



Ecological Impact Assessment



Princess Yachts
Newport Street
Stonehouse
Plymouth
PL1 3QG

Grid reference: SX46203 54284

January 2024

Version: 1.0

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1. Contract Details

Ecological Impact Assessment	
Grid Reference:	SX4620354284
Client:	Princess Yachts
Architect/Planning Consultant:	Bailey Partnership
Date of Survey(s):	08/12/2023 (Extended Phase 1 Habitat Survey)
Date of Report:	05/01/2024
Report Reference:	EcIA_PrincessYachtsStonehouse_PrincessYachts_Jan2024
Associated Reports Reference:	NA
Workflow Number	PEA2023554
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Revision no:	01
Issue date:	January 2024
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Company Registration Number:	Incorporated in England and Wales- No: 08262426.
VAT Registration Number:	224 3182 38

Declaration of Compliance

BS 42020:2013

This study has been undertaken in accordance with British Standard 42020:2013 Biodiversity, Code of practice for planning and development, unless specifically stated otherwise.

Code of Professional Conduct

The information which we have prepared is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Validity of Survey Data and Report

The findings of this report are valid for 12 months from the date of survey, unless the site has been maintained in exactly the same condition, in which case the report can be considered valid for 24 months. Please be aware that some Local Planning Authorities (LPAs)

require an update once 12 months has elapsed. If work has not commenced within this period, an updated survey by a suitably qualified ecologist may be required.

Legal and Moral Constraints and Responsibilities Summary

An overview of relevant legislation and responsibility is given within the Appendices: Planning Policy and Legislation. Constraints exist for development where specific habitats or species are, or are potentially, within or adjoining a site proposed for development. Therefore, avoidance, mitigation, compensation and enhancement for a site will apply. In all instances where Mitigation is given, also refer to:

- Any further survey work for protected species (Phase 2 Surveys) recommended, or their results.
- General Good Practice during Construction Stage.
- Law and Legislation pertaining to specific species (plants and animals)
- Prevention of the spread of native and non-native invasive plants and animals.
- Avoidance of Wildlife Crime <http://www.nwcu.police.uk/>

Further advice if species are found onsite during development may be sought from Ecological Surveys Ltd (Tel: 01503 240846 or 07736 458609) or Natural England.

What is an Ecological Impact Assessment (EcIA)?

Ecological Impact Assessment (EcIA) is the term used to describe the 'process of identifying, quantifying and evaluating potential effects of development-related or other proposed actions on habitats, species and ecosystems. The findings of an assessment can help competent authorities understand ecological issues when determining applications for consent. EcIA can be used for the appraisal of projects of any scale including the ecological component of Environmental Impact Assessment (EIA).' (CIEEM, 2016).

The key objectives of an EcIA are:

- To identify and describe all potentially Important Ecological Features, including designated sites, priority habitats and legally protected and notable species.
- To identify and assess all potentially significant ecological effects associated with the proposed development.
- To provide advice and recommendations to avoid or minimise any adverse effects and consider compensation measures if required.
- To identify mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects.
- To identify and assess the significance of any residual effects.
- To identify appropriate biodiversity enhancement measures and opportunities to increase the diversity of habitats and species on site and to achieve biodiversity gain.
- To identify the requirements for monitoring.

2. Non-technical Summary

Proposed development:	Demolition of existing structures and replacement with open area for staff with seating and planters. Also repairs and reinstatement of the sea wall alongside.
Purpose of the report:	To present the results of the Extended Phase 1 Habitat Survey and any additional Phase 2 Surveys undertaken at Princess Yachts, Newport Street, Stonehouse, Plymouth, PL1 3QG, hereafter referred to as 'the Site'; assess the impacts of the proposed development on the Important Ecological Features identified; and detail applicable compensation, mitigation measures and biodiversity enhancements, along with monitoring details, as appropriate.

List of Surveys undertaken	- Extended Phase 1 Habitat Survey
Further Survey Work	- None required.
Further Assessment	- None required.
Habitats Regulations Assessment (HRA) likely?	<p>It is considered possible that the local planning authority (LPA) will request an HRA and we advise urgent consultation with the LPA to clarify this requirement.</p> <p>NB The works include repairs to the sea wall alongside Stonehouse Creek, approximately 570m upstream of Plymouth Sound and Estuaries Special Area of Conservation (SAC).</p>
Important Ecological Features (IEFs)	The presence of an IEF on site, or in a location which could potentially be impacted by the development or post development activities will need to be mitigated for.
IEF Designated sites	<p>Onsite:</p> <ul style="list-style-type: none"> - Plymouth Biodiversity Network Site <p>Offsite:</p> <ul style="list-style-type: none"> - Plymouth Sound and Estuaries Special Area of Conservation (SAC)
IEF Habitats	<p>Onsite:</p> <ul style="list-style-type: none"> - Structure 2: potential for nesting birds <p>Offsite:</p>

<p>IEF Species</p>	<ul style="list-style-type: none"> - Mudflats: Habitat of Principal Importance (HPI) within 50m of the proposed development site <p>Onsite:</p> <ul style="list-style-type: none"> - Nesting birds: potentially using Structure 2 <p>Offsite:</p> <ul style="list-style-type: none"> - None
<p>Invasive Non-native Species (Schedule 9 species) If present, you have a legal obligation to avoid spreading these plants into the wider environment</p>	<ul style="list-style-type: none"> - On site: None - In the immediate vicinity: None
<p>Key Impacts of Proposed Development on IEFs</p>	<ul style="list-style-type: none"> - Loss of habitats - Degradation/damage/modification of habitats - Loss of species - Incidental mortality or injury of species - Disturbance of species
<p>Avoidance Measures</p>	<p>You must avoid impacts to the following habitats:</p> <ul style="list-style-type: none"> - Mudflats HPI
<p>Mitigation Measures</p>	<ul style="list-style-type: none"> - Pollution prevention/control measures including demolition screening to prevent any dust and particulates entering the river/estuary - Risk Assessment Method Statements detailing methods to be used to prevent contamination of the River Tamar and Stonehouse Creek, particularly during the repairs to the sea wall - Demolition of structure 2 undertaken outside of bird nesting season i.e. undertaken between October and February inclusive or checking of structure for nesting birds immediately prior to its demolition
<p>Enhancement Measures The LPA have an obligation to ensure that all developments result in a 'net biodiversity gain'. Consequently, even if there are no perceived negative biodiversity impacts, you will still have to provide some</p>	<ul style="list-style-type: none"> - Placement of five planters with shrubs and herbaceous plants - Inclusion of solitary bee bricks into new walls

form of biodiversity enhancement.	
Monitoring Measures	- Monitoring of all avoidance, mitigation and enhancement measures set out above during the pre-construction/groundworks and construction phases of the proposed development by an Ecological Clerk of Works / suitably experienced ecologist.
Biodiversity Auditing and Accounting (Statutory Small Sites Metric)	- Habitat Biodiversity Units net change: +0.0015 (representing a gain of 1.17%). A further 0.0117 habitat biodiversity units are required to achieve the minimum 10% net gain
Landscape and Ecological Management Plan (LEMP) A LEMP clarifies the timings and process which must be followed to ensure the biodiversity protection and enhancement of the site, during and post-development, as well as landscape considerations.	- A Landscape and Ecological Management Plan is not considered necessary for the proposed development at this site.
Important Advisory	Ensure all onsite contractors/personnel are familiar with this report (and any Phase 2 reports associated with this site) and able to act upon the law and legislation governing protection of species and habitats onsite and mitigation specifically pertaining to this site. Should protected species be discovered on site, all works in the vicinity must cease immediately and ecological advice sought urgently.
Other relevant information / advice	The LPA should ensure that any mitigation and compensation measures identified in this report, together with enhancement and monitoring recommendations are either 'conditioned' where appropriate, or that full permission is withheld pending the agreement of mitigation, compensation (where necessary) and enhancement measures.

Any works which negatively impact the biodiversity of this site, post the results of this ecological survey being received verbally, or in writing, could constitute a Wildlife Crime (refer to Appendix D; <http://www.nwcu.police.uk/>).

3. Introduction

Ecological Surveys Ltd were commissioned to undertake an Ecological Impact Assessment (EcIA) in support of a planning application for the re-development of an area relating to Princess Yachts, Newport Street, Stonehouse, Plymouth in Devon, hereafter known as 'the application site' or 'the site'. This report presents information concerning the ecological conditions on site and the potential nature conservation issues associated with the proposed development of the site. It sets out mitigation measures and enhancements for biodiversity, as well as required monitoring.

This EcIA report includes a desk-based study, with information sought from Devon Biodiversity Records Centre and from the Defra MAGiC website, followed by a field survey (an Extended Phase 1 Habitat Survey) undertaken by a suitably qualified ecologist on 8 December 2023.

Results of both the desk-based study and all the field surveys were analysed in conjunction with the proposed development plans, and the mitigation hierarchy applied. Mitigation measures and biodiversity enhancements were then identified and set out.

Ecological Surveys Ltd were commissioned to appraise the ecological baseline status of the application site and identify any potential significant ecological impacts associated with development of the site. This report does not address any other potential environmental impacts that may result from the proposed development.

Details of the proposed development, including an outline design, were provided by the client before any survey work was undertaken. Ecological Surveys Ltd was not informed of previous surveys undertaken on this site.

It should be recognised that ecology is temporally and spatially variable and the findings of this report are based on observations made and data available at the time of the surveys. Further survey work will be required if a period of one year passes prior to the commencement of site operations, to ensure compliance with statutory legal responsibilities. The survey and assessment were based upon the brief and development plans presented at the time of the survey (8 December 2023). The assessment will require re-assessment if there are any changes to the proposed plans, including boundary changes; location of buildings; planting schemes; changes of use etc. to ensure that it is fit for purpose within the planning process.

This Ecological Impact Assessment follows the guidance and standards set out in:

- *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition* (CIEEM, 2016);
- *Guidelines for Ecological Report Writing* (CIEEM, 2017);
- *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed.), 2023);
- *Biodiversity – Code of practice for planning and development. BS 42020:2013* (The British Standards Institution, 2013);
- *Biodiversity Net Gain: Good practice principles for development. Part A: A practical*

guide (Baker, J *et al*, 2019a);

- *Good Practice Requirements for Delivering Biodiversity Net Gain (On- and Off-site). July 2021* (CIEEM, 2021).

It is the responsibility of the client/developer to ensure they familiarise themselves with and comply with any law and/or legislation relating to this survey's findings and recommendations. An overview of planning policy and regulation relating to this survey may be found within Appendix C of this report but is by no means comprehensive. Contractors and visitors to the proposed site should always refer to the law and legislation pertaining to protected species and proceed mindfully.

3.1 Site description

The Site is located in the Stonehouse area of Plymouth in Devon adjacent to Stonehouse Creek within the Tamar Estuary. It comprises a number of fabricated metal buildings, lifting apparatus and a section of quay, and occupies approximately 0.13ha (see Figure 3.1). Light industrial buildings lie to the east, south and west, with Stonehouse Creek, part of the Tamar Estuary, to the north.

The Site is level and is dominated by buildings and sealed surface.



Overview of site, looking north-west

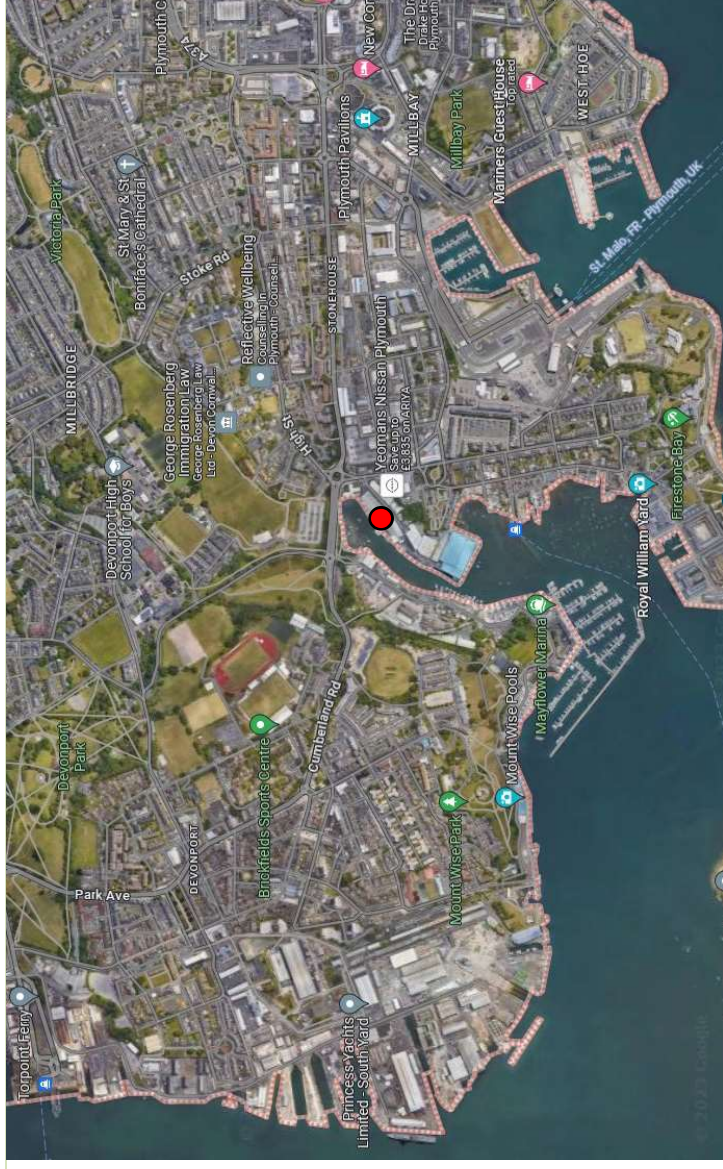


Sea wall requiring repairs/reinstating

3.2 Proposed Development

The proposed development on site comprises the demolition of existing structures and replacement with open area for staff with seating and planters. There will also be repairs to and reinstatement of the sea wall forming the Site's northern boundary. The proposed works and site layout are given in Figure 3.2.

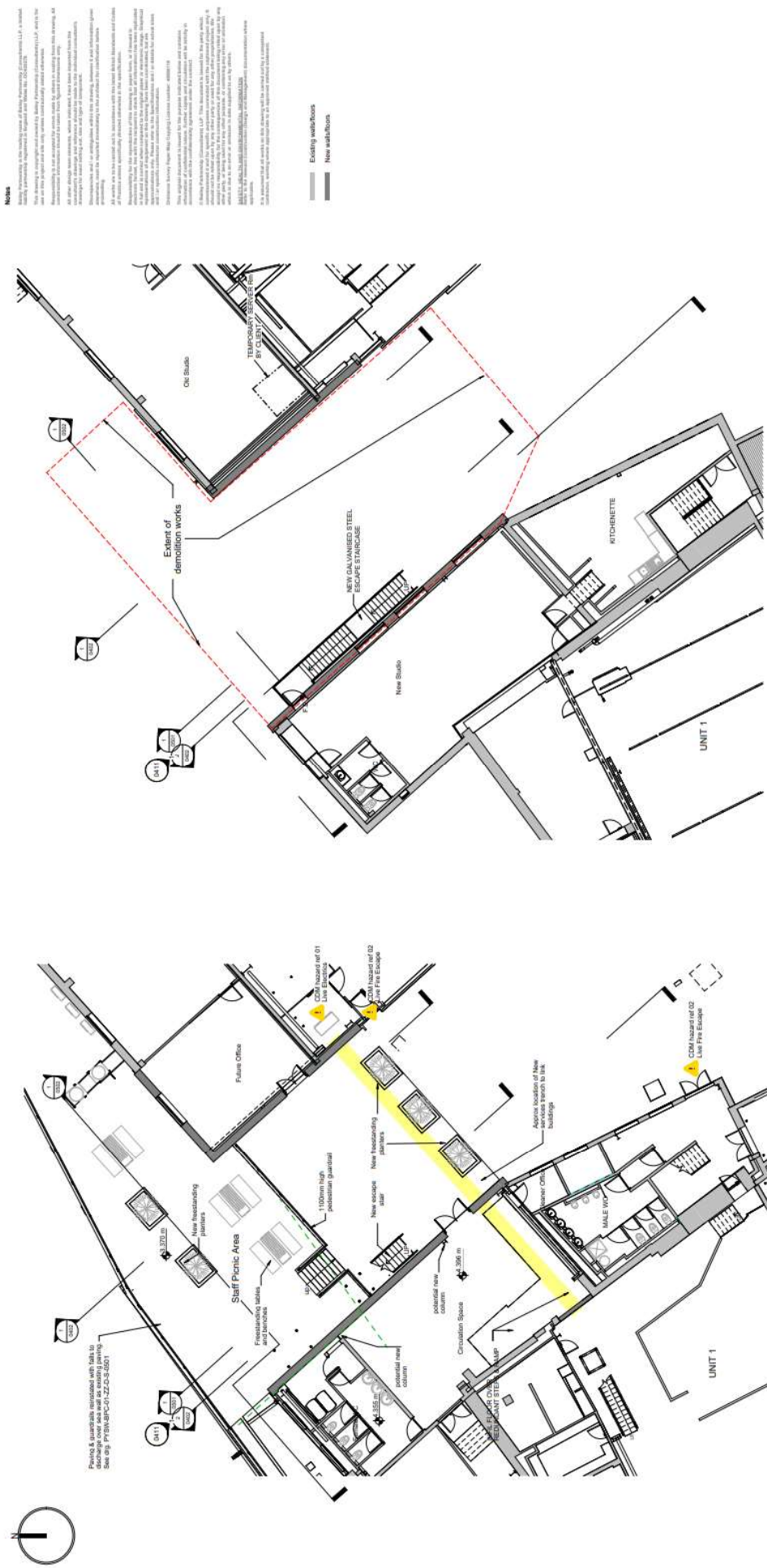
Figure 3.1. Location of development



Location of site

Position of site (●) within the wider landscape

Figure 32. Layout of proposed development



1 | Level 01A Ground Floor Remedial Works
SCALE: 1:100

2 | Level 02B First Floor Remedial Works
SCALE: 1:100

Walls:
Trapezoidal profiled metal sheet cladding to match existing cladding. Colour: Colourcoat HP2000 Plastisol protective coating. Colour: Coosexams Grey to match existing cladding. Colour of all flashings and trims to match existing.

