2640
  Web: http://www.landscapeinstitute.org
  See what a Landscape Architect can offer and find a practice with the skills and expertise you need

- **Arboricultural Advisory & Information Service**
  Alice Holt Lodge, Wrecclesham, Farnham, Surrey, GU10 4LH
  Tel: 09065 161147 (Premium Rate) or
  Administration: 01420 22022
  Email: admin@treehelp.info
  Web: www.treehelp.info/
  Advice and guidance on tree care and issues related to trees on development sites

- **Planning and City Regeneration**
  City and County of Swansea Council, Civic Centre, Oystermouth Road, Swansea, SA1 3SN
  Tel: 01792 636000
  Email: planning@swansea.gov.uk or protectedtrees@swansea.gov.uk
  Web: www.swansea.gov.uk

- **Natural Resources Wales**
  Tel: 0300 065 3000
  Email enquiries@naturalresourceswales.gov.uk

LDP Policy Extracts



ER 11: 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.

Ancient Woodland, Ancient Woodland Sites, Ancient and Veteran Trees merit specific protection and development will not normally be permitted that would result in:

i. **Fragmentation or loss of Ancient Woodland;**

ii. **The loss of an Ancient or Veteran Tree;**

iii. **Ground damage, loss of understorey or ground disturbance to an area of Ancient Woodland or Ancient or Veteran Tree's root protection area;**

iv. **A reduction in the area of other semi natural habitats adjoining Ancient Woodland;**

v. **Significant alteration to the land use adjoining the Ancient Woodland;**

vi. **An increase in the likely exposure of Ancient Woodland, Ancient or Veteran Tree to air, water or light pollution from the surrounding area;**

vii. **Alteration of the hydrology in a way that might impact on Ancient Woodland, Ancient or Veteran Trees;**

viii. **Destruction of important connecting habitats relating to Ancient Woodland;**

ix. **Destruction of Plantations on Ancient Woodland Sites (PAWS); and/or**

x. **Development in close proximity to Ancient Woodland and Ancient and Veteran Trees.**

Where necessary, planning applications for development proposals on sites containing, or adjacent to, trees will be required to provide: a tree survey; an arboricultural impact assessment; an arboricultural method statement; 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.

2.9.67 National Planning Policy and Guidance[61] provides for the protection of trees and woodlands. Throughout the County it is estimated that over 50,000 trees are protected by individual/ group orders, area orders or woodland orders. This is in addition to trees in conservation areas whilst hedgerows are protected by separate legislation.[62]

2.9.68 In recognition of the importance of trees to the County, the Plan seeks to ensure that suitable trees, whether they are protected by legislation or not, are retained and protected on any development site. Further information relating to the protection of trees on development sites is provided in SPG. NRW i-tree Eco assessment* provides useful information on the *ecosystem services* provided by trees. Where appropriate planning conditions or Tree Preservation Orders will be used to protect important trees and woodlands. The LPA will pursue appropriate enforcement action against unauthorised works to protected trees.

[61] Planning Policy Wales and TAN 10: Tree Preservation Orders
[62] Town and Country Planning Act 1990 (as amended), Town and Country Planning (Trees) Regulations 1999, Forestry Act 1967, Hedgerow Regulations 1997.
* i-Tree Eco is a software application to quantify the structure and environmental effects of urban trees, and calculate their value to society.
Please see https://www.forestresearch.gov.uk/research/i-tree-eco/ for further details.

Chapter 2 Policies and Proposals

Swansea Local Development Plan 2010 - 2025

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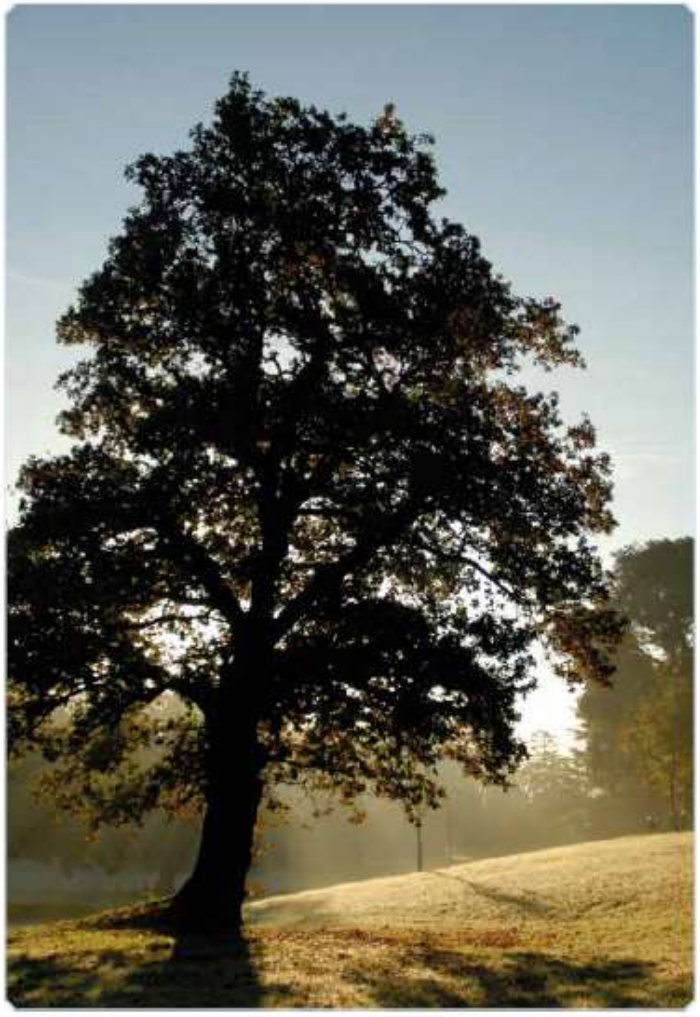

