



## **Ecological Impact Assessment (EcIA)**

Site:

Abbey Bridge, Tavistock, Devon

Grid Reference: SX 48298 74514

26<sup>th</sup> October 2022



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**Document Control:**

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<b>OS Grid Reference:</b>	SX 48298 74514
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<b>Client:</b>	Tavistock Town Council
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**Declaration:**

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

<b>Chloe Balmer</b>	
<b>Kim Jelbert</b>	

**Report Lifespan:**

Ecological features can change over time, particularly if Site management/ use changes. Typically, EcIAs are valid for one year (until October 2023).



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## 1.0 Non-Technical Summary

Tavistock Town Council, commissioned Plan for Ecology Ltd to undertake an Ecological Impact Assessment (EcIA) of a section of the River Tavy at Abbey Bridge, Tavistock in Devon (OS Grid Refs SX 48298 74514) in August 2022. The client proposes to undertake repairs to the existing river wall flanking Market Road in Tavistock (remedial works at road level and at river level).

The Ecological Impact Assessment (EcIA) comprised an extended Phase 1 Habitat Survey of land within the orange boundary to determine any possible constraints. This EcIA report describes and evaluates the results of the assessment in accordance with the CIEEM Guidelines for Ecological Impact Assessment (CIEEM, 2018).

There are three habitat features of ecological importance within the site: Running water (G2), Scattered trees (A3) and inundation vegetation (F2.2). The site also has potential to support bats (EPS; S41 NERC Act, 2006; Annex II), reptiles, breeding birds, otter, invertebrates, water vole, amphibian species (S41 NERC Act, 2006). Dormouse and badger (EPS; S41 NERC Act, 2006; Annex II) are likely to be absent.

Ecological constraints and opportunities are detailed on the accompanying 'Ecological Constraints and Opportunities Plan' (ECOP) (below). The proposed development incorporates the following mitigation measures:

- **Running water (degradation):** To limit the exposure of construction waste into the River Tavy (S41 NERC Act, 2006) protective fencing is recommended to catch any debris and prevent spill effecting downstream habitats (south of the site). Measures must be taken to prevent degradation of this habitat arising from construction activities or the operational use of the site, including the risk of pollutants entering the watercourse. The Environment Agency's Pollution Prevention Guidelines (PPG5) must be followed. In the absence of current guidelines, we advise that the old guidelines are adhered to. Works within 10m of a watercourse require 'Ordinary Watercourse Consent' from the Environment Agency (EA) <https://www.gov.uk/permission-work-on-river-flood-sea-defence>.
- **Scattered trees and inundation vegetation (degradation):** The scattered trees and inundation vegetation are fully retained under the proposals. Minimum working distances and protective fencing are recommended. Follow BS5837: 2012 Trees in relation to design, demolition and construction.
- **Water vole, hedgehog, otter and other mammals:** Implement measures to prevent harm during works and to provide continued access post-works. A pre-construction survey is required.
- **Bats (foraging and commuting):** Impact on foraging/ commuting bats are considered unlikely subject to restriction of works to daylight hours.
- **Bats (roosting):** Preconstruction visual assessment of wall cavities is required immediately prior to works.
- **Birds:** Any vegetation to be cleared should be undertaken when birds are unlikely to be breeding (i.e., between September – February inclusive). If this is not possible, then vegetation must be inspected by an ecologist immediately prior to clearance. Cavities in the river wall may provide nest sites for bird species; those assessed as being suitable for nesting birds but unsuitable for roosting bats should be endoscoped when birds will not be nesting, and then blocked to prevent nesting in spring/ at the time of remediation works.



- **Fish:** A separate method statement will be provided by an ecologist specialising in freshwater fish/ ecology. Water quality (oxygen content) to be monitored by qualified person. Fish rescue in operation. Seasonally timed to avoid fish breeding season.
- **Reptiles and amphibians:** Detailed reptile surveys are not recommended; suitable reptile habitat will not be impacted by the current proposals. If the proposals change, and it becomes necessary to impact potentially suitable reptile habitat, then this should be conducted in summer under the watching brief of an ecologist.
- **Invasive plants:** Three Schedule 9 WCA (1981) invasive plant species were recorded on-site: Japanese knotweed, montbretia and Himalayan balsam. A spring/ early summer survey is required to identify plant stands (if present) and prevent accidental spread of these species to other parts of the stream during remediation works. Measures to control these species are recommended.
- **Further surveys:** If the works change such that they require light spill onto the river and scattered trees then further survey for bats will be required.
- A precautionary, preconstruction visual assessment of wall cavities to be impacted by the remediation works is required to rule out opportunistic use by roosting bats. NB: use by bats is considered unlikely as these cavities are typically below the waterline of the river for much of the year.
- A preconstruction survey in spring is required to map invasive plant stands and identify any early flowering species that may have died back/ been treated at the time of the September 2022 survey.
- A preconstruction survey to search for evidence of water vole and otter is required immediately prior to commencement of remediation works to ensure that new resting places have not been created since the September 2022 survey.
- **Biodiversity Enhancements:** There is opportunity to incorporate some features to enhance aspects of the site for ecology. See the 'Ecological Constraints and Opportunities Plan' (ECOP) below.

The baseline statement of predicted change (habitat losses and gains) resulting from the proposed development is summarised below (PTO):



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Baseline statement of predicted change (habitat losses and gains):

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<b>Ecological Receptor</b>	<b>Ecological Value</b>	<b>Loss (approximate)</b>	<b>Gain (approximate)</b>
<b>Scattered trees (A3) and inundation vegetation (F2.2)</b>	Parish Value	None anticipated – to be confirmed (TBC) by applicant	Neutral – TBC by applicant
<b>Running water (G2)</b>	Parish Value; Section 41 NERC Act (2006)	None anticipated – to be confirmed (TBC) by applicant	Neutral – TBC by applicant

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**The residual impact of the proposed development is considered likely to be neutral** subject to the successful implementation of the mitigation measures detailed in this report and the fish mitigation method statement, and following completion of the precautionary pre-construction surveys for invasive plants, bats, otter and water vole.



## **2.0 Ecological Constraints and Opportunities Plan**



# Map 1: Section of River Tavy, Tavistock, Devon - Phase 1 Habitat Distribution and Ecological Constraints and Opportunities Plan

**Target note:**

1. Large cavity in wall. Fully inspected. No bats or evidence of otter. Unlikely to support roosting bats or otter (negligible suitability due to open nature and fluctuating water level). Precautionary visual assessment required prior to works.
2. Cavity on waterline. Too small for otter and likely covered by water for much of the year. Precautionary visual assessment required prior to works.
3. Culvert. Otter potential. 30m+ from impact zone. Precautionary visual assessment required prior to works.
4. Cavities in tree roots within wall - otter potential. 30m+ from impact zone. Precautionary visual assessment required prior to works.
5. Cavities in tree roots - otter potential but fully inspected and no evidence. Precautionary visual assessment required prior to works.
6. Cracks in wall with bat roost potential (low due to fluctuating water level). Not impacted under current scheme but requiring at least one emergence survey if to be impacted.

**Constraints: Running water (degradation):** To limit the exposure of construction waste into the River Tavy (S41 NERC Act, 2006) protective fencing is recommended to catch any debris and prevent spill effecting downstream habitats (south of the site). Measures must be taken to prevent degradation of this habitat arising from construction activities or the operational use of the site, including the risk of pollutants entering the watercourse. The Environment Agency's Pollution Prevention Guidelines (PPG5) must be followed. In the absence of current guidelines, we advise that the old guidelines are adhered to. Works within 10m of a watercourse require 'Ordinary Watercourse Consent' from the Environment Agency.

**Constraints: Invasive plants:** Three Schedule 9 WCA (1981) invasive plant species were recorded on-site: Japanese knotweed, montbretia and Himalayan balsam. A spring/ early summer survey is required to identify plant stands (if present) and prevent accidental spread of these species to other parts of the stream during remediation works. Measures to control these species are recommended.

**Constraints: Scattered trees and inundation vegetation (degradation):** The scattered trees and inundation vegetation are fully retained under the proposals. Minimum working distances and protective fencing are recommended. Follow BS5837: 2012 Trees in relation to design, demolition and construction.

**Constraints: Reptiles and amphibians:** Detailed reptile surveys are not recommended; suitable reptile habitat will not be impacted by the current proposals. If the proposals change, and it becomes necessary to impact potentially suitable reptile habitat, then this should be conducted in summer under the watching brief of an ecologist.

**Constraints: Water vole, hedgehog, otter and other mammals:** Implement measures to prevent harm during works and to provide continued access post-works. A pre-construction survey is required.

**Constraints: Bats (foraging and commuting):** Impact on foraging/ commuting bats are considered unlikely subject to restriction of works to daylight hours.

**Constraints: Fish:** A separate method statement will be provided by an ecologist specialising in freshwater fish/ ecology. Water quality (oxygen content) to be monitored by qualified person. Fish rescue in operation. Seasonally timed to avoid fish breeding season.

**Constraints: Birds:** Any vegetation to be cleared should be undertaken when birds are unlikely to be breeding (i.e., between September – February inclusive). If this is not possible, then vegetation must be inspected by an ecologist immediately prior to clearance. Cavities in the river wall may provide nest sites for bird species; those assessed as being suitable for nesting birds but unsuitable for roosting bats should be endoscoped when birds will not be nesting, and then blocked to prevent nesting in spring/ at the time of remediation works.