Roof:
Trapezoidal profiled metal sheet roofing to match existing with Colourcoat HP2000 Plastisol protective coating, colour light grey to match existing.

External personnel Doors:
Insulated galvanised steel with polyester powder protective coatings, colour: Red as existing. Vision panels as shown on elevations.

Windows:
Aluminium double glazed fixed and opening windows with polyester powder coating finish, colour white.

Escape stairs:
Galvanised steel, marine grade

Legend Proposed Materials
SCALE: 1:100

Notes:
1. All works shall be in accordance with the Building Regulations 2010 and the Building Regulations 2014.
2. All works shall be in accordance with the Building Regulations 2010 and the Building Regulations 2014.
3. All works shall be in accordance with the Building Regulations 2010 and the Building Regulations 2014.
4. All works shall be in accordance with the Building Regulations 2010 and the Building Regulations 2014.
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10. All works shall be in accordance with the Building Regulations 2010 and the Building Regulations 2014.

bailey partnership
Princess Yachts

Building Alterations to facilitate Unit 3 Seawall Repairs
Remedial Work Floor Plans

S2 - Suitable for information

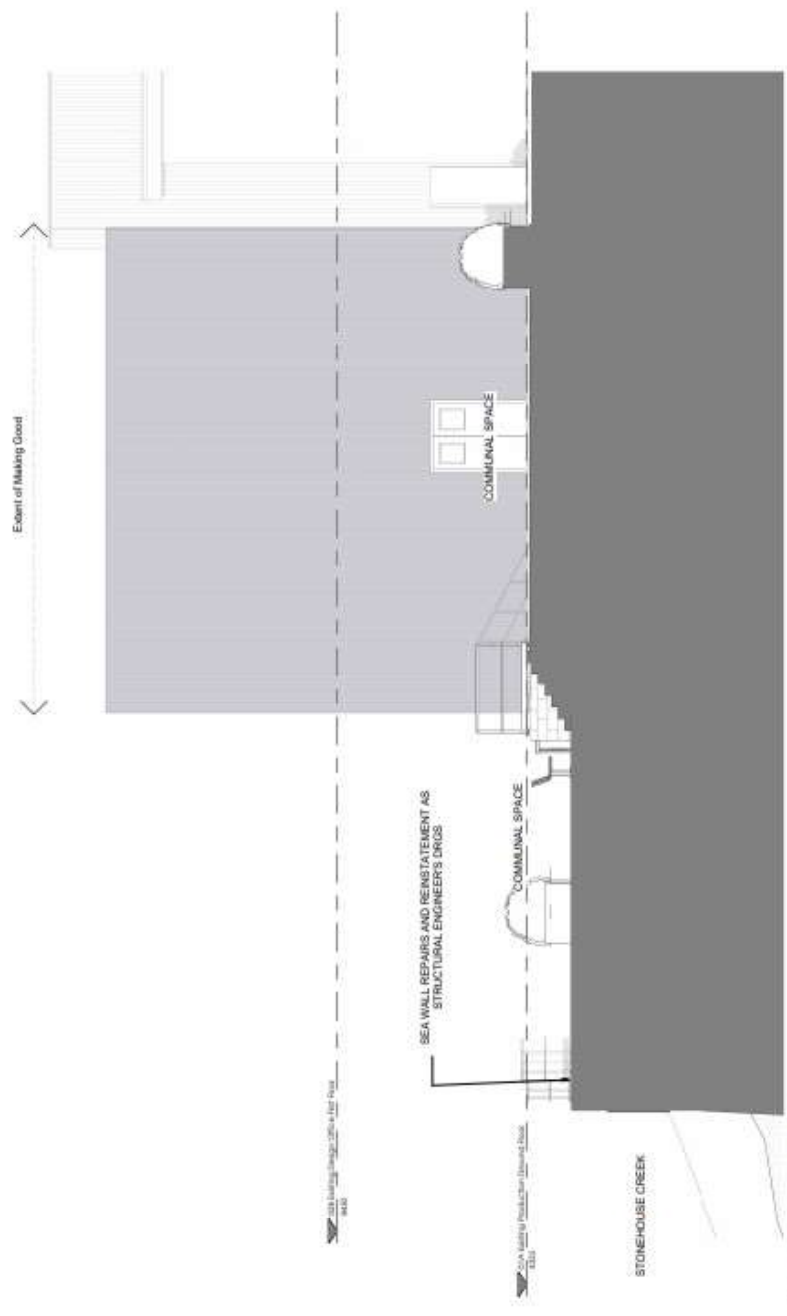
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1:100
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0m 5m 10m
Scale: 1:100

03 of 76

Notes

1. This drawing is a technical drawing and is not to be used for any other purpose.
2. All dimensions are in millimeters unless otherwise stated.
3. All materials are to be of a quality suitable for the intended use.
4. All work is to be carried out in accordance with the relevant standards and specifications.
5. All work is to be carried out in accordance with the relevant safety regulations.
6. All work is to be carried out in accordance with the relevant environmental regulations.
7. All work is to be carried out in accordance with the relevant health and safety regulations.
8. All work is to be carried out in accordance with the relevant fire safety regulations.
9. All work is to be carried out in accordance with the relevant accessibility regulations.
10. All work is to be carried out in accordance with the relevant sustainability regulations.



1 Section 1 Making Good Extents
SCALE 1:50

- Walls:** Trapezoidal profiled metal sheet cladding to match existing cladding with Cokoracoat HP200 Fluxalac protective coating, colour Coosweeping Grey to match existing cladding. Colour of all fittings and trim to match existing.
 - Roof:** Trapezoidal profiled metal sheet roofing to match existing with Cokoracoat HP200 Fluxalac protective coating, colour light grey to match existing.
 - External personnel Doors:** Insulated galvanneal sheet with polyester powder protective coatings, colour Red as coating. Vision panels as shown on elevations.
 - Windows:** Aluminium double glazed fixed and opening casement windows with polyester powder coating finish, colour white.
 - Escape stairs:** Galvanneal steel marine grade.
- Legend Proposed Materials**
BLOCK 11.00



Princess Yachts

Building Alterations to facilitate Unit 3 Szevali Repairs

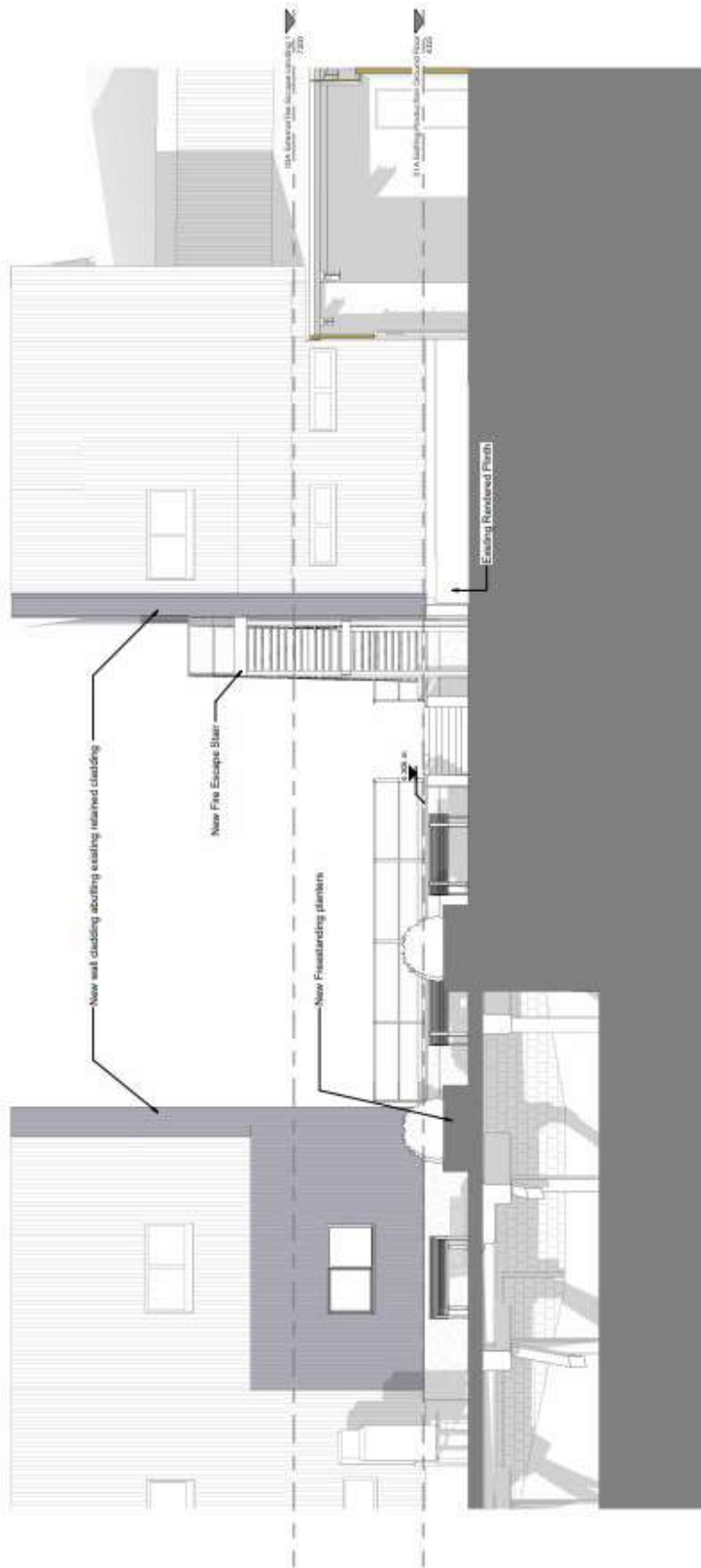
Section 1 Making Good Work Extents

50-WJP

34146	As Indicated	P01
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Notes

1. All work shall be in accordance with the relevant Australian Standards and the relevant Building Code of Australia (BCA) provisions.
2. All work shall be in accordance with the relevant Australian Standards and the relevant Building Code of Australia (BCA) provisions.
3. All work shall be in accordance with the relevant Australian Standards and the relevant Building Code of Australia (BCA) provisions.
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1 Section 2 Seawall repair excavation

SCALE 1:10

- Walls:**
- Trapezoidal profiled metal sheet cladding to match existing cladding with Colourscoat HP200 Plastisol protective coating, colour Dovegrey. Grey to match existing cladding. Colour of all flashings and trims to match existing.
- Roof:**
- Trapezoidal profiled metal sheet roofing to match existing with Colourscoat HP200 Plastisol protective coating, colour light grey to match existing.
- External personnel Door:**
- Insulated galvanneal steel with polyester powder protective coating, colour Red as existing. Vision panels as shown on elevations.
- Windows:**
- Aluminium double glazed fixed and opening casement windows with polyester powder coating finish, colour white.
- Escape stairs:**
- Galvanneal steel, marine grade.

Legend Proposed Materials

SCALE 1:10

Princess Yachts

Building Alterations to facilitate Unit 3 Seawall Repairs

Section 2 Making Good Work

S0-WIP

34146	As Indicated	PG1
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PYSW - BPC - 01 - ZZ - D - A - 0502

4. Planning policy and legislation

4.1 Legislation

The main two pieces of legislation relating to wildlife in the UK are the Wildlife and Countryside Act 1981 as amended (the WCA 1981) and the Conservation of Habitats and Species Regulations 2017, known as “the Habitat Regulations” (and as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019)). These are discussed below, along with other relevant legislation.

The Conservation of Habitats and Species Regulations 2017 (and as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019)) originally transposed the Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (“the Habitats Directive”) and elements of Directive 2009/147/EC on the conservation of wild birds (“the Birds Directive”) in England, Wales, and to limited extent, Scotland and Northern Ireland. The objective of the Regulations is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The Regulations set out the rules for the protection, management and exploitation of such habitats and species. They place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species. These sites are known generally as ‘European sites’ and in the UK form the national sites network (known in Europe as Natura 2000 sites). They include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Refer to Appendices C and E for further details.

Ramsar Sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. Originally intended to protect sites of importance especially as waterfowl habitat, the Convention has broadened its scope over the years to cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities.

Notification as a Site of Special Scientific Interest (SSSI) gives legal protection to nationally important sites for wildlife and geology. Natural England is responsible for identifying and protecting the SSSIs in England under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000).

All European Protected Species (EPS) are protected under the WCA 1981 and the Habitat Regulations. Under this legislation it is illegal to:

- i. Intentionally or deliberately capture, kill or injure listed species;
- ii. Intentionally deliberately or recklessly damage, destroy or obstruct access to any place used for shelter or protection including resting and breeding places, whether occupied or not; and
- iii. Deliberately, intentionally or recklessly disturb listed species when in a place of shelter (and elsewhere for EPS).

All the UK bat species are protected under this legislation.

All wild birds in the UK are protected under the WCA 1981. This makes it illegal to:

- i. Kill, injure or take any wild bird;
- ii. Take, damage or destroy the nest of any wild bird while it is being built or in use;
- iii. Take or destroy the eggs of any wild bird; and
- iv. Possess or control any wild bird or egg unless obtained legally

The widespread UK reptile species are protected under the WCA 1981 against intentional killing or injury.

Some species, listed on Schedule 1 of the WCA 1981 receive a higher level of protection, making it illegal to intentionally or recklessly disturb any bird listed on Schedule 1 while nest building or at or near a nest containing eggs or young, or to disturb any of its dependent young.

Badgers and their setts are protected under the Protection of Badgers Act 1992 which makes it illegal to kill, injure or take badgers or to interfere with a badger sett. The term 'badger sett' is normally understood to mean the system of tunnels and chambers, in which badgers live, and their entrances. Badgers and their setts are protected under the Protection of Badgers Act 1992 which makes it illegal to kill, injure or take badgers or to interfere with a badger sett. The term 'badger sett' is normally understood to mean the system of tunnels and chambers, in which badgers live, and their entrances.

In 2021, the Environment Act, covering England, received Royal Assent on 9 November 2021 (HM Government, 2021). This Act has a number of key elements, three of which directly concern species and habitats:

- All new developments to deliver 10% increase in biodiversity (biodiversity net gains), to be managed for at least 30 years (reviewable by the Secretary of State), with a Biodiversity Gain Site Register to be implemented and maintained for at least 30 years after the site scheme has completed.
- Introduction of Local Nature Recovery Strategies (LNRSs) – new spatial strategies led by a “responsible authority” in each area. Statutory guidance to be given to Local Planning Authorities (LPAs) explaining how they should take account of the LNRSs.
- Introduction of a new Species Conservation Strategy which places a duty on LPAs to cooperate with Natural England and other LPAs etc. to safeguard the future of 'at risk' species.

Further details concerning legislation and species are given in Appendix C.

4.2 National Policy

The National Planning Policy Framework 2023 (HM Government, 2023) sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. It states that there is a presumption in favour of sustainable development, as well as stating that planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

[Taken from NPPF 2023, Section 15. Conserving and enhancing the natural environment, paragraph 174]

Section 15 of the NPPF 2023 goes on to state that 'when determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be integrated as part of their design, especially where

this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'

[Taken from NPPF 2023, Section 15. Conserving and enhancing the natural environment, paragraph 180]

4.3 Local Policy

Policies in the Plymouth & South West Devon Joint Local Plan relating to the natural environment (including European protected sites) have been consulted, namely Policy DEV26 'Protecting and enhancing Biodiversity and Geological Conservation' (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020). This policy sets out the protected sites hierarchy, as well as the mitigation hierarchy, and has six sub-policies as outlined below.

