St Christopher's Forest School,

Stockwell Grove, Wrexham, LL13 7BW

Preliminary Ecological Appraisal

and

Protected Species Report

29th July 2026



Produced by Wildbanks Conservation

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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

Report Version	Date	Completed by:	Date	Approved by:
Final	29/07/2026	Tanya Cobb	29/07/2026	Mick Smith

The information we have prepared is true and we confirm that the opinions expressed are our true and professional bona fide opinions.

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1.0 INTRODUCTION

1.1 This report has been prepared on behalf of St Christopher's School and provides the results of a Preliminary Ecological Appraisal (PEA) and protected species surveys undertaken on 8th July 2026. The PEA considers the potential ecological constraints associated with erecting a modular building and 2 no metal storage containers within the existing Forest School area to improve the resources available to pupils. The proposed works are to take place at St Christopher's School, Stockwell Grove, Wrexham, LL13 7BW (approximate OS Grid Ref: SJ 33926 49264).

1.2 A planning application for the proposed works has been submitted to Wrexham County Borough Council (planning application ref: P/2026/0056) and NRW have responded requesting up-to-date information regarding protected species, in particular, with respect to bats following recommendations within the submitted Preliminary Ecological Appraisal by Indigo Surveys Ltd, dated 26th September 2024 (2024 PEA) (NRW response dated 24/03/2026).

1.3 It is noted that the 2024 PEA consists of an ecological assessment of the entire school grounds i.e. blue line of Figure 1, and that NRW refer to paragraph 5.3.3.2 of the 2024 PEA, in their response dated 24/03/2026, which states that "*Due to the low potential for bats to be present in buildings B1, B2 and B3 it is recommended that a further survey of these buildings is carried out during the peak season for bats, which is May to August. The survey should comprise a thorough inspection of the buildings, including an internal inspection, followed by a single bat activity survey carried out with sufficient surveyors and Night Vision Aids (NVA) to cover the areas of potential around the buildings. The number of surveyors required will depend on the impact of the works.*" However, the redline boundary of the planning application for the Forest School is a small part of the red line boundary that the 2024 PEA covers. A planning application for the full development of the school has also been submitted and the 2024 PEA was produced to cover this whole development but was also submitted for the separate planning application for the Forest School. The Forest School planning application consists of constructing a small, single storey modular unit, restricted to a 100m2 area of grassland within the wider school grounds which is 105m, 125m and 180m from buildings B1, B2 and B3, respectively, therefore, it is not considered necessary to conduct a bat activity survey of buildings B1, B2 and B3 to inform the planning application for the Forest School. Any potential bats present within these buildings will be undisturbed and unaffected by the proposed works.

1.4 The aim of the PEA was to provide sufficient, up-to-date ecological information to:

- Provide baseline information on the current habitats and ecological features both on-site and in the immediate surrounding area;

- Identify the presence of any protected species or habitats and/or features of habitats that could support protected species and provide recommendations for further pre-construction survey work and/or mitigation measures, if required;
- Provide an appraisal of any potential effects that the proposed development may have on protected species or habitat, if possible;
- Provide recommendations for habitat enhancements to obtain a net gain in biodiversity;
- To, in essence, replace the 2024 PEA as a more site specific and appropriate PEA for the Forest School development.

1.5 The redline boundary of the proposed development site consists of unmanaged, neutral grassland and is defined on Figure 1. All of the land within the red line boundary will be affected by the proposed development through excavation and a concrete pad foundation constructed, as well as a linear area of mown, short sward playing field to connect new drainage channels to existing foul water sewer. Therefore, the land within the red line boundary and a 20m "potential working area" buffer has been assessed as part of this Appraisal and is hereto referred to as "the Site".

1.6 Protected species surveys included a Ground Level Tree Assessment (GLTA), the results of which have been combined within this Report with the PEA.

2.0 SITE DESCRIPTION

2.1 The Site is situated within St Christopher's School grounds in Wrexham town. The Site is immediately bounded by a small woodland block to the south, school playing fields to the west and north, and residential properties to the east. The surrounding habitat includes residential properties and suburban environment in all directions, however, Erddig Country Park is location 310m to the south of the Site which consists of grassland, Clywedog river and mature mixed woodland.

2.2 The immediate habitat surrounding the site is considered to have potential for a wide variety of protected species e.g., great crested newts, reptiles, bats, badgers and birds.



Figure 1. Aerial map showing development boundary outlined red, approximate new drainage route dashed light blue and the wider school grounds outlined blue. (Imagery ©2026 Airbus, Bluesky, Infoterra Ltd & COWI A/S, Maxar Technologies, Map data ©2026)