**Constraints: Bats (roosting):** Preconstruction visual assessment of wall cavities is required immediately prior to works.

**Key**

- Crocosmia x crocosmiiflora
- Fallopia japonica
- Impatiens glandulifera
- Target note
- Wall
- Approx. survey area
- Approx. impact zone
- ▨ Riverbank - above water (inundation vegetation & scattered trees)
- ▨ River - below water

**Opportunities:** The biodiversity value of the site could potentially be enhanced by successfully implementing the following recommendations:

- 1). the successful eradication of Schedule 9 (WCA, 1981) invasive plant species will enhance the biodiversity value of the site and help to protect the spread to semi-natural habitats within the area.
- 2). installation of bat boxes on the south and/ or west elevations of scattered trees on-site.
- 3). installation of bird boxes on the north and/ or east elevations of scattered trees on-site.

**Further surveys:** If the works change such that they require light spill onto the river and scattered trees then further survey for bats will be required.

- A precautionary, preconstruction visual assessment of wall cavities to be impacted by the remediation works is required to rule out opportunistic use by roosting bats. NB: use by bats is considered unlikely as these cavities are typically below the waterline of the river for much of the year.
- A preconstruction survey in spring is required to map invasive plant stands and identify any early flowering species that may have died back/ been treated at the time of the September 2022 survey.
- A preconstruction survey to search for evidence of water vole and otter is required immediately prior to commencement of remediation works to ensure that new resting places have not been created since the September 2022 survey.





## 3.0 Introduction

### 3.1 Background & Purpose of Survey

Tavistock Town Council, commissioned Plan for Ecology Ltd to undertake an Ecological Impact Assessment (EcIA) of a section of the River Tavy at Abbey Bridge, Tavistock in Devon (OS Grid Refs SX 48298 74514) in August 2022. The client proposes to undertake repairs to the existing river wall flanking Market Road in Tavistock (remedial works at road level and at river level).

The Site is defined as the land enclosed with the orange boundary as shown on Map 1 above; the impact zone for the described works is defined as the area within the pink boundary on Map 1. The location of the site is also shown on Map 1 above.

### 3.2 Site Location & Description

The section of wall to be repaired lies within the River Tavy along Market Road in Tavistock, c. 3.7 km southeast of Rushford, c. 10.8 km west of Princetown and c. 13 km northeast of Callington in south Devon. The Site comprises a section of the River Tavy and associated river bank, and is surrounded by urban infrastructure associated with a town. To the south and east (c. 60m) of the site are areas of Deciduous Woodland (Section 41 NERC Act (2006) / UK BAP Priority Habitat).

The survey area comprises predominantly of a river (below water) and riverbank (above water) habitats; the riverbank habitat consisted of inundation vegetation & scattered trees, while a wall was present along the western stretch of the riverbank. The Phase 1 Habitat Distribution is shown on Map 1 above.

### 3.3 Proposed Site Plans

The client proposes to undertake repairs to the existing river wall flanking Market Road in Tavistock (remedial works at road level and at river level).

### 3.4 Project Administration

<b>Site Name:</b>	Section of River Tavy, Abbey Bridge, Tavistock, Devon
<b>Client:</b>	Tavistock Town Council
<b>Planning Authority:</b>	Devon County Council
<b>Report Reference Number:</b>	P4E2793
<b>Site proposals:</b>	The client proposes to undertake repairs to the existing river wall flanking Market Road in Tavistock (remedial works at road level and at river level)
<b>Survey Dates:</b>	22 <sup>nd</sup> September 2022 (Extended Phase 1 Habitat Survey including a detailed bat roost survey and survey for otter, water vole survey and Schedule 9 WCA invasive plants)
<b>Surveyors &amp; Licence Numbers:</b>	Dr Kim Jelbert BSc. (Hons) MSc. PhD. MCIEEM; bat licence: 2015-10444-CLS-CLS (CL18) Level 2; RC 224; barn owl licence no. CL29/00037; dormouse license no: 2016-22394-CLS-CLS

## 4.0 Methodology

This assessment has been carried out in accordance with the 'Guidelines for Preliminary Ecological Appraisal' produced by the Chartered Institute of Ecology and Environmental Management (CIEEM,



2017); BS42020-2013 Biodiversity – Code of Practice for Planning & Development, as adopted by local planning authorities (British Standard, 2013); and the CIEEM Guidelines for Ecological Impact Assessment (CIEEM, 2018).

#### **4.1 Extended Phase 1 Habitat**

The Ecological Impact Assessment (EcIA) comprised a desk study and a site survey. The desk study is a search of all ecological records and site designations held by the Devonshire Biological Records Centre (DBRC, 2022) within a 1km radius centred from the centre of the Site (Appendix 1). The distance between the Site boundary and nearby European sites was measured using MAGIC <http://www.magic.gov.uk> to determine whether the Site falls within a European site Zone of Influence.

The survey comprised an extended Phase 1 Habitat Survey of land within the orange line boundary, which extended more than 30m beyond the impact zone (Map 1; pink line).

The Phase 1 Habitat Survey identifies the habitats present and their associated plant species (JNCC, 2010), and assesses the potential of the site to support protected species and species of conservation concern, as well as plant species listed on Schedule 9 WCA (1981) and as injurious (harmful) under the Weed Act (1959).

For the survey within the river channel (including the riverbank) this was undertaken following a prolonged dry spell. Water level was unusually low but was still out of the depth of the surveyor in two locations. The surveyor (Kim Jelbert) wore a wet suit, buoyancy aid and was aided with a rescue line due to water depth and a second surveyor (Simon Crabb; Engineer).

The survey also functioned to provide further baseline data and determine constraints associated with the repair of the retaining wall. There is a significant void at the base of the riverbank retaining wall requiring remediation. The void in the face of the retaining wall void measures c. 3.5m long and extends c. 1.0m below the water line to the base of the wall and c. 2.1m from the external face of the wall back under the road above, creating a cave like structure. The ecologist was able to access the interior of the void and search for bats, otter and water vole. The ecologist also searched other accessible bat roost features, potential otter holts, hovers and rest sites for signs of otter and for signs of water vole and badger setts as outlined below.

#### **4.2 Bat Roost and Breeding Bird Survey**

The ecologist (Kim Jelbert) assessed the voids along the retaining wall and scattered trees in proximity to the proposed remediation works for evidence of roosting bats and nesting birds. A high-power torch was used to illuminate all accessible areas with potential to support roosting bats and roosting/ nesting birds. The ecologist searched for signs of bats and birds including droppings, staining, feeding remains, bird nests, barn owl pellets and liming.

The assessment was carried out in accordance with the 'Bat Survey for Professional Ecologists – Good Practice Guidelines' produced by the Bat Conservation Trust (Collins, 2016).

#### **4.3 Otter, Badger and Water Vole Survey**

A detailed search for evidence of otter, badger and water vole was undertaken alongside the Phase 1 Habitat survey on 22<sup>nd</sup> September 2022. A walk over assessment of the stream and stream banks was undertaken by the surveyor from within the river channel; access to the banks was restricted by the retaining wall along the west bank and steep/ off-site access to the east bank. The surveyor walked the stream looking for field signs; field signs for otter include holts, slides, nest, tracks, prints and feeding signs; field signs for water vole include droppings/ latrines, feeding signs/ remains, footprints and burrows. The ecologist also searched for badger setts along the riverbank.



## 4.4 Ecological Impact Assessment (EcIA)

Within the Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018), produced by the Chartered Institute of Ecology and Environmental Management (CIEEM), CIEEM recommend an approach to ecological evaluation that utilises available guidance and information, such as the distribution and status of the species or features within the locality of the site, and professional judgment.

The methods and standards for site evaluation within the British Isles are defined in 'A Nature Conservation Review' (Ratcliffe, 2009). They are broadly used across the United Kingdom to rank sites, so priorities for nature conservation can be attained. The criteria are size, diversity, naturalness, rarity and fragility, with secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units.

The assessment judges features within the site in relation to other sites because a number of habitats may be of nature conservation importance when combined. Habitats of local importance are often highlighted within a local BAP.

Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the international level.

The legislative and planning policy context are important and have been given full consideration in this assessment.

The likely value of ecological features is determined within a geographical context in accordance with the CIEEM Guidelines for Ecological Impact Assessment (CIEEM, 2018). Value is assigned in decreasing order of importance as follows: International/ European, UK, Regional (southwest), County, District, Parish, Local, within the Zone of Influence and Negligible.

There are also a number of other important considerations as follows:

- Designated Sites and Features (e.g. Special Protection Areas, SPA; SAC; Sites of Special Scientific Interest, SSSI; ecologically important hedgerows etc.);
- Biodiversity Value (use of BAP and local development plans);
- Potential Value;
- Secondary or Supporting Value;
- Social or Economic Value; and
- Legal Designation.

Ecologically important features to be affected by the proposed development were identified using the criteria described above. Likely impact upon a feature(s) was determined to be significant or not by considering the factors that categorize its ecological structure and function.