DEV26.1 – European Sites and Habitats Regulations Assessment (HRA): The Tamar Estuaries Complex Special Area of Conservation (SAC) and Plymouth Sound and Estuaries Special Protection Area (SPA) are two European Sites within Plymouth City Council's area. The HRA of the Joint Local Plan concluded that the recreational impacts on these sites arising from planned residential development, either alone or in combination with other plans or projects needs to be addressed – mitigation measures need to be put in place to ensure no likely significant effect on the Sites. Recreational mitigation will be delivered through the *Recreation Mitigation and Management Scheme Plymouth Sound and Estuaries European Marine Sites* (Plymouth City Council, 2019) which requires all residential development within a 12.3km zone of influence to contribute towards the costs of the plan (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020: 127).

DEV26.2 – National significant sites for nature conservation: Where development is likely to affect a Site of Special Scientific Interest (SSSI) or a National Nature Reserve (NNR), directly or within identified 'Impact Risk Zones' (IRZ) around them, the local planning authority (LPA) will consult Natural England and, where development may have an effect on Ancient Woodland, ancient trees and veteran trees, the LPA will consult Standing Advice published by Natural England and the Forestry Commission (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020: 127).

DEV26.3 – Locally designated sites: Locally designated sites play an important function as part of the local ecological network either for interaction between communities and nature (Local Nature Reserves (LNRs)) or because they are of county importance for wildlife/geology in Devon (County Wildlife Sites (CWS) and Regionally Important Geological Sites (RIGS) (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020: 128).

DEV26.4 – Protected species, Priority Habitats and Species and associated planning policy and legislation: The presence of protected species and Priority Habitats and Species and consideration of impacts of a proposed development upon them is a material consideration (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020: 128).

DEV26.5 – Biodiversity Net Gain: Net gains in biodiversity will be sought from all major development proposals. The LPAs will consider a 10% increase in biodiversity units when applying the Defra Biodiversity Metric to be policy compliant. The LPAs will also encourage provision for biodiversity net gain where appropriate for smaller developments. Minor developments are able to deliver proportionate (in relation to type, scale and impact of the development) and measurable net gain or enhancements for biodiversity. It is understood that Defra will release a simplified version of the Biodiversity Metric suitable for use for minor applications, i.e. <10 dwellings. Upon release, the LPAs anticipates requiring applicants to use this version of the calculator for minor applications where suitable and to demonstrate measurable net gain/enhancements. Prior to the release of the simplified version of the Defra Biodiversity Metric, minor development planning applications will be encouraged to submit an Ecological Opportunities Plan (ECOP) and Biodiversity Budget (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020: 128).

DEV26.6 – Securing measures for biodiversity and ensuring long term management: This policy provides for the mitigation and compensation of unavoidable impacts on wildlife, as well as Biodiversity Net Gain. Planning obligations will be used to secure off-site mitigation; off-site delivery of Biodiversity Net Gain; long-term management of mitigation/compensation measures which have been delivered off-site in perpetuity, and for Biodiversity Net Gain measures, for a period of 30 years or longer (management either provided/secured by the applicant in accordance with a Management Plan, or by payment of an agreed commuted sum; and/or, inspection fees or a bond to ensure correct implementation and management of the work on-site or off-site when carried out by the applicant or a third party (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020: 133).

4.4 Biodiversity Action plans and ‘UK Post-2010 Biodiversity Framework’

Biodiversity Action Plans (BAPs) were formulated by the Government in 1994 and set out a broad strategy and objectives for enhancing and conserving species and habitats in the UK. In 1995, the UK Steering Group published a report including detailed proposals for the UK’s most critical species and habitats. These plans provided a framework for biodiversity conservation and provided the UK commitment to the Biodiversity Convention signed in Rio in 1992. In addition, the Natural Environment and Rural Communities Act 2006 (as amended) (HM Government, 2006) included a list of ‘Species and Habitats of Principal Importance’ (s41 for England).

In July 2012, UKBAP was superseded by the UK Post-2010 Biodiversity Framework (JNCC and Defra, 2012) as a result of a change in strategy following the publication of the Convention on Biological Diversity’s Strategic Plan for Biodiversity 2011-2020 (Convention on Biological Diversity, 2010). The priority species and habitats agreed under UKBAP (and s41 of NERC Act 2006) still form the basis of biodiversity work i.e. habitats and species in England that were identified as requiring action in the UKBAP continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework.

The presence of these 'Species and Habitats of Principal Importance' is a material consideration for decision-makers such as public bodies, including local and regional authorities, in determining planning applications and carrying out other functions.

The UK Post-2010 Biodiversity Framework, 'Species and Habitats of Principal Importance' are mentioned where necessary within the appropriate sections of this report.

Further details concerning BAP species are given in Appendix C.

5. Methodology

This Ecological Impact Assessment (EcIA) encompasses the establishment of the ecological baseline by undertaking a desk-based study, drawing on existing information and data, and a field survey; evaluation of the impacts of the proposed development on the designated sites, habitats and species (ecological features) found both on site and in the immediate vicinity of the Site and the identification of measures to mitigate the **significant effects** of these impacts on the **Important Ecological Features**; and the identification of ways to enhance the biodiversity of the area. The monitoring of these mitigation measures and biodiversity enhancements is also outlined.

The study area was defined by Ecological Surveys Limited as the application site and a 2km radius around it as is accepted as an industry standard. Baseline information for this area was collated to determine ecological features that could potentially be affected by the development of the site. These included habitats and species both within and outside the application site but within the study area. The ecological baseline for the assessment was established by undertaking a desk-based study and field surveys of the application site.

5.1 Establishing the Ecological Baseline: Desk-based Study

Ecological baseline conditions are those 'existing in the absence of proposed activities' (CIEEM, 2016). Baseline information for the application site and the study area was collated on the basis of readily available data from the Multi-Agency Geographical Information for the Countryside (MAGiC) website. This includes internationally and nationally designated wildlife and earth science sites; Priority Habitats and granted European Protected Species (EPS) Licence applications. National Network Sites (Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and known in Europe as Natura 2000 sites) were considered for distances up to 10km from the Site or within the same watershed. All other designated sites, Priority Habitats and granted EPS Licence applications were noted within a 2km radius of the site. These distances reflect the zones of influence over which ecological features may be subject to significant effects as a result of the proposed development and associated activities.

The Local Environmental Record Centre (Devon Biodiversity Records Centre) was consulted for records of protected and notable species within the study area. Devon Biodiversity Records Centre (DBRC) provided records of legally protected and/or rare species, as well as 'Species of Principle Importance' (both international, UK and local) recorded since 1999. Locations of designated sites and other land use designations were also obtained. Data were requested for a 1km radius. As mentioned above, these distances reflect the zones of influence over which ecological features may be subject to significant effects as a result of the proposed development and associated activities.

Only records of legally protected/notable species made since 1999 were used in the evaluation, unless more recent records for relevant species had not been made.

Data Local Environmental Record Centres and on websites are reliant on the information input into the system. The absence of a record of a species in a particular

area is not evidence that the particular species does not exist but may simply be due to a lack of survey effort, or a failure to record its presence. Therefore, an absence of evidence (records) should not be interpreted as evidence of absence.

Ordnance Survey (OS) maps and aerial photographs of the site and surrounding area were also consulted.

5.2 Establishing the Ecological Baseline: Field Survey

An Extended Phase 1 Habitat Survey of the application site was undertaken on 8 December 2023 by Paul Diamond RHS Cert (Hort), BSc (Hons), MSc, MCIEEM, MARborA. This consisted of a walkover assessment of the site using Phase 1 Habitat Survey methodology (JNCC, 2010), as amended by the Institute of Environmental Assessment (IEA, 1995), involving the mapping of different habitats in accordance with standard habitat definitions. A Phase 1 Habitat Map was produced, which included target notes detailing any features of nature conservation interest. The Phase 1 Habitat Map is given in Figure 6.2. All areas within the Site were surveyed, the main plant species recorded, and habitat type mapped. Indicators of ecological value were also noted, including the presence or signs of any legally protected or rare species.

Plant species were identified according to Stace (2019).

The habitat survey undertaken included an assessment of the potential of the application site to support protected species and/or species of nature conservation importance. This included the identification of potentially suitable habitat for such species. Any direct observations of species and/or field signs were also noted.

Any buildings onsite were assessed for their potential to support roosting bats (using the criteria set out in Appendix F). Buildings were examined both externally and internally to consider the potential and actual use by bats, as well as by nesting birds.

Any hedges present have been assessed for their 'importance' under the 1997 Hedgerows Regulations (HM Government, 1997). As all native hedgerows over 20m in length are now classified as a priority habitat feature; these too were recorded.

A search was also made to identify the presence of any invasive non-native species (particularly those listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)), including Japanese knotweed (*Reynoutria japonica*) and Himalyan balsam (*Impatiens glandulifera*).

Areas outside of the development site boundary were assessed where possible, if evidence from the site indicated that legally protected/rare species may be present in close proximity to the site. Examples include badger trails, potential nesting or roosting habitat adjoining the site.

A check was made for water bodies within 500 m of the application site using the MAGiC website and OS mapping to assist in determining the potential for the presence of amphibians, such as great crested newt (*Triturus cristatus*).

All the surveys undertaken on Site (including any species-specific Phase 2 surveys) are given in Table 5.1 below.

Table 5.1. Surveys undertaken

Survey type	Date(s)	Weather conditions	Surveyor(s)	Equipment used
Extended Phase 1 Habitat Survey	08/12/2023	Fine and dry, good visibility	Paul Diamond RHS Cert (Hort), BSc (Hons), MSc, MCIEEM, MARborA	Phone camera
Buildings Visual Assessment for bats/birds (external only)	08/12/2023	Fine and dry, good visibility	Paul Diamond RHS Cert (Hort), BSc (Hons), MSc, MCIEEM, MARborA	Phone camera, binoculars

5.3 Impact Assessment and Mitigation Measures

All ecological data and information gained through both the desk-based study and the survey work were evaluated. The Important Ecological Features were identified and evaluated against the potential impacts/effects that the proposed development may have on the ecology of the site and surrounding area. The impact assessment determines how the conditions, focusing on the Important Ecological Features identified, will change in relation to the baseline conditions to allow a clear understanding of the effects of the proposed development.

The impact assessment has been carried out in accordance with the *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition* (CIEEM, 2016) and *Guidelines for Ecological Report Writing, second edition* (CIEEM, 2017).

The intrinsic ecological value of the feature has been considered for the purposes of determining ecological impacts and has been considered independently of any legal protection afforded. For instance, European badger (*Meles meles*) is common, widespread and of little conservation concern in much of the UK but is a protected species. When considering impacts on badgers the conservation status may not be affected, but there may be legal consequences of effects of a scheme. In section 8, *Assessment of Effects and Mitigation Measures*, the ecological impact is noted and if there are legal implications these are also noted separately.

The ecological importance of existing habitats and species on the application site has been determined using the evaluation scale below, whereby ecological features are assessed for their importance in a geographical context:

- i. International
- ii. National (i.e. England)
- iii. Regional (i.e. south-west);
- iv. Local

Various characteristics contribute to the importance of ecological features. These include recognised and published criteria (e.g. Ratcliffe, 1977; CIEEM, 2016) where the ecological features are assessed in relation to their size, diversity, naturalness, rarity, fragility, typicality, connectivity with surroundings, intrinsic value, recorded history and potential value.

A wide range of sources can be used to assign importance to ecological features, including legislation, policy, published methods, or professional judgment. In the case of designated sites, their importance reflects the geographic context of the designation.

When assessing the impact of the development and changes to the baseline conditions on site, predictions will be made which focus solely on the zone of influence whilst taking into consideration the lifespan of the development and the significant impacts as identified from the proposed work operations throughout the lifespan of the development.

Impacts likely to result from the construction and operation of the proposed development on ecological receptors were identified through liaison with the client and a review of layout options for the development.

The proposed development aims to firstly avoid and then mitigate against any potential effects/impacts on the local ecology/biodiversity, ensuring compliance with nature conservation legislation. It aims to achieve this by applying the mitigation hierarchy (as mentioned in the National Planning Policy Framework and detailed in Paragraph: 018 Reference ID: 8-018-20140306 of National Planning Practice Guidance) and delivering mitigation measures that:

- avoid significant negative ecological impacts/effects;
- reduce negative impacts/effects that cannot be avoided; and
- compensate for any remaining significant negative ecological impacts/effects.

Appropriate measures to avoid and/or minimise the significant negative effects on the Important Ecological Features have been identified. These mitigation measures aim firstly to avoid the overall effect/impact, or for those that cannot be avoided, reduce their overall effect value. It is not always possible to fully mitigate an adverse effect to neutral levels and so an assessment is made of residual effects following the proposed mitigation measures.

Thus, the mitigation hierarchy should be applied when considering the impacts of developments and local planning decisions on the natural environment, with the protection of important wildlife sites, habitats, species and ecosystem services; the avoidance of impacts, mitigating these impacts where appropriate, and then achieving biodiversity net gain through enhancements.

This is also in line with local plan policy DEV26 (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020).

There is a requirement within the EcIA process to consider the cumulative effect of other plans or projects in combination with the site under assessment. Cumulative impacts are those additional changes caused by a proposed development in conjunction with similar developments, or as the combined effect of several developments taken together.

Ideally adjacent developments should include existing developments, either under construction or operational, approved developments and proposals awaiting determination with sufficient data available within the public domain.

5.4 Biodiversity Enhancement

The aim of development should be to deliver net ecological gain on site as well as limiting damage to Important Ecological Features. This aim is supported by the recently published *Biodiversity Net Gain: Good practice principles for development. Part A: A practical guide* (Baker, J *et al*, 2019a), as well as stated in Section 15 of the NPPF 2023 (as mentioned in section 5.3 above).

This is also in line with local plan policy DEV26, particularly DEV26.5 concerning Biodiversity Net Gain (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020).

Using the information gained during the desk-based study and the Extended Phase 1 Habitat Survey, and the ecological requirements of habitats, species and local environmental conditions, biodiversity enhancements for the site have been considered, providing opportunities to increase the diversity of habitats and species on site.

Enhancement (measures that improve the biodiversity/ecological condition) of all sites post-development is a planning requirement. The law, central government planning policy and local planning policy point towards the enhancement of a site's biodiversity as part of the development process.

Ecological enhancement measures must be over and above any avoidance, mitigation and compensation measures required to neutralise the impacts of the development on wildlife. An increased need for effective enhancement has been reinforced by recent research conducted by a United Nations-backed panel called the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) stating up to million plant and animal species face extinction. Whilst we in the UK are not directly responsible for all of this loss, we can try to protect the threatened species within the UK.

Enhancements for biodiversity have made reference to the combined habitat networks map for England resulting from the work undertaken by Natural England regarding the mapping of national habitat networks (Natural England, 2020). This combined habitat networks map provides a national overview of the distribution of habitat networks focused on the priority habitats with suggestions for future action to enhance biodiversity, looking specifically at habitat creation and restoration in the vicinity of existing habitat. The map shows:

- A. Existing Habitat with four components mapped: the primary habitat itself; associated habitat; areas where habitat creation/restoration is underway; and restorable habitat (where the primary habitat is present in a degraded or fragmented form and which are likely to be suitable for restoration).
- B. Network Enhancement and Expansion, with four components mapped: Network Enhancement Zone 1 (land connecting existing patches of primary and associated habitats which is likely to be suitable for creation of the primary habitat); Network Enhancement Zone 2 (land connecting existing patches of primary and associated habitats which is less likely to be suitable for creation of the primary habitat); Fragmentation Action Zone (land within Enhancement Zone 1 that connects existing patches of primary and associated habitats which are currently highly fragmented and where fragmentation could be reduced by habitat creation); and Network Expansion Zone (land beyond the Network Enhancement Zones with potential for expanding, linking/joining networks across the landscape).

5.5 Biodiversity Impact Assessment: Biodiversity Losses and Gains

The biodiversity impact assessment calculations, to determine the biodiversity losses and gains associated with the proposed development, have been undertaken using the Statutory Small Sites Metric and are set out in section 11. This metric uses habitat to describe biodiversity, which is converted into measurable 'biodiversity units' according to the area of each type of habitat. The metric scores different habitat types (e.g. woodland, grassland) according to their relative biodiversity value and adjusts this according to the condition and location of the habitat. Where new habitat is created or existing habitat is enhanced then the associated risks of doing so are factored into the metric.

The metric can be used as an auditing tool to quantify the biodiversity value of habitats on a patch of land and it can be used to calculate the losses and gains in biodiversity from actions such as development or from positive conservation management.

It should be noted that the metric for biodiversity offsetting only considers habitats, both those currently present on site and those proposed as mitigation and biodiversity enhancements for the proposed development. The metric does not take account of species onsite, or enhancements proposed to deliver biodiversity gain for species (except where they equate to gain in semi-natural habitats).

This is in line with local plan policy DEV26.5 concerning Biodiversity Net Gain (West Devon Borough Council, South Hams District Council and Plymouth City Council, 2020).