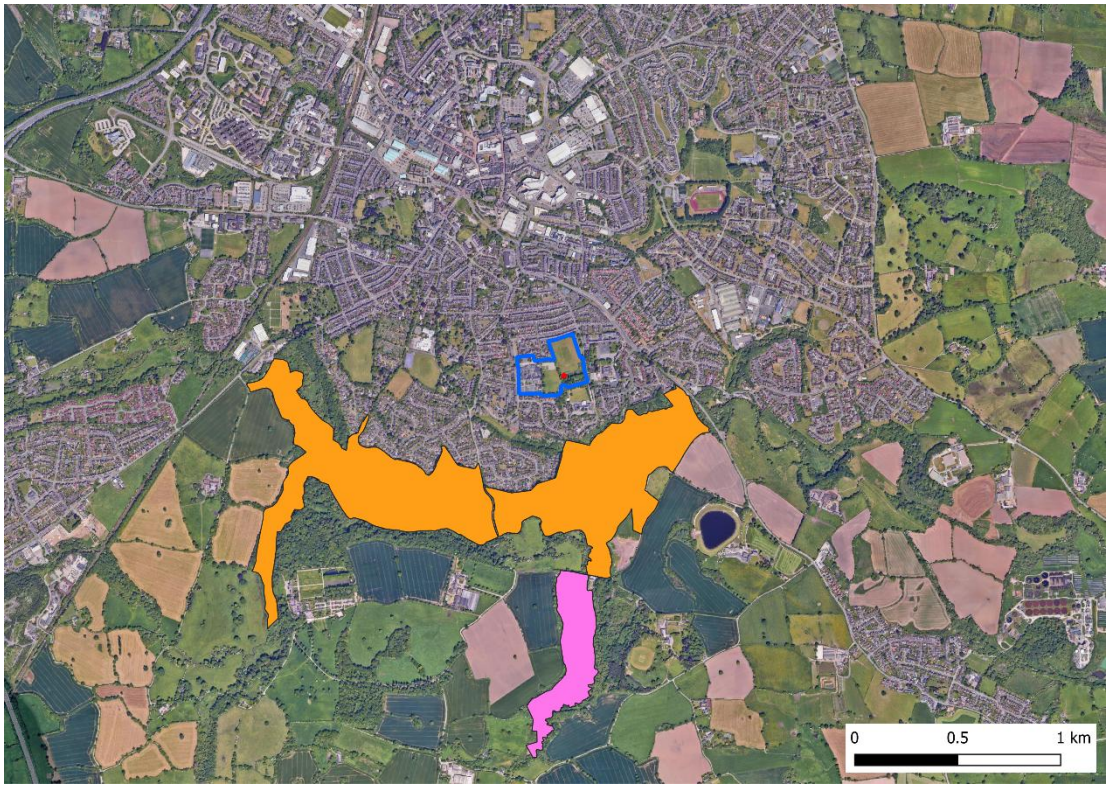


Figure 2. Aerial map showing property boundary outlined red, wider school grounds outlined blue, Erddig Park coloured orange, Sontley Marsh SSSI coloured pink and the wider landscape. (Imagery ©2026 Airbus, Bluesky, Infoterra Ltd & COWI A/S, Landsat / Copernicus, Maxar Technologies, Map data ©2026 Google)

3.0 SURVEY METHODOLOGY

3.1 To inform this Preliminary Ecological Appraisal and Protected Species Report, a desk-top study and field survey were undertaken in line with Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017).

3.2 Desk Top Study

3.2.1 A desk top study was undertaken by Wildbanks Conservation Ltd. The following other online resources were also used for background information of the Site.

- MAGIC website
- Ordnance Survey maps
- Aerial photographs

3.2.2 A Trees and Construction BS5837 Tree Survey Assessment by Indigo Surveys Ltd dated 4th October 2024 (2024 Tree Report) has been provided and reviewed to provide background information and context for ecological conclusions within this Appraisal.

3.3 Field Survey

3.3.1 The purpose of the field survey was to identify and assess the following:

- the habitats present;
- the potential for legally protected species to be present;
- any potential constraints to the development;
- the presence of invasive plants and animals; and
- to provide recommendations for ecological enhancements.

3.3.2 The Field Survey was undertaken by Jack Halpin BSc ACIEEM & Tanya Cobb BSc, Ecologist and Assistant Ecologist, Wildbanks Conservation, on 8th July 2025.

3.4 Protected Species

3.4.1 The Site was searched for evidence of, or feature/habitat that could be used by protected species such as great crested newts (GCN) *Triturus cristatus*, reptiles, bats, badgers *Meles meles*, otters *Lutra lutra,* water vole *Arvicola amphibius*, and nesting birds, as well as any invasive plants and/or animals.

3.4.2 Where evidence, or suitable habitat, for any of the aforementioned protected species was identified, a more in-depth species-specific survey was carried out, if possible, in accordance with recognised guidelines for that species/habitat, or such surveys are recommended to be carried out.

3.5 *Great Crested Newts*

3.5.1 An assessment was made of the habitats present on the Site for their suitability for use by great crested newts (GCN) following best practice guidance (English Nature, 2001). Typical habitats used by GCN include grassland, scrub, woodland, hedgerows, waste ground or quarry floors. The key factors for GCN occupation are availability of invertebrate prey species combined with the presence of dense ground vegetation or voids in the substrate to allow refuge and shelters on the surface, such as logs and rocks. The Site was searched for potential winter hibernation features such as access underground amongst tree roots and/or mammal burrows, or above ground refuges like deadwood or rubble piles. GCN often occur in metapopulations, therefore, presence of waterbodies, connectivity, or hibernating opportunities in the wider landscape was taken into account.

3.5.2 Low potential habitats such as muddy, cattle-poached, heavily vegetated or shady ponds, ditches and temporary, flooded hollows can also be used by great crested newts and recently destroyed habitat (within the last four years), such as the ploughed or soil stripped land, or in-filled ponds were not ruled out as, it is possible for GCN to survive for several years on sites where the breeding pond has been destroyed.

3.6 *Reptiles*

3.6.1 An assessment was made of the habitats present on site for their suitability for use by reptiles, based on the criteria outlined in the Herpetofauna Workers' Manual (Gent, 2003). This habitat-based approach evaluates the site's capacity to support a population by identifying key life-cycle requirements, specifically:

- **Vegetation Structure:** Assessing diversity of vegetation structure to provide both open areas for thermoregulation and dense cover for predator avoidance.
- **Basking Opportunities:** Identifying south-facing aspects, bare ground, or log piles that receive high levels of sunlight.
- **Foraging and Prey Availability:** Evaluating the presence of invertebrate or small mammal populations to support specific reptile species.
- **Hibernation and Egg-laying Potential:** Searching for "hibernacula", e.g., stone walls, root balls, or mammal burrows, and suitable egg-laying media such as decomposing vegetation or compost heaps.

- **Connectivity:** Determining the site's role as a biological corridor or buffer to local protected habitats.

3.6.2 Sightings of individuals were also recorded during the survey, if encountered; however, the primary assessment focused on the potential of habitats to support these species in accordance with standardised habitat evaluation.

3.7 *Bats – Ground Level Tree Assessment*

3.7.1 A Ground Level Tree Assessment (GLTA) was conducted on all trees that may be affected by the proposed works i.e. due to felling or pruning in line with Bat Survey Guidelines (Collins, 2023).

