United Environmental Services Ltd
1 Booths Park,
Chelford Road,
Knutsford,
Cheshire
WA16 8QZ

www.ues.org.uk
[redacted]
[redacted]

PRELIMINARY ECOLOGICAL APPRAISAL

At

Land Between F Lloyd Penley and Bedwell Park
Wrexham Industrial Estate
Wrexham
LL13 0TS

NGR: SJ 37528 48464

Prepared for:	Eight Industrial (Wrexham 4) Ltd.
Written by:	Tom Kenwright, UES Senior Ecologist
Approved by:	Toby Hart, UES Managing Director
	[redacted]
Date:	7th July 2026
UES reference:	UES05251/01

CONTENTS

EXECUTIVE SUMMARY **3**
1 INTRODUCTION **4**
1.1 Author, surveyors, qualifications and scope of study area 4
1.2 Survey objectives 4
1.3 Development works 5
1.4 Structure of the report 5
2 METHODOLOGY **6**
2.1 Desk study 6
2.2 Field survey 6
2.3 Otter and water vole survey 6
2.4 Survey limitations 7
3 RESULTS **8**
3.1 Desk study 8
3.2 Baseline conditions – Habitats 8
3.3 Baseline conditions and retrospective assessment of impacts – Protected species or resources 10
4 EVALUATION AND RECOMMENDATIONS **17**
4.1 Habitats 17
4.2 Species 19
5 CONCLUSION **23**
6 REFERENCES **24**
APPENDICES **25**
Appendix 1 – Desk study 25
Appendix 2 – UKHab plan 26
Appendix 3 – Aerial photographs 27
Appendix 4 – Photographs 28
Appendix 5 – Botanical species list 29
Appendix 6 – Planning and statutory context 30

EXECUTIVE SUMMARY

United Environmental Services Ltd (UES) was commissioned to carry out a baseline ecological survey of a retrospective development at a parcel of land located between F Lloyd Penley and Bedwell Park, Wrexham Industrial Estate. A desk study and Preliminary Ecological Appraisal (PEA) survey were undertaken on 16th May 2024, including searches using the Multi Agency Geographic Information Centre (MAGIC). The walkover survey was extended to include a detailed otter Lu*tra lutra* and water vole *Arvicola amphibius* survey 250m upstream and downstream of the working area. This included an assessment of habitat potential and a search of evidence of activity of both species.

The PEA provides an assessment of potential ecological impacts associated with the development of the land parcel. A planning application has been submitted to Wrexham Borough Council for the erection of a bridge over the River Clywedog and associated access road (reference P/2025/0886). The application is retrospective as the bridge has already been constructed.

The works resulted in the loss of small areas of riparian woodland, the creation of a gap in the tree canopy of approximately 20m, and disturbance of bankside vegetation. It is considered that there will have likely been very limited impacts on protected or otherwise notable species, although there is potential that nesting birds or bats using roosting features within felled trees may have been adversely affected at the time of clearance. No evidence of otter, water vole or notable bird species was recorded within close proximity to the working area, and the wider riparian corridor remains broadly intact and functional.

As the application is retrospective and all construction works have already been completed, no ongoing construction-phase impacts are anticipated. Should any additional works be required in the future, particularly vegetation clearance or activities that impact the banks or channel of the river, the necessary mitigation measures to safeguard protected or otherwise notable species and habitats are set out in Section 4 of this report and should be implemented in full.

A suite of compensation measures is recommended to address the impacts identified and to deliver an ecological enhancement. These include the installation of bat and bird boxes on retained trees, supplementary native tree planting to reduce the canopy gap and restore commuting routes for bats. Full details of these measures are set out in Section 4. Further compensation and enhancement measures required can be secured through an appropriately worded planning condition requiring an Ecological Compensation & Enhancement Plan.

This report should be read with appendices 1 to 6, which include results of the desk study, GIS UKHab mapping, photographs of site and relevant statutory guidance.

1 INTRODUCTION

1.1 Author, surveyors, qualifications and scope of study area

This report is written by Tom Kenwright BSc MSc ACIEEM, UES Senior Ecologist. Tom holds a level 6 Botanical Society for Britain and Ireland (BSBI) field identification skills certificate (FISC). Level 6 is only awarded in exceptional circumstances where the surveyor is a very competent professional field botanist and is of national status. Tom is licensed by Natural Resources Wales to disturb all species of bat and take or handle all species other than greater *Rhinolophus ferrumequinum* or lesser horseshoe *Rhinolophus hipposideros* under licence number S094176/1. Tom is licensed by Natural Resources Wales to disturb, take and handle great crested newts (GCNs) *Triturus cristatus* under licence number S095290/1.

The survey was undertaken by:

- Josh Howard BSc, UES Field Ecologist. Josh holds a level 4 BSBI FISC, which certifies him as competent to undertake phase 1 habitat surveys, UKHab and national vegetation classification (NVC) surveys. Josh is listed as an accredited agent on the bat survey licence of UES Managing Director Toby Hart (S095644/2). As such, he has been deemed competent to undertake licensable activities such as using a torch and endoscope to survey for bats. Josh is licensed by Natural Resources Wales to disturb, take and handle GCNs under licence number S094673/1.

The report provides an assessment of the potential ecological impacts associated with the retrospective development of a parcel of land between F Lloyd Penley and Bedwell Park.

The zone of influence considered within the scope of the survey includes all land within the red line boundary. Where relevant, other ecological resources, receptors and important habitats which are spatially separate from the site are considered.

1.2 Survey objectives

UES was commissioned to conduct a PEA of the development site. This was completed in order to:

- Establish baseline conditions and determine the importance of ecological features present or potentially present within the survey area
- Identify key ecological constraints to the project
- Make recommendations for design options to avoid significant effects on important ecological resources at an early stage of development planning
- Identify potential requirement for further surveys for nationally or internationally protected species which may be present on site
- Identify potential requirement for mitigation or compensation, including measures that may be required based on further surveys

1.3 Development works

A planning application has been submitted to Wrexham Borough Council for the erection of a bridge over the River Clywedog and associated access road (reference P/2025/0886). The application is retrospective as the bridge has already been constructed.

1.4 Structure of the report

This report is a baseline appraisal that forms the basis for further ecological surveys and environmental impact assessments (EIA) if required. In the majority of cases the preliminary ecological assessment will not provide all the ecological data required by the Local Planning Authority to determine an application, especially in the event that protected habitat or species issues are present or likely.

This report should be read with appendices 1 to 6, which include results of the desk study, GIS UKHab mapping, photographs of site and relevant statutory guidance.

2 METHODOLOGY

This PEA comprises a desk study and a field survey. The desk study is conducted in order to collate ecological information on species and / or habitats of interest that may be present. The field survey is conducted in order to assess the habitats and their importance, both on site and in the context of their wider surroundings.

2.1 Desk study

The following resources were used to inform the desk study:

- National – Using the UK government's MAGIC website, statutorily protected sites were scoped to a distance of 10km from the application site.

2.2 Field survey

An ecological walkover survey was carried out on 10th June 2026 by Josh Howard. The purpose of the survey was to identify, record and map dominant habitat types within the development area and highlight any further species surveys that may be required based on the quality of those habitats. When conducting the surveys particular focus was concentrated on the following species and habitat features:

- Amphibians
- Reptiles
- [redacted]
- Bats
- Hazel dormouse *Muscardinus avellanarius*
- Hedgehog *Erinaceus europaeus*
- Otter
- Water vole
- White-clawed crayfish *Austropotamobius pallipes*
- Birds
- Trees
- Hedgerows
- Plant communities
- Invasive species

The habitats were assessed by using the UKHab survey technique, which is a system for environmental audit widely used within the environmental consultancy field. The survey was undertaken in accordance with the methodology in the UK Habitat Classification Version 2.0 (UKHab Ltd, 2023) as recommended by Natural England, and in the "Guidelines for Preliminary Ecological Appraisal" (CIEEM, 2017).

The survey area encompasses all of the land within the development footprint and the land to a distance of 30m outside it where accessible. In line with recognised guidelines, ponds were also scoped to a distance of 500m (250m radius from the survey area).

The UKHab survey methodology was extended to record any signs of habitats suitable to support protected / invasive species and any incidental observations of other noteworthy species.

2.3 Otter and water vole survey

A detailed otter and water vole survey was undertaken along the River Clywedog as part of the walkover assessment. The survey focused on the working area associated with the bridge

construction and extended 250m upstream and 250m downstream, providing full coverage of the riparian corridor with the potential to have been impacted by the works.

The survey was conducted in suitable weather conditions, with no recent periods of prolonged rainfall that could have washed away field signs such as footprints, latrines, feeding remains or burrow entrances. Both banks were inspected systematically, and all accessible sections of the riparian zone were examined.

Habitats along the watercourse were assessed for their suitability to support otters and water voles, including an evaluation of bank structure, shading, vegetation cover, availability of herbaceous food plants, presence of potential resting sites, and connectivity to the wider riparian network. A thorough search was undertaken for field signs of both species, including:

- Footprints and slides
- Spraints
- Latrines, feeding stations and feeding remains
- Burrows, bolt-holes and runs
- Couches, holts or resting places
- Water vole grazing lawns or burrow openings

2.4 Survey limitations

The survey was undertaken post-development, as this assessment is intended to inform a retrospective planning application. Consequently, the habitats and features recorded represent the current condition of the site following the construction of the bridge and associated vegetation clearance. While this means that pre-construction baseline conditions could not be verified directly on the ground, historic aerial imagery from Google Earth was reviewed to identify the habitats present prior to the works (see Appendix 3). This imagery provided a reliable indication of former vegetation cover and riparian structure and was used to support the retrospective assessment of impacts and the determination of likely pre-development habitat types.