5.6 Constraints / Limitations

All areas of the Site were readily accessible to enable the Extended Phase 1 Habitat Survey to be undertaken; all buildings were surveyed both externally and internally. The time spent on site was considered appropriate to obtain all the details required for each habitat and species to enable an assessment to be made. Although some plant species would not have been visible during the survey period, the botanical diversity was considered sufficient to be able to classify and assess the habitats present, as well as their potential for supporting legally protected and notable species.

The weather conditions were fine and dry, with good visibility.

All surveys were carried out by suitable-skilled and experienced surveyors.

However, it is worth remembering that any single survey gives a snapshot of species and habitats present on site on a particular day. The presence or absence of species recorded on site that day, particularly mobile species with larger home ranges, will vary and does not therefore necessarily represent the total species using the site over time, hence the undertaking of further surveys (as listed in Table 5.1 above) for potential species using the site, as identified during the Extended Phase 1 Habitat Survey.

It should be noted that habitats, and the species they may support, change over time due to natural processes and because of human influence. In line with current guidelines, the survey on which this report is based is only valid for two years, after which time it will need updating. It being accepted that some local planning authorities now expect a survey to be updated after 12 months.

6. Baseline Ecological Conditions/Results

6.1 Designated Sites of Nature Conservation

6.1.1 Internationally Designated Sites

The proposed development site does not lie within any internationally designated sites of nature conservation. There are two sites of international importance within the study area: Plymouth Sound and Estuaries Special Area of Conservation (SAC) and Tamar Estuaries Complex Special Protection Area (SPA). The locations of these sites are shown on Figure 6.1; a summary of the features of importance at each site is presented below in Table 6.1.

Table 6.1. Internationally designated sites within the study area

Designation	Site name	Key ecological features	Distance and direction from application site
Special Area of Conservation (SAC)	Plymouth Sound and Estuaries	<ul style="list-style-type: none"> 1110 Sandbanks which are slightly covered by sea water all the time 1130 Estuaries 1160 Large shallow inlets and bays 1170 Reefs 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) 1140 Mudflats and sandflats not covered by seawater at low tide 1441 Shore dock <i>Rumex rupestris</i> 1102 Allis shad <i>Alosa alosa</i> 	~570m to the south-west
Special Protection Area (SPA)	Tamar Estuaries Complex	<ul style="list-style-type: none"> Nationally important numbers of Annex I species little egret <i>Egretta garzetta</i> and avocet <i>Recurvirostra avosetta</i> 	~2.0km to south-west

		<ul style="list-style-type: none"> Nationally important numbers of wintering shelduck <i>Tadorna tadorna</i>, black-tailed godwit <i>Limosa limosa</i>, dunlin <i>Calidris alpina</i>, curlew <i>Numenius arquata</i> and redshank <i>Tringa totanus</i> Nationally important numbers of whimbrel <i>Numenius phaeopus</i> in autumn 	
RAMSAR	N/a	N/a	N/a
World Heritage Site	N/a	N/a	N/a

6.1.2 Nationally Designated Sites

The proposed development site does not lie within any nationally designated sites of nature conservation. There are three sites of national importance within the study area; these sites are shown on Figure 6.1, with a summary of the features of importance at each site presented below in Table 6.2.

The Site lies within a Site of Special Scientific Interest (SSSI) Impact Risk Zone, with the local planning authority may needing to consult with Natural England.

Figure 6.1. Map showing statutory designated sites within the study area

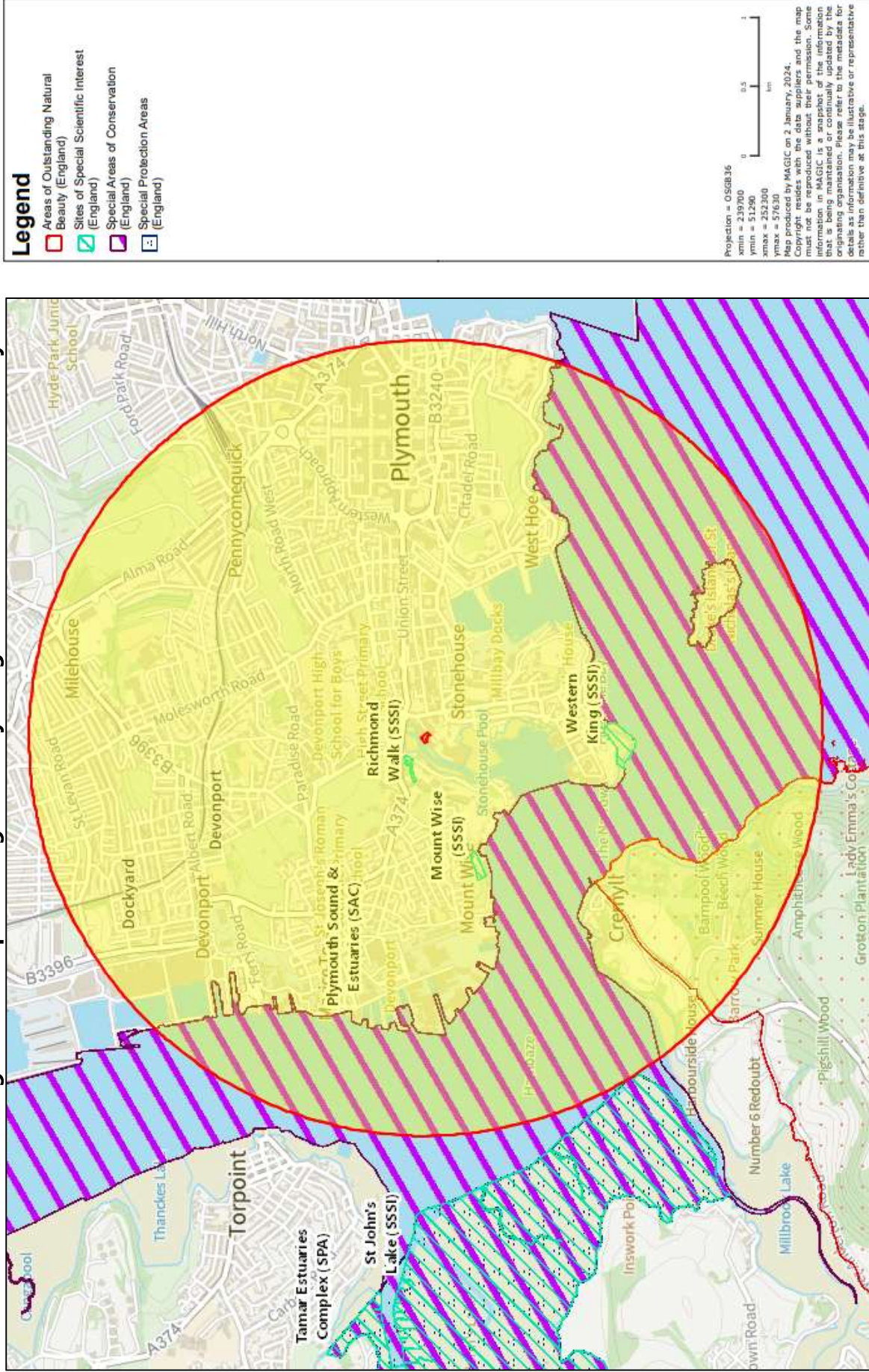


Table 6.2. Nationally designated sites within the study area

Designation	Site name	Key ecological features	Distance and direction from application site
Site of Special Scientific Interest (SSSI)	Richmond Walk	<ul style="list-style-type: none"> • Good section through fossiliferous Devonian limestones notable for their coral and conodont faunas of mid-late Givetian age. • Important site for interpreting the changing palaeoecology of the area in mid-Devonian times. 	~110m to the north-west
	Mount Wise	<ul style="list-style-type: none"> • Good fossiliferous locality. • Important for the Mount Wise Shell Bed – a discontinuous horizon very rich in shelly remains of importance; useful for correlation purposes as it appears to be equivalent to the Lummaton Shell Beds Member in the Torquay area. 	~610m to the south-west
	Western King	<ul style="list-style-type: none"> • Complex series of Devonian limestones, of late Frasnian to early Fammenian age, which comprise the youngest limestones of the Plymouth Limestone Group. • Important microfossils, known as conodonts, which are used to subdivide the rock sequence and relate it to comparable sequences elsewhere. • Some of the earliest studies on British fossil corals of Devonian age were carried out here. 	~900m to the south

		<ul style="list-style-type: none"> Nationally rare plant field erylngo <i>Eryngium campestre</i>, which is listed on Schedule 8 of the Wildlife and Countryside Act (1981) (as amended) 	
National Nature Reserve (NNR)	N/a	N/a	N/a
National Landscape (Area of Outstanding Natural Beauty)	Cornwall	N/a	~1.1km to the south-west

6.1.3 Locally Designated Sites

The proposed development site does not lie within any locally designated sites of nature conservation, although a Plymouth Biodiversity Network Site extends into the northern section of the Site (see below).

There are three non-statutory sites of local importance within the study area – two County Wildlife Sites (CWS) and one Regionally Important Geological/Geomorphological Sites (RIGS); a summary of the features of importance at each site is presented below in Table 6.3 and their location shown in Figure 6.2. There are no statutory designated local sites within a 2km radius of the Site.

There are a number of Plymouth Biodiversity Network Sites within a 2km radius of the Site; the closest one is the river corridor buffering the statutory site, Plymouth Sound and Estuaries SAC, which extends into the northern section of the Site.

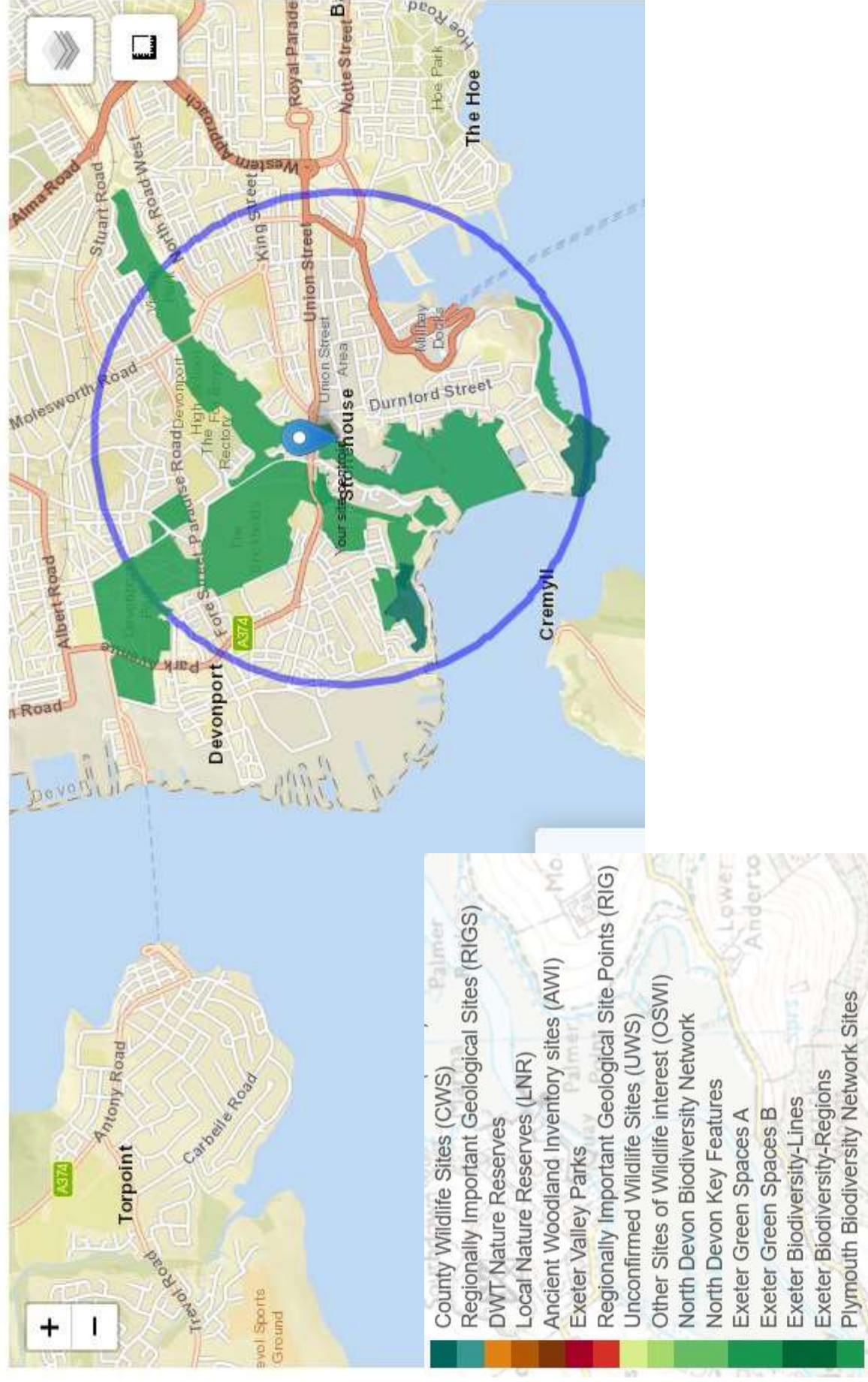
Table 6.3. Locally designated sites within the study area

Designation	Site name	Key ecological features	Distance and direction from application site (km)
Local Nature Reserve (LNR)	N/a	N/a	N/a
County Wildlife Site (CWS)	Mount Wise	Species-rich calcareous grassland site with five Devon Notable plant species present.	~560m to the south-west

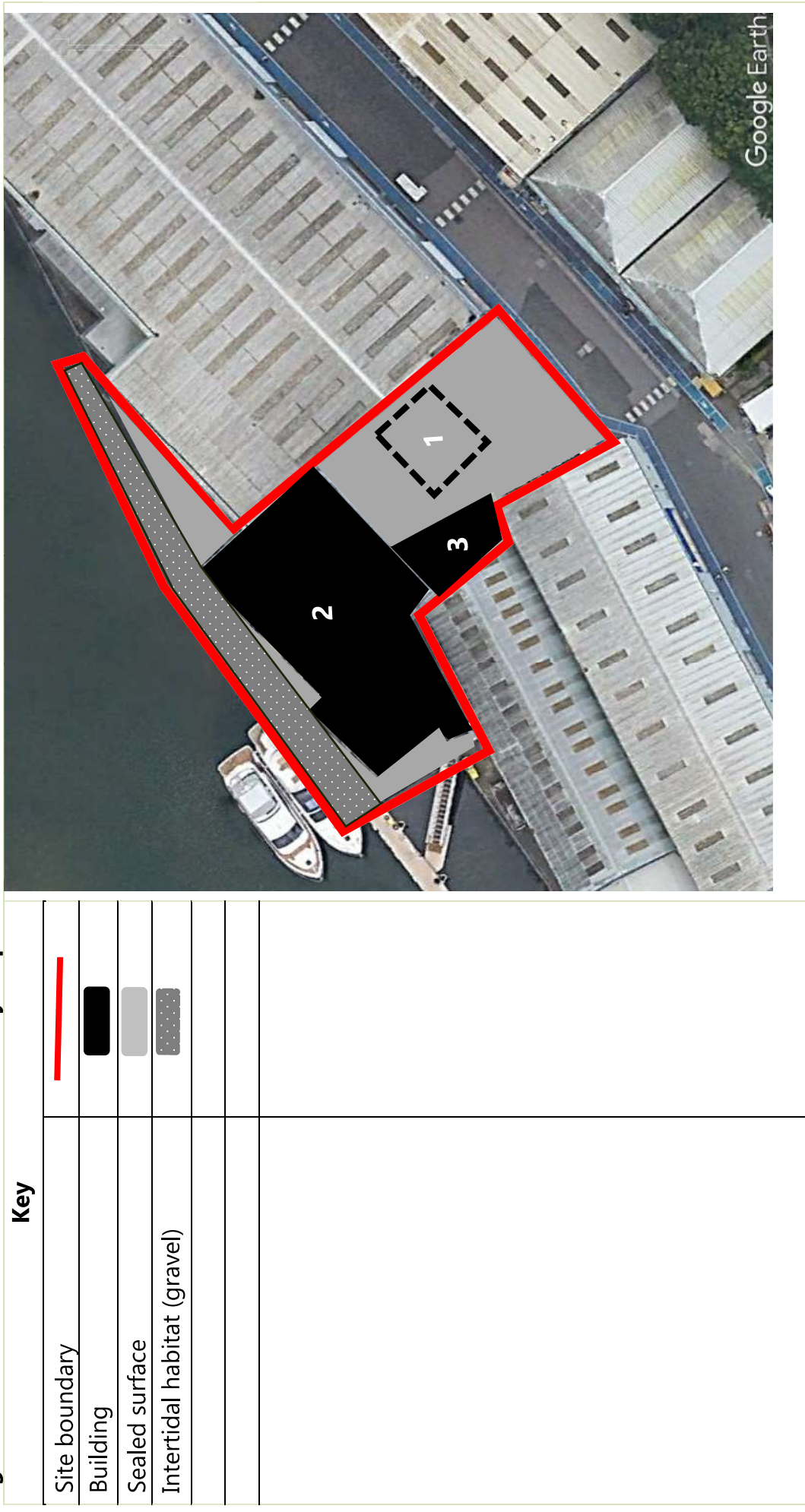
	Devil's Point – Eastern King Point	Amenity grassland, unimproved calcareous grassland, coastal grassland, cliff vegetation and notable plant interest.	~890m to the south
Regionally Important Geology Site (RIGS)	Bluff Battery	Quarried outcrops with rich fossil fauna.	~140m to the north-west

Designated sites considered Important Ecological Features with respect to the proposed development	<ul style="list-style-type: none"> - Plymouth Sound and Estuaries SAC - Plymouth Biodiversity Network Site
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Figure 6.2. Map showing locally designated sites within the study area



6.2 Habitats
Figure 6.3. Extended Phase 1 Habitat Survey Map



This section details the habitats present on the Site and recorded during the Extended Phase 1 Habitat Survey, along with important habitats within the vicinity of the Site. Figure 6.3 maps the Phase 1 habitats recorded onsite during the field survey and Table 6.4 summarises the area of each of these habitats.