3.7.2 Assessment undertaken on trees included using ladders, binoculars, high-lumen torches, inspection mirrors and endoscopes, where possible. Features such as rot holes, hazard beams, woodpecker holes, lifted bark, vertical cracks, dense ivy, or callus formations were recorded and evaluated. Trees were then classified according to bat roost potential as follows:

- Negligible – No suitable PRF observed.
- PRF-I (Individual use) – Small, isolated PRF suitable for single or small numbers of bats.
- PRF-M (Multiple bats) – Larger, more sheltered features potentially suitable for group or maternity roosts.

3.7.3 Any direct evidence of bat use—such as droppings, staining, feeding remains, or live bats—was noted. Conversely, the presence of dense cobwebs or detritus obstructing PRF entrances was used to infer likely absence of recent use.

3.7.4 Tree numbering was consistent with the Trees and Construction BS5837 Tree Survey Assessment by Indigo Surveys Ltd dated 4th October 2024 (2024 Tree Report), for ease of reference.

3.7.5 Consideration was also given to wider bat habitat requirements including flight paths and foraging opportunities.

3.8 [redacted]

3.8.1 [redacted]

3.9 *Otter*

3.9.1 During the Field Survey, visual searching methods were used to establish the Sites suitability for otter. An assessment was made of the habitats present to support otters based upon factors including proximity to watercourses, habitat type, vegetation cover, volume of human disturbance and prey availability as per survey guidelines (South Wales Wildlife Trust, 2024). Any areas of woodland or thick scrub, extensive reed beds, ponds and lakes, timber stacks and log piles, groups of windblown trees, large bank-side root systems, hollow trunks or stands of tussocky, tall, fen vegetation, especially if connected to waterbody edges and riparian corridors, were searched, where possible.

3.10 *Water vole*

3.10.1 During the Field Survey, an assessment was made of the habitats present on the Site for their suitability for use by water vole, taking into account proximity to watercourses, habitat type, vegetation cover and volume of human disturbance. Any watercourse identified on, or adjacent, to the Site, were assessed for their potential to support water vole using the Water Vole Conservation Handbook (Strachan et al., 2011).

3.11 *Birds*

3.11.1 During the Site field survey, any trees, buildings and other structures were examined for suitable bird nesting locations.

3.12 *Invasive Species*

3.12.1 During the Site field survey, visual searching methods were used to identify any non-native invasive species present. The survey was inclusive of all habitats present.

3.13 **Survey Limitations**

3.13.1 It is considered that there are no significant limitations that would reduce the veracity of the conclusions or recommendations detailed within this Appraisal.

3.13.2 GLTAs are an approximation of bat roosting potential due to not all PRFs potentially being visible from the ground and the extent of each feature cannot always be established accurately. Assessments were undertaken whilst the trees were in leaf so visibility of PRFs from the ground was limited. However, the trees were in good condition, with no obvious signs of damage which would increase the likelihood of PRFs being present.

4.0 RESULTS

4.1 Desk Top Study

4.1.1 One statutory designated site is located within 2km of the Site, shown in Figure 2.

- Sontley Marsh SSSI: designated for its botanical interest in 1986 and located 940m south of the Site. Due to the distance of the Site from this SSSI and the small extent of the proposed works, the SSSI will not be affected by this development.

4.1.2 One non-statutory designated site exists within 2km of the Site, shown in Figure 2.

- Erddig Country Park: A diverse parkland, consisting of grassland, lakes, ponds, Clywedog river, veteran trees and woodland and architectural features and located 310m south of the Site. Due to the distance of the Site from Erddig Country Park and the small extent of the proposed works, the Country Park will not be affected by this development. However, the Site is within the dispersal range of particular protected species inhabiting Erddig Park, such as GCN, bats, badger and otter and therefore, these will be considered within this Appraisal.

4.2 Field survey

4.2.1 The Site is approximately 100m² and comprises of overgrown, unmanaged, neutral grassland with some ruderal species present such as Bramble, *Rubus fruticosus* agg., Common nettle *Urtica dioica,* Old man's beard *Clematis vitalba* and Willowherb sp. *Epilobium sp.* (Plate 1). No mature trees, building, watercourses or waterbodies exist within the Site.

4.2.2 The Site is bounded by more unmanaged, neutral grassland to the east and south, a mature line of trees to the west and a mown grass playing field, used by dog walkers to the north. A pile of large boulders, rubble, soil and brash is located approximately 5m southwest of the Site and is vegetated over by the above listed ruderal species (Plate 2 & 4). The area surrounding the Site also has log piles and dense vegetation suitable for a range of protected species.

4.3 Protected Species Surveys

4.3.1 *Great Crested Newts*

4.3.1.1 No waterbodies were identified within the redline boundary or within 500m. The unmanaged and overgrown nature of the grassland on Site is excellent habitat for GCN to use for foraging, shelter and hibernation. The log and boulder piles in close proximity to the Site (~5m) also provide shelter

and refugia for any potential GCN on site. No direct evidence of GCN was recorded. However, it is acknowledged that GCN may be very difficult to find during a walkover survey.

4.3.1.2 The Site is located over 500m from any known potential breeding habitats and within an urban area of Wrexham town (Figure 1). However, it is widely accepted that Wrexham, and the surrounding landscape, contains a well-established and substantial population of GCN, with hotspots located in Wrexham Industrial Estate, 3km east of the Site and 3.5km southwest in Strat Las a'r Hafod SSSI, designated for its GCN population. It is acknowledged that most adult newts likely stay within around 250m of breeding ponds (English Nature, 2001; Langton et al., 2001) but can disperse up to 500m. Newts are more likely to travel greater distances from their breeding ponds if there is higher quality foraging and refuge habitat extending beyond their breeding pond. There is a potential that unrecorded garden ponds do exist within the area around the Site where GCN populations may exist as such, the presence of GCN within the Site cannot be completely ruled out, although it is anticipated that the chance of them being present is unlikely.