The survey itself was completed at an appropriate time of year for botanical assessment and at a time when most protected or otherwise notable faunal species are active, meaning that field signs of species such as otter, water vole and bats would likely have been visible had they been present. Weather conditions were suitable, access was unrestricted, and all areas within the redline boundary and immediate surroundings could be surveyed.

No significant constraints were encountered, and the timing, conditions, accessibility and availability of historic aerial imagery mean that there are considered to be no significant limitations affecting the robustness of the survey or the reliability of the conclusions drawn.

3 RESULTS

3.1 Desk study

A desk study was conducted for the development site and surrounding area. Statutorily protected sites were scoped to a distance of 10km. Further results of the desk study can be found at Appendix 1 – Desk study.

There are no statutorily protected sites within 2km of the development site.

The development site lies within a SSSI Impact Risk Zone (IRZ) within which Natural England do not request that they are consulted on this type of development.

There are eighteen statutorily protected sites within 2 – 10km of the development site:

- Afon Dyfrdwy (River Dee) SSSI[1]
- Chwarel Singret SSSI
- Cloy Brook Pastures SSSI
- Coedwig Ffosil Bymbo Fossil Forest SSSI
- Dee Cliffs, Farndon SSSI
- Gatewen Marsh SSSI
- Llay Bog SSSI
- Marford Quarry SSSI
- Midland Meres & Mosses Phase 2 Ramsar
- Nant-y-Belan and Prynela Woods SSSI
- Old Pulford Brook Meadows SSSI
- River Dee and Lake Bala SAC[2]
- River Dee (England) SSSI
- Shell Brook Pastures SSSI
- Sontley Marsh SSSI
- Stryt Las a'r Hafod SSSI
- Vicarage Moss SSSI
- Well Rough and Long Plantation SSSI

3.2 Baseline conditions – Habitats

The results of the PEA are also shown on the accompanying map at Appendix 2 – UKHab plan. Habitats are colour-coded in accordance with the UKHab standard. A full botanical species list is provided at Appendix 5.

The following principal habitat types were characterised on site:

- g3c Other neutral grassland
- r2a Rivers (priority habitat)
- u1b Developed land; sealed surface
- u1f Sparsely vegetated urban land
- w1f Lowland mixed deciduous woodland

3.2.1 g3c Other neutral grassland

At the time of the survey, the southern riverbank to the west of the bridge had been cleared and has since been colonised by other neutral grassland. Given the disturbance and the self-seeded nature of vegetation establishing on previously cleared woodland, the sward now supports a relatively high diversity of species, many of which however are indicative of disturbance and nutrient enrichment. Graminoid species recorded include cock's-foot *Dactylis*

[1] SSSI – Site of Special Scientific Interest

[2] SAC – Special Area of Conservation

glomerata, rough meadow-grass *Poa trivialis*, Yorkshire fog *Holcus lanatus*, soft brome *Bromus hordeaceus* and soft rush *Juncus effusus*. Forbs present include cleavers *Galium aparine*, wood avens *Geum urbanum*, spear thistle *Cirsium vulgare*, common ragwort *Jacobaea vulgaris*, teasel *Dipsacus fullonum*, greater willowherb *Epilobium hirsutum*, oxeye daisy *Leucanthemum vulgare* and common vetch *Vicia sativa*.

3.2.2 r2a Rivers (priority habitat)

At the time of the walkover survey, the river was relatively shallow, with a moderate flow rate, and varied in depth from approximately 20 cm to 60 cm across the surveyed section. The riverbed comprised a mixture of gravel and cobbles, with occasional silty patches present along slower-flowing margins and depositional areas.

The channel supports a narrow riparian corridor of broadleaved woodland and bankside vegetation, providing shading along much of the surveyed section. Marginal vegetation was present intermittently, with shaded banks limiting the development of extensive emergent or aquatic vegetation.

3.2.3 u1b Developed land; sealed surface

The bridge that has been erected has been constructed from a combination of metal and concrete that is sealed and not colonisable by plants.

3.2.4 u1f Sparsely vegetated urban land

Areas of recently disturbed ground are present on the banks of the watercourse adjacent to the bridge, where vegetation clearance has been more recent, and along the margins of the northern access road leading to the bridge. These areas support a floristic composition broadly similar to the self-seeded grassland that has colonised the previously cleared banks, but with a lower sward height, a reduced abundance of graminoid species, and a higher proportion of ruderal and ephemeral species typical of early successional, nutrient-enriched substrates. Species recorded within these disturbed areas include feverfew *Tanacetum parthenium* and weld *Reseda luteola*, alongside scattered individuals of other disturbance-tolerant grasses and forbs present within the adjacent self-seeded grassland.

3.2.5 w1f Lowland mixed deciduous woodland

The woodland within the survey area is predominantly young to semi-mature, with a canopy composed of crack willow *Salix fragilis*, sycamore *Acer pseudoplatanus* and ash *Fraxinus excelsior*. An understory layer is present and includes hawthorn *Crataegus monogyna*, dog rose *Rosa canina*, grey willow *Salix cinerea* and blackthorn *Prunus spinosa*, in addition to occasional younger individuals of the canopy species. There is no clearly defined delineation between the canopy and understory layers, with both merging into a structurally varied but continuous band of riparian woodland.

The ground flora is dense and well-developed, dominated by bramble *Rubus fruticosus agg.* and extensive stands of Himalayan balsam *Impatiens glandulifera*. Additional species recorded include water figwort *Scrophularia auriculata*, soft rush, pendulous sedge *Carex pendula*, wood avens, hedge woundwort and cleavers. The sward also contains scattered

grasses and ruderal species typical of disturbed riparian woodland, such as spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense* and cock's-foot.

3.3 Baseline conditions and retrospective assessment of impacts – Protected species or resources

As part of the PEA, specific observations of wildlife were also recorded. Wildlife observations focused on protected species, invasive species or species of conservation concern. Habitats with potential to support protected species were noted with a view to follow up surveys if required.

3.3.1 Amphibians

A single mapped pond is located within 250m of the development site, located approximately 230m to the south. This pond is isolated from the working area by a substantial extent of buildings and hardstanding, resulting in very limited functional connectivity for amphibians.

The Wrexham Industrial Estate is known to support a nationally important meta-population of GCNs, and UES is aware of a GCN receptor site with unmapped ponds located to the north-east. While most of this receptor site lies over 250m from the development boundary, a small section comprising scrub and rough grassland occurs approximately 100m east of the working area at its closest point. Despite this proximity, UES is not aware of any ponds present within this receptor area inside the 250m radius of the works. The receptor site is also fully separated from the working area by at least 100m of urbanised land comprising buildings, roads and hardstanding, which would act as a significant barrier to amphibian movement.

The River Clywedog is unsuitable for breeding amphibians due to its flowing water. Woodland habitats along the riverbanks provide some foraging, commuting and sheltering opportunities, but these terrestrial features are limited in extent and are isolated from any potential breeding ponds.

Taking into account the lack of suitable breeding ponds within 250m of the working area, the barriers to amphibian movement created by surrounding built infrastructure, the limited scale of woodland loss associated with the bridge construction, and the unsuitability of the River Clywedog for breeding, it is considered unlikely that GCN or other amphibian species were present within the affected habitats at the time of the works or that they have been adversely impacted by the works undertaken to date.

3.3.2 Reptiles

The habitats affected by the bridge construction comprised small areas of woodland on both banks of the River Clywedog. These habitats provide some limited opportunities for common reptile species, including occasional basking, foraging and sheltering features. The woodland strip along the riverbanks continues both east and west and therefore provides a degree of linear connectivity to the wider landscape. However, this connectivity is constrained by the surrounding built environment, with buildings, hardstanding and roads forming continuous barriers that substantially limit movement between the working area and more extensive areas of suitable reptile habitat within the wider Wrexham Industrial Estate.

Although the industrial estate is known to support a very small and highly localised reptile population, reptiles have not been recorded across large areas of suitable habitat within the wider estate, including sites previously surveyed by UES. This indicates that reptile distribution in the local area is patchy and restricted, with many suitable areas of habitat not supporting viable populations.

The River Clywedog itself offers limited value for reptiles. Its flowing water and predominantly shaded, steep banks mean it is unsuitable for most species and provides only marginal foraging potential for grass snake, which typically favour still or slow-moving waterbodies with abundant wetland vegetation. As such, the river corridor is unlikely to function as a notable commuting corridor for reptiles. The woodland removed during the bridge construction were restricted in extent and, although forming part of a wider linear habitat, was not well connected to any areas known to support reptiles. Taking into account the limited suitability of the habitats affected, the restricted functional connectivity created by surrounding built infrastructure, the very small and localised nature of reptile populations within the wider estate, and the small scale of habitat loss associated with the bridge construction, it is considered unlikely that reptiles were present within the working area or have been adversely impacted by the works undertaken to date.



3.3.4 Bats

The habitats affected by the bridge construction comprised small areas of woodland on both banks of the River Clywedog. These habitats provide foraging and commuting opportunities for bats, particularly along the linear woodland strip that continues both east and west and forms part of a wider riparian corridor. No buildings are present within or immediately adjacent to the working area, and the walkover survey did not identify any structures with potential to support roosting bats.

The closest remaining tree with potential roosting features (PRFs) was identified approximately 100m west of the bridge (grid reference SJ 37403 48459). As such, the works undertaken will not have adversely affected any retained trees that may support roosting bats.

However, the construction of the bridge involved the removal of a small number of trees and from the woodland on both banks of the river. If any of the felled trees contained PRFs, there is potential that roosting features may have been lost as part of the works and potential risk of harm to any bats that may have been present at the time of felling / clearance.