Table 6.4. Phase 1 habitats associated with the site, their extent and value in a geographical context.

Phase 1 habitat type	Area or length
Sealed surface	545sqm
Structures	630sqm
Estuary / gravel substrate	165sqm

Semi-natural Broadleaved Woodland

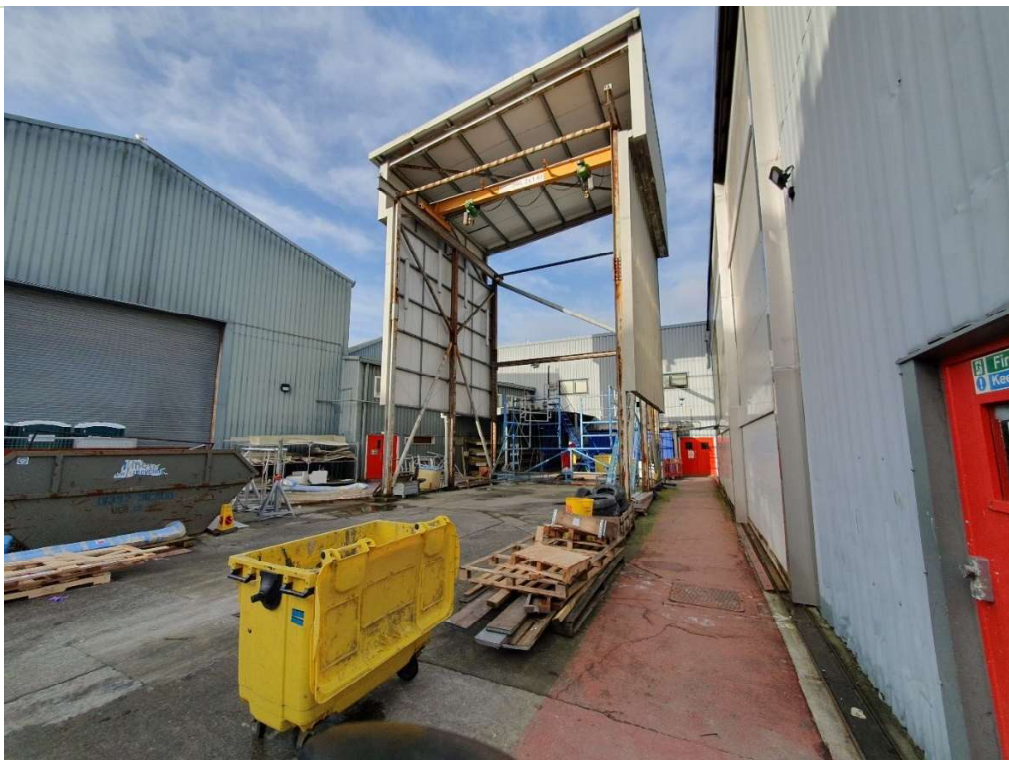
Onsite	There is no semi-natural broadleaved woodland onsite.
Phase 2 Botanical Survey undertaken	No (not required)
Area of semi-natural broadleaved woodland on site	0sqm
Condition of semi-natural broadleaved woodland on site	N/a
Offsite	<p>There are a number of small areas of broadleaved woodland within a 2km radius of the proposed re-development site, the nearest of which lies approximately 30m to the south of the Site.</p> <p>A few woodlands within a 2km radius have been assigned as a deciduous woodland Habitat of Principal Importance under the NERC Act 2006, the closest of which is approximately 140m to the north-west. There is no ancient woodland within a 2km radius of the Site.</p> <p>A further Habitat of Principal Importance, woodpasture and parkland lies some 770m to the north-west at Devonport Park.</p>
Legal Constraints	None.
Important Ecological Feature (IEF)	No

Habitat loss/gain	0sqm
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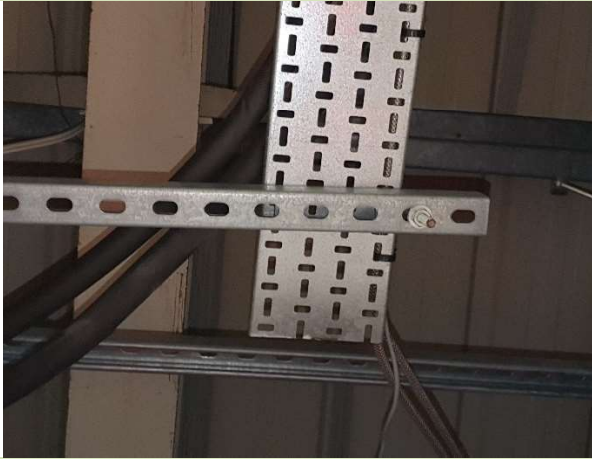
Sealed Surface

Onsite	There is an area of sealed surface in and around the lifting apparatus occupying the southern half of the Site.
Phase 2 Botanical Survey undertaken	No (not required)
Area of sealed surface on site	545sqm
Condition of sealed surface on site	N/a
Offsite	There is sealed surface in the vicinity of the Site, comprising roads, pavements and car parking.
Legal Constraints	None.
Important Ecological Feature (IEF)	No
Habitat loss/gain	Gain of 622sqm

Structures



Lifting apparatus (1) in the centre, with southern end of building 2 at far end and east end of building 3 in far corner



Internal roof structure of building 2

Internal roof structure of building 3

<p>Onsite</p>	<p>Structure 1 in the southern half of the site is a lifting apparatus, with a steel frame, sloping sheet metal roof and walls on the east and west elevations (completely open on the north and south sides). There is no potential for protected species – no potential for roosting bats nor nesting birds.</p> <p>Structure/Building 2 dominates the northern half of the site. This is a two-storey sheet metal fabricated building. It has no potential for supporting protected species other than perhaps nesting herring gull (<i>Larus argentatus</i>).</p> <p>Structure/Building 3 is also constructed of sheet metal, with the section within the development zone being single storey. This connects to a two-storey structure which is also steel frame with prefabricated walls and roofing panels. There is no potential within the single storey section to support roosting bats or nesting birds; the two-storey section has negligible potential.</p>
<p>Bat Emergence Surveys undertaken</p>	<p>No (not required)</p>
<p>Area of habitat formed by the structures on site</p>	<p>630sqm</p>
<p>Offsite</p>	<p>There are a number of buildings adjacent to the site, including predominantly light industrial buildings.</p>
<p>Legal Constraints</p>	<p>No nests are present but potential exists; all nesting birds and their eggs are protected by law from disturbance, harm or death.</p> <p>Structure 2 must be retained where nesting and fledging is occurring, usually between March and September, but bird specific.</p>

Important Ecological Feature (IEF)	Yes: Structure 2 has low potential for nesting birds
Habitat loss/gain	Loss of 630sqm

Intertidal/Coastal Habitats

Onsite	There is a small area of intertidal gravels within the Tamar Estuary within the extreme northern section of the Site.
Phase 2 Botanical Survey undertaken	No (not required)
Area of intertidal habitat on site	165sqm
Condition of intertidal habitat on site	Moderate
Offsite	There are areas of mudflats, a Habitat of Principal Importance (HPI) under the NERC Act 2006, within the vicinity of the Site, with the closest of these some 10m to the south-west. Areas of another HPI, maritime cliff and slope, lie within a 2km radius of the Site, the closest being approximately 920m to the south, at Devils Point.
Legal Constraints	Mudflats, a Habitat of Principle Importance designated under the NERC Act 2006, lie within 50m of the site.
Important Ecological Feature (IEF)	Yes - Mudflats
Habitat loss/gain	0sqm

6.3 Species

This section includes details concerning the species recorded on site during the Extended Phase 1 Habitat Survey, as well as legally protected and/or notable species recorded within a 2km radius of the development site. The potential for the presence of legally protected and/or notable species on site has also been included, based on the habitats recorded on site and adjacent land.

Where there is no potential for a species or species group to be present within the site, they have been scoped out at this stage. Appendix A lists the flora found on site and Appendix B lists the fauna.

Bats

Phase 2 Bat Surveys undertaken	No (not required)
Onsite	[The use of any buildings/structures on site by bats has been included in section 6.2 <i>Habitats</i> , in the <i>Structures</i> section.] There are no trees present on site that have potential for roosting bats. Neither bat roosting, foraging or commuting potential exist on this site.
Offsite	All bat species are legally protected; the following bat species have been recorded within a 2km radius of the site since the year 1999: common pipistrelle (<i>Pipistrellus pipistrellus</i>), noctule (<i>Nyctalus noctula</i>) and lesser horseshoe bat (<i>Rhinolophus hipposideros</i>) (DBRC records), along with brown long-eared bat (<i>Plecotus auritus</i>) (Granted European Protected Species (EPS) Applications obtained via www.magic.defra.gov.uk on 02/01/2024).
Legal Constraints	None.
Important Ecological Feature (IEF)	No

Other Mammals

Phase 2 Survey(s) undertaken	No (not required)
Onsite	No mammals were recorded onsite during the survey. Habitats comprise built structures and sealed surfaces and are therefore unsuitable for supporting this species group.
Offsite	No legally protected and/or notable mammal species (other than those mentioned in the preceding sections) have been recorded within a 1km radius of the Site since 1999.
Legal Constraints	None
Important Ecological Feature (IEF)	No

Birds

Phase 2 Breeding Bird Survey undertaken	No (not required)
Onsite	Structure/Building 2 has low potential for supporting nesting herring gull (<i>Larus argentatus</i>). All bird species are protected whilst nesting, breeding and rearing young.
Offsite	A number of legally protected and/or notable birds have been recorded within a 1km radius of the site since the year 1999; these include house sparrow (<i>Passer domesticus</i>), wren (<i>Troglodytes troglodytes</i>), greenfinch (<i>Chloris chloris</i>), song thrush (<i>Turdus philomelos</i>), starling (<i>Sturnus vulgaris</i>), swift (<i>Apus apus</i>), firecrest (<i>Regulus ignicapilla</i>), tawny owl (<i>Strix aluco</i>), herring gull, Mediterranean gull (<i>Larus melanocephalus</i>), sandwich tern (<i>Sterna sandvicensis</i>), common tern (<i>S. hirundo</i>) and oystercatcher (<i>Haematopus ostralegus</i>).
Legal Constraints	The habitat (Structure/Building 2) has been assessed as capable of supporting protected bird species: - legal constraints apply: legal protection under the Wildlife and Countryside Act 1981 (as amended) and the NERC Act 2006.
Important Ecological Feature (IEF)	Yes - Structure/Building 2

Reptiles

Phase 2 Reptile Survey undertaken	No (not required)
Onsite	No reptiles were recorded onsite during the survey. Habitats comprise built structures and sealed surfaces and are therefore unsuitable for supporting this species group.
Offsite	The following legally protected and/or notable reptile species have been recorded within a 1km radius of the site since the year 1999: slow-worm (<i>Anguis fragilis</i>).
Legal Constraints	None
Important Ecological Feature (IEF)	No

Amphibians

Phase 2 Amphibian / Great Crested Newt eDNA Survey undertaken	No (not required)
Onsite	No amphibians were recorded onsite during the survey. Habitats comprise built structures and sealed surfaces and are therefore unsuitable for supporting this species group. The Site lies within a Great Crested Newt Consultation Zone; the nearest great crested newt (<i>Triturus cristatus</i>) record was recorded in 1984, 3.9km away from the Site.
Offsite	The following legally protected and/or notable amphibian species have been recorded within a 1km radius of the site since the year 1999: common toad (<i>Bufo bufo</i>).
Legal Constraints	None
Important Ecological Feature (IEF)	No

Invertebrates

Phase 2 Invertebrate Survey(s) undertaken	No (not required)
Onsite	No invertebrate species were recorded onsite during the survey. Habitats comprise built structures and sealed surfaces and are therefore unsuitable for supporting this species group.
Offsite	A number of legally protected and/or notable invertebrates have been recorded within a 1km radius of the Site since the year 1999, all moth species: Jersey tiger (<i>Euplagia quadripunctaria</i>), dark-streaked button (<i>Acleris umbrana</i>), grey dagger (<i>Acronicta psi</i>) and <i>Cosmopterix pulchrimella</i> .
Legal Constraints	None
Important Ecological Feature (IEF)	No

Vascular Plants

Phase 2 Botanical Survey undertaken	No (not required)
Onsite	No plants were recorded onsite during the survey. Habitats comprise built structures and sealed surfaces.
Offsite	The following legally protected and/or notable vascular plant species have been recorded within a 1km radius of the site since the year 1999: twiggy mullein (<i>Verbascum virgatum</i>), ivy broomrape (<i>Orobanche hederæ</i>), corn parsley (<i>Petroselinum segetum</i>), field eryngo (<i>Eryngium campestre</i>), golden-samphire (<i>Inula crithmoides</i>), toothed medick (<i>Medicago polymorpha</i>), cornflower (<i>Centaurea cyanus</i>), box (<i>Buxus sempervirens</i>) and southern polypody (<i>Polypodium cambricum</i>).
Legal Constraints	None
Important Ecological Feature (IEF)	No

Invasive Non-native Species

Onsite	No species listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended) were noted onsite during the field survey.
Offsite	The following invasive non-native species have been recorded within a 1km radius of the site since the year 1999: Japanese knotweed (<i>Reynoutria japonica</i>) and montbretia (<i>Crocsmia x crocosmiiflora</i>). Neither have been recorded in the immediate vicinity of the Site.
Legal Constraints	None.
Important Ecological Feature (IEF)	No

6.4 Summary of Important Ecological Features

Table 6.5 summarises the Important Ecological Features as identified from the baseline conditions, with respect to the proposed re-development at Princess Yachts, Newport Street, Stonehouse in Plymouth.

Table 6.5. Summary of Important Ecological Features (IEFs)

Important Feature (IEF)	Ecological	Level of importance	Specific reason
Designated sites			
Plymouth Sound and Estuaries SAC		International	Located approximately 570m to the south-west of the proposed development site, downstream.
Plymouth Biodiversity Network Site		Local	River corridor buffering the statutory site, Plymouth Sound and Estuaries SAC.
Habitats			
Structure 2		Local	Low potential for nesting birds
Mudflats		Local	Habitat of Principal Importance, with the closest area approximately 10m south-west of the proposed development site
Species			
Birds (nesting)		Local	Potential to nest on Structure 2.

7. Proposed development

The proposed development on site comprises the demolition of existing structures and strengthening of the quay along the Site's northern boundary – the quay has started to corrode and deteriorate, hence the need for repairs. A specialist company will carry out the necessary work at low tide.

The structures will be replaced by an open outdoor area for staff, with seating and five planters containing ornamental plants. A range of flowering plants will be selected for the planters to provide nectar over a long season.

8. Assessment of Effects and Mitigation Measures

Figure 3.2 shows the location and layout of the proposed re-development which will replace at Princess Yachts, Newport Road, Stonehouse in Plymouth. As detailed in section 7 above, the structures onsite will be demolished and replaced by an open outdoor area for staff, with seating and five planters containing ornamental plants. The adjacent sea wall will also be repaired and reinstated as it has started to corrode and deteriorate.

The clearance of the site during the groundworks phase, the repairs to the sea wall and the construction of the new seating area during the construction phase, all have the potential to lead to both direct and indirect effects on the ecology of the site and its immediate environs. These effects are listed in Table 8.1 below.

Each of the Important Ecological Features identified from the existing baseline conditions (summarised in section 6.4 above) are assessed against the potential effects from the proposed development, with the potential significant impacts identified. The mitigation hierarchy is then applied, with the aim of firstly avoiding any loss or damage/degradation to any of the Important Ecological Features. If avoidance is not possible then the impacts/effects of the operational procedures of the development will be minimised and reduced as much as possible; with mitigation measures set out. Any residual effects are identified at the end of this section.