4.3.2 *Reptiles*

4.3.2.1 The unmanaged nature of the grassland and log and boulder piles, provide good opportunities for reptiles to bask and take shelter. However, these areas are isolated from other suitable reptile habitat in the wider area by substantial areas of suburban infrastructure and high levels of foot traffic and human disturbance from the school attendees and residential properties, which will deter reptile use of the Site. Opportunistic use by less sensitive species, such as slow worm *Anguis fragilis*, which often frequent residential gardens, cannot be ruled out.

4.3.2.2 No direct evidence of reptiles was recorded. However, it is acknowledged that reptiles may be very difficult to find during a walkover survey.

4.3.3 *Bats – Ground Level Tree Assessment*

4.3.3.1 At the time of this Appraisal, no trees are due to be felled or pruned as part of the proposed works. No trees are located within the redline boundary of the Site. A Ground Level Tree Assessment was undertaken on twelve trees in close proximity of the redline boundary. Six of these trees are located within 20m of the redline boundary and are therefore, at the greatest risk of disturbance. Four of these six trees were identified as having features suitable for individual roosting bats; T97, T98, T100 and T101 (Figure 3), therefore, requiring further surveys/inspections, in the form of Aerial Tree Inspections (ATI), before they can be felled (if felling is necessary).

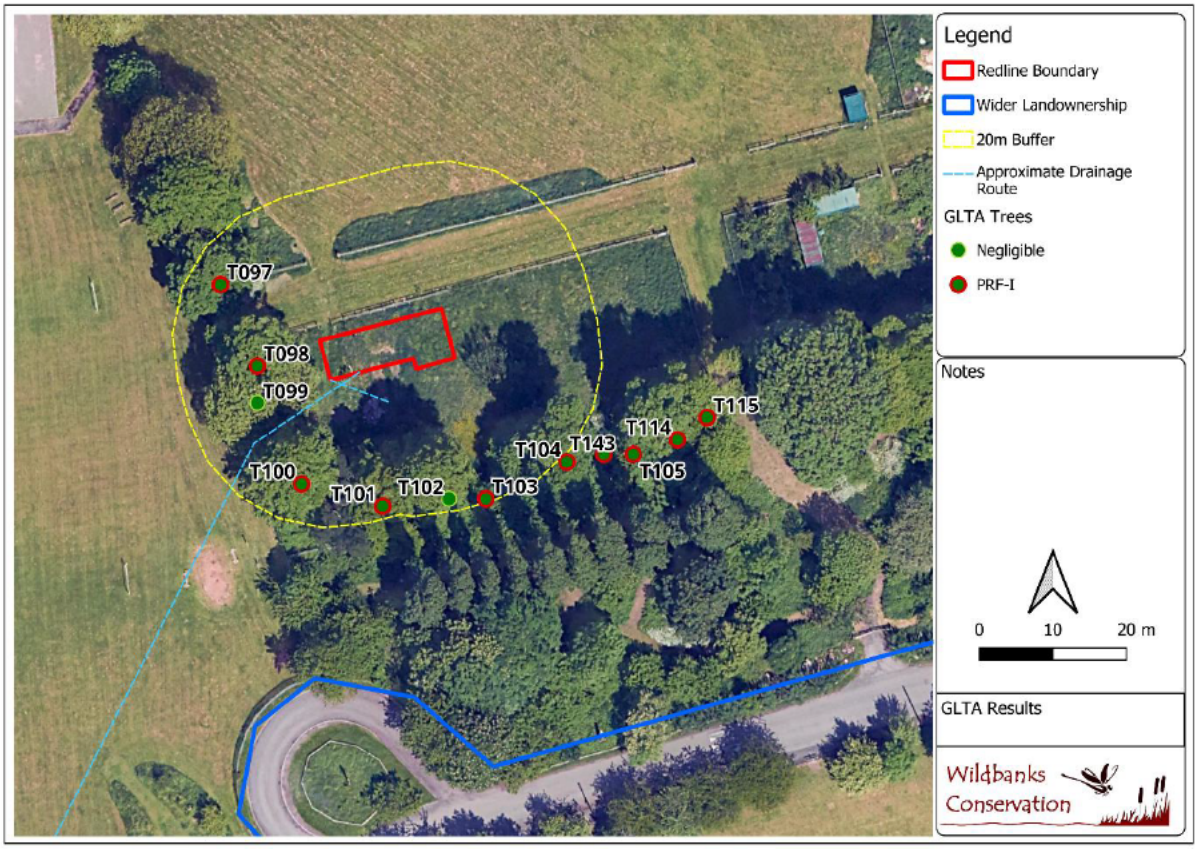


Figure 3. Aerial map showing trees assessed for potential roost features across the Site.

Table 1: All trees assessed for their suitability for bats.

Tree Number	GPS Coordinates		Tree species	Description of Tree/PRF	GLTA PRF category
	Easting	Northing			
T97	333898	349269	Common lime	Tree in full leaf and cannot see higher into canopy than 8m up. Squirrel drey present.	PRF-I
T98	333903	349258	Common lime	Old branch wound with associated callus roll, depth unknown from ground.	PRF-I
T99	333903	349253	Sycamore	Small cavity associated with knothole but depth too shallow for bats.	Negligible
T100	333909	349242	Common lime	Heavy leaf growth. Opening tennis ball size but depth unknown from ground.	PRF-I
T101	333920	349239	Silver birch	Lifting bark.	PRF-I
T102	333929	349240	Oak Hybrid	Bird box with opening enlarged by woodpecker/squirrel. Cavity too open for bats.	Negligible
T103	333934	349240	Common lime	Epicormic growth, leaf cover and ivy obscured tree and potential features.	PRF-I
T104	333945	349245	Common lime	Small cavity but depth unknown from ground.	PRF-I
T105	333954	349246	Common lime	Various old wounds higher in tree but depth unknown from ground.	PRF-I
TT114	333960	349248	Common lime	Leaf cover restricting view over 8m high.	PRF-I
TT115	333964	349251	Poplar -other	Mature, pollarded tree with dense ivy restricting view.	PRF-I

TT143	333950	349246	Dead/Dying	Pollarded stump covered in ivy.	PRF-I

[redacted]

4.3.4.2 The Site itself comprises an area of unmanaged neutral grassland containing areas of ruderal vegetation. As badgers forage within habitats with higher worm densities, their primary foraging habitat type includes short, amenity grassland and mown grassland, and their secondary foraging habitat type includes, but is not limited to, rough, un-grazed grassland, scrub and broadleaved woodland (Badger Trust, 2023). Therefore, the Site provides a small proportion of secondary foraging habitat for badger, compared to the foraging provisions within the wider landscape.