The removal of vegetation has created a break in canopy cover of approximately 20m at the bridge crossing. This gap reduces the continuity of the riparian commuting corridor and may reduce bat movement along the river corridor, particularly for species that favour enclosed or semi-enclosed flight lines. However, the base of the bridge lies approximately 4m from the water, meaning that bats can continue to commute beneath the bridge along the river channel as well as above the bridge, maintaining functional flight routes despite the canopy break. There is no external lighting installed on or immediately adjacent to the bridge, and therefore no operational lighting impacts currently affecting bat foraging or commuting behaviour within the riparian corridor.

Despite these considerations, the scale of habitat loss was small, and the wider riparian corridor remains intact to both the east and west. Taking into account the limited extent of habitat removal, the absence of PRFs within the retained trees, the small scale of the canopy break, and the availability of mitigation measures, it is considered unlikely that bats have been adversely impacted by the works undertaken to date.

3.3.5 Hazel dormouse

Hazel dormice have a restricted national distribution and are not known to be present within the Wrexham Industrial Estate or the surrounding areas.

The habitats affected by the bridge construction comprised small areas of woodland on the banks of the River Clywedog. While these habitats provide some structural diversity, they are not characteristic dormouse habitat and lack the continuous, species-rich shrub layer typically associated with the species. The wider riparian corridor is also fragmented by built infrastructure, further reducing its suitability.

Given the absence of dormouse records in the local area and the limited distribution of the species nationally, hazel dormice are considered unlikely to be present within the working area or to have been adversely impacted by the construction of the bridge.

3.3.6 Hedgehog

The habitats affected by the bridge construction comprised small areas of woodland on both banks of the River Clywedog. These habitats provide some limited foraging and sheltering opportunities for hedgehogs, although the working area is constrained by surrounding built infrastructure, including buildings, hardstanding and roads, which reduce the likelihood of regular hedgehog use.

No evidence of hedgehog activity was recorded within the site or its immediate surroundings during the walkover survey. The areas of woodland removed as part of the bridge construction were restricted in extent and did not contain any features indicative of hedgehog presence.

Given the small scale of habitat loss, the absence of field signs during the walkover survey, and the limited suitability of the affected habitats, it is considered unlikely that hedgehogs were

present within the working area or have been adversely impacted by the construction of the bridge.

3.3.7 Otter

Otters are known to sporadically use the River Clywedog for commuting and occasional foraging, as evidenced by UES surveys undertaken of other sites on the Wrexham Industrial Estate that border the river. As part of the walkover survey for this assessment, a search of the watercourse, its banks and the riparian woodland strip was undertaken to 250 m upstream and downstream of the working area. No evidence of otter activity was observed, with no spraints, footprints, slides, couches or feeding remains recorded.

A small number of trees with basal features offering potential opportunities for otter holts were identified within relatively close proximity to the working area, the closest of which lies approximately 30m west. However, no signs were observed to indicate that these features are currently in use.

The habitats affected by the bridge construction comprised small areas of woodland on both banks of the river. These areas were restricted in extent and did not contain any evidence of otter presence. The wider riparian corridor remains intact to both the east and west, and the works have not resulted in any substantial modification of the river channel itself.

Given the absence of field signs during the walkover survey, the known sporadic use of the river, the limited extent of habitat loss, and the continued availability of suitable riparian habitat, it is considered unlikely that otters were present within the working area at the time of works or have been adversely impacted by the works undertaken to date.

3.3.8 Water vole

As part of the walkover survey, an inspection of the River Clywedog, its banks and the adjacent riparian woodland was undertaken up to 250m upstream and downstream of the working area. No evidence of water vole activity was recorded, with no latrines, footprints, feeding remains, burrows or runs observed along either bank.

The riverbanks within and adjacent to the working area are heavily shaded, with limited herbaceous vegetation and few areas of suitable bank structure. As such, they provide some, albeit broadly low-value habitat for water voles. The shaded nature of the banks, combined with the restricted extent of vegetation removal associated with the bridge construction, reduces the likelihood that the affected habitats were regularly used by the species.

The habitats affected by the bridge construction comprised small areas of riparian woodland on both banks of the river. These areas were restricted in extent and did not contain any features indicative of water vole presence. The wider riparian corridor remains intact to both the east and west, and the works have not resulted in any substantial modification of the river channel itself.

Given the absence of field signs during the walkover survey, the limited suitability of the riverbanks, and the small scale of habitat loss associated with the works, it is considered unlikely that water voles were present within the working area or have been adversely impacted by the construction of the bridge.

3.3.9 White-clawed crayfish

White-clawed crayfish have a restricted national distribution and are not known to be present within the River Clywedog or the wider surrounding area. No records or previous survey evidence indicate that the species occurs along this watercourse or within the riparian habitats associated with the working area.

The habitats affected by the bridge construction comprised small areas of riparian woodland on both banks of the river. While the River Clywedog provides flowing water and marginal vegetation, these features are not characteristic of watercourses known to support white-clawed crayfish, and no suitable refuges or signs of crayfish activity were observed during the walkover survey.

Given the absence of records, the unsuitable nature of the affected habitats, and the limited distribution of the species nationally, white-clawed crayfish are considered unlikely to be present within the working area or to have been adversely impacted by the construction of the bridge.

3.3.10 Birds

The habitats affected by the bridge construction comprised small areas of riparian woodland on both banks of the River Clywedog. These wooded areas provide suitable nesting, foraging and sheltering opportunities for a range of common and widespread bird species typically associated with riparian corridors.

No evidence of notable or protected bird species was recorded within or immediately adjacent to the working area during the walkover survey. The areas of woodland removed as part of the bridge construction were restricted in extent (approximately 20m in total) and comprised habitats of relatively low distinctiveness, used primarily by common species. However, as the works were undertaken retrospectively, there is potential that active nests may have been present at the time of vegetation clearance, and therefore the works may have adversely impacted breeding birds through the loss of nests, eggs or dependent young.

The sections of riverbank affected by the works are not suitable for breeding kingfisher, which require steep, sandy banks into which nest burrows can be excavated. The banks within the working area do not provide this structure, and therefore the works would not have affected nesting opportunities for this species.

Given the small scale of woodland loss, the continued availability of suitable riparian woodland along the wider corridor, and the absence of any features indicative of notable bird interest, any impacts are likely to have been limited to common and widespread species potentially nesting within the affected vegetation at the time of clearance.

3.3.11 Trees

Trees removed on site may be protected by a Tree Preservation Order (TPO), for which a check has not been undertaken.

3.3.12 Hedgerows

There were / are no hedgerows within the development site.

3.3.13 Plant communities

No plant communities or individual species were recorded on site which are afforded statutory protection in their own right.

The habitats affected by the bridge construction comprised small areas of riparian woodland on both banks of the River Clywedog. Riparian woodland is recognised as a Habitat of Principal Importance (HPI) under Section 41 of the NERC Act 2006. The woodland removed as part of the works was restricted in extent (approximately 20m in total) and formed only a small part of the wider riparian corridor.

The works did not affect any other HPI within or adjacent to the working area.

Given the limited scale of woodland loss, the continued availability of riparian woodland along the wider corridor, and the retention of habitat connectivity upstream and downstream, it is considered unlikely that the construction of the bridge has resulted in any material adverse impact on Habitats of Principal Importance.

3.3.14 Watercourse

The River Clywedog flows through the site and forms a key linear ecological feature within the landscape. The river supports a narrow riparian corridor of broadleaved woodland and bankside vegetation, with shaded banks and intermittent areas of marginal vegetation. Upstream and downstream of the bridge, the riparian corridor remains intact. A section of riparian woodland extending west along the southern bank has been cleared; however, this lies outside the redline boundary and is not part of the works covered by this retrospective application.

As the application is retrospective, the effects on the watercourse arising from the vegetation clearance and bridge construction have already occurred. These works involved the removal of small areas of riparian woodland on both banks and temporary disturbance to the immediate river margins. Although no works were undertaken within the river channel itself, the activities had the potential to generate short-term impacts, including localised mobilisation of sediment from disturbed soils, temporary increases in turbidity within the immediate working area, and a risk of pollution associated with construction materials, machinery or accidental spills. Disturbance to marginal vegetation and temporary changes in shading or cover may also have occurred. No evidence was observed during the walkover survey to suggest that these potential impacts resulted in lasting changes to water quality, channel structure or the ecological function of the river, and the watercourse continues to operate as a connected riparian corridor.

3.3.15 Invasive species

Himalayan balsam is present on both banks of the River Clywedog within and adjacent to the working area. This species is listed under Schedule 2 of the Invasive Alien Species

(Enforcement and Permitting) Order 2019, which makes it an offence to plant or otherwise cause this species to grow in the wild.

Himalayan balsam is already well-established along the River Clywedog and its associated riparian habitats, with dense stands present upstream and downstream of the bridge. The bridge construction works involved the removal of small areas of riparian woodland on both banks of the river, which will have disturbed existing stands of Himalayan balsam and may have resulted in the dispersal of seed within the immediate area. However, no evidence was observed during the walkover survey to suggest that the works have caused the spread of Himalayan balsam to new areas beyond those already heavily colonised.

Given the species' existing distribution along the river, any plants present within the disturbed areas would have set seed and dispersed naturally regardless of whether the works took place. As such, while the works likely disturbed Himalayan balsam within the affected habitats, it is considered unlikely that they have contributed to its spread outside areas already occupied by the species.

4 EVALUATION AND RECOMMENDATIONS

This section provides a brief assessment of the likely impacts associated with the development on the receptors identified during the walkover survey and desk study. It also includes any mitigation and compensation measures which may be required for the development to continue / be approved.