2.9.69 The circumstances in which further information in support of a planning application will be required are outlined in the policy. This information must be in accordance with the current British Standard BS5837 and have regard to the long term impact of the proposed development on the trees as they grow and wherever possible seek to avoid future conflict, such as that caused by over-hanging branches, shading and dominance.

2.9.70 Planning Permission will normally only be granted where the trees on the site are fully protected in the long term, or appropriate replacement trees will be planted when the removal of a tree or trees is unavoidable. The removal of trees would only be acceptable where there is no other alternative location for the development; and the need for and benefits from the development outweighs the importance of the tree or trees.

2.9.71 Replacement trees will be planted in accordance with British Standard BS8545. Tree Preservation Orders (TPOs) will normally be placed on the replacement trees.

2.9.72 Planning Conditions, Article 4 Directions and/or *Planning Obligations* will be used to secure any necessary mitigation/ compensation/enhancement measures in relation to trees and development proposals.

2.9.73 New tree or mitigation planting should be designed to achieve maturity and to ensure that there is an ongoing contribution to amenity with negligible negative impacts. New *landscape* schemes should follow the principles set out in "Trees in the Townscape: A Guide for Decision Makers"* and be delivered using guidance in "Trees in Hard Landscapes: A Guide for Delivery".*

* Trees in Hard Landscapes: A Guide for Delivery. Trees and Design Action Group (2014).

2.9.74 *Ancient woodland* is defined as land that has had a continuous woodland cover since accurate maps were first produced. It is a valuable and irreplaceable resource, having been present in the *landscape* over some time. *Ancient woodland* is rich in wildlife and more likely to support protected and priority species and to contain special features of importance for *biodiversity*. It is also more likely to contain features of historical and archaeological importance. Their rarity and importance means that these areas should be protected. Direct loss of *Ancient Woodland* must be avoided. A minimum buffer of 15 metres should be provided between *Ancient Woodland* and most forms of development.[63] This is necessary to provide essential root and understorey protection (as required in BS5837:2012) and to protect the important *Ancient Woodland* habitat from indirect damage, such as trampling, fly-tipping, encroachment of invasive features and vegetation clearance resulting from the new development. Ideally, the buffer should be planted with woodland edge species or left as natural grass to increase or maintain ecological connectivity and create a transitional habitat i.e. *ecotone*, providing resilience for this sensitive and highly valued habitat. Where possible, opportunities should be taken to restore plantations on *Ancient Woodland* sites to native tree cover. Plantations on Ancient Woodlands (PAWS) are sites believed to have been continuously wooded for over 400 years, but currently have a canopy cover of at least 50% non-native conifer tree species. Critically, such areas support *Ancient Woodland* soil systems and have the potential to be restored to an *Ancient Woodland* habitat.

2.9.75 All areas of *Ancient Woodland* known at the time of the Plan's preparation are shown on the Constraints and Issues Map. However this is only a provisional list and all development sites that support woodland will need to be assessed for *Ancient Woodland* status. NRW will be consulted on any proposals that may give rise to potentially damaging operations.

2.9.76 An *Ancient Tree* is one that has passed beyond maturity and is old or aged. A *Veteran Tree* may not be old but because of its environment or life experiences has developed the valuable features of an *Ancient Tree*. *Ancient* and *veteran trees* are of prime importance because of their rarity and function within an ecosystem. Individual Ancient and *veteran trees* often have local or national significance, due to their age, size or condition. They are also of importance to sustain a range of nationally and internationally *protected species*. In order to provide the necessary protection a buffer of 15x the diameter of the stem of ancient and *veteran trees* when measuring at 1.5m from ground level will be required for most forms of development, as endorsed by the Arboricultural Association.[64]

2.9.77 There is currently no comprehensive inventory of ancient and *veteran trees* within Wales. The required tree survey in support of development proposals will detail whether a site contains or is adjacent to any trees which could be considered to be Ancient or Veteran.

[63] The Woodland Trust Planner's Manual for Ancient Woodland and Veteran Trees – Woodland Trust 2017.

[64] Ancient and other Veteran Trees: Further Guidance and management by D. Lonsdale (2013).