4.3.4.3 The Site is located on the outskirts of Wrexham Town Centre, surrounded by housing estates, and is located approximately 310m from Erddig Country Park, which comprises a mixture of woodland, and parkland, providing suitable foraging opportunities for badger. The immediate area surrounding the Site, within the school grounds, contain areas of amenity grassland, and small area of broadleaved woodland, which will likely provide additional foraging opportunities for badgers, as well as a potential commuting route to/from Erddig Country Park. As the school grounds are surrounded by residential houses, access to the Site by badger, from Erddig is restricted to this small area of woodland and public footpath.

4.3.5 *Otter*

4.3.5.1 No evidence of otter, including signs such as spraints, footprints, feeding remains or resting places, was recorded during the Field Survey.

4.3.5.2 The Site does not contain any watercourses, ponds or wet features. The habitats present comprise dry, unmanaged long grassland with no substantial areas of scrub (<0.5ha). The site is subject to regular disturbance from the adjacent school and use of the surrounding field by dog walkers and is surrounded by housing on all aspects.

4.3.5.3 Otters may be using the wider landscape around the Site. The River Clywedog is located approximately 500m south of the Site, and represents the nearest suitable aquatic habitat identified during assessment. Otter territory ranges can be as large as 25 – 35km (NIEA, 2011), however, due to housing separating the River Clywedog and the Site, and the volume of human disturbance, the Site is considered to have negligible potential for otter and they are not considered further within this Appraisal.

4.3.6 *Water vole*

4.3.6.1 No suitable watercourse was found within, or adjacent to the Site. The nearest potentially suitable watercourse is located approximately 500m south of the Site; Clywedog River, separated by a woodland, houses, and pastoral fields. Water vole are semi-aquatic and forage, burrow and breed within riparian vegetation up to 2-5m from the water's edge (Strachan et al., 2011). Water vole will also use open water bodies with suitable bank side vegetation such as ponds and canals. Water voles will not ordinarily travel across open ground for more than 10m. Therefore, the Site is considered to have negligible potential for water vole and they are not considered further within this Appraisal.

4.3.7 *Birds*

4.3.7.1 Opportunities for nesting birds exist around the Site within the unmanaged grassland, for species such as wren *Troglodytes troglodytes,* robin *Erithacus rubecula* and dunnock *Prunella modularis*, and in close proximity to the Site within areas of dense scrub and mature trees, suitable for additional species such as thrushes, tits, pigeons and finches etc. Due to proximity of the proposed development to this potential bird nesting habitat, a precautionary approach should be taken with regards to nesting birds.

4.3.8 *Invasive Species*

4.3.8.1 No non-native, invasive animal or plants species were identified on Site or within 20m.

5.0 APPRAISAL OF POTENTIAL EFFECTS

5.1 This section provides an appraisal of potential effects of the outlined proposals on protected habitats and species. The proposals comprise installing a modular building and 2 no. metal storage containers within the Forest School area. This will require the removal of ground vegetation, soil stripping and levelling ground, install concrete foundations, and connect drainage services to existing infrastructure, as well as the building of the Forest School building.

5.2 *Designated Sites*

5.2.1 The proximity of designated sites to the proposed development has been carefully evaluated. The nature and scale of the proposed development are small and have low environmental impact, with limited soil disturbance, and material movement, and short-term works with limited vehicle movement on and off site.

5.2.2 The proposed works are restricted to within the school grounds and no direct damage or loss to the SSSI's protected habitat will happen during the construction phase. Any potential noise, light, dust, vibration or rubbish disturbance/pollution to the SSSI and Country Park will be screened by the intervening residential neighbourhood. Therefore, given the distance of Sontley Marsh SSSI (940m south) and Erddig Country Park (310m south) from the Site, no direct or indirect effects on the qualifying features of the SSSI or the condition of the Country Park are anticipated.

5.3 *Habitats*

5.3.1 Habitat loss is limited to a small area of unmanaged, neutral grassland (100m2). Although, this grassland does possess ecological value for a variety of species, it is a very small area in comparison to the retained grassland and woodland adjacent to the Site (<1.5%). The Site will be used as a Forest School and therefore, maintaining habitats for wildlife is a top priority. The development and future use of the Site is not considered to reduce the biodiversity or ecological value of the local area.

5.4 *Great Crested Newt*

5.4.1 No evidence of GCN use was found on Site however, moderate-quality terrestrial habitat suitable for GCN foraging, resting and hibernation was identified on Site and within close proximity (20m). Due to the well-established, large, breeding populations of GCN in the Wrexham area, the presence of transient GCN on Site cannot be ruled out.

5.4.2 The loss of terrestrial habitat within the development footprint is considered to represent a low-level impact. The works will remove approximately 100m² of habitat considered suitable for GCN, although this represents only a very small proportion of the available terrestrial habitat associated

with the wider school grounds (<1.5%). The wider area contains more extensive areas of suitable habitat, including scrub, rough grassland and woodland habitats, which will be retained and continue to provide opportunities for foraging, shelter and refuge. The proposed works are not considered likely to result in the isolation or fragmentation of the local GCN population, as the Site does not represent a critical commuting route.

5.4.3 Potential impacts associated with artificial lighting and noise during the construction phase are considered unlikely to result in a significant impact on any local GCN population. Any temporary lighting required during construction will be limited to working areas and will be removed following completion of the works. No lighting will be on during the night. Construction noise will also be temporary in nature and limited to the construction period. Given the short-term nature of these impacts and the existing disturbance associated with the adjacent school and existing Forest School, significant impacts on GCN are not anticipated.