4.1 Habitats

4.1.1 Designated sites

The sites identified during the desk study were cross-referenced with the survey area relevant to this report. There are no statutorily designated sites within 2km of the development site and the closest statutorily protected site are the Afon Dyfrdwy (River Dee) SSSI and the River Dee SAC, which are located approximately 2.8km to the west of the working area at their closest point.

Given the distances from site and the scale of development, it is considered unlikely that the development has / will have any direct or indirect impact on these or any other designated sites.

4.1.2 Trees and woodland

The riparian woodland corridor along the River Clywedog remains intact other than the section extending west along the southern bank, which has been cleared; however, this clearance lies outside the redline boundary and is not covered by this planning application. Within the working area itself, only small areas of riparian woodland on both banks were removed to facilitate the construction of the bridge, with the remainder of the corridor retained.

Construction impacts

As this application is retrospective, all construction impacts have already occurred. The works have resulted in the removal of small areas of riparian woodland, creating a break in canopy cover of approximately 20m.

Mitigation

Although the works have already taken place, any future activities within or adjacent to the working area should ensure that remaining woodland is retained and adequately protected. A protective buffer should be established around retained trees and woodland edges, with tree protection fencing installed to safeguard root zones and prevent accidental encroachment. Contractors should not enter the woodland unless authorised to do so for works directly related to its protection. No materials, waste or equipment should be stored within the woodland, and no temporary or permanent external lighting should be directed onto the woodland or river corridor.

Compensation

Given that areas of riparian woodland have been removed, it is recommended that compensation planting is provided. Replacement planting should use native species

appropriate for riparian woodland and should be focused on reducing the break in canopy cover created by the works. To achieve this, new planting should be located on both sides of the bridge, reinforcing canopy continuity and restoring the structural linkage along the riparian corridor.

Operational impacts

There are no operational impacts at present, as no external lighting is installed on or immediately adjacent to the bridge. However, if lighting is proposed in the future, it should be designed to avoid or reduce overspill onto the riparian woodland and river corridor, ensuring that retained habitats remain dark and undisturbed. Sensitive lighting design would prevent operational-phase impacts on woodland structure, nocturnal wildlife movement and the integrity of the riparian corridor.

4.1.3 Watercourse

The River Clywedog flows through the site and forms a key linear feature within the landscape. Small areas of riparian woodland on both banks were removed during the construction of the bridge, and temporary disturbance to the immediate river margins occurred. No works were undertaken within the river channel itself, and the watercourse continues to function as a connected riparian corridor.

Construction impacts

As this application is retrospective, all construction impacts have already occurred. Vegetation clearance and bridge construction had the potential to cause short-term disturbance to the watercourse, including localised mobilisation of sediment, temporary increases in turbidity, and a risk of pollution associated with construction materials or machinery. Disturbance to marginal vegetation may also have occurred. These impacts were restricted in extent and no lasting changes to channel structure or hydrological function have been identified.

Mitigation

Although the main works have already taken place, any future activities within or adjacent to the river should ensure that the watercourse and its riparian margins are adequately protected. No materials, waste or equipment should be stored close to the banks, and measures should be in place to prevent pollution or sediment run-off entering the river. Any future works should avoid direct encroachment onto the banks and should maintain the integrity of the riparian corridor.

Compensation

Given the small areas of riparian vegetation removed during construction, compensation should focus on reinforcing riparian structure and supporting the ecological function of the river corridor. Native, riparian-appropriate planting should be incorporated with planting positioned to strengthen canopy continuity and bankside cover where appropriate.

Operational impacts

There are no operational impacts at present, as no external lighting is installed on or immediately adjacent to the bridge. If lighting is proposed in the future, it should be designed

to avoid overspill onto the river and riparian corridor, ensuring that the watercourse remains dark and undisturbed.

4.2 Species

4.2.1 Bats

Small areas of riparian woodland on both banks of the River Clywedog were removed during the construction of the bridge. These areas of vegetation formed part of a linear woodland strip that continues both east and west and forms part of the wider riparian corridor. The works have created a break in canopy cover of approximately 20m, although the base of the bridge lies approximately 4m from the water, allowing bats to continue commuting beneath the bridge along the river channel as well as above the bridge.

Construction impacts

As this application is retrospective, all construction impacts have already occurred. The removal of trees may have resulted in the loss of potential roosting features if present within the felled trees, with an associated risk of harm to bats that may have been roosting at the time of clearance. The canopy break created by the works has temporarily reduced the continuity of the riparian commuting corridor, particularly for species that favour enclosed or semi-enclosed flight lines. No external lighting has been installed on or immediately adjacent to the bridge, and therefore no lighting-related disturbance has occurred.

Mitigation

Although the main works have already taken place, any future activities within or adjacent to the riparian corridor should avoid further vegetation removal unless preceded by a pre-commencement ground level tree assessment for bats. This assessment should be undertaken by a suitability qualified ecologist and can be undertaken at any time of year, however it may identify the requirement for further aerial tree assessments and / or bat presence / absence surveys, which can only be undertaken during the bat survey period of May to September.

Compensation and enhancement

To compensate for any PRFs that may have been lost during tree removal, a suite of bat boxes should be installed on retained trees within the riparian woodland. These will provide replacement roosting opportunities and deliver an ecological enhancement to the site. Further details on the make, model and precise locations of bat boxes can be provided within an Ecological Compensation & Enhancement Plan, secured through an appropriately worded planning condition.

In addition, a small amount of supplementary tree planting should be incorporated around the bridge to reduce the canopy gap and help reinstate the commuting corridor for bats. Planting should use native species appropriate for riparian woodland and be positioned to strengthen canopy continuity on both sides of the bridge.

Operational impacts

There are no operational impacts at present, as no external lighting is installed on or immediately adjacent to the bridge. If lighting is proposed in the future, it should be designed

to avoid overspill onto the river and riparian corridor, ensuring that the watercourse remains dark and undisturbed.

4.2.2 Birds

Small areas of riparian woodland on both banks of the River Clywedog were removed during the construction of the bridge. These habitats provided suitable nesting, foraging and sheltering opportunities for a range of common and widespread bird species typically associated with riparian corridors. Some of the wider riparian woodland remains intact to both the east and west, maintaining a connected habitat corridor.

Construction impacts

As this application is retrospective, all construction impacts have already occurred. Vegetation clearance undertaken during the works may have adversely affected breeding birds if active nests were present at the time of felling or removal. The affected woodland was of relatively low distinctiveness and primarily used by generalist species; however, the loss of nests, eggs or dependent young cannot be ruled out if the works were undertaken during March to August. No habitat suitable for breeding kingfisher was affected, as the banks within the working area do not provide the steep, sandy substrate required for nest burrow excavation.

Mitigation

Although the main works have already taken place, any future activities within or adjacent to the riparian corridor should avoid vegetation clearance during the bird breeding season, and should not be undertaken from March to August inclusive. If this is not possible and works need to take place between this period, a targeted breeding bird nest scoping survey should be conducted by a suitably qualified ecologist immediately prior to the works, or an ecological clerk of works appointed to oversee the works.

Compensation and enhancement

To compensate for the loss of nesting opportunities associated with the vegetation removed, a suite of bird boxes should be installed on retained trees within the riparian corridor. Boxes should be targeted towards common and widespread species, reflecting the assemblage likely to have used the affected habitats. The provision of bird boxes will help reinstate nesting opportunities and enhance the structural and ecological value of the retained woodland. Further details on the make, model and locations of bird boxes can be provided within an Ecological Compensation & Enhancement Plan, secured through an appropriately worded planning condition.

Operational impacts

No operational impacts are anticipated. There is no external lighting installed on or immediately adjacent to the bridge, and therefore no lighting-related disturbance to nocturnal or crepuscular bird activity is expected.

4.2.3 Otter and water vole

A walkover inspection of the River Clywedog, its banks and the adjacent riparian woodland strip up to 250m upstream and downstream of the working area recorded no evidence of otter

or water vole activity. The banks within the working area are heavily shaded, with limited herbaceous vegetation and few areas of suitable bank structure. As such, they provide some, albeit broadly low-value habitat for water vole and restricted foraging and commuting opportunities for otter.

Construction impacts

As this application is retrospective, all construction impacts have already occurred. The works involved the removal of small areas of riparian woodland on both banks and temporary disturbance to the immediate river margins. Although no evidence of otter or water voles was recorded within the survey area, the clearance and construction activities had the potential to cause short-term disturbance to any individuals moving through the corridor at the time of works. This particularly applies to otters which are known to use the river on a transitional basis for commuting. Potential impacts include temporary displacement, disturbance from noise and human presence, and short-term changes to bankside cover. No works were undertaken within the river channel itself, and it is considered likely that no features suitable for holts or burrows were affected.

Mitigation

Although the main works have already taken place, any future activities within or adjacent to the river should be undertaken sensitively to avoid disturbance to riparian mammals. No materials, waste or equipment should be stored close to the banks, and measures should be in place to prevent pollution or sediment run-off entering the watercourse. If further vegetation removal is required, it should be preceded by a check from a suitably qualified ecologist to ensure no otter resting places or water vole burrows are present.

Compensation

Given the low suitability of the affected banks and the absence of field signs, compensation requirements are limited. However, the supplementary riparian planting recommended will help reinforce bankside cover and support the ecological function of the riparian corridor. Planting should use native, riparian-appropriate species and be positioned to strengthen canopy continuity and marginal vegetation structure.

Operational impacts

No operational impacts are anticipated. There is no external lighting installed on or immediately adjacent to the bridge, and therefore no lighting-related disturbance to nocturnal otter movement or water vole activity is expected. The river channel remains unobstructed, and the bridge design allows continued passage along the watercourse.