Where an impact (positive or negative) on the integrity of a defined feature (habitat, species or ecosystem) was identified, the impact significance has been described in the following terms: major, moderate, minor and negligible. The likelihood of the impact occurring was described as: certain / near certain (probability estimated at 95% chance or higher), probable (probability estimated above 50% but below 95%), unlikely (probability estimated above 5% but below 50%) and extremely unlikely (probability estimated below 5%). Reference has also been made to the extent and magnitude of impact (i.e. area affected) and duration (short-term impacts associated with construction and long-term impacts associated with the operational phase of the development). A significant effect is an effect that either supports or undermines biodiversity



conservation objectives for 'important ecological features' or for biodiversity in general (CIEEM, 2018).

The impact significance of the proposed development on the integrity of the site as a whole has been determined using the framework described above. Site integrity has been defined as follows: 'The integrity of a site is the coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified (CIEEM, 2018). Site integrity is dependent on the extent, magnitude and duration of impacts upon each ecological feature (habitats or species). The accumulative impact, across all features, is therefore used to determine overall impact significance on the integrity of the site, and in EIA terms. Available guidance and information, such as the distribution and status of the species or features, and professional judgment have been used to determine impact significance. Where an identified adverse impact cannot be fully mitigated, the residual impact remains. This residual impact in combination with similar impacts locally could constitute a cumulative impact. Due to the small scale and nature of the proposed development, only cumulative impact arising from potential development of adjoining land is considered within this assessment.

This report describes and evaluates the ecological interest of the site, identifies potential impacts that the works may have on wildlife, and details adopted recommendations to avoid, mitigate and/or compensate for these impacts, in accordance with BS42020-2013 Biodiversity – Code of Practice for Planning & Development (British Standard, 2013) and the CIEEM Guidelines for Ecological Impact Assessment (CIEEM, 2018).

Recommendations are provided using the Mitigation Hierarchy (British Standard, 2013; CIEEM, 2018). The Mitigation Hierarchy seeks to avoid impacts, then to mitigate unavoidable impacts, and, as a last resort, to compensate for residual impacts that remain after implementation of avoidance and mitigation measures. Biodiversity enhancements are also detailed.

## **4.5 Limitations**

September is a suitable time of year to undertake vegetation surveys (Phase 1 Habitat and invasive plant surveys). In September most species will be visible, and many will be in flower/going over, enabling species identification and habitat classification, however, some early flowering species, notably some Schedule 9 plant species may have already undergone vegetative dieback in September.

Japanese knotweed and Himalayan balsam are present but occur rarely. It is likely that one or more of these species is controlled by the Council (The Client), with conspicuous parts having been removed earlier in the season. Japanese knotweed may remain quiescent below ground, and, therefore, absence cannot be assumed in parts of the river where it was not recorded.

Preliminary bat roost assessments of trees and cavities are best carried out in winter (December – March) after the vegetation has undergone dieback and the leaves have fallen and before new leaves replace them in spring to allow for maximum visibility.

Evidence of bats, otter, badger and water vole within riverbank features could be removed by fluctuating water levels, though at the time of the survey the river level was particularly low and had been for some time. The optimal time of year to survey water voles is between May and June during peak breeding season and prior to extensive vegetation growth that may conceal field signs.

Where access to land outside of the orange line boundary was not available, the land was viewed from adjacent accessible land (within the river channel). Absence of protected species and invasive plant species in these areas cannot be assumed.



The river was deep in places, notably being out of the depth of the surveyor in two locations. The surveyor (Kim Jelbert) wore a wet suit, buoyancy aid and was aided with a rescue line and second surveyor. Access was compromised by depth of the water in places. Vascular plant species and evidence of faunal species may have been under-recorded.

Weather conditions during the survey were in line with seasonal norms. There are no limitations to the survey associated with weather conditions.

Ecological features can change over time, particularly if site management/ use changes. Typically, Ecological Impact Assessments are valid for one year (until 22<sup>nd</sup> September 2023). A search for Tree Preservation Orders (TPO's) or Conservation Area status does not form part of this assessment.



## 5.0 Assessment Results

### 5.1 Designated Sites and Local Conservation Initiatives

The Site does not lie within a designated site of nature conservation importance.

There are no statutory designated sites (International, National, Regional or Local), or non-statutory designated site of nature conservation importance located within a 1 km radius of the Site. No non-statutory sites of nature conservation value at county level lie within 1 km of the Site.

The Site does lie within a Great Crested Newt Consultation Zone.

One Other Site of Wildlife Interest (OSWI) or previously known as Local Wildlife Sites (LWS) lies within 1 km of the site:

- Whitchurch Down (OSWI) lies c. 800m south-east of the Site and is noted for its parkland with areas of improved, semi-improved & unimproved dry acid-neutral grassland & remnant heath.

Two sites of Regionally Important Geological and Geomorphological Sites (RIGS) lie within 1 km of The Site

- Tavistock Railway Cutting (RIGS) lies c. 390m northwest of The Site.
- St. John's Avenue Carpark (RIGS) lies c. 450m south-west of The Site.

The proposed remediation works are considered likely to have a **negligible impact on a County scale on the above OSWI and RIGS sites.**

### 5.2 Phase 1 Habitat Distribution

A total of four Phase 1 Habitats were recorded within the site during the Phase 1 Habitat Survey: Running water (G2), scattered trees (A3), inundation vegetation (F2.2) and wall (J2.5) (Figs 1-5). **Of the habitats within the site, running water (River Tavy) and scattered trees with inundation vegetation habitats are considered to be of significant ecological value.** Wall is considered to be of low ecological value and is briefly described below. NB: Habitats of low ecological value may support protected or notable species; see section 5.4 in relation to species.

#### **Wall (J2.5):**

The wall lining the west riverbank requires remediation and is constructed of stone (Figs 1-3). This feature is dominated by ivy and with abundant buddleia. Harts-tongue fern, willowherb and ash occur occasionally here with alder, false brome and broad-buckler fern occurring rarely in this habitat/ feature. Wall is considered to be of **negligible** ecological value.

The assemblage of vascular plant species associated with each habitat including Latin names is provided in the table at Appendix 2. Habitats that lack vegetation are not listed in the table at Appendix 2. A description of notable habitats and species is provided below.



Figure 1: There is a significant void at the base of the riverbank retaining wall requiring remediation (red rectangle). The void in the face of the retaining wall void measures c. 3.5m long and extends c. 1.0m below the water line to the base of the wall and c. 2.1m from the external face of the walling back under the road above, creating a cave like structure. The ecologist was able to access the interior of the void and search for bats/ evidence of. The ecologist also searched other accessible roost features, and potential otter holts, hovers and rest sites for signs of otter.



Figure 2: Void (Fig. 1) interior.





Figure 3: Section of wall requiring remediation works (red line); view southwest.



Figure 4: View north from Abbey Bridge. Impact Zone out of sight on west bank (left).



Figure 5; View southeast along river showing stone wall requiring remediation (right; red line) and referred to as the impact zone on Map 1.

### 5.3 Notable Habitats

#### Scattered trees (A3) and inundation vegetation (F2.2):

The riverbank comprises inundation vegetation subject to periodic inundation (silts, sands and gravel of exposed riverbed) and emergent vegetation (tree lined river corridor with shade tolerant woodland ground flora) along the east and west of the River Tavy (Figs 3-5). The scattered tree habitat comprises abundant sycamore; frequent alder and oak species; with beech, sweet chestnut and ash trees occurring occasionally. The ground flora/ inundation vegetation included frequent common bent-grass, false brome, buddleja and ivy; locally frequent creeping bent, Yorkshire fog, hemlock water-dropwort and red campion; occasional hart's-tongue fern and pendulous sedge (or drooping) with three Schedule 9 WCA (1981) invasive plant species montbretia, Japanese knotweed and Himalayan balsam occurring rarely in this habitat. NB: access to the riverbank was limited in places due to water depth; vascular plant species are likely to have been under-recorded.

This habitat is considered to be of '**Parish Value**' for biodiversity and likely forms a component part of the S41 NERC Act (2006) habitat of principal Importance, 'river'.

In the absence of mitigation, the impact of the development on scattered trees and inundation vegetation is **predicted to be short-term negative of probable occurrence, and of moderate significance on a Parish scale**. Mitigation measures are provided in Section 6.2 below.

#### Running water (G2):

The River Tavy flows south with vegetation largely absent and inaccessible in parts due to the nature of this habitat type (Figs 1, 3-5; Map 1).



River qualifies as a UK BAP priority habitat /Section 41 NERC Act (2006) habitat of principle importance 'river'. Rivers enhance connectivity across the wider site, providing a corridor through which wildlife can travel. River and riverbank vegetation (as described above under scattered trees and inundation vegetation) provides potential habitat for nesting birds, water vole, otter, freshwater invertebrate species, fish, and commuting and foraging bat species.

Running water habitat within the site is considered to be of '**County Value**' for biodiversity.

In the absence of mitigation, the impact of the development on running water is **predicted to be short-term negative of near certain occurrence, and of minor significance on a County scale**. Mitigation measures are provided in Section 6.2 below.

## 5.4 Notable Species

Notable species and species groups with potential to use the site are described below:

### Badger

The river bank and wall supporting scattered trees and inundation vegetation are considered to be suboptimal habitat for badger (*Meles meles*), a common and widespread species in Devon. There are no records for badger within a 1km radius of the survey area (DBRC, 2022). No badger setts were identified during the Phase 1 Habitat Survey.