The scale of any mitigation scheme should be proportional to the proposed development with a guiding principle of minimising intervention in any given habitat. All mitigation measures are summarised in Table 8.2 in section 8.5, with any residual effects set out in section 8.6. The mitigation measures (as well as the enhancements) are mapped in the **Ecological Constraints and Opportunities Plan (ECOP) set out in Appendix I.**

8.1 Designated sites (IEFs)

The proposed development site does not lie within any statutory or non-statutory designated wildlife or earth science sites, notified at the international, national or local scale. However, it does lie within a Site of Special Scientific Interest (SSSI) Impact Risk Zone, with the local planning authority may needing to consult with Natural England.

There is one statutory designated wildlife/earth science sites, notified at the international or national scale, lying within a 2km radius of the site that has been identified as an Important Ecological Feature (IEF): Plymouth Sound and Estuaries Special Area of Conservation (SAC).

There are three non-statutory sites of local importance within the study area – two County Wildlife Sites (CWS) and one Regionally Important Geological/Geomorphological Sites (RIGS); none are deemed IEFs regarding the proposed development on this site.

The Site lies within a Plymouth Biodiversity Network Site, Stonehouse Creek area, with a number of other Plymouth Biodiversity Network Sites within a 2km radius of the Site.

Table 8.1. Potential effects on the ecology during the various phases of development

Phase of development	Potential effects on ecology	Impacts
Groundworks / pre-construction	<ul style="list-style-type: none"> • Demolition operations • Movement of materials to/from or within a site • Acoustic disturbance and vibration from construction activities • Dust generation • Environmental incidents and accidents e.g. spillage, noise and emissions 	<ul style="list-style-type: none"> • Loss of habitats • Degradation/damage/modification of habitats • Loss of species • Incidental mortality or injury of species • Disturbance of species
Construction	<ul style="list-style-type: none"> • Movement of materials to/from or within a site e.g. topsoil • Acoustic disturbance and vibration from construction activities • Dust generation • Environmental incidents and accidents e.g. spillage, noise and emissions • Structural works to existing buildings 	<ul style="list-style-type: none"> • Degradation/damage/modification of habitats • Disturbance of species
Operational	<ul style="list-style-type: none"> • Site operation and management e.g. maintenance operations, lighting, noise and water pollution (though likely to be less than existing operations) 	<ul style="list-style-type: none"> • Disturbance of species

Plymouth Sound and Estuaries SAC and Plymouth Biodiversity Network Site

Plymouth Sound and Estuaries SAC lies approximately 570m downstream from proposed development site (to the south-west). The SAC is designated for the following qualifying features:

- 1110 Sandbanks which are slightly covered by sea water all the time
- 1130 Estuaries
- 1160 Large shallow inlets and bays
- 1170 Reefs
- 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1441 Shore dock *Rumex rupestris*
- 1102 Allis shad *Alosa alosa*

The proposed development site is within a Plymouth Biodiversity Network Site, that is the river corridor that buffers the Plymouth Sound and Estuaries SAC.

Potential impacts

The potential impacts on Plymouth Sound and Estuaries SAC have been identified as follow:

- Degradation/damage/modification of habitats (groundworks and construction phases)

Pollution resulting from dust and materials used to create the new seating area and repair the sea wall has the potential to degrade habitats for which the SAC was designated, as well as affecting the buffering Plymouth Biodiversity Network Site.

Avoidance/Mitigation Measures

The following measures need to be put in place to avoid/mitigate against the potential impacts and their effects of the proposed development on Plymouth Sound and Estuaries SAC, as well as on the Plymouth Biodiversity Network Site:

- Pollution prevention/control measures including demolition screening to prevent any dust and particulates entering the river/estuary.
- Risk Assessment Method Statements detailing methods to be used to prevent contamination of the River Tamar and Stonehouse Creek, particularly during the repairs to the sea wall.

Residual effects

There are likely to be no residual effects on Plymouth Sound and Estuaries SAC, as long as the avoidance/mitigation measures listed above are put in place.

A separate Habitats Regulations Assessment (HRA) is likely to be required for the proposed re-development at this site. Consultation with the LPA should take place as soon as possible.

8.2 Habitats (IEFs)

The site contains the following habitats that have been identified as Important Ecological Features:

- ✓ Structure 2: potential to support nesting birds (herring gull)

The following habitats are considered Important Ecological Features and are found adjacent to/in the vicinity of the proposed development site:

- ✓ Mudflats: Habitat of Principal Importance

Structure 2 has been assessed as an IEF due to its potential to support legally protected/notable species and therefore has all been assessed in the next section, *8.3 Species (IEFs)*.

Mudflats

There are areas of mudflats, a Habitat of Principal Importance (HPI) under the NERC Act 2006, within the vicinity of the Site, with the closest of these some 10m to the south-west in an area close to the sea wall requiring repairs.

Potential impacts

The potential impacts on the mudflats in the vicinity of the proposed development site have been identified as follow:

- Degradation/damage/modification of habitats (groundworks and construction phases)

Pollution resulting from dust and materials used to create the new seating area and repair the sea wall has the potential to degrade the mudflats.

Avoidance/Mitigation Measures

The following measures need to be put in place to avoid/mitigate against the potential impacts and their effects of the proposed development on the adjacent mudflats:

- Pollution prevention/control measures including demolition screening to prevent any dust and particulates entering the river/estuary.
- Risk Assessment Method Statements detailing methods to be used to prevent contamination of the River Tamar and Stonehouse Creek and damage to the mudflats, particularly during the repairs to the sea wall.

Residual effects

There are likely to be no residual effects on the mudflats in the vicinity of the site, as long as the avoidance/mitigation measures listed above are put in place.

8.3 Species (IEFs)

The site contains the following species/species groups that have been identified as Important Ecological Features:

- ✓ Nesting birds: potential for using structure 2

Nesting Birds

Structure 2 onsite has low potential for nesting birds (herring gull).

Potential impacts

The potential impacts on nesting bird species onsite have been identified as follow:

- Loss of habitat due to demolition of structure 2 (groundworks phase)
- Loss of species (all phases)
- Incidental mortality to/injury of species (groundworks phase)
- Disturbance of species (groundworks phase)

Avoidance/Mitigation Measures

The following measures need to be put in place to avoid/mitigate against the potential impacts and their effects of the proposed development on bird species:

- Demolition of structure 2 undertaken outside of bird nesting season i.e. undertaken between October and February inclusive or checking structure for nesting birds immediately prior to its demolition. [If an active nest is encountered, demolition works to structure 2 must not proceed until all young have fully fledged.

Residual effects

There are likely to be no significant residual effects on bird species onsite, as long as the avoidance/mitigation measures listed above are put in place.

8.4 General advice to avoid damage to the environment

All activities on site should bear in mind the potential for wildlife or the environment being harmed through the process of development from inception to end, with a proactive approach occurring for lawful protection of wildlife and the environment regarding use of materials, machines, chemicals, and human activity on site.

- ✓ All contractors will be given a toolbox talk by an ecologist/ecological clerk of works ahead of the commencement of groundworks/demolition works. The talk will include the identification of sensitive ecological features and methods of working that minimise the risk of harm to these features. This talk will be adapted and given at appropriate stages throughout the development, particularly at the stage of each stage of development as well as when there are new groundworks/construction teams onsite.
- ✓ Contractors must ensure that no harm can come to wildlife by maintaining the site efficiently, clearing away any material such as wire in which animals can become entangled and preventing access to toxic substances.
- ✓ If there is a substantial delay before development commences, the site should be maintained in a way that would prevent wildlife colonising it and causing constraints in the future. Such management should include mowing grassland at least twice a year and preventing scrub encroachment.

- ✓ Erection of signage to inform of any Health and Safety considerations during development and post development for the benefit of residents.
- ✓ If any species is discovered during any stage of the works, any vegetation, materials etc. should be replaced to re-establish a level of cover allowing the animal to move away of its own accord. If required further advice should be sought from Ecological Surveys Ltd (Tel: 01503 240846 or 07736 458609) or Natural England.

8.5 Summary of mitigation measures

Table 8.2 summarises the mitigation measures required for the proposed development of this site.

Table 8.2. Mitigation measures

Mitigation measure	Development Phase	Important Ecological Feature(s) initially impacted upon / effected	Avoidance / reduction in effect
Risk Assessment Method Statements in place and adhered to	Groundworks Construction	Designated sites, Mudflats HPI	Avoidance / Reduction
Pollution prevention/control measures in place	Groundworks Construction	Designated sites, Mudflats HPI	Avoidance / Reduction
Demolition of structure 2 outside of bird nesting season or checking of structure for nesting birds immediately prior to demolition	Groundworks	Nesting birds	Avoidance

8.6 Residual effects and compensation

The mitigation and initial compensation measures set out above, and summarised in Table 8.2, seek to address the potential effects/impacts of the development (demolition of existing structures and replacement with open area with seating and planters, along with repairs and reinstatement of the sea wall). There are no significant residual effects/impacts resulting on any Important Ecological Features once these mitigation and initial compensation measures have been carried out.

9. Enhancement for Biodiversity

There is limited opportunity within the proposed development to increase biodiversity on the site through pro-active enhancement measures. The proposed enhancements for biodiversity are outlined below and mapped in the **Ecological Constraints and Opportunities Plan (ECOP) set out in Appendix I** (along with the mitigation and compensation measures).

Planting of Trees, Shrubs and Herbaceous Plants

Five ground level planters (1m x 1.6m) will be placed within the new seating area onsite. These plants will have shrubs and herbaceous plants selected for the provision of nectar over a long flowering season.

- ✓ Plant a variety of flowering plants, biased towards native and near-native species. Exotics are not required; however, a selection of exotics to extend the flowering season and potentially provide resources for specialist groups now and in the future, is becoming increasingly important owing to climatic changes, and should be given serious consideration by any with a view to protecting and sustaining present and future biodiversity. Plant holistically for biodiversity value: nectar rich plants/shrubs which yield fruits /nuts of benefit to a multitude of species.
- ✓ Select a variety of plants that will produce foods in different seasons. For winter residents as well as migrants that return early in spring, plants that hold their fruits throughout the winter ("winter-persistent" plants) are a vital food source.
- ✓ Avoid pesticide and insecticide use.
- Appropriate aftercare and management should ensure that these areas are maintained to give optimum benefit to wildlife.

Solitary Bee Provision

Any walls constructed will have solitary bee bricks built in. Each bee brick provides multiple cavities for solitary bees to lay their eggs. The bricks should ideally be built into south-facing, sunny walls, at between 1m and 2m above ground level and with nectar sources nearby.



Example of solitary bee bricks

10. Monitoring

The monitoring of both the mitigation measures and the biodiversity enhancements will be undertaken to ensure they are put in place and carried out correctly. The monitoring will be undertaken by a suitably qualified ecologist or an Ecological Clerk of Works. Table 10.1 below outlines the monitoring required.

Table 10.1 Monitoring required of mitigation and biodiversity enhancement measures.

Mitigation/ enhancement measure	Monitoring requirement		
	Groundworks/ demolition phase	Construction phase	Operational phase
Risk Assessment Method Statements in place and adhered to	ECoW ¹ to check.	ECoW ¹ to check.	N/a
Pollution prevention/control measures in place	ECoW ¹ to check.	ECoW ¹ to check.	N/a
Demolition of structure 2 outside of bird nesting season or checking of structure for nesting birds immediately prior to demolition	ECoW ¹ to check.	N/a	N/a
Placement of five planters containing a variety of shrubs and herbaceous plants	N/a	ECoW ¹ to check.	N/a
Integration of bee bricks in any new walls (as appropriate)	N/a	ECoW ¹ to oversee.	N/a

[ECoW¹ = Ecological clerk of works or suitably experienced/qualified ecologist]

11. Biodiversity Impact Assessment: Losses and Gains

The proposed development is classed as a minor development and therefore, at the present time, there is no mandatory requirement for the Statutory Biodiversity Metric to be used to calculate the biodiversity losses and gains associated with the development – a 10% biodiversity net gain (BNG) is not required. However, in line with the *National Planning Policy Framework 2023*, which requires that all development must provide BNG throughout the development process, and Plymouth City Council policy regarding BNG, as stated in section 4.3, the Biodiversity Metric 4.0 has been used to calculate the biodiversity losses and gains onsite.

As mentioned in section 5.5 above, the Small Sites Metric (The Biodiversity Metric) has been released and has been used to calculate the biodiversity losses and gains for this development.

The ecological information regarding the habitats present on site prior to development commencing has been obtained from the Extended Phase 1 Habitat Map (Figure 6.3), with the habitats shown as per the habitat type used by the Statutory Small Sites Metric set out in Figure 11.1. The proposed habitats present on site post-development have been obtained from the proposed site layout produced by Bailey Partnership (drawing reference PYSW-BPC-01-22-D-A 0303). This is shown in Figure 3.2, with Figure 11.2 showing the post-development habitats as per the habitat type used in the Statutory Small Sites Metric.

The Mitigation Hierarchy has been followed, seeking to firstly avoid, minimise, restore and enhance existing habitats onsite, and then compensate for those habitats lost. There are no irreplaceable habitats onsite or adjacent to the site and therefore there is no loss or impact on any such habitats. The baseline habitat onsite was assessed as being dominated by developed land, sealed surface with a narrow strip of littoral coarse sediment. Post-development, a small area of developed land, sealed surface will be replaced with ground level planters – five, each 1m x 1.6m.

Table 11.1 below sets out the habitats recorded on site, along with their condition and spatial extent, with Table 11.2 outlining the habitats to be retained and Table 11.3 those being created.

Table 11.1 Existing habitats recorded on site, their coverage and condition.

Habitat type	Area / Length	Condition
Area habitats		
Urban – Developed land; sealed surface	1175sqm	n/a
Intertidal sediment - Littoral coarse sediment	165sqm	Moderate

Table 11.2 Habitats being retained on site, along with their target condition.

Habitat type	Area / Length	Condition
Area habitats		
Urban – Developed land; sealed surface	1167sqm	N/a
Intertidal sediment - Littoral coarse sediment	165sqm	Moderate

Figure 11.1. Pre-development habitats, with habitat type as used in Statutory Small Sites Metric

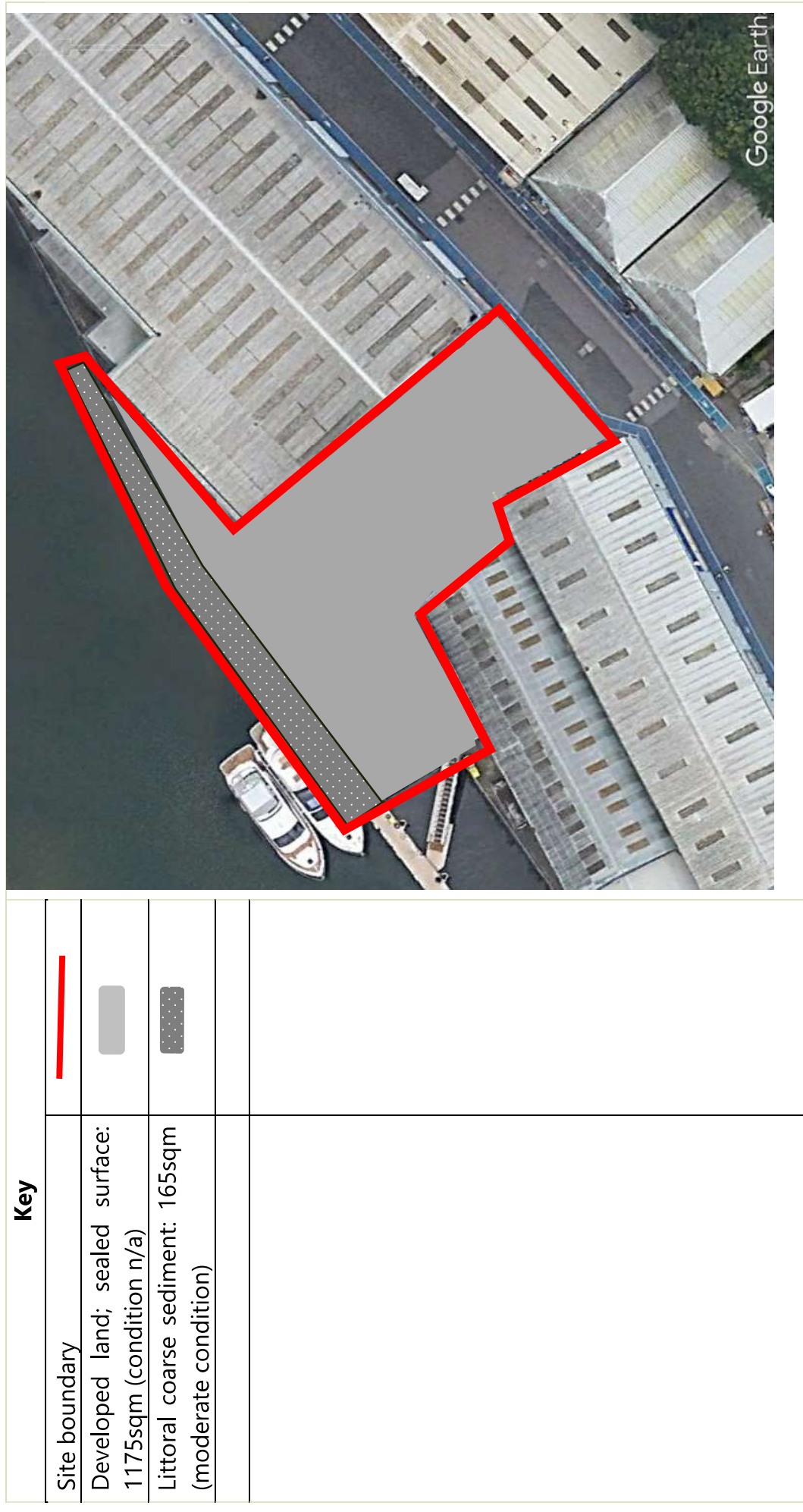


Figure 11.2. Post-development habitats, with habitat type as used in Statutory Small Sites Metric