4.2.4 Invasive species

Himalayan balsam is present on both banks of the River Clywedog within and adjacent to the working area. This species is listed under Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) Order 2019, which makes it an offence to plant or otherwise cause this species to grow in the wild. Dense stands of Himalayan balsam are already well-established along the river corridor upstream and downstream of the bridge.

Construction impacts

As this application is retrospective, all construction impacts have already occurred. The removal of small areas of riparian woodland and associated ground disturbance during the bridge construction works will have disturbed existing stands of Himalayan balsam and may have resulted in the dispersal of seed within the immediate working area. However, no evidence was observed during the walkover survey to suggest that the works have caused the spread of Himalayan balsam to new areas beyond those already heavily colonised. Given the species' existing distribution along the river, any plants present within the disturbed areas would have set seed and dispersed naturally regardless of whether the works took place.

Mitigation

Although the main works have already taken place, any future activities within or adjacent to the riparian corridor should be undertaken in accordance with a biosecurity protocol to prevent further spread of Himalayan balsam. Contractors should ensure that no plant material or soil containing balsam seeds is moved off-site or deposited in areas free of the species. Machinery and footwear should be cleaned before leaving the working area (excluding vehicles and pedestrians passing over the bridge during standard operational use).

Operational impacts

No operational impacts are envisaged, as use of the bridge by pedestrians and vehicles has no risk of disturbing the retained Himalayan balsam along the river and its riparian corridor.

5 CONCLUSION

The retrospective preliminary ecological appraisal has identified that the construction of the bridge and associated access road resulted in the loss of small areas of riparian woodland, a break in the tree canopy of approximately 20m, and disturbance to bankside vegetation. It is considered that there will have likely been very limited impacts on protected or otherwise notable species, although there is potential that nesting birds or bats using roosting features within felled trees may have been adversely affected at the time of clearance. No evidence of otter, water vole or notable bird species was recorded within close proximity to the working area, and the wider riparian corridor remains broadly intact and functional.

Although the works have already been completed, there is potential that nesting birds or bats using roosting features within felled trees may have been adversely affected at the time of vegetation clearance. No ongoing construction-phase impacts are anticipated; however, any future works with potential to affect retained habitats or the river channel should follow the mitigation measures set out in Section 4 of this report.

A suite of compensation and enhancement measures is recommended to address the impacts identified and to improve the ecological value of the site. These include the installation of bat and bird boxes on retained trees and supplementary native tree planting to reduce the canopy gap and restore commuting routes for bats. Further details of these measures can be secured through an appropriately worded planning condition requiring an Ecological Compensation & Enhancement Plan.

Provided that the recommended mitigation, compensation and enhancement measures are implemented in full, the development can proceed without causing further adverse impacts to protected or otherwise notable ecological receptors.

6 REFERENCES

CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal* (Second Edition).

DEFRA (2026). *MAGIC* [online]. Available at: http://magic.defra.gov.uk/.

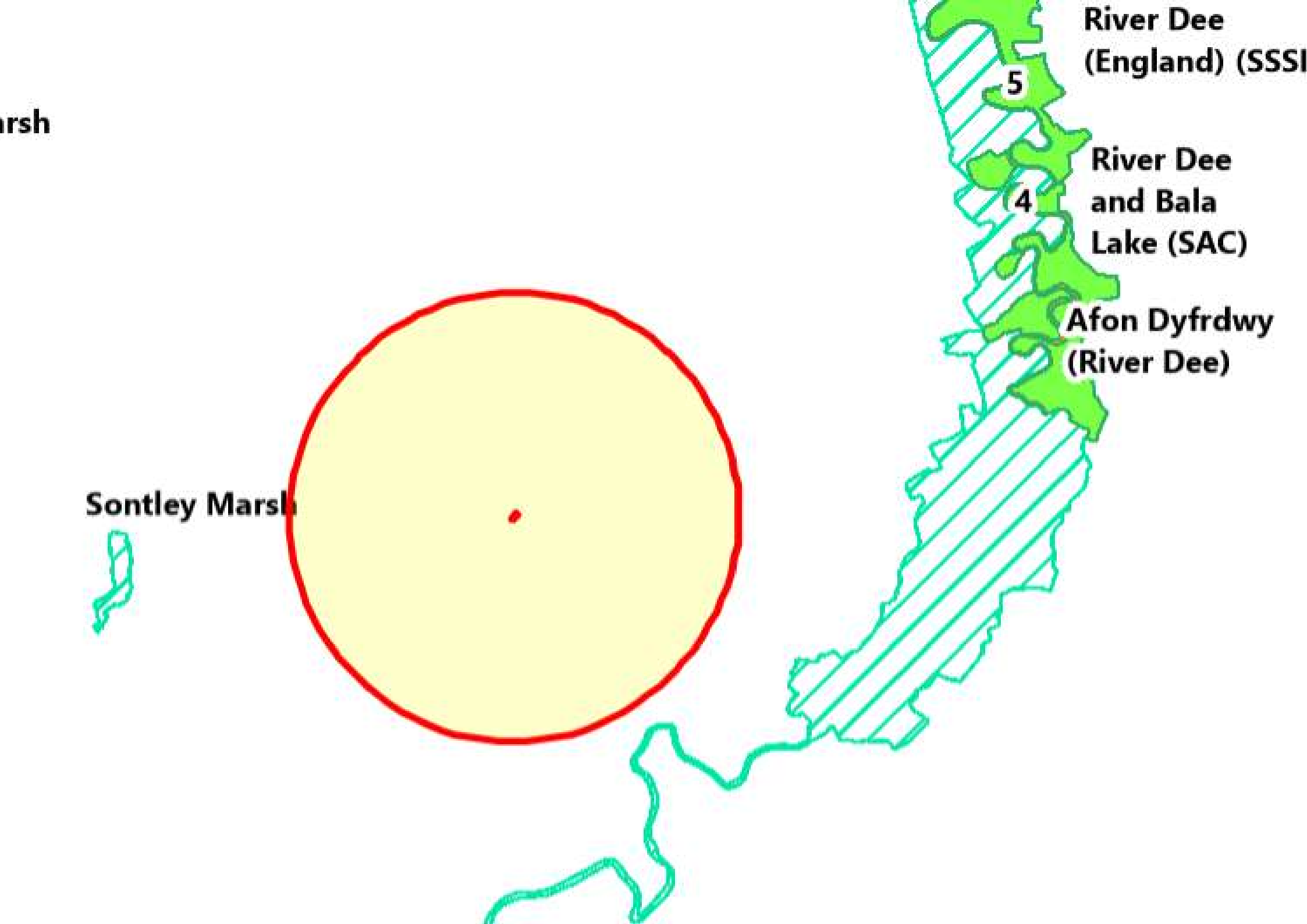
Ministry of Housing, Communities & Local Government (2024). *National Planning Policy Framework.*

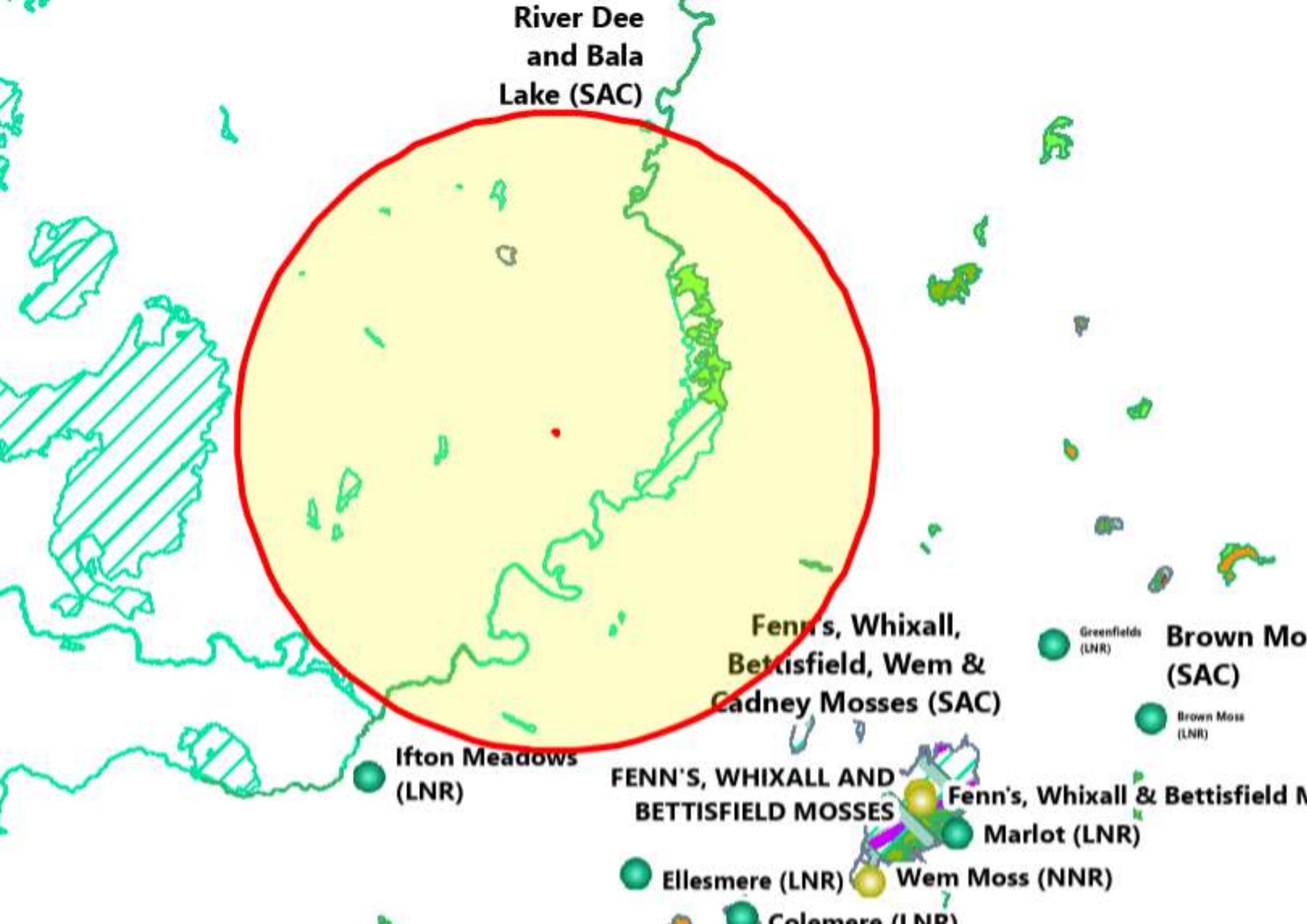
UKHab Ltd (2023). *UK Habitat Classification Version 2.0.* Available at: *https://www.ukhab.org.uk).*

Welsh Government (2024). Planning Policy Wales: Edition 12. Published February 2024; last updated 19 July 2024.