The site is considered to be of '**Negligible Value**' for badger.

Badgers and their setts are legally protected under the Protection of Badgers Act 1992 (HM Government, 1992) (see Appendix 3). Measures to avoid or mitigate for any potential impacts on badger are provided in section 6.3 below.

In the absence of mitigation, the impact of the development on badger is **predicted to be negligible**. Works to the site are unlikely to impact badger, due to the likely absence of this species from the site

### Bats (Foraging and Commuting)

Scattered trees and the river corridor provide good quality habitat for foraging and commuting bats.

The DBRC desk study revealed 33 records for six bat species within a 1km radius of the Site: common pipistrelle bat (*Pipistrellus pipistrellus*), soprano pipistrelle bat (*Pipistrellus pygmaeus*), brown long-eared bat (*Plecotus auritus*), noctule bat (*Nyctalus noctula*), lesser horseshoe bat (*Rhinolophus hipposideros*), greater horseshoe bat (*Rhinolophus ferrumequinum*) (EPS; CRDB; UK BAP priority species/ Section 41 NERC Act (2006); Annex II) and records for 'a bat' species and 'a long-eared bat' species.

On the basis that the proposals will retain all scattered trees and running water and the works will be undertaken during day light hours (requiring no installation of artificial lighting), works are considered unlikely to impact foraging and commuting bats.

In accordance with the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016) the site was assessed as being of 'moderate suitability' for foraging and commuting bats, but on the basis that there will be no significant habitat loss and no increase in artificial lighting, detailed bat surveys are not recommended. If the proposals change, requiring habitat loss or if artificial lighting is required to facilitate night works, then further bat activity surveys would be required to inform the proposals.



Overall and based on the bat species recorded within a 1km radius of the site, the site is considered likely to be of '**County Value**' for foraging and commuting bats.

In the UK all bat species are European Protected Species (EPS) protected under both UK and European Legislation; for further information on legal protection see Appendix 3.

In the absence of mitigation, the impact of the development on foraging and commuting bats is considered to be a **short-term, negative impact, of unlikely occurrence, and of minor significance on a County scale.**

Measures to avoid or mitigate any potential impacts on foraging and commuting bats are provided in section 6.3 below.

### **Bats (Roosting)**

In accordance with the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016) trees and buildings were assessed for their potential to support a bat roost.

There is a significant void at the base of the riverbank retaining wall requiring remediation (Fig 2). The void in the face of the retaining wall void measures c. 3.5m long and extends c. 1.0m below the water line to the base of the wall and c. 2.1m from the external face of the walling back under the road above, creating a cave like structure. The ecologist was able to access the interior of the void and no evidence of bat was observed. The void opening sits below the high-water mark for some of the year (following prolonged rain fall over winter) and, therefore was assessed as being of negligible suitability for roosting bats, though occasional use when water level is use could not be ruled out. A preconstruction visual survey of the void interior is recommended.

Elsewhere, there are occasional gaps/ crevices in the retaining wall forming the west riverbank, but all are located outside of the impact zone. These were assessed as being of low suitability for roosting bats. NB: if remediation works to the wall were to be extended north, then further detailed bat emergence surveys would be required to rule out the presence of bat roosts within the wall. No trees with potential to support roosting bats were identified within the impact zone (Map 1). Scattered trees along the east riverbank and those along the west riverbank, and located outside of the impact zone, were considered to be of low suitability for roosting bats. All were in full leaf, which has potential to obscure potential bat roost features. Further survey of these trees would be required if the proposals were to impact trees outside of the impact zone.

The site is considered likely to be of '**Local Value**' for roosting bats (if present). The impact zone is considered likely to be of negligible value for roosting bats.

In the UK all bat species are European Protected Species (EPS) protected under both UK and European Legislation; for further information on legal protection see Appendix 3.

It is understood that the scattered trees (excluding those immature specimens growing out of the wall requiring remediation works) will not be affected by the proposals. In the absence of mitigation, the impact of the development on roosting bats is considered to be a **short-term, negative impact, of unlikely occurrence, and of minor significance on a local scale.**

Precautionary measures to avoid or mitigate any potential impacts on roosting bats are provided in section 6.3 below.

### **Dormouse**

The hazel dormouse occurs within woodland, hedgerows and scrub habitats. The mature scattered trees that border the east riverbank have some low potential to support dormouse; those along the west riverbank are poorly connected and are considered likely to be of negligible suitability for



dormouse. The DBRC desk study, revealed no records for dormouse within a 1km radius of the Site.

Due to the presence of suitable habitat, the Site is considered to be of up to '**Local Value**' for dormouse (if present).

The impact zone is considered to be of **negligible suitability** for dormouse. The proposed remediation works to the wall are unlikely to impact dormouse, due to the likely absence of this species.

The hazel dormouse is a European Protected Species (EPS) protected under both European and UK Legislation; see Appendix 3 for further information on legal protection in the UK. Dormice and their nests are legally protected under the Conservation Regulations 2019 (see Appendix 3); they are also UK and a Devonshire BAP priority species for conservation.

### **Fish**

The proposed remediation works will require partially diverting the river within the impact zone (Map 1). These works will inevitably impact aquatic species present, notably fish. A separate fish impact assessment and method statement will be provided by an ecologist specialising in freshwater fish/ ecology. It is understood that remediation works will be timed to avoid the fish breeding season. Water quality (oxygen content) will be monitored by qualified person and fish rescue will be in operation.

The value of the site for fish and the impact of the scheme in both the absence and after incorporation of mitigation will be presented in a standalone report prepared by an ecologist specialising in freshwater/ fish ecology.

### **Hedgehog**

The DBRC desk study revealed one records for hedgehog (*Erinaceus europaeus*) (UK BAP priority species/ Section 41 NERC Act (2006)) within a 1km radius of the survey area. Hedgerow, dense scrub and grassland habitats provide potentially suitable foraging, resting and hibernation sites for hedgehog. These habitats are largely absent from the site.

The site is considered to be of **negligible suitability** for hedgehog. Works to the site are unlikely to impact hedgehog, due to the likely absence of this species from the site. See Section 6.3 for precautionary mitigation recommendations.

### **Water vole**

Water vole (*Arvicola amphibious*) (EPS; UK BAP priority species/ NERC Section 41 (2006) species of principle importance; Devon BAP) have been shown to prefer sites supporting wide swathes of riparian vegetation growing from the water and riverbank, penetrable soil, slow flowing and deep water courses. There is suitable habitat for water vole present on-site, however, the DBRC desk study revealed no records for water vole within a 1km radius of the site (DBRC, 2022) and a detailed search for evidence of water vole was negative. However, access was compromised by depth of the water in places. Evidence of faunal species may have been under-recorded. Furthermore, water vole is most likely to be detected when surveyed for in May and June, during the breeding season and when vegetation is yet to be dense.

Water vole is a European Protected Species (EPS) protected under both European and UK Legislation; see Appendix 3 for further information on legal protection in the UK.

The Site is considered to be of '**Local Value**' for water vole (if present).



In the absence of mitigation, the nature of the identified impacts on Water vole is considered to be **short-term in duration, of unlikely occurrence, negative on a local scale, and of minor significance.**

A pre-construction water vole survey is required to ensure that water vole have not moved into the area during the period elapsed between the September 2022 survey and the proposed works in spring/ early summer 2023.

### **Otter**

The river corridor comprising the river itself and riverbank is highly suitable for otter, and the site is well-connected to off-site suitable habitats within the wider landscape. The surveyor searched all accessible features and found no current evidence of otter but noted a number of potentially suitable resting places (Map 1). The DBRC records search revealed one record for otter (*Lutra lutra*) (EPS; UK BAP priority species/ NERC Section 41 (2006) species of principle importance; Devon BAP) within a 1km radius of the site (DBRC, 2022). Otters occupy linear home ranges that incorporate watercourses and standing water bodies. Watercourses and standing water bodies that support abundant fish and amphibian species are particularly important because these species groups are the dominant dietary component for otter.

The site is considered to be of '**Local Value**' for otter and almost certainly forms part of an otter home range.

In the absence of mitigation, the nature of the identified impacts on otter is considered to be **short-term in duration, of unlikely occurrence, negative on a local scale, and of minor significance.**

A pre-construction otter survey is required to ensure that otter have not occupied any of the identified potentially suitable resting places during the period elapsed between the September 2022 survey and the proposed works in spring/ early summer 2023.

### **Reptiles and Amphibians**

The DBRC desk study revealed three records for slow-worm (*Anguis fragilis*), one record for Palmate Newt (*Lissotriton helveticus*), one record for the common frog (*Rana temporaria*) and one record for a Great Crested Newt (*Triturus cristatus*) (GCN) within a 1km radius of the Site. On-site, riverbank vegetation has some very limited potential to support common reptile species such as slow worm and grass snake (*Natrix Helvetica*) and amphibians such as common toad (*Bufo bufo*), common frog, palmate newt and GCN. The site is located within a GCN (EPS; UK BAP priority species/ NERC Section 41 (2006) consultation zone. However, no standing water is present within the site or within 500m of the site according to Ordnance Survey mapping and GCN do not typically use fast flowing rivers characteristic of the River Tavy. The GCN Mitigation Guidelines (English Nature, 2001) state that GCN are capable of mitigating up to 500 m from their ponds; however, in reality such migrations are only likely to be used where there is a lack of suitable habitat locally. A later publication by English Nature (2004) suggested that most individuals remain within 100 m and very few (if any) migrate beyond 200m. Based on this information, GCN are considered highly unlikely to be impacted by the proposals due to their likely absence from the site.