5.4.4 Given the small area of terrestrial habitat that will be affected, the moderate quality of that habitat, and the fact that the development is not expected to fragment habitats, create barriers to movement or adversely affect dispersal opportunities, the proposal is unlikely to result in a significant impact on any local GCN population.

5.5 *Reptiles*

5.5.1 The grassland within the Site, and refugia piles in close proximity, offer small scale, isolated habitat suitable for reptile resting and foraging. These areas are isolated from other suitable reptile habitat in the wider landscape by large areas of mown, playing fields, roads and housing estates. The Site is also frequently disturbed by Forest School attendees and school children and could be accessed by dog walkers. There is a chance that opportunistic use of the site by less sensitive species, such as slow worm could take place, but it is considered that reptiles are likely absent from the Site and, as such, direct impacts on reptiles are expected to be negligible.

5.5.2 However, because reptile presence cannot be completely ruled out, a precautionary approach should be adopted through the construction period.

5.6 *Bats*

5.6.1 No works are due to take place to any of the trees located outside but in close proximity to the boundary of the Site, therefore, no damage to potential roost features within these trees is anticipated. Any noise, dust, or vibration disturbance to potential roosting bats within trees 20m from the Site during construction will be temporary and no disturbance is anticipated post-construction.

5.6.2 Due to the presence of unmanaged grassland on Site, mature trees and woodland adjacent to Site and the proximity of Erddig Country Park, bats are likely to be foraging in the local area and may be directly using the Site as a commuting route and/or foraging resource. Therefore, mitigation for potential disturbance to bats will need to be considered.

5.6.3 Potential impacts associated with artificial lighting and noise during the construction phase are considered unlikely to result in a significant impact on any local bat population. Any temporary lighting required during construction will be limited to working areas and will be removed following completion of the works. No lighting will be on during the night. Construction noise will also be temporary in nature and limited to the construction period. Given the short-term nature of these impacts and the existing disturbance associated with the adjacent school and existing Forest School, significant impacts on bats are not anticipated. No external lighting on the new building is planned at this time, however, should this change, sympathetic lighting to avoid disturbing bats should be installed and follow Guidance Note 08/23: Bats and Artificial Lighting at Night (ILP, 2023).

[redacted]

[redacted]

5.8 *Birds*

5.8.1 The habitats within the Site, i.e. unmanaged grassland, is a small proportion of the wider nesting habitat available in the vicinity and is of low quality due to its frequent disturbance by school attendees and local dog walkers. It is considered the impact of the development on nesting birds will be minimal.

6.0 DISCUSSION AND RECOMMENDATIONS

6.1 The proposed provision of a Forest School building at St Christopher's School has been subject to a Preliminary Ecological Appraisal (PEA), which consists of a Desk Top Survey and a Field Survey conducted on 8th July 2026. As part of the Field Survey, a Ground Level Tree Assessment (GLTA) was undertaken also.

6.2 The Site was searched for evidence, or habitat that could potentially be used by protected species: great crested newts (GCN), reptiles, bats, badgers, otters, water vole and nesting birds. No evidence of protected species, and only habitat suitable for GCN, reptiles and nesting birds were found on Site. Habitat suitable for bats and badger was found within 20m of the Site, including within the construction area of the new drainage services.

6.3 Further Protected Species Survey Recommendations

Recommendation 1

6.3.1 Undertake a badger survey to assess badger use across Site, which may include sett presence/absence and activity levels. This includes a thorough search of the Site, and within 30m, by a qualified ecologist. The level of badger activity will be assessed using any evidence of recent soil disturbance and/or tracks around sett entrance holes, mammal tracks and the presence/absence of any foraging sites or latrines on the Site as per best practice guidelines (Badger Trust, 2023. The survey will take place during the optimal season i.e. Feb–Apr and Oct–Nov.

6.4 Mitigation Recommendations and Enhancements

6.4.1 The following mitigation measures and recommendations are proposed to address the potential effects identified in Section 5 and to ensure that any risks identified to are avoided, minimised, or appropriately managed.

6.4.2 These mitigation measures and enhancements are subject to change depending on the results of further surveys.

6.4.3 *Habitats*

Recommendation 1

6.4.3.1 All rubbish and building materials will be located securely to avoid debris blowing around, or off, site in strong winds, such as placed in skips with lids. All fuel/oil tanks will be stored in appropriately bunded storage and spill kits will be present, following best practice guideline for construction site management

Recommendation 2

6.4.3.2 A Root Protection Area (RPA) will be established around the trees in close proximity to the Site in accordance with guidance document BS 5837:2012 and following recommendations set out in Trees and Construction BS5837 Tree Survey Assessment by Indigo Surveys Ltd dated 4th October 2024 (2024 Tree Report). This will ensure that trees are not accidentally damaged and that root systems are protected from compaction, excavation, or disturbance during the construction period.

6.4.4 *Great Crested Newt*

Recommendation 1

6.4.4.1 Although GCN are considered to be likely absent from the Site, suitable GCN habitat will still be destroyed and disturbed during the proposed works (see Section 5), therefore, it is recommended that a precautionary Reasonable Avoidance Method Statement (RAMS) be created and followed by contractors to ensure that the proposed development does minimise the potential for disturbance, injury or killing of GCN. The proposed RAMS may include the below and should be adhered to before and during construction works.

6.4.4.2 Summarised Reasonable Avoidance Measures:

- A suitable qualified ecologist will be appointed to oversee the works.
- Prior to the commencement of works a toolbox talk will be provided to onsite personal by a Natural Resources Wales (NRW) licensed ecologist. The talk will include information regarding the protection of species, habitats, legal implications, their responsibilities and what to do if a protected species is encountered.
- If works are to take place within the tussocky grassland or rubble piles across the Site, then the areas will be searched by suitably qualified ecologist following standard 2 stage cutting protocols.
- No works to features that provide hibernation potential will take place between December and March (inclusive) or when temperatures are forecast to drop to below 5C over night for 3 consecutive nights.
- If GCN are found during works, works must stop immediately, and the licensed ecologist will be contacted, and advice sought: Wildbanks Conservation; 01691 623505.