APPENDICES

Appendix 1 – Desk study

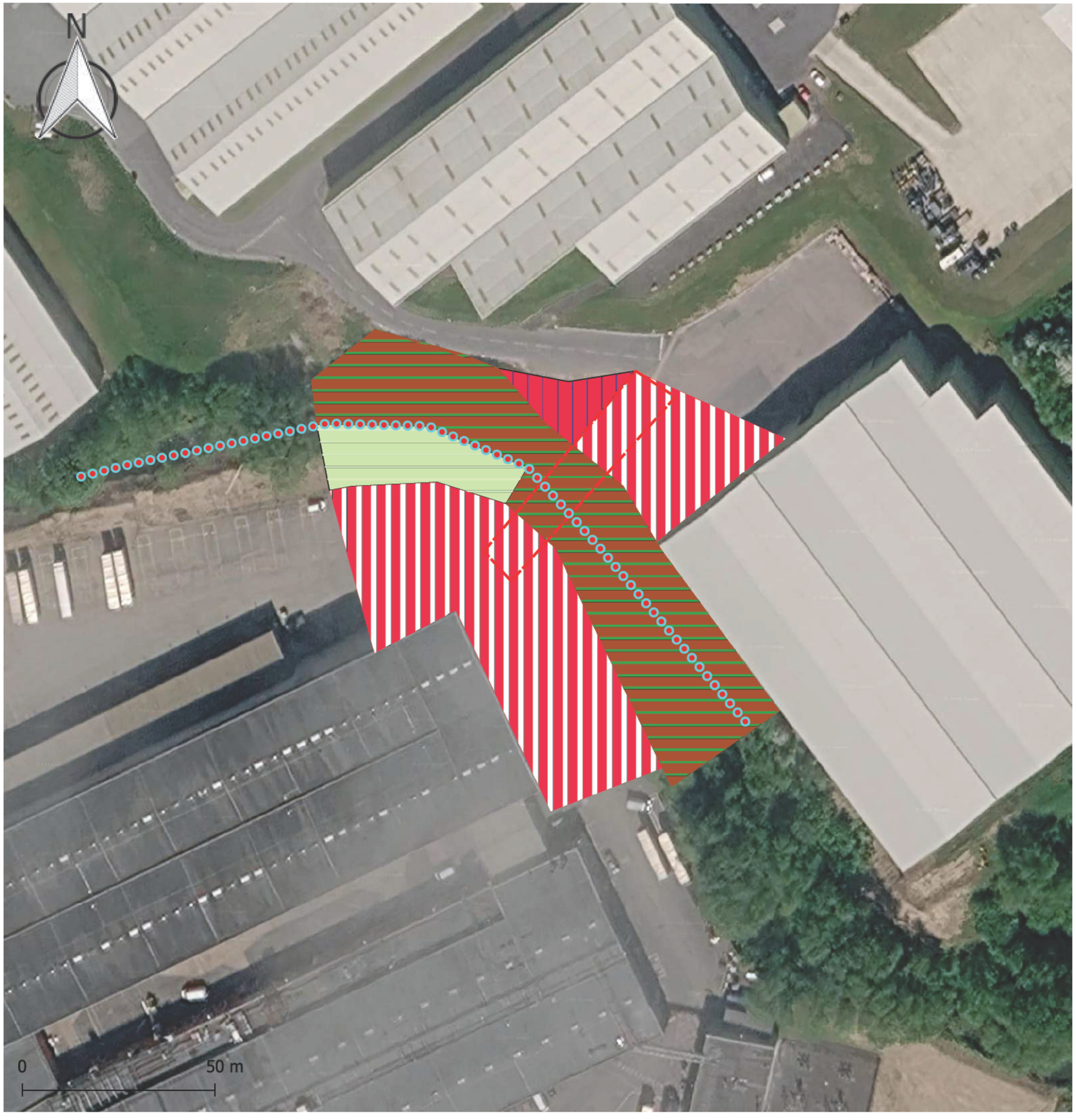

River Dee
(England) (SSSI
5
River Dee
and Bala
Lake (SAC)
4
Afon Dyfrdwy
(River Dee)
Sontley Marsh


River Dee and Bala Lake (SAC)
Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses (SAC)
Greenfields (LNR)
Brown Mo
(SAC)
Brown Moss (LNR)
Ifton Meadows (LNR)
FENN'S, WHIXALL AND BETTISFIELD MOSSES
Fenn's, Whixall & Bettisfield M
Marlot (LNR)
Ellesmere (LNR)
Wem Moss (NNR)

Appendix 2 – UKHab plan

UKHab Plan - Pre-development

Site: Land Between F Lloyd Penley and Bedwell Park
NGR: SJ 37528 48464
Author: Tom Kenwright
Date: 07/07/2026





KEY:

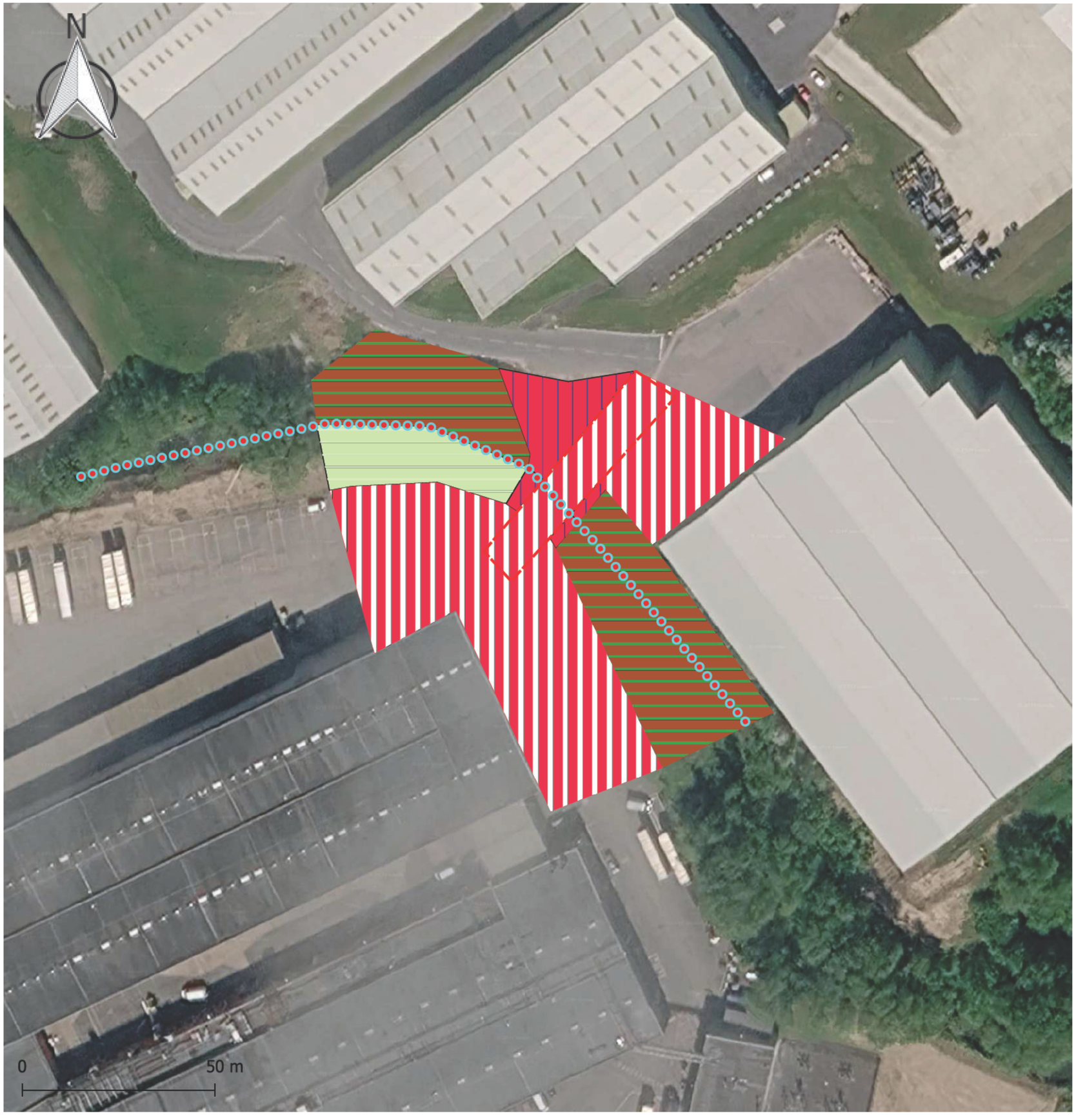
- g3c - other*neutral grassland
- w1f - lowland mixed*deciduous woodland
- u1b - developed*land. sealed surface
- u1f - sparsely*vegetated urban land
- r2a - rivers*(priority habitat)
- Development boundary

THIS PLAN IS BASED UPON OpenStreetMap® AND IS OPEN DATA, LICENSED UNDER THE OPEN DATA COMMONS OPEN DATABASE LICENCE (ODbl) BY THE OpenStreetMap FOUNDATION.