The Site is considered to be of no greater value for reptiles and amphibians than '**within the Zone of Influence**' (if present).

Impacts associated with construction are likely to be confined to the wall and riverbed, and are therefore unlikely to injure or kill individual animals. Further survey for reptile and amphibian species is not required, but precautionary avoidance measures will be implemented.



In the absence of mitigation, the nature of the identified impacts on reptiles and amphibians is considered to be **short-term in duration, of unlikely occurrence, negative with the zone of influence, and of minor significance.**

Reptiles: slowworm, adder, common lizard and grass snake, the four commonly occurring reptile species in the UK, are protected under Schedule 5 of the WCA (1981, as amended); see Appendix 3 for further details of legal protection. See section 6.3 for mitigation recommendations.

### **Birds**

A number (31) of bird species have been recorded within a 1km radius of the Site. Of the species recorded, six have potential to use the site on occasion – Great White Egret (*Ardea alba*), dipper (*Cinclus cinclus*) and common kingfisher (*Alcedo atthis*) (all three; RSPB Amber List; UK BAP/ Section 41 NERC Act (2006)), starling (*Sturnus vulgaris*), yellowhammer (*Emberiza citrinella*) (both RSPB Red List; UK BAP/ Section 41 NERC Act (2006)) and bull finch (*Pyrrhula pyrrhula*) (RSPB Amber List; UK BAP/ Section 41 NERC Act (2006)). These species have the potential to breed within habitats in the site. No suitable roost sites for barn owl (*Tyto alba*) were recorded, however, in 2006-2008 the DBRC desk study revealed one record of Barn Owl within a 1 km radius of the site, therefore, barn owl are likely present in the area (Schedule 1 WCA, 1981; CRDB; UK BAP/ Section 41 NERC Act (2006)). During the survey, cavities and vegetation on the wall were assessed as having potential to support nesting birds between March – August/ September.

Based on the size of the Site, the habitat types present (scattered trees, river and riverbank vegetation), and the number and species of bird recorded within the desk study, the site is considered likely to be of '**Local Value**' for birds.

It is understood that all scattered tree and river habitat will be retained in its entirety. The proposed works have potential to disturb and/ or harm nesting, foraging and resting bird species and could result in the loss and degradation of suitable bird nesting habitat.

In the absence of mitigation, the nature of the identified impacts on bird species is considered to be **short-term in duration, of likely occurrence, negative on a local scale and of minor significance.** Mitigation recommendations are provided in section 6.3.

### **Invertebrates**

The DBRC desk study revealed 36 records for invertebrate species of conservation significance/ UK BAP species within a 1km radius of the Site. Species of interest include Purple hairstreak (*Favonius quercus*), which can be found on oak trees and Knot grass (*Acrionicta rumicis*), which can be found in mixed habitats and could occur within the Site.

The survey area supports a mosaic of habitat types with potential to support diverse invertebrate species.

Whilst the site has some potential to support notable invertebrate species, it lacks those habitat features such as standing water, significant areas of wetland habitat, heathland, coastal grassland and significant bare ground that are typically associated with the most diverse and important invertebrate assemblages. The Site has potential to support a diversity of freshwater invertebrate species and overall is considered to be of '**Local Value**' for invertebrates.

The proposed works has potential to harm or disturb individuals. The nature of the identified impacts on invertebrates is considered to be **short-term in duration, of probable occurrence, negative on a local scale and of minor significance.** Follow mitigation for habitats in Section 6.2

Mitigation recommendations are provided in section 6.3.



## Vascular Plants

A total of 23 vascular plant species were recorded within the site during the Phase 1 Habitat survey (see Appendix 2). Access was compromised by depth of the water in places. Vascular plant species may have been under-recorded. Scattered trees and inundation vegetation are the most botanically diverse habitats on-site. No species of conservation significance was recorded within the site:

The DBRC desk study revealed no records for species of conservation significance.

Based on the size of the site, habitats present, and species recorded locally, the site is considered to be of value '**within the Zone of Influence**' for vascular plant species.

The proposed works has some potential to impact plant species as a result of construction disturbance and dust generation, but those habitats of greatest ecological value (scattered trees and inundation vegetation) will likely be fully retained and protected.

In the absence of mitigation, the nature of the identified impacts on vascular plant species is considered to be **short-term in duration, of unlikely occurrence, negative within the zone of influence and of minor significance.**

Mitigation recommendations are provided in section 6.3.

## Invasive Plants

In the UK a number of 'invasive plant species' are listed on Schedule 9 of the WCA (1981, as amended) making it an offence to cause them to spread to the wild. The desk study revealed 8 records for Japanese Knotweed (*Fallopia japonica*) WCA (1981) Schedule 9 invasive plant species within a 1km radius of the site. Three invasive species were recorded during the Phase 1 Habitat Survey: Himalayan balsam (*Impatiens glandulifera*), montbretia (*Crocsmia x crocosmiiflora*) and Japanese knotweed. Steps should be taken to control these species; see section 6.3 for mitigation recommendations.

No plants listed as injurious (harmful) under the Weed Act (1959) were present within the Site.

## Non-Vascular Plants

A specialised survey for non-vascular plants, bryophytes and lichens, was outside the scope of this study. The desk study revealed a small number of records for lower plant species of conservation significance within a 1km radius of the Site; none of which have potential to occur within habitats on-site.

Overall, the site is small and lacks those features such as metalliferous mining waste with potential to support the most diverse assemblages of lower plant species of conservation significance.

The Site is considered to be of no greater value for non-vascular plant species than '**within the Zone of Influence**'. Development of the site is unlikely to adversely impact local non-vascular plant populations. The nature of the identified impacts on non-vascular plant species is considered to be **short-term in duration, of unlikely occurrence, negative within the Zone of Influence and of negligible significance.**

Follow mitigation recommendations for habitats (see Section 6.2).





## 6.0 Mitigation Recommendations

Recommendations are provided using the Mitigation Hierarchy in accordance with BS42020-2013 (British Standard, 2013). The Mitigation Hierarchy seeks to avoid impacts, then to mitigate unavoidable impacts, and, as a last resort, to compensate for residual impacts that remain after implementation of avoidance and mitigation measures.

### 6.1 Designated Sites

No statutory designated sites (International, National, Regional or Local) or non-statutory designated site of nature conservation importance lie within 1 km of the Site. However, one Other Site of Wildlife Interest (OSWI) or previously known as Local Wildlife Sites (LWS) lies within 1 km of the site:

- Whitchurch Down (OSWI) lies c. 800m south-east of the Site and is noted for its parkland with areas of improved, semi-improved & unimproved dry acid-neutral grassland & remnant heath.

The proposed remediation works to the wall forming the west bank of the River Tavy are considered to be sufficiently distant for proposed constructional activities and subsequent operational use not to impact nearby non-statutory designated sites. Mitigation not required.

- The Site lies within a Great Crested Newt Consultation Zone. Due to the absence of ponds within 500m of the site, further survey or mitigation for GCN is not considered necessary.

### 6.2 Habitats

Of the habitats within the site, scattered trees (A3), inundation vegetation (F2.2) and running water (G2) are considered to be of significant ecological value.

1. **Scattered trees (A3) and inundation vegetation (F2.2) (degradation):** It is understood that all scattered trees (excluding immature self-down trees within wall habitat) and inundation vegetation within the site will be retained and protected to maintain a continuous wildlife corridor. If the proposals change, and habitat loss is unavoidable, then loss must be mitigated.
2. **Running water (G2) (temporary degradation):** This habitat is understood to be fully retained but will require temporary diversion away from the base of the wall to facilitate remediation works. Measures must be taken to prevent degradation of this habitat arising from construction activities or the operational use of the site, including the risk of pollutants entering the watercourse. The Environment Agency's Pollution Prevention Guidelines (PPG5) must be followed. In the absence of current guidelines, we advise that the old guidelines are adhered to. Works within 10m of a watercourse require 'Ordinary Watercourse Consent' from the Environment Agency (EA) <https://www.gov.uk/permission-work-on-river-flood-sea-defence>.

### 6.3 Species

The site has potential to support otter, water vole, reptile, fish and amphibian species, breeding birds, dormouse and bats (foraging and commuting and roosting); impact on these species/species groups will be avoided and/or mitigated by following the recommendations below.

3. **Badger, hedgehog, otter, water vole and other mammals:** All excavated pits (if required) associated with the works must be covered overnight and all trenches must have



sloping planks (no greater than 45° angle) placed in them as a means of escape so that animals will not become trapped.