Recommendation 2

6.4.4.3 As an enhancement measure, it is recommended that the boulder, soil, brash pile be designated as a terrestrial refugia / hibernation feature suitable for GCN with a small amount of improvements carried out (Figure 4). The hibernaculum will be modified to meet recommendations for hibernacular design set out in the Great Crested Newt Mitigation Guidelines (English Nature, 2001). This will include increasing the size of the hibernaculum (if necessary) to at least 2m length x 1m width x 1m height and ensuring the lower margins of the mound are partially exposed to facilitate access for GCN. Once finalised, the mound will remain undisturbed; no future brash, grass cuttings or soil, etc. will be placed on the mound to avoid disturbing any GCN present.

6.4.5 *Reptiles*

Recommendation 1

6.4.5.1 Although reptiles are considered likely absent from Site, suitable reptile habitat will still be destroyed during the proposed works (see Section 5), therefore, it is recommended that a precautionary Reasonable Avoidance Method Statement is implemented to ensure that the proposed development does not result in the accidental disturbance, injury or killing of reptiles, should they be present.

6.4.5.2 Summarised Reasonable Avoidance Measures:

- A toolbox talk will be delivered to all site operatives prior to the commencement of works. The talk will cover the legal protection afforded to reptiles, species identification, site-specific risks, responsibilities of site personnel, and procedures to follow if a reptile is encountered.
- A suitable ecologist will be engaged to oversee the works to ensure legal compliance and minimise potential risks.
- Vegetation clearance will be undertaken during the reptile active season (April–August inclusive) where practicable.
- All vegetation clearance will be carried out in a directional and staged manner, starting from the edge of suitable habitat and progressing towards areas of lower habitat suitability. Clearance will proceed in 5–10 m sections at a time using hand tools or brush cutters to allow reptiles to disperse naturally. This will be the same vegetation clearance that is required for the GCN RAMS.
- All cut arisings will be raked up and removed on the same day to prevent the creation of temporary refugia and placed in a designated compost area, separate from the GCN hibernaculum referenced in 6.4.4.3, for use by reptiles for shelter and warmth (Figure 4).

- No works will take place to features with potential to provide hibernation habitat (e.g. rubble piles, log piles, dense tussocky grassland) during the period November–March inclusive, or when temperatures are forecast to fall below 5°C overnight for three consecutive nights.

- If a reptile is encountered during works, all works will cease immediately in the affected area and advice will be sought from a suitably qualified ecologist prior to works recommencing.

6.4.6 *Bats*

Recommendation 1

6.4.6.1 Any trees within 20m of the Site, or associated drainage works, categorised as having a Potential Roost Feature (PRF) require further investigation should the tree require felling or pruning within the proposed works. Any works to trees should be undertaken under a Precautionary Work Method Statement (PWMS). This is non-licensable approach which assumes low bat potential and no evidence of bat use. The PWMS will include, but not be limited to:

- Toolbox talk by licensed ecologist will be undertaken prior to any works commencing.
- A detailed PRF inspection survey, or Aerial Tree Inspection (ATI), to assess their suitability for bats and to confirm the absence of roosting bats should be conducted prior to felling.
- If no evidence of bats is found during the ATI, works to trees should follow a 'Soft Felling' approach. A licensed ecologist or Accredited Agent will provide a watching brief during the works.

6.4.6.2 Aerial Tree Inspections may involve tree-climbing and/or ladders, depending on the tree's location, PRF height and ground access.

6.4.6.3 If bats or evidence of a roost are identified during the ATI, all works must cease immediately, and advice should be sought from a licensed bat ecologist. A European Protected Species (EPS) licence, issued by Natural Resources Wales (NRW), may be required before any further works can proceed. No works affecting the roost may legally continue without this licence in place.

6.4.6.4 Providing no bat(s)/evidence of use by bats is found within identified trees, a European Protected Species licence will not be required for the proposed works. The works can be carried out at any time of year.

6.4.6.5 If any bats are found during works, works must stop immediately, and the site ecologist will be contacted, and advice sought: **Wildbanks Conservation; 01691 623505.**

Recommendation 2

6.4.6.6 As a precaution, lighting during the construction period will not be switched on permanently throughout the night to avoid effects on foraging and commuting areas in the wider area of light sensitive species such as brown long eared bats.

6.4.6.7 In addition, trees are not to be lit during construction or throughout operation of the new premises. If trees are to be lit after sunset, then trees will be selected with no PRF's.

6.4.6.8 Guidance on lighting schemes can be found in Guidance Note 08/23: Bats and Artificial Lighting at Night (ILP, 2023) or on the Bat Conservation Trust website at www.bats.org.uk.

6.4.7 *Badger*

6.4.7.1 Working methods, mitigation, compensation and enhancement will be agreed between an ecologist, St Christopher's School, the Local Authority and/or NRW, where applicable, following the results of the badger survey.

6.4.8 *Birds*

Recommendation 1

6.4.8.1 Vegetation/tree clearance or disturbance to any potential nesting features should be undertaken between October and March. Outside of this time a nesting bird survey will be undertaken by a qualified ecologist prior to any vegetation clearance/disturbance taking place. If nests are identified, the nests must remain intact and undisturbed until young have fledged. A cordon of 5-10m (depending on species) will be placed around the nest and works can continue outside this cordon.

Recommendation 2



6.4.8.2 2x Schwegler 1B Nest Box, or similar, will be installed on the western elevation of the new building (Figure 4).

6.4.9 *Compensatory Habitats*

6.4.9.1 Planning Policy Wales (PPW12) requires development to provide a Net Benefit to Biodiversity (NBB), i.e. a better outcome than if the site would be left undeveloped. Although loss of habitat on Site will be minimal and be isolated to loss of the 100m2 of neutral grassland. To compensate for loss of grassland, we recommend sowing neutral grassland seed mix (Emorsgate EM1, or similar) onto the areas left bare after works have completed, to accelerate the natural regeneration of the grassland back to its baseline condition.