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UKHab Plan - Post-development

Site: Land Between F Lloyd Penley and Bedwell Park
NGR: SJ 37528 48464
Author: Tom Kenwright
Date: 07/07/2026





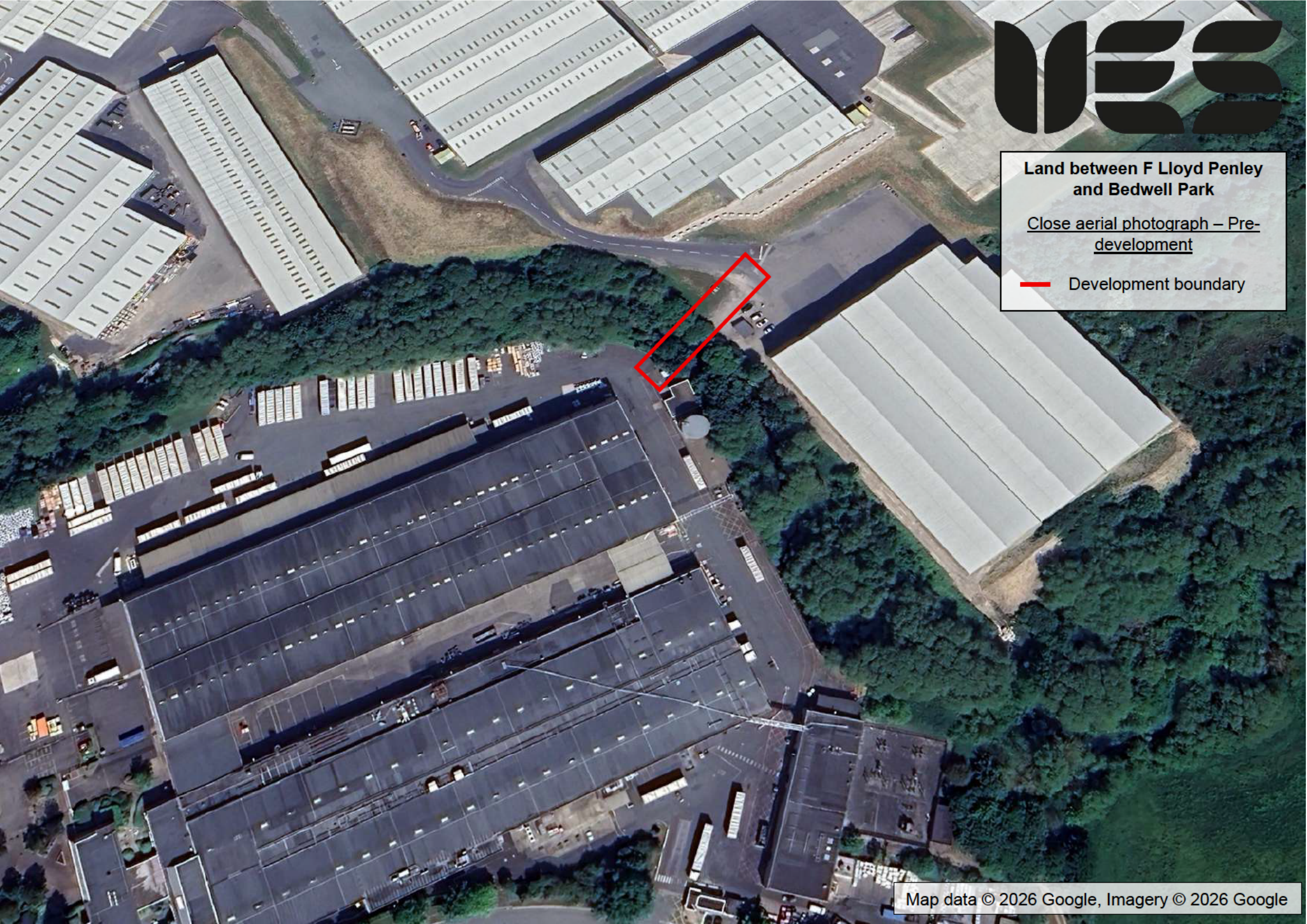
KEY:

- g3c - other*neutral grassland
- w1f - lowland mixed*deciduous woodland
- u1b - developed*land. sealed surface
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Appendix 3 – Aerial photographs


Land between F Lloyd Penley and Bedwell Park
Close aerial photograph – Pre-development
Development boundary
Map data © 2026 Google, Imagery © 2026 Google


Land between F Lloyd Penley and Bedwell Park
Close aerial photograph – Post-development
Development boundary
Map data © 2026 Google, Imagery © 2026 Google


Land between F Lloyd Penley and Bedwell Park
Wide aerial photograph
Site Location
Map data © 2026 Google, Imagery © 2026 Google

Appendix 4 – Photographs



Photograph 1 – Looking south-west across the newly constructed bridge.



Photograph 2 – Looking south under the newly constructed bridge.



Photograph 3 – Areas of self-seeded grassland and ruderal vegetation along the southern bank of the river, to the west of the bridge.



Photograph 4 – Areas of self-seeded grassland and ruderal vegetation along the southern bank of the river, to the west of the bridge.



Photograph 5 – Looking west from the bridge.



Photograph 6 – Looking north-east from the bridge.



Photograph 7 – Showing areas of sparsely vegetated land around the margins of the bridge and access road.



Photograph 8 – Showing areas of sparsely vegetated land around the margins of the bridge and access road.



Photograph 9 – Showing Himalayan balsam along the banks for the river.



Photograph 10 – Showing the channel bed of a section of the river located immediately adjacent to the bridge.

Appendix 5 – Botanical species list

Scientific name	Common name
Acer pseudoplatanus	Sycamore
Agrostis stolonifera	Creeping bent
Alliaria petiolata	Hedge garlic
Bromus hordeaceus	Soft brome
Calystegia sepium	Hedge bindweed
Carex pendula	Pendulous sedge
Cirsium arvense	Creeping thistle
Cirsium vulgare	Spear thistle
Crataegus monogyna	Hawthorn
Dactylis glomerata	Cock's-foot
Dipsacus fullonum	Teasel
Epilobium hirsutum	Greater willowherb
Fraxinus excelsior	Ash
Galium aparine	Cleavers
Geum urbanum	Wood avens
Helminthotheca echioides	Bristly ox-tongue
Holcus lanatus	Yorkshire fog
Impatiens glandulifera	Himalayan balsam
Jacobaea vulgaris	Common ragwort
Juncus effusus	Soft rush
Lactuca serriola	Prickly lettuce
Leucanthemum vulgare	Oxeye daisy
Poa trivialis	Rough meadow-grass
Prunus spinosa	Blackthorn
Ranunculus repens	Creeping buttercup
Reseda luteola	Weld
Rosa canina agg.	Dog rose
Rubus fruticosus agg.	Bramble
Rumex crispus	Curled dock
Rumex obtusifolius	Broadleaved dock
Salix cinerea	Grey willow
Salix fragilis	Crack willow
Scrophularia umbrosa	Water figwort
Senecio vulgaris	Groundsel
Solanum dulcamara	Bittersweet
Sonchus asper	Prickly sowthistle
Stachys sylvatica	Hedge woundwort
Tanacetum parthenium	Feverfew
Trifolium dubium	Lesser trefoil
Urtica dioica	Stinging nettle
Vicia sativa	Common vetch

Appendix 6 – Planning and statutory context

STATUTORY AND PLANNING CONTEXT

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of the legislative protection that is relevant to the findings of this report.

Habitats

Section 7 of the Environment Act (Wales) places a duty on Welsh Ministers to publish, review and revise lists of types of habitats and species in Wales which they consider are of key significance to sustain and improve biodiversity. The Welsh Ministers must also take all reasonable steps to maintain and enhance the habitats published in these lists,and encourage others to take such steps.

Amphibians

<u>Great crested newts</u>

Great crested newts (GCN) *Triturus cristatus* and their habitat (aquatic and terrestrial) are afforded full protection by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture GCN
- Deliberately, intentionally or recklessly disturb GCN in such a way to be likely to significantly affect:
    - their ability to survive, breed, reproduce, rear or nurture their young
    - their ability to hibernate or migrate
    - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of GCN
- Damage or destroy breeding sites or resting places of GCN
- Intentionally or recklessly disturb sheltering GCN, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead GCN, any part of GCN or anything derived from GCN

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

GCN are also protected by the Protection of Animals Act 1911, which prohibits cruelty and mistreatment. Releasing a GCN in such a way as to cause undue suffering may be an offence under the Abandonment of Animals Act 1960.

In addition to the above, there are various statutory provisions relating to the transport of animals, designed to ensure their welfare. GCN are also listed under Section 7 of the Environment (Wales) Act 2016.

It is important to identify the presence of GCN individuals and also to identify suitable habitat on sites so that legal obligations regarding this species can be observed. If a survey identifies the presence of GCN on the site, an assessment of the population size class is required. This can then inform a mitigation scheme, which would need to be developed in liaison with the local Natural Resources Wales (NRW) team, and which minimises direct threats to newts and compensates for any loss of habitat. A licence issued by NRW is required for the legal implementation of a mitigation scheme.