4. All fences (temporary and permanent) must have a minimum 25cm gap below to permit movement of faunal species (notably otter).
5. **Bats (forging and commuting):** Impact on foraging / commuting bats is unlikely subject to restriction of works to daylight hours. Detailed bat surveys are not recommended. If the proposed works change, requiring use of artificial light then further survey for bats may be required.
6. **Bats (roosting):** A preconstruction visual survey of the void interior in the wall is recommended. Elsewhere, there are occasional gaps/ crevices in the retaining wall forming the west riverbank, but all are located outside of the impact zone. These were assessed as being of low suitability for roosting bats. NB: if remediation works to the wall were to be extended north, then further detailed bat emergence surveys would be required to rule out the presence of bat roosts within the wall. No trees with potential to support roosting bats were identified within the impact zone (Map 1). Scattered trees along the east riverbank and those along the west riverbank, and located outside of the impact zone, were considered to be of low suitability for roosting bats. All were in full leaf, which has potential to obscure potential bat roost features. Further survey of these trees would be required if the proposals were to impact trees outside of the impact zone.
7. **Birds:** Undertake any clearance/ pruning of any vegetation during the winter months (October – February inclusive) to avoid the bird nesting season. Alternatively (and as a very last resort) precede vegetation clearance with a thorough search of vegetation for nesting birds (to be undertaken by an ecologist). If an active bird nest is uncovered, then works within 5m of the nest must stop until nesting activity has ceased. Works are most likely to be delayed between April and July.
8. Cavities in the river wall may provide nest sites for bird species; those assessed as being suitable for nesting birds but unsuitable for roosting bats should be endoscoped when birds will not be nesting, and then blocked to prevent nesting in spring/ at the time of remediation works.
9. **Fish (harm/disturbance):** A separate method statement will be provided by an ecologist specialising in freshwater fish/ ecology. Measures to be implemented include water quality (oxygen content) to be monitored by qualified person; fish rescue will be in operation; and works will be seasonally timed to avoid breeding season.
10. **Reptiles and amphibians (harm/disturbance):** No habitat on-site is likely to be lost, however, a precautionary approach should be adopted during the works.
11. **Great crested newt (harm/disturbance):** habitat on-site is not suitable; however, a precautionary approach should be adopted during the works. In the unlikely event, that a GCN is uncovered during works, works must stop immediately (as soon as it is safe to do so) and a GCN licensed ecologist contacted for advice.
12. **Otter & Water Vole (disturbance):** A pre-construction otter and water vole survey is required to ensure that species have not occupied the site during the period elapsed between the September 2022 survey and the proposed works in spring/ early summer 2023.
13. **Invasive plants:** Japanese knotweed, montbretia and Himalayan balsam are present within the site. These species are listed on Schedule 9 WCA (1981) making it an offence to cause them to spread to the wild. There is potential for additional non-native invasive plant



species to be present within the site that were not visible during the Phase 1 Habitat survey undertaken in September. A preconstruction survey in spring is required to map invasive plant stands and identify any early flowering species that may have died back/ been treated at the time of the September 2022 survey. Development of the site must be informed with an invasive plant method statement.

14. **Vascular and non-vascular plants: and invertebrates (disturbance):** Follow recommendations for habitats and species above.

#### **6.4 Opportunity for Biodiversity Enhancements**

The biodiversity value of the site could potentially be enhanced by successfully implementing the following recommendations:

15. The successful eradication of Schedule 9 (WCA, 1981) invasive plant species will enhance the biodiversity value of the site and help to protect the spread to semi-natural habitats within the area.
16. Installation of bat boxes on the south and/ or west elevations of scattered trees on-site.
17. Installation of bird boxes on the north and/ or east elevations of scattered trees on-site.

#### **6.5 Further surveys**

- If the proposed works change such that they require use of artificial light then further survey for bats will be required.
- A preconstruction visual assessment of wall cavities to be impacted by the remediation works is required to rule out opportunistic use by roosting bats. NB: this is considered unlikely as these cavities are typically below the waterline of the river for much of the year. In the unlikely event that a bat roost is uncovered, then further more detail bat emergence surveys (restricted to the period between May and September) would be required to determine species present, number of bats and roost type. Works would be subject to obtaining a European Protected Species mitigation licence from Natural England.
- A preconstruction survey in spring is required to map invasive plant stands and identify any early flowering species that may have died back/ been treated at the time of the September 2022 survey.
- A preconstruction survey to search for evidence of water vole and otter is required immediately prior to commencement of remediation works to ensure that new resting places have not been created since the September 2022 survey. In the event that water vole or otter resting or breeding sites are encountered, then more detailed survey may be required and works would be subject to obtaining an appropriate mitigation licence from Natural England. A separate method statement will be provided by an ecologist specialising in freshwater fish/ ecology.

#### **6.6 Monitoring**

Ecological monitoring requirements will be required to safeguard fish. A separate method statement will be provided by an ecologist specialising in freshwater fish/ ecology.

### **7.0 Impact Assessment**

Table 2: Assessment of Impact of the proposed development on features of ecological importance before and after mitigation.



<b>Feature</b>	<b>Characterisation of unmitigated impact</b>	<b>Effect without mitigation</b>	<b>Mitigation (Points 1 – 17 Sections 6.1 – 6.4)</b>	<b>Significance of effect of residual impact after mitigation</b>
<b>Running water</b>	Degradation (construction and operational)	Short-term negative of near certain occurrence, and of minor significance on a County scale	2	Neutral
<b>Scattered trees + inundation vegetation</b>	Degradation (construction and operational)	Short-term negative of unlikely occurrence, and of minor significance on a Parish scale	1	Neutral
<b>Badger &amp; hedgehog</b>	Harm or disturbance to individual animals (construction)	Neutral	3 - 4	Neutral
<b>Bats (foraging and commuting)</b>	Degradation of scattered tree habitat (construction and operational)	Short-term, negative impact, of unlikely occurrence, and of minor significance on a County scale	5	Neutral
<b>Bats (roosting)</b>	Disturbance to roosting habitat (construction) Harm or disturbance to individual animals (construction)	Short-term, negative impact, of unlikely occurrence, and of minor significance on a local scale	6	Neutral
<b>Birds</b>	Loss or disturbance to nesting habitat (construction)	Short-term in duration, of likely occurrence, negative on a local scale and of minor significance	7-8, 17	Neutral
<b>Fish</b>	Loss of or degradation of suitable habitat (construction and operational) Harm or disturbance to individual animals (construction)	See supporting Fish Impact Assessment and method statement	9	See supporting fish impact assessment and method statement
<b>Reptiles &amp; Amphibians</b>	Loss of or degradation of suitable habitat (construction and operational) Harm or disturbance to individual animals (construction)	Short-term in duration, of unlikely occurrence, negative with the zone of influence, and of minor significance	10-11	Neutral
<b>Invertebrates</b>	Loss of or degradation of suitable habitat (construction and operational)	Short-term in duration, of unlikely occurrence, negative on a local	14	Neutral



Feature	Characterisation of unmitigated impact	Effect without mitigation	Mitigation (Points 1 – 17 Sections 6.1 – 6.4)	Significance of effect of residual impact after mitigation
		scale and of minor significance		
<b>Otter</b>	Harm or disturbance to individual animals (construction)	Short-term, negative impact, of unlikely occurrence, and of minor significance on a local scale	12	Neutral
<b>Water vole</b>	Degradation of suitable habitat (construction and operational) Harm or disturbance to individual animals (construction)	Short-term, negative impact, of unlikely occurrence, and of minor significance on a local scale	12	Neutral
<b>Dormouse</b>	Harm or disturbance to individual animals (construction)	Neutral	-	Neutral
<b>Vascular plants</b>	Loss or degradation of habitats (construction and operational)	Short-term in duration, of unlikely occurrence, negative within the Zone of Influence and of minor significance.	14	Neutral
<b>Non-vascular plants</b>	Loss of or degradation of suitable habitat (construction and operational)	Short-term in duration, of unlikely occurrence, negative within the Zone of Influence and of negligible significance	14	Neutral

## 7.1 Residual Impacts

**The residual impact of the proposed development is considered likely to be neutral** subject to the successful implementation of the mitigation measures detailed in this report and the fish mitigation method statement, and following completion of the precautionary pre-construction surveys for invasive plants, bats, otter and water vole.