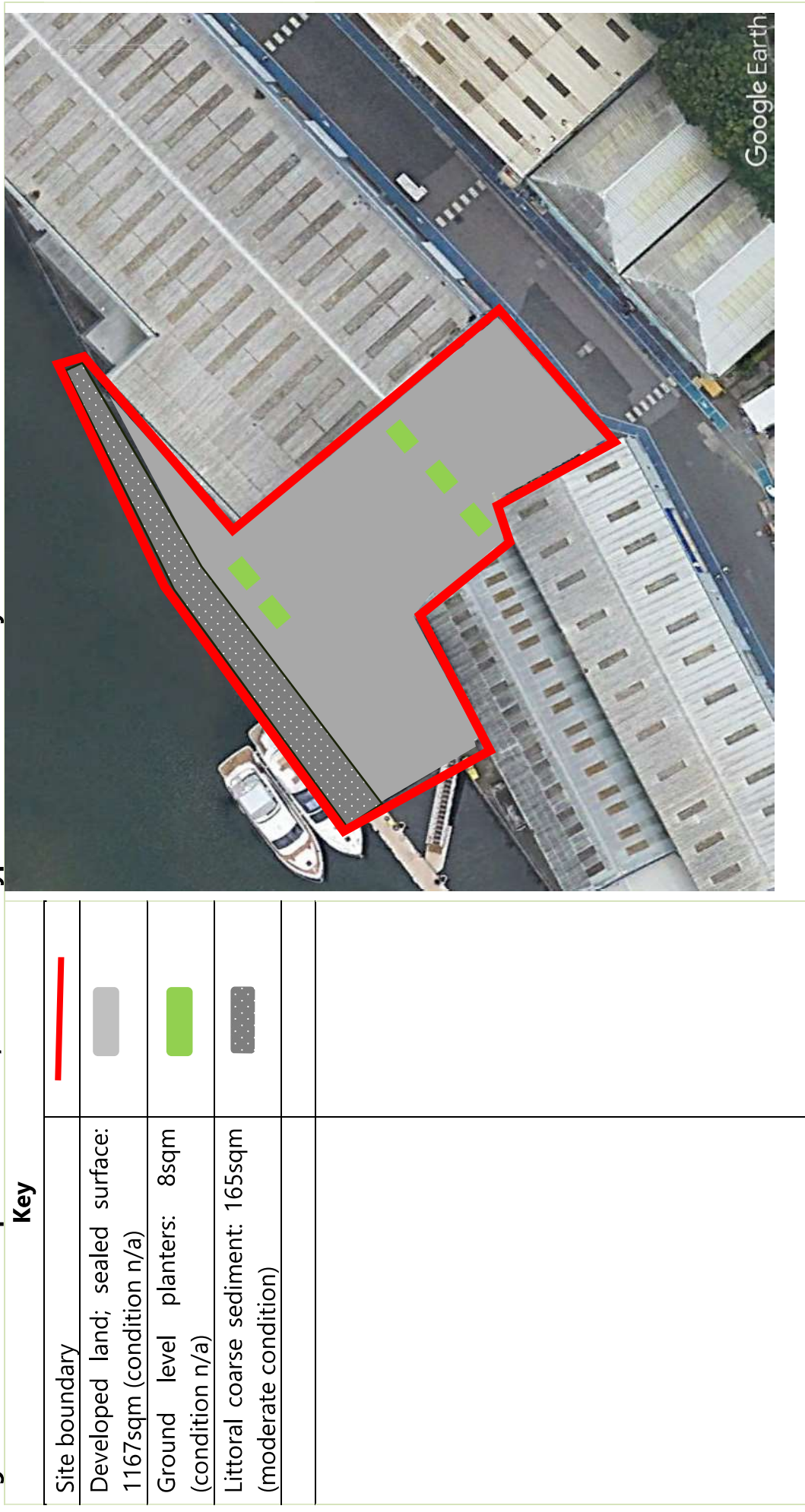


Table 11.3 Habitats being created on site, along with their target condition.

Habitat type	Area / Length	Target condition
Area habitats		
Urban – Ground level planters	8sqm	N/a

The Headline Results from the Statutory Small Sites Metric are given in Figure 11.3 below.

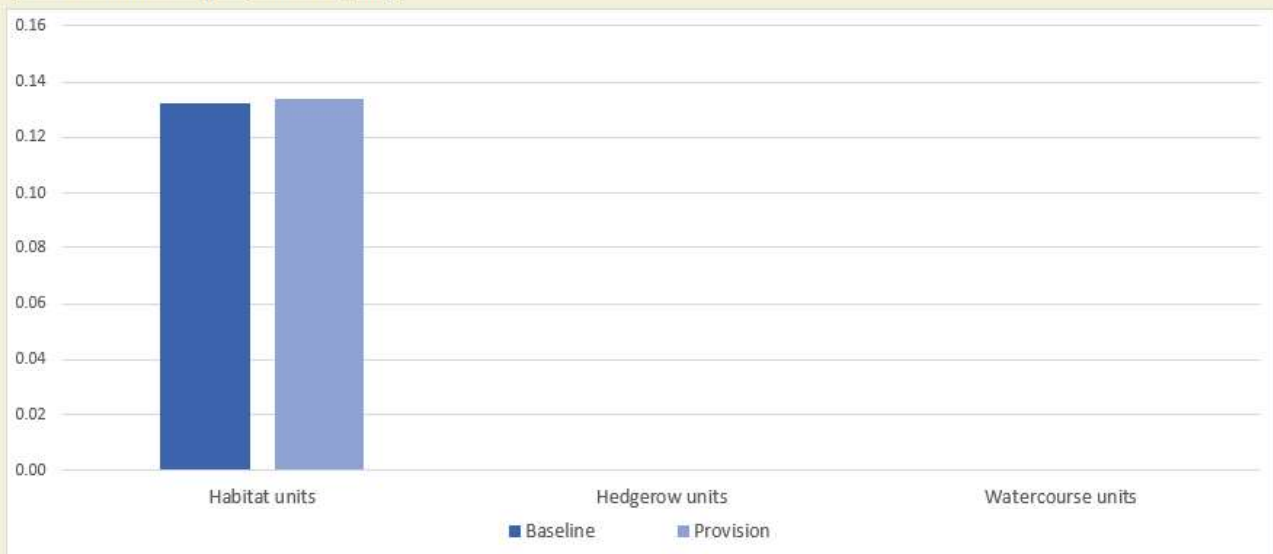
The onsite baseline score for habitat units is 0.1320, with the score increasing to 0.1335 following the development (a total net unit change of +0.0015). This post-development score takes into the habitats retained, enhanced and created onsite. This equates to a **gain of 1.17% in habitat units.**

Therefore, the proposed re-development at Princess Yachts, Newport Road, Stonehouse in Plymouth, is not likely to result in a biodiversity net gain greater than 10% in habitat units. A further 0.0117 habitat biodiversity units are required to achieve a minimum 10% net gain.

Figure 11.3. Headline Results taken from the Statutory Small Sites Metric

Site Name	Princess Yachts, Newport Road, Stonehouse, Plymouth	
Sheet Name	Headline Results	
Headline Results		
Headline	BNG Targets Not Met ▲	
Trading Rules	Trading Rules Satisfied ✓	
Next steps	Scheme alterations or offsite units required	
If BNG targets cannot be reached on-site, the Main Biodiversity Metric should be used.		
Baseline Units	Habitat units	0.1320
	Hedgerow units	Zero Units Baseline
	Watercourse units	Zero Units Baseline
Post-development Units	Habitat units	0.1335
	Hedgerow units	0.0000
	Watercourse units	0.0000
Total net unit change	Habitat units	0.0015 ▲
	Hedgerow units	0.0000
	Watercourse units	0.0000
Total net % change	Habitat units	1.17% ▲
	Hedgerow units	% target not appropriate
	Watercourse units	% target not appropriate
Habitats units required to meet target		0.0117
Hedgerow units required to meet target		0.0000
Watercourse units required to meet target		0.0000

Chart 1 - Unit change by habitat group



12. Conclusions

The proposed re-development site is considered to be of low ecological value due to it comprising metal fabricated buildings and sealed surface. However, Stonehouse Creek and the Tamar Estuary, forms the northern boundary of the Site, with the proposed repair works to the quay being undertaken from within the Estuary. Some 570m downstream lies the Plymouth Sound and Estuaries Special Area of Conservation (SAC).

The Extended Phase 1 Habitat Survey that was undertaken on 8 December 2023, along with the desktop survey, are considered to have collected enough information about the ecological condition of the site to have been able to adequately assess the impact of the proposed development. Further survey work is therefore not required.

The Important Ecological Features were identified and evaluated against the potential impacts/effects that the proposed development may have on the ecology of the site and surrounding area. The impact assessment determined how the conditions, focusing on the Important Ecological Features identified, are likely to change in relation to the baseline conditions, allowing a clear understanding of the effects of the proposed development.

Avoidance, mitigation and compensation measures have been set out to avoid and reduce the effects/impacts of the development on the Important Ecological Features and the local environment as a whole. These include Risk Assessment Method Statements, pollution prevention/control measures and the demolition of structure 2 outside the main bird nesting season. All measures should be included as a planning condition for the proposed development.

Enhancement measures for biodiversity have also been set out, including the provisions of five planters containing a variety of shrubs and herbaceous plants and the inclusion of bee bricks in any walls (as appropriate). These enhancements should be included as a planning condition for the proposed development.

All the avoidance, mitigation, compensation and enhancement measures require monitoring; this has been outlined in tabular format and should also be included as a planning condition for the proposed development.

As the Site is within the vicinity of the Plymouth Sound and Estuaries SAC, a separate Habitats Regulations Assessment (HRA) is likely to be required for the proposed re-development at this site. Consultation with the LPA should take place as soon as possible.

Providing the recommendations within this Ecological Impact Assessment (EcIA) are adhered to, with the mitigation measures and enhancements agreed, there would appear to be no ecological constraints to prevent this development. The local planning authority (LPA) should ensure that the mitigation measures, together with enhancement recommendations, are either 'conditioned' where appropriate, or that full permission is withheld pending the agreement of mitigation, compensation (where necessary) and enhancement measures.

An Ecological Clerk of Works or a suitably experienced/qualified ecologist will oversee the implementation of the ecological mitigation measures and the enhancements for biodiversity.

If the recommendations within this EcIA are adhered to, it is envisaged that there will be an overall net gain in habitat biodiversity units onsite of 1.17%. A further 0.0117 habitat biodiversity units are required to achieve a minimum 10% net gain.

It is the responsibility of all those involved with the proposed development works at Princess Yachts, Newport Street, Stonehouse, Plymouth, to ensure that wildlife protection and nature conservation legislation is complied with throughout the lifespan of the development, at every stage. Although no current evidence of protected species was found on site it cannot be assumed that they are not present when the development work commences. Care should therefore be taken during all stages of the development and if any protected are discovered they must not be handled; works must stop immediately, and advice sought from a licensed ecologist.

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13. Appendices

Appendix A. Flora Species Recorded Onsite During Extended Phase 1 Habitat Survey

None recorded onsite during the Extended Phase 1 Habitat Survey.

Appendix B. Faunal Species Recorded Onsite During Survey Work

None recorded onsite during the Extended Phase 1 Habitat Survey.

Appendix C. Summary of the Legislation and Policy relating to Habitats and Species

The Wildlife and Countryside Act (WCA) 1981 (as amended)

This Act is the primary legislation that protects animals, plants and certain habitats in the UK. It is the means by which the Bern Convention and the Birds Directive and Habitats Directive are implemented in Britain. Protected birds, animals and plants are listed in Schedules 1, 5 and 8 respectively of the Wildlife and Countryside Act.

Schedule 1 Part 1 – Birds which are protected by special penalties at all times from being intentionally killed, injured, or taken and whose eggs, nests or dependent young are also protected from being disturbed.

Schedule 5 Section 9 Part 1 (killing/injuring) – Animals which are protected from being intentionally killed or injured.

Schedule 5 Section 9 Part 1 (taking) – Animals which are protected from being taken.

Schedule 5 Section 9 Part 4a – Animals which are protected from intentional damage to, destruction of, or obstruction of access to any structure or place used for shelter or protection.

Schedule 5 Section 9 Part 4b – Animals which are protected from intentional disturbance while occupying a structure or place used for shelter or protection.

Schedule 5 Section 9 Part 4c – Animals which are protected from their access to any structure or place which they use for shelter or protection being obstructed.

Schedule 6 - Animals which are protected from being killed or taken by certain methods under Section 11(1). The methods listed are: self-locking snares, bows, crossbows, explosives (other than ammunition for a firearm), or live decoys.

Schedule 8 – Plants and fungi which, subject to exceptions, are protected from: intentional picking, uprooting or destruction; selling, offering for sale, possessing or transporting for the purpose of sale; advertising for buying or selling.

Schedule 9 – Plant and animal species that are prohibited from introducing into the wild as they may cause ecological or environmental harm or where they pose a threat to the native habitats and species. Under Schedule 9 of the Wildlife & Countryside Act 1981 (as amended) it is a criminal offence to cause any of 48 non-native plant species (6/4/2010) and (non-native animals) to spread into the wild where they cause damage to the environment/ economy/health/lifestyle.

The site owner has a responsibility to:

- Prevent invasive, non-native plants on their land spreading into the wild and causing a nuisance.
- Prevent harmful weeds on their land spreading onto a neighbour's property

The owner of the site must not plant in the wild or cause certain invasive and non-native plants to grow in the wild. This can include moving contaminated soil or plant cuttings. If this occurs there is a fine or prison term for up to 2 years. The site owner is not legally obliged to remove these plants or to control them on site. However, at the

point of change: **development, mulching, earth moving operations**: it is important that they are identified, and their spread controlled in the most appropriate way.

Environmental Protection Act 1990

Environmental Protection Act 1990 allows for the potential classification of soil and other waste containing viable propagules of invasive non-native plant species as controlled waste. This has been applied to Japanese Knotweed with the result that waste containing this species must be disposed of in accordance with the duty of care set out in section 34 of the Act. The Environment Agency have issued guidance which will be of use in complying with the duty of care.

In addition:

- Any Schedule 9 plant material, or soil containing root or rhizome fragments, may be classified as 'controlled waste' under the Environmental Protection Act 1990 (EPA).
- In addition to a criminal prosecution under the Wildlife & Countryside Act, infringement of the EPA can result in an *unlimited fine*.
- The owner may also be held liable for costs incurred from the spread into adjacent properties and for disposal of contaminated soil off site during development, which later leads to the spread on another site.

Protection of Badgers Act 1992

Both badgers and their setts are protected, making it illegal to kill, injure or take, possess or cruelly ill-treat badgers or to interfere with a badger sett (including blocking tunnels or damaging the sett in any way).

The Hedgerow Regulations 1997

Any hedgerows classified as 'important' under the 1997 Hedgerows Regulations cannot be removed without a Hedgerow Removal Notice issued by the relevant Local Authority unless previously approved as part of a planning permission. The UK Biodiversity Action Plan (BAP) now classifies any native hedge over 20m in length as a priority habitat feature. Priority hedgerows should be those comprising 80% or more cover of any native tree/shrub species.

The Local Authority is the arbiter as to classification of hedgerows.

The Countryside and Rights of Way (CROW) Act 2000

This Act increases measures for the management and protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation.

Natural Environment and Rural Communities Act 2006

The Act made amendments to the both the Wildlife and Countryside Act 1981 and the Countryside and Rights of Way (CROW) Act 2000. For example, it extended the CROW biodiversity duty to public bodies and statutory undertakers. The Act also makes provisions in respect of pesticides harmful to wildlife, the protection of birds, and in respect of invasive non-native species, and also alters enforcement powers in connection with wildlife protection, and extends time limits for prosecuting certain wildlife offences.

Section 41 of the Act requires that the Secretary of State publishes a list of species of

flora and fauna considered to be of principal importance for the purpose of conserving biodiversity in England. The list is intended to be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the NERC Act 2006 'to have regard' to the conservation of biodiversity in England, when carrying out their normal functions.

The UK BAP list of 1149 species, published in 2007, was used to draw up a list of 938 species, also known as the 'England Biodiversity List', comprising those species found in England which have been identified as requiring action under the UK BAP. In addition, the Hen Harrier has also been included on the list because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England.