An NRW mitigation licence application requires a Mitigation Method Statement and a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

Other amphibians

More common British amphibians, such as common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Triturus vulgaris* and palmate newt *Triturus helveticus* are protected only by Section 9(5) of the Wildlife and Countryside Act 1981 (as amended). This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy.

The above named species are also listed as UK Species of Conservation Concern. Due to general declines in most British amphibian species in recent years, many local authorities require amphibian surveys as a planning condition, or as part of environmental information submitted as part of a planning application, even where the presence of GCN is ruled out.

Natterjack toad *Bufo calamita* and pool frog *Pelophylax lessonae* are also offered the same level of protection as GCN, through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.

Natterjack and common toad are also listed under Section 7 of the Environment (Wales) Act 2016.

Water bodies that support all five (more common) species of British amphibians in high numbers, may be afforded protection in local plans, as Sites of Importance for Nature Conservation (SINC), or a similar equivalent, for sites of local importance. A site may require statutory protection as a Site of Special Scientific Interest (SSSI).

Reptiles

Common lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, grass snake *Natrix natrix* and adder *Vipera berus* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure any of the species listed above
- Sell, offer, advertise or transport for sale a live or dead animal of the species listed above

If a proposed development is likely to have an impact on these reptiles the local statutory nature conservation organisation must be consulted.

Sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* receive full protection under the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species Regulations 2017. Read together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture any sand lizards or smooth snakes
- Deliberately, intentionally or recklessly disturb sand lizards or smooth snakes in such a way to be likely to significantly affect:
    - their ability to survive, breed, reproduce, rear or nurture their young
    - their ability to hibernate or migrate
    - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of such an animal
- Damage or destroy breeding sites or resting places of such animals
- Intentionally or recklessly disturb sheltering sand lizards or smooth snakes, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead sand lizards or smooth snakes, any part of such an animal or anything derived from such an animal

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

All reptile species (except for smooth snake) are also listed under Section 7 of the Environment (Wales) Act 2016.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Hazel dormouse

Hazel dormice *Muscardinus avellanarius* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture dormice
- Deliberately, intentionally or recklessly disturb dormice in such a way to be likely to significantly affect:
    - their ability to survive, breed, reproduce, rear or nurture their young
    - their ability to hibernate or migrate
    - their local distribution or abundance
- Damage or destroy breeding sites or resting places of dormice
- Intentionally or recklessly disturb sheltering dormice, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead dormouse, any part of a dormouse or anything derived from a dormouse

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

Dormice are also listed under Section 7 of the Environment (Wales) Act 2016.

Bats

In the United Kingdom, all species of bat and their roosts are afforded full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (known as the "Habitats Regulations"). The Wildlife and Countryside Act is the domestic implementation of the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) and was amended by the Countryside and Rights of Way Act 2000. This makes it an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture a bat
- Deliberately, intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (even if the bat is not present at the time)
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead bat, any part of a bat or anything derived from a bat

Under UK law, a bat roost is *any structure or place which any wild [bat] … uses for shelter or protection*. As bats often reuse the same roosts, legal opinion is that a roost is protected whether or not the bats are present at the time of the activity taking place.

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

If an activity is likely to result in any of the above offences, a licence can be applied for to derogate from the protection afforded. These licences must provide appropriate mitigation and are issued by NRW.

The Environment (Wales) Act 2016 also lists the following bat species as species of principle importance under Section 7:

- Barbastelle *Barbastella barbastellus*
- Bechstein's bat *Myotis bechsteinii*
- Noctule *Nyctalus noctula*
- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Brown long-eared bat *Plecotus auritus*
- Greater horseshoe *Rhinolophus ferrumequinum*
- Lesser horseshoe *Rhinolophus hipposideros*

Birds

All wild birds, their nests and young are protected throughout England and Wales by the Wildlife & Countryside Act 1981 (as amended). It is illegal to kill, injure or take any wild bird, or damage or destroy the nest or eggs of breeding birds. The legislation applies to all bird species, common and rare.

In addition to the protection afforded to all wild birds, more vulnerable species listed on Schedule 1 of the Act receive enhanced protection when breeding. Schedule 1 species, including their dependent young, are protected from intentional or reckless disturbance whilst at or near the nest, in addition to the protection afforded the more common species.

The Environment (Wales) Act 2016 offers further protection to the nests of some species that regularly re-use their nests, even when the nests are not in use.

The leading governmental and non-governmental conservation organisations in the UK have reviewed the population status' of 244 UK bird species. "Birds of Conservation Concern 4: the Red List for Birds" is the most recent publication summarising their findings. Three lists, Red, Amber and Green, have been produced based on the most up-to-date evidence available and criteria include conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance. These lists are a valuable resource when considering conservation priorities.

Trees

Trees may be protected on an individual or group level through a Tree Preservation Order (TPO). In order to carry out works to trees with a TPO, prior written consent must be obtained from the Local Planning Authority. Trees may also be protected through a condition of planning consent or designated conservation areas.

Hedgerows

The Hedgerow Regulations are made under Section 97 of the Environment Act 1995 and came into operation on 1st of June 1997. They aim to protect important hedgerows in the countryside by controlling their removal through a system of notification to the Local Planning Authority.

A hedgerow can only be considered for classification as "important" if it, or the hedgerow of which the section belongs to is over 20m in length (or which meets a hedgerow at either end) and has existed for 30 years or more.

Plants

Schedule 8 of the Wildlife & Countryside Act 1981 (as amended) lists a number of plant species which are protected under Section 13 of the same legislation. As such, it is an offence to:

- Intentionally or recklessly pick, uproot or destroy a plant, or any seeds or spores attached to it, which is listed on Schedule 8
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead wild plant on Schedule 8, any part of the plant or anything derived from the plant

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

The Conservation of Habitats and Species Regulations 2017 extends European legislative protection to a further subset of plants. It is therefore an offence to pick, collect, cut, uproot, destroy or trade any plant listed in Schedule 4 of these Regulations, unless the appropriate licence is first obtained.

A large number of species of vascular plants, lichens, algae, fungi, mosses, stoneworts and liverworts are also protected through planning policy as species of principal importance, as required under Section 7 of the Environment Act (Wales) 2016.

Invasive Plant Species

A number of invasive, non-native plant species are listed under Schedule 9 (Part II) of the Wildlife and Countryside Act 1981 (as amended). The most commonly encountered listed species in ecological surveys are Japanese knotweed *Fallopia japonica*, Montbretia *Crocosmia x crocosmiiflora* and variegated yellow archangel *Lamiastrum galeobdolon subsp. argentatum*. Section 14(2) of this Act makes it an offence to *plant or otherwise cause to grow in the wild* any plant listed on Schedule 9 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

A number of invasive, non-native plants species are listed under Schedule 2 (Part II) of the Invasive Alien Species (Enforcement and Permitting) Order 2019. The most commonly encountered listed species in ecological surveys are Himalayan balsam *Impatiens glandulifera* and giant hogweed *Heracleum mantegazzianum*. Section 3 of this Act make it an offence to *plant* or *otherwise causes to grow in the wild* any plant which is listed on Schedule 2 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

Soil or plant material contaminated with non-native and invasive plants can cause ecological damage and may be classified as controlled waste. It is an offence to keep, treat or dispose of waste that could harm the environment or human health. If there is any doubt, contact the local authority or Environment Agency.

Japanese knotweed has an extensive root system and new plants can regenerate rapidly from the smallest fragments of rhizomes. Material containing this species is classed as “controlled waste” under the Environmental Protection Act (Duty of Care) Regulations 1991. The disposal of such waste requires all involved parties to follow a strict code of practice and maintain adequate records regarding their conduct.

Otter

European otter *Lutra lutra* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture otters
- Deliberately, intentionally or recklessly disturb otters in such a way to be likely to significantly affect:
    - their ability to survive, breed, reproduce, rear or nurture their young
    - their ability to migrate
    - their local distribution or abundance
- Damage or destroy breeding sites or resting places of otters
- Intentionally or recklessly disturb sheltering otters, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead otter, any part of an otter or anything derived from otter

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

Otters are also listed under Section 7 of the Environment (Wales) Act 2016.

Water vole

Water voles *Arvicola amphibius* are protected by the provisions of Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take water vole
- Possess or control live or dead water vole or any part of a water vole
- Intentionally or recklessly damage destroy or obstruct access to any structure or place which a water vole uses for shelter or protection, or disturb water vole using such a place
- Sell, offer, advertise or transport live or dead water voles for sale

Licences are available from NRW to allow activities that would otherwise be an offence, including:

- Scientific or educational purposes
- For the purposes of ringing or marking
- Conserving wild animals or introducing them into particular areas
- Preserving public health or public safety
- Preventing the spread of disease
- Preventing serious damage to any form of property or to fisheries

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

Water voles are also listed under Section 7 of the Environment (Wales) Act 2016.

White-clawed crayfish

White-clawed crayfish *Austropotomobius pallipes* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure white-clawed crayfish
- Sell, offer, advertise or transport for sale a live or dead white-clawed crayfish

If a proposed development is likely to have an impact on white-clawed crayfish then the local statutory nature conservation organisation must be consulted.

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.
Their inclusion on the EC Habitats Directive allows areas to be designated as Special Areas of Conservation (SAC) for the presence of white-clawed crayfish. Such a designation brings legal protection under the Conservation of Habitats Regulations 2017, this includes how the site is managed and what development can occur on and in proximity to these sites.

White-clawed crayfish are also listed under Section 7 of the Environment (Wales) Act 2016.

Planning Policy

National planning guidance is issued in the form of Planning Policy Wales (Edition 12 - 2024). The most relevant sections are included in Chapter 6: Distinctive and Natural Places. This chapter details the policies on issues such as the protection of trees, woodlands, species, and designated sites. The document is free and available to view online.