## 8.0 Bibliography

- Baker, J., Hoskin, R. and Butterworth, T. (2019) Biodiversity Net Gain. Good Practice Principles for Development. A Practical Guide. CIRIA, 2019. ISBN: 978-0-86017-791-3.
- BSI (British Standards) (2005) BS 5837:2005 Trees in relation to Construction. BSI.
- BSI (2013) BS 42020: 2013 Biodiversity: Code of Practice for Planning and Development. BSI.
- Bright et al., (2006) Dormouse Conservation Handbook. English Nature (now Natural England).
- Cheffings C.M. & Farrell L. (2005) The Vascular Plant Red Data List for Great Britain. Species Status 7: 1-116. JNCC, Peterborough.
- Church J. M. Hodgetts N.G. Preston C. D. & Stewart N. F. (2004). British Red Data Books: Mosses and Liverworts. JNCC, Peterborough.
- Church J. M. Coppins B. J. Gilbert O. L. James P. W. & Stewart N. F. (1996) British Red Data Books: Lichens. JNCC, Peterborough.
- CIEEM [Chartered Institute of Ecology and Environmental Management (2018) Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland. CIEEM.
- CIEEM [Chartered Institute of Ecology and Environmental Management (revised 2017) Guidelines for Preliminary Ecological Appraisal. 2<sup>nd</sup> Edition. CIEEM.
- Collins, J (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> Edition). Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1.
- Devon County Council (2019) South Hams SAC – Greater Horseshoe Bats – Habitats Regulations Assessment Guidance. [https://www.dartmoor.gov.uk/data/assets/pdf\\_file/0033/375945/2019-October\\_FINAL\\_South\\_Hams\\_SAC\\_HRAGuidance.pdf](https://www.dartmoor.gov.uk/data/assets/pdf_file/0033/375945/2019-October_FINAL_South_Hams_SAC_HRAGuidance.pdf)
- English Nature (2001) Great Crested Newt Mitigation Guidelines. English Nature, Peterborough.
- English Nature (2004) An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt *Triturus cristatus*. English Nature Reports 576.
- European Commission (1992) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. European Commission.
- European Commission (2009a) Directive 2009/147/EC on the conservation of wild birds. European Commission.
- Environment Agency (2007) Works in, near or over watercourses, PPG5: prevent pollution (withdrawn 14<sup>th</sup> December 2015 but not replaced). Environment Agency.
- DBRC [Devonshire Biological Records Center] (to 2022) Erecords computer database. Devonshire Wildlife Trust. Unpublished.
- HM Government (1981 as amended) The Wildlife and Countryside Act 1981. HMSO, London.
- HM Government (1992) Protection of Badgers Act 1992. HMSO, London.
- HM Government (1981 as amended) The Wildlife and Countryside Act 1981 (as amended). HMSO, London.
- HM Government (1997) Statutory Instrument 1997 No.1160. The Hedgerow Regulations 1997. HMSO, London.
- HM Government (2000) The Countryside and Rights of Way Act 2000. HMSO, London.



- 
- HM Government (2006) The Natural Environment and Rural Communities Act 2006. HMSO, London.
- HM Government (2019) The Conservation of Habitats and Species Regulations 2019 (as amended). HMSO, London.
- Gent A.H. & Gibson S.D. (1998) Herpetofauna Worker's Manual. JNCC, Peterborough.
- JNCC [Joint Nature Conservation Committee] (2011) UK BAP Priority Species and Habitats. Available at: <http://jncc.defra.gov.uk>.
- JNCC (2011) Species Status Assessment Project. Available at: <http://jncc.defra.gov.uk>.
- JNCC (2010) Handbook for Phase 1 Habitat Survey - A Technique for Environmental Audit. ISBN 0 86139 636 7.
- Ministry of Housing, Communities and Local Government (2018) National Planning Policy Framework  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/779764/NPPF\\_Feb\\_2019\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf)
- Natural England Advice Note (2015) <https://www.gov.uk/guidance/hazel-or-common-dormice-surveys-and-mitigation-for-development-projects>
- Natural England (2015) [www.gov.uk/guidance/reptiles-protection-surveys-and-licences](http://www.gov.uk/guidance/reptiles-protection-surveys-and-licences)
- ODPM [Office of the Deputy Prime Minister] (2005) Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.
- Poland J. & Clement E. (2009) The Vegetative Key to the British Flora. Poland & BS BIO, Southampton.
- Preston C. D. Pearman D. A. & Dines T. D. (2002) New Atlas of the British and Irish Flora. Oxford Unity Press Inc., New York
- Ratcliffe, D. (2009) A Nature Conservation Review. Cambridge University Press. Cambridge.
- Stace C. (2010) New Flora of the British Isles – Third edition. Cambridge University Press, Cambridge.
- Wiggington M.J. (1999) British Red Data Book. Vascular Plants. 3rd Edition. JNCC, Peterborough.



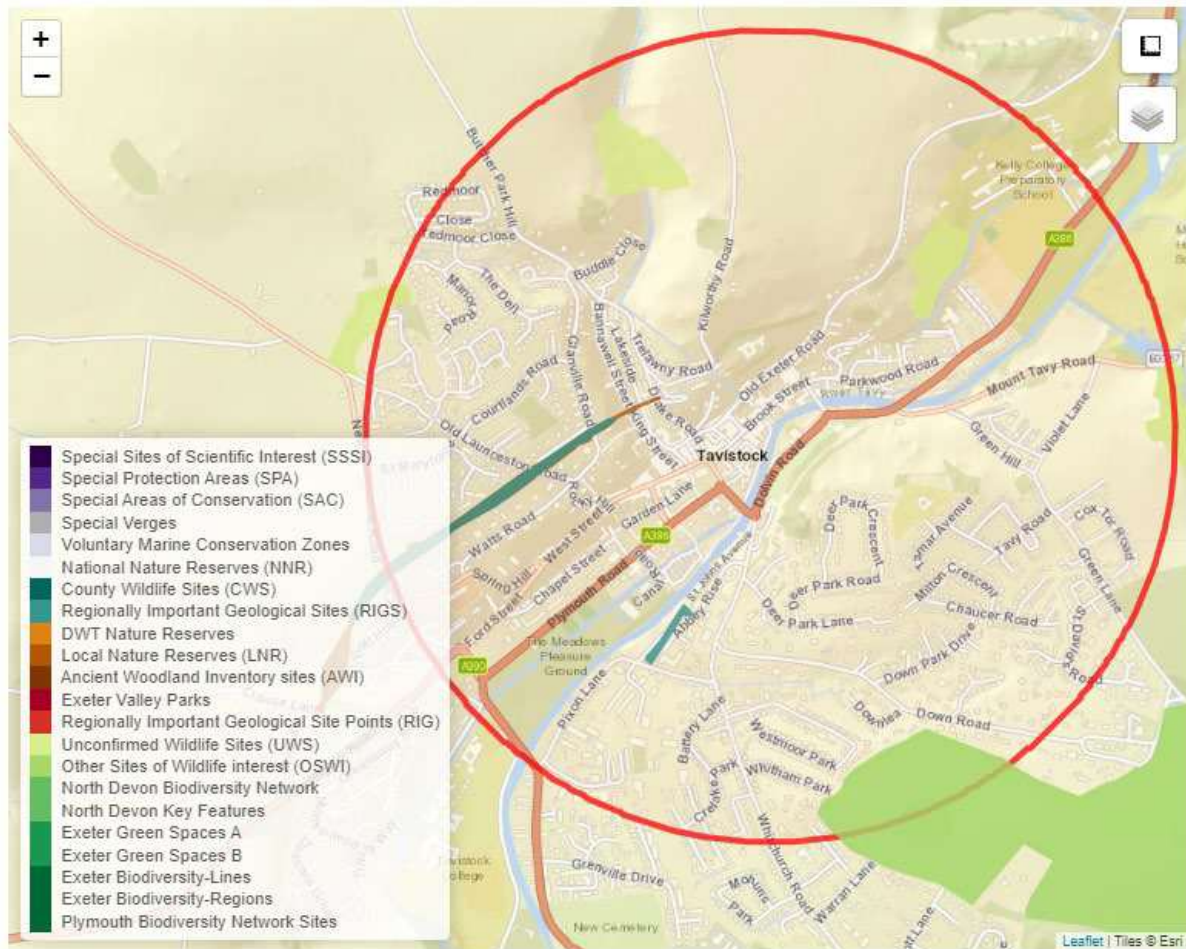
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## 9.0 Appendix 1: Designated Sites Plan