The list of species of principal importance was first published in 2002 by DEFRA under Section 74 of the Countryside and Rights of Way (CRoW) Act 2000, and was identical to the UK BAP list at that time. The CRoW Act Section 74 list has now been replaced by the Section 41 list.

Sixty-five (65) habitats are listed as being of principal importance, in the Secretary of State's opinion, for the purposes of conserving biodiversity. Under section 41 (England) of the NERC Act (2006) there is a need for these habitats to be taken into consideration by a public body when performing any of its functions with a view to conserving biodiversity. These habitats are the subject of National and Local Biodiversity Action Plans.

The Anti-social Behaviour, Crime and Policing Act 2014

[Anti-social Behaviour, Crime and Policing Act 2014](#) enables community protection notices to be served by local authorities or the Police against individuals who are acting unreasonably and who persistently or continually act in a way that has a detrimental effect on the quality of life of those in the locality. These powers are designed to be flexible and could be used to address specific problems caused by widespread species such as Japanese knotweed.

The Conservation of Habitats and Species Regulations 2017 (as amended)

[The Conservation of Habitats and Species Regulations 2017](#) (and as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019)) originally transposed the Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive") and elements of Directive 2009/147/EC on the conservation of wild birds ("the Birds Directive") in England, Wales, and to limited extent, Scotland and Northern Ireland. The objective of the Regulations is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The Regulations set out the rules for the protection, management and exploitation of such habitats and species. They place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species. These sites are known generally as 'European sites' and in the UK form the national sites network (known in Europe as Natura 2000 sites). They include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

Environment Act 2021

The Environment Act 2021 received Royal Assent on 9 November 2021. It only applies to England. Key elements of the Act include:

- All new developments to deliver 10% increase in biodiversity (biodiversity net gains), to be managed for at least 30 years (reviewable by the Secretary of State), with a Biodiversity Gain Site Register to be implemented and maintained for at least 30 years after the site scheme has completed.
- Introduction of Local Nature Recovery Strategies (LNRSs) – new spatial strategies led by a “responsible authority” in each area. Statutory guidance to be given to Local Planning Authorities (LPAs) explaining how they should take account of the LNRSs.
- Introduction of a new Species Conservation Strategy which places a duty on LPAs to cooperate with Natural England and other LPAs etc. to safeguard the future of ‘at risk’ species.
- LPAs to produce Biodiversity Reports every five years, describing action taken and the impact it has had on local biodiversity.
- Establishment of the Office for Environmental Protection (OEP), a green ‘watchdog’ to ensure the enforcement of the environmental legislation in England and Northern Ireland.
- Introduction of the five Principles to which organisations must have regard:
 - (i) Integration (environmental protection should be integrated into the making of policies);
 - (ii) Prevention (preventative action should be taken to avert environmental damage);
 - (iii) Precautionary (a precautionary approach should be taken to the possibility of environmental harm);
 - (iv) Rectification At Source (where possible any environmental harm should be rectified at source);
 - (v) Polluter Pays (the person(s) who causes the harm must suffer the financial penalty both in terms of mitigation and compensation)
- Long-term (at least 15 years, starting in 2022) legally binding targets on air quality, biodiversity, water, resource efficiency and waste reduction.

Circular 06/2005 Biodiversity and geological conservation – statutory obligations and their impact within the planning system

This circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It complements the national planning policy in the National Planning Policy Framework and the Planning Practice Guidance.

National Planning Policy Framework, 2023

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied. It contains a number of policies relating to ecology including "minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures". Under NPPF, local planning authorities have an obligation to promote the preservation, restoration and recreation of priority habitats, ecological networks and the protection and recovery of priority species as identified under the Natural Environment and Rural Communities Act (2006). Local Planning Authorities will seek to produce a net gain in biodiversity, by requiring developers to design wildlife into their plans and to ensure that any unavoidable impacts are appropriately mitigated for. The NPPF 2023 version replaces the first NPPF published in March 2012 and includes minor clarifications to the revised version published in 2018, 2019 and 2021.

The natural choice: securing the value of nature (2011) (Natural Environment White Paper)

This White Paper outlines the Government's vision for the future of landscape and ecosystem services.

UK Post-2010 Biodiversity Framework, 2012

The 'UK Post-2010 Biodiversity Framework', published in July 2012, succeeds the UK BAP and 'Conserving Biodiversity – the UK Approach', and is the result of a change in strategic thinking.

Biodiversity 2020

This is a national strategy for England's wildlife and ecosystem services based on the White Paper.

European Red Data lists (IUCN, 2000)

International Union for Conservation of Nature (IUCN) and the European Commission have been working together on an initiative to assess around 6,000 European species according to IUCN regional Red Listing Guidelines. Through this process they have produced a European Red List identifying those species which are threatened with extinction at the European level so that appropriate conservation action can be taken to improve their status.

Appendix D. Wildlife Crime

<http://www.nwcu.police.uk/what-is-wildlife-crime/>

In general, wildlife crime is any action which contravenes current legislation governing the protection of the UK's wild animals and plants.

A wildlife crime may also be reported and recorded where advice has been given regarding the potential or actual presence of a protected species within a habitat with that habitat then removed/impacted causing actual disturbance/harm/death to that species. Examples in relation to this report may be seasonally pertinent but could include cutting back or removal of a hedgerow where birds and dormice are nesting; removing or doing works to trees where bats roost; cutting grass where reptiles such as slow-worms are inhabiting; filling in or blocking access to badger setts. Specific legislation should be referred to regarding the protection of any animal species or habitat.

Appendix E. Habitats Regulation Assessment (HRA)

A Habitat Regulations Assessment (HRA) is required under EC Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna (the 'Habitats Directive') (Article 6(3)) wherever a plan or project that is not directly connected to, or necessary to the management of a Natura 2000 site has the potential to have a significant effect on the qualifying species populations or habitats within the site.

From this, the relevant plan-making body shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the designated site concerned, unless in certain exceptional circumstances.

The European Union (Withdrawal) Act 2018 provides for the retention of existing EU law, despite the UK having left the EU at the end of 2020. 'EU-derived domestic legislation', which in England and Wales includes *The Conservation of Habitats and Species Regulations 2017*, continues to have effect, and all 'direct EU legislation', such as the Birds and Habitats Directives is preserved and converted to become part of domestic law. The retained 2017 Habitats Regulations have been amended by *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. The objective of the Regulations is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The Regulations set out the rules for the protection, management and exploitation of such habitats and species. They place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species. These sites are known generally as 'European sites' and in the UK form the national sites network (known in Europe as Natura 2000 sites). They include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

If the proposed development has the potential to impact up on any of the European sites, the LPA can request an HRA be conducted. The responsibility for conducting such an HRA lies with the LPA, but they can insist that all relevant information is provided to them by the developer.

Proximity to a site is not the defining factor, potential 'impact' is, and for large projects this could be up to 15km from the site. The closer to a protected site, the more likely it is that an HRA will be required, even for a very small site.

Appendix F. Assessing the Potential Value for Buildings for Roosting Bats Survey Method of Buildings.

Where appropriate, the building exteriors and interiors are searched visually, using binoculars, for field evidence of bats, with particular attention being paid to sheltered areas such as window ledges and pipes where bat droppings might lie undisturbed from the weather, insect prey remains, urine stains, oil stains from bats repeatedly moving over a small area and polishing the surface, and the potential presence of bats either dead or alive.

Classification Criteria

It should be noted that the grading system below only reports on the situation at the time of survey; should bat activity levels change after the initial survey, or should the buildings be modified (for example if roof tiles are removed or fascia boards develop cracks), the category may need revision.

Category (Potential value)	Description
Please note: Intermediate categories (e.g. Low – Moderate value) may apply.	
No/Negligible value	Buildings with no or very few features capable of supporting roosting bats. Often buildings are of 'sound' well- sealed structure or have a single skin and no roof void. They tend to have high interior light-levels, and little or no insulation. Buildings without any roofs may also fall into this category.
Low value	Buildings of largely unsuitable construction, but with a few features of potential value to bats (e.g. gaps above windows, apparently shallow crevices). No supporting evidence (e.g. droppings / staining) found. Buildings may be surrounded by poor or sub-optimal bat foraging habitat, as is often the case in urban-centre locations.
Moderate value	Buildings usually of brick or stone construction with a number of features of obvious potential value to roosting bats e.g. loose roof / ridge tiles, gaps in brickwork, gaps under fascia boards, and/or warm sealed roof-spaces with under-felt.
High value	Buildings with a large number of features of obvious potential value to bats (as above). Bats may be suspected to roost within the building (at least at certain times of year), but no supporting evidence found.





Confirmed roost	Bats discovered roosting within the building or recorded emerging from / entering the building at dusk and / or dawn. Building found to contain conclusive evidence of occupation by bats, such as bat droppings. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.
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Appendix G. Bat Activity and Bat Emergence Survey Information

Survey Method of Buildings.

Where appropriate, the building exteriors and interiors are searched visually, using binoculars, for field evidence of bats, with particular attention being paid to sheltered areas such as window ledges and pipes where bat droppings might lie undisturbed from the weather, insect prey remains, urine stains, oil stains from bats repeatedly moving over a small area and polishing the surface, and the potential presence of bats either dead or alive.

BCT Tree Categories 2016

-  **1*** - Tree with multiple, highly suitable features capable of supporting larger roosts.
-  **1** - Tree with definite potential, supporting fewer suitable features than Category 1* trees or capable of supporting roosts for single/low numbers of bats.
-  **2** - Tree with no obvious potential for roosting bats although due to its size and maturity the tree may support some features with limited potential to support bats.
-  **3** - Tree with no roosting potential.

Development and Planning Trigger for Bat Surveys

Bat Emergence

The Emergence Surveys are required to confirm the species, extent of use (in terms of numbers of bats), type of bat use (in terms of seasonality and functionality of use) and bat access points. These details are required to ascertain the requirement for a Natural England EPSL and to provide the information **required by Natural England should** an application prove necessary.

It is dependent upon the results of Emergence Surveys as to whether Natural England (NE) European Protected Species Licences (EPSL) will be required prior to any construction work commencing. Protected Species surveys, such as bat emergence surveys, cannot be conditioned by the LPA and must be completed prior to Planning Applications being determined. Bat Conservation Trust (BCT) guidelines recommend the level of Bat Emergence Surveys required for each circumstance.

Development and planning trigger list for bat surveys, which can be adapted to local circumstances, taken from the Association for Local Government Ecologists (ALGE)

template for biodiversity and geological conservation validation checklists 2007, available from <http://alge.org.uk/publications/index.php>

- (1) **Conversion, modification, demolition or removal of buildings (including hotels, schools, hospitals, churches, commercial premises and derelict buildings) which are:**
 - Agricultural buildings (e.g. farmhouses, barns and outbuildings) of traditional brick or stone construction and/or with exposed wooden beams;
 - Buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water;
 - Pre-1960 detached buildings and structures within 200m of woodland and/or water;
 - Pre-1914 buildings within 400m of woodland and/or water;
 - Pre-1914 buildings with gable ends or slate roofs, regardless of location;
 - Located within, or immediately adjacent to woodland and/or immediately adjacent to water;
 - Dutch barns or livestock buildings with a single skin roof and board-and-gap or Yorkshire boarding if, following a preliminary roost assessment, the site appears to be particularly suited to bats.
- (2) **Development affecting built structures:**
 - Tunnels, mines, kilns, ice-houses, adits, military fortifications, air-raid shelters, cellars and similar underground ducts and structures; unused industrial chimneys that are unlined and brick/stone construction;
 - Bridge structures, aqueducts and viaducts (especially over water and wet ground).
- (3) **Floodlighting of**
 - Churches and list buildings, green space (e.g. sports pitches) within 50m of woodland, water, field hedgerows or lines of trees with connectivity to woodland or water;
 - Any building meeting the criteria listed in (1) above.
- (4) **Felling, removal or lopping of:**
 - Woodland;
 - Field hedgerows and/or lines of trees with connectivity to woodland or water bodies;
 - Old and veteran trees that are more than 100 years old;
 - Mature trees with obvious holes, cracks or cavities, or that are covered with mature ivy (including large dead trees).
- (5) **Proposals affecting water bodies:**
 - In or within 200m of rivers, streams, canals, lakes, reed beds or other aquatic habitats.
- (6) **Proposal located in or immediately adjacent to:**
 - Quarries or gravel pits;
 - Natural cliff faces and rock outcrops with crevices or caves and swallets.
- (7) **Proposals for wind farm developments**

- of multiple wind turbines and single wind turbines (depending on the size and location) (NE TIN 051 – undergoing updates at the time of writing)

(8) **All proposals in sites where bats are known to be present¹**

- This may include proposed development affecting any type of buildings, structures, features or location.

Notes:

1. Where sites are of international importance to bats, they may be designated as SACs. Developers of large sites 5-10km away from such SACs may be required to undertake a HRA.

BCT Emergence and Activity Guidelines

Bat Emergence Survey Requirements

Extracted from - Table 7.3 & 7.1 BCT Recommended Minimum Survey Effort

Low Roost Suitability	Moderate Roost Suitability	High / Confirmed roost Suitability
One Survey visit – One dusk or dawn re-entry survey	Two separate survey visits – One dusk and one dawn re-entry survey	Three separate survey visits – at least one must be a dawn re-entry and one a dusk emergence, the other can be either.

Structures that have been categorized as low potential can be problematic and the number of surveys required should be judged on a case by case basis. If there is a possibility that quiet calling, late emerging species are present then a dawn survey may be more appropriate, providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

Multiple survey visits should be spread out to sample as much of the recommended survey period as possible, it is recommended that surveys are spaced at least two weeks apart, preferably more. A dawn survey immediately after a dusk one is considered only one visit.

EMERGENCE – RE-ENTRY Survey Dates

May to August (structures) No further survey required (trees)	May to September with at least one between May and August	May to September with at least two, between May and August
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September surveys are both weather and location dependent. Conditions may become unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season. Multiple survey visits should be spread out as much as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more, unless there are specific ecological reasons for the surveys to be closer together (for example a more accurate count of a maternity colony is required but it is likely that the colony will soon disperse) if there is potential for a maternity colony then consideration must be given to detectability. A survey on 31st august followed by a mid-September survey is unlikely to pick up a maternity colony. An ecologist should use their professional judgement to design the most appropriate survey regime.

Bat Activity Survey Requirements

Extracted from - Table 8.3. BCT Recommended Minimum Survey Effort.

Transect/spot count/timed search surveys		
Low Habitat Value	Moderate Habitat Value	High / Confirmed Habitat Value
One Survey visit per season (Spring- April/May, summer- June/July/August, autumn- September/October) in appropriate weather conditions for bats. Further surveys may be required if these survey visits reveal higher levels of bat activity than predicted by habitat alone.	One survey visit per month (April to October) in appropriate weather conditions for bats. At least one of the surveys should comprise dusk and pre-dawn (or dusk to dawn) within one 24 hr period.	Up to two survey visits per month (April to October) in appropriate weather conditions for bats. At least one of the surveys should comprise dusk and pre-dawn (or dusk to dawn) within one 24hr period.
Automatic / static bat detector surveys		
One location per transect, data to be collected on five consecutive nights per season (spring- April/May; summer- June/July/August; autumn- September/October) in appropriate weather conditions for bats.	Two locations per transect, data to be collected on five consecutive nights per month (April to October) in appropriate weather conditions for bats.	Three locations per transect; data to be collected on five consecutive nights per month (April to October) in appropriate weather conditions for bats)
Refer to BCT guidelines document Table 8.3 for further details and dependent conditions where the survey effort is not straightforward.		

Appendix H. Bat Roost Warning Sign

Please print off the below and attached it to any loft hatches or other human access points into a known bat roost.

Appendix I. Ecological Constraints and Opportunities Plan
 [For illustrative use only]

<p>Constraints</p> <p>Plymouth Sound and Estuaries SAC (offsite): 570m downstream</p> <ul style="list-style-type: none"> - Pollution prevention/control measures including demolition screening to prevent any dust and particulates entering the river/estuary - Risk Assessment Method Statements detailing methods to be used to prevent contamination of the River Tamar and Stonehouse Creek, particularly during the repairs to the seawall 	
<p>Mudflats (offsite): Habitat of Principal Importance</p> <ul style="list-style-type: none"> - Pollution prevention/control measures including demolition screening to prevent any dust and particulates entering the river/estuary - Risk Assessment Method Statements detailing methods to be used to prevent contamination of the River Tamar and Stonehouse Creek, particularly during the repairs to the seawall 	 
<p>Structure 2: potential to support nesting birds (heining gull)</p> <ul style="list-style-type: none"> - Demolition of structure undertaken outside of bird nesting season i.e. undertaken between October and February inclusive or checking of structure for nesting birds immediately prior to its demolition 	 
<p>Opportunities</p> <p>Ground level planters</p>	
	
<p>In-built bee bricks in any suitable walls.</p>	