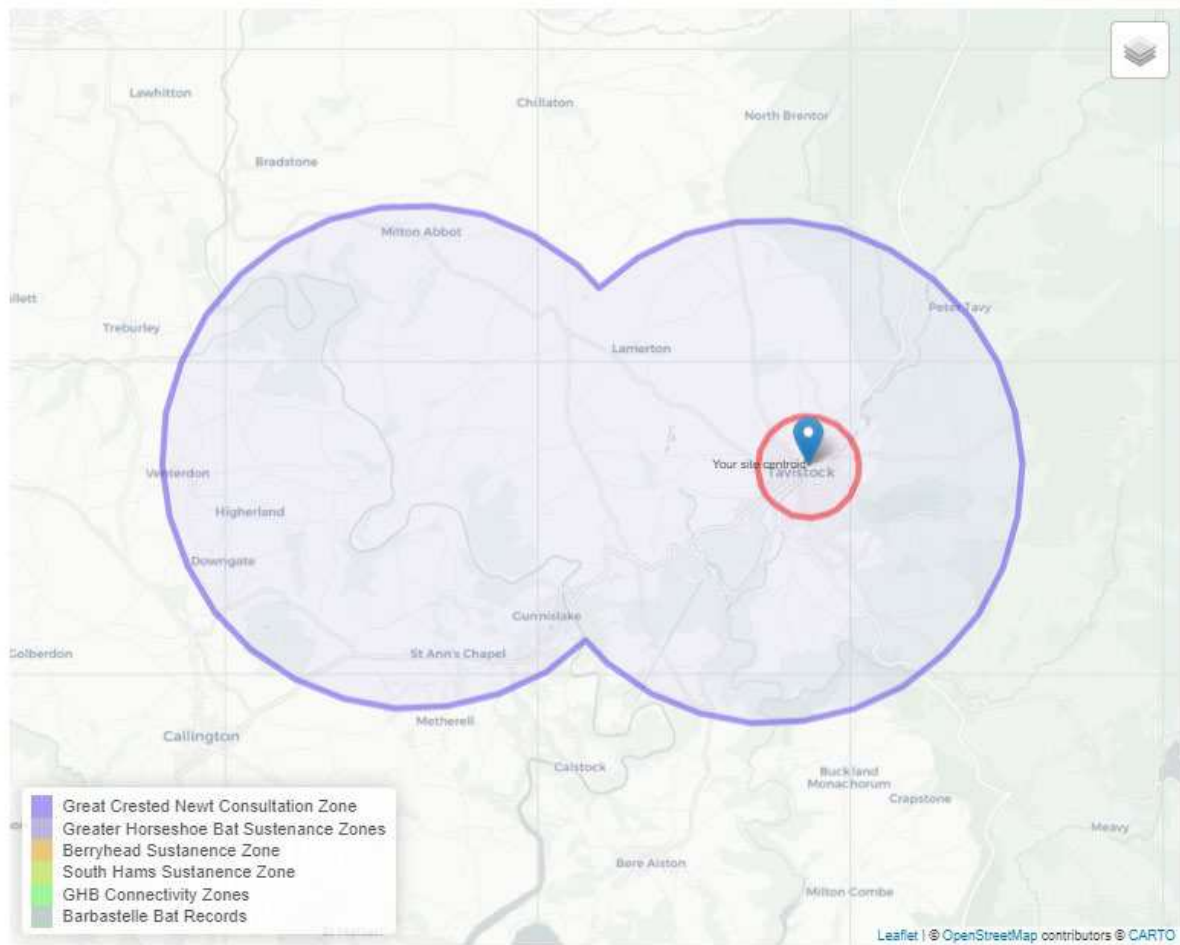




## Map of statutory and non-statutory sites within 1 kilometre of SX4829874514 (04/10/2022) Enq no.10-2345



Designated Sites within 1 km of Site (above)



## Consultation Zones within 1 kilometre of SX4829874514 (04/10/2022) Enq no.10-2345

**Great Crested Newt Consultation Zones:** Your site is in a Great crested newt consultation zone. These are five kilometre buffers around existing and historical (post 1970) great crested newt records. You may need to carry out great crested newt survey if your site is within one of these zones. For more information please go to: <http://www.devon.gov.uk/devon-gcn-guidance-june-2012.pdf>

The nearest great crested newt record to your site is: 0.8 km away and was recorded in 2013 at SX475744



## 10.0 Appendix 2: Phase 1 Habitat Plant List

Latin Name	Common Name	Running water (G2)	Scattered trees (A3) + Inundation vegetation (F2.2)	Wall (J2.5)
<i>Acer sp.</i>	Sycamore	Vegetation largely absent & inaccessible in parts	A	
<i>Agrostis capillaris</i>	Common bent-grass		F	
<i>Agrostis stolonifera</i>	Creeping bent		LF	
<i>Alnus glutinosa</i>	Alder		F	R
<i>Asplenium scolopendrium</i>	Hart's-tongue fern		O	O
<i>Brachypodium sylvaticum</i>	False brome		F	R
<i>Buddleja davidii</i>	Buddleja		F	A
<i>Carex pendula</i>	Pendulous sedge (or drooping)		O	
<i>Castanea sativa</i>	Sweet chestnut		O	
<i>Centranthus ruber</i>	Red valerian			F
<i>Crocsmia x crocosmiiflora</i>	Montbretia		R	
<i>Dryopteris dilatata</i>	Broad buckler fern			R
<i>Epilobium sp.</i>	Willowherb			O
<i>Fagus sylvatica</i>	Beech		O	
<i>Fallopia japonica</i>	Japanese Knotweed		R	
<i>Fraxinus excelsior</i>	Ash		O	O
<i>Hedera helix</i>	Ivy		F	D
<i>Holcus lanatus</i>	Yorkshire fog		LF	
<i>Impatiens glandulifera</i>	Himalayan balsam		R	
<i>Juncus effusus</i>	Soft rush		O	
<i>Oenanthe crocata</i>	Hemlock water-dropwort	LF		
<i>Quercus SP.</i>	Oak sp.	F		
<i>Silene dioica</i>	Red campion	LF		

DAFOR is a nominative scale where D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare. L = Locally; or combination of.



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## 11.0 Appendix 3: Legislation and Planning Policy

### Protected Habitats, Species and Designated Sites

- The Conservation of Habitats and Species Regulations (HM Government, 2019) (as amended) encompasses Special Areas of Conservation (SACs) and provides additional protection for Special Protected Areas (SPA's), RAMSAR Sites and European Protected Species (EPS).
- The Countryside and Rights of Way (CRoW) Act (HM Government, 2000, as amended) provides additional protection for Sites of Special Scientific Interest (SSSIs) and threatened species; under the CRoW Act (2000) Local Authorities have a statutory duty to consider UK BAP priority habitats and species as part of planning applications.
- The Hedgerows Regulations (1997) protects ecologically/ historically important hedgerows.
- The Natural Environment and Rural Communities (NERC) Act (HM Government, 2006) bestows a legal duty on public authorities to conserve biodiversity. Section 41 includes a list of habitats and species of principle conservation importance.
- The Protection of Badgers Act (1992) protects badgers as specified below.
- The Wildlife and Countryside Act (HM Government 1981, as amended) encompasses the protection of wildlife (fauna and flora), SSSIs, SPAs, National Nature Reserves (NNRs) and RAMSAR Sites.

**Badgers:** Badgers are legally protected under the Protection of Badgers Act 1992. As a result of this statutory legislation, it is an offence to:

- Purposely kill, injure or take a badger;
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett;
- Disturb a badger when occupying a sett.

**Birds:** In Britain the nests (whilst in use or being built) and eggs of wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981 (as amended) (HM Government, 1981).

Some species (i.e. barn owl) are also listed on Schedule 1 of the Wildlife and Countryside Act (HM Government, 1981 as amended); it is an offence to:

- Intentionally capture, injure or kill a Schedule 1 listed species;
- Intentionally or recklessly disturb a Schedule 1 listed species whilst nesting;
- Intentionally or recklessly disturb a dependent young Schedule 1 listed species.

**European Protected Species (EPS) (Bat, dormouse, otter, water vole & great crested newt):** EPS are listed on Annex IV(a) of the European Communities Habitats Directive.



In Britain protection of EPS is achieved through their inclusion on Schedule 2 of the Conservation and Habitats Regulations 2019, Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 12 of the Countryside and Rights of Way Act 2000 (HM Government, 1981, 2000 & 2010).

As a result of this statutory legislation it is an offence to:

- Deliberately capture, injure or kill an EPS;
- Intentionally or recklessly disturb an EPS in its place of rest/ breeding Site;
- Intentionally or recklessly damage, destroy or obstruct access to a EPS place of rest/ breeding Site (even if the EPS is not occupying the resting / breeding place at the time);
- Possess or sell or exchange an EPS (dead or alive) or part of an EPS.

**Reptiles** (species found in Devon: adder, common lizard, slow worm and grass snake): reptiles are protected under Schedule 5 (section 9(1) and 9(5)) of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to kill and/ or injure reptiles, and sell or transport for the purpose of sale.

### **Statutory Designated Sites**

**Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)** are of International nature conservation importance.

**Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)** are of National importance. Development proposals with potential to affect a SAC, SSSI or NNR require permission from Natural England.

**Local Nature Reserves (LNRs)** are protected from development; the Local authority is responsible for LNRs.

### **Non-Statutory Designations**

Non-statutory Sites include **County Wildlife Sites (CWS), County Geology Sites (CGS), Roadside Verge Audit Biological Sites** and **Ancient Woodlands**. CWSs and CGSs are of at least county importance for wildlife/geology in Devon; all are given increased protection through the planning process.

**Biodiversity Action Plans (BAPs)**: BAPs distinguish National and County level priority habitats and species for conservation. The Local Authority has a duty to conserve UK BAP priority habitats and species under Section 74 of the CRoW Act (2000).

**Red Data Books & Lists**: detail the status of species in relation to threat.

### **Planning Context**

The local planning authority has a statutory obligation to consider impacts upon protected species resulting from development. Planning permission will not be granted with outstanding ecological surveys, and if applicable an appropriate mitigation plan (except under exceptional circumstances as set out in ODPM Circular 06/2005).

**National Policy**: The revised National Planning Policy Framework (NPPF) was published on 24 July 2018 and sets out the government's planning policies for England and how these are expected to be applied. This revised Framework replaces the previous National Planning Policy Framework published in March 2012. Chapter 15 of the NPPF 'Conserving and enhancing the natural environment' is detailed below:



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170. 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.

171. Plans should: distinguish between the hierarchy of international, national and locally designated Sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

172. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

173. Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 172), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.



174. To protect and enhance biodiversity and geodiversity, plans should: a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated Sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

175. 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 encouraged, especially where this can secure measurable net gains for biodiversity.

176. The following should be given the same protection as habitats Sites:

a) potential Special Protection Areas and possible Special Areas of Conservation;

b) listed or proposed Ramsar Sites; and

c) Sites identified, or required, as compensatory measures for adverse effects on habitats Sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar Sites.

177. The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats Site is being planned or determined.

178. Planning policies and decisions should ensure that:

a) a Site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);

b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and

c) adequate Site investigation information, prepared by a competent person, is available to inform these assessments.



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179. Where a Site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.

180. Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the Site or the wider area to impacts that could arise from the development. In doing so they should:

- a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;
- b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and
- c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

181. Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual Sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.

182. Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.

183. The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.