6.4.9.2 An avenue of fruit trees will be planted (70m) along the fencelines between the Site and the mown (Figure 4), grass field to the north of the Site to provide a screen between the dog walkers and the

Site, enrichment for school children, foraging opportunities for a range of species, including bats, badger and birds, and enhance biodiversity.

6.4.9.3 16 local variety fruit trees will be planted, including species such as, but not limited to, apples, pears, plums, cherry, damsons etc. At least two of each variety of chosen tree will be planted to allow for successful pollination and, therefore, fruit production. The trees will be planted in a line along the fenceline, at least 4.5m apart. Rootstock will be those suitable for a range of soils such as M116/Quince A (semi-vigorous), or equivalent.

6.4.9.4 When planting the fruit trees, the hole must be dug with a spade, not with a digger as the bucket of the digger can 'glaze' the hole, preventing possible root penetration. The roots should fit into the hole without being bent. Before the tree is planted, knock a 3-4" diameter stake into the ground on the windward side of the tree for support. The tree must be planted to the same depth as it was grown in the nursery, as shown by a distinct change of colour of the trunk just above the roots. The graft union should be kept clear of soil and mulch to prevent the stem rotting. Apply mulch or mulch mats around each tree to retain soil moisture and slow weed growth around the establishing roosts. Tie the tree to the stake using a soft flexible tree tie that can be adjusted over time as the trunk girth expands.



Figure 4. Mitigation, compensation and enhancement plan.

7.0 REFERENCES

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A1 APPENDIX – SITE PHOTOGRAPHS



Plate 1. General location of the Site within unmanaged, neutral grassland.



Plate 2. General understory composition of the line of mature trees, within 20m of the Site to the south. Note the dense, undisturbed ground vegetation suitable for a range of protected species.



Plate 3. Example of piles of logs suitable for a range of protected species.



Plate 4. A habitat pile located 5m southwest of the Site comprising of large boulders, rubble, soil and brash.



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A2 APPENDIX - LEGISLATION AND PLANNING POLICY

A2.1 Many sites, animals and plants are protected by European and/or UK legislation either because of their decline across Europe and the UK or due to the persecution they have placed upon them by negligent or illegal acts such as baiting or trade. Legislation is also in place to prevent the spread of introduced or non-native invasive species and harmful weeds. When undertaking an appraisal of a proposed development, such legislation is taken into account as follows.

- European: Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive'); and Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds (codified version of Directive 79/409/EEC as amended) (the 'Birds Directive').

- UK (England & Wales): The Conservation of Habitats and Species Regulations 2017, as amended (the 'Habitat Regulations'), which transposes the Habitats Directive in UK law; The Wildlife and Countryside Act 1981 (as amended); the Countryside and Rights of Way Act (CRoW) 2000; the Protection of Badgers Act 1992; the Natural Environment and Rural Communities Act (NERC) (2006); Environment (Wales) Act 2016 and the Environmental Protection Act (EPA) 1990.

A2.2 Great Crested Newts (GCN), otters, and all UK bat species are referred to as European Protected Species (EPS) under Regulation 43 of the Conservation of Habitats and Species Regulations 2017, as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

A2.3 If work is proposed that would affect a European Protected Species, then a license from Natural Resources Wales (NRW) will be required. NRW, in exercise of the powers conferred under regulation 53(1) and 56(3) (a) of the Conservation of Habitats and Species Regulations 2017, may issue licenses for the following purposes:

- Preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;

- Preventing the spread of disease;

- Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber or any other form of property or to fisheries; to allow people to carry out activities which would otherwise be illegal.

A2.4 Before issuing a license under the Habitats Regulations, the licensing authority must be satisfied that "there is no satisfactory alternative" to the work as proposed and, that the proposed actions "will not be detrimental to the maintenance of the population of the species at a favourable conservation status (FCS)".

A2.5 To ensure EPS licensing requirements are met, the licensing authority must have enough information to complete an assessment of the application. This includes sufficient survey data so that how the Site is used by protected species is understood and impacts upon the protected species are appropriately assessed so that mitigation and/or compensation can be designed into the proposed development that will ensure that protected species' population can be incorporated and maintained in the long term.

A2.6 Species such as reptiles (Common Lizard, Slow Worm, Grass Snake and Adder), GCN, water vole, otters and bats (all UK species) are also protected in the UK under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

A2.7 It is an offence to damage or destroy a breeding site or resting place; intentionally or recklessly damage, destroy, or obstruct access to a place used for shelter or protection and to possess, advertise control, transport, sell, exchange or offer for sale/exchange any live or dead animal, or any part of one, listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

Bats

A2.8 Seven bat species are UK BAP Priority Species. These are as follows:

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

Badgers

A2.9 Badgers and their setts are protected under the Protection of Badgers Act 1992. Under this legislation it is an offense to intentionally capture, kill or injure a badger, damage, destroy or block access to their setts, disturb badgers in setts, treat a badger cruelly, deliberately send or intentionally allow a dog into a sett or bait or dig for badgers. A badger sett includes the entrance holes, tunnels and chambers.

GCN

A2.10 In addition to aforementioned legislation, Great Crested Newts are also protected under Schedule 2 of the Conservation (Natural Habitats etc) Regulations 1994 (Regulation 38). Because of their rarity they are protected under Annexes IIa and IVa of the Habitats and Species Directive and under the Berne Convention.

A2.11 It is illegal to intentionally capture or kill great crested newts; intentionally injure or recklessly disturb GCN including places used for shelter or protection.

Birds

A2.12 All wild bird species, their eggs and nests are protected under Wildlife and Countryside Act 1981 (as amended). You must always try to avoid harming birds or to use measures which do not kill or injure them before considering taking harmful action.

A2.13 It is an offence to intentionally kill, injure or take wild birds, intentionally take, damage or destroy a wild bird's nest while it's being used or built, intentionally take or destroy a wild bird's egg, possess, control or transport live or dead wild birds, or parts of them, or their eggs, sell wild birds or put them on display for sale, use prohibited methods to kill or take wild birds.

A2.14 Some birds, have additional legal protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). For these bird species it is also an offence to disturb them while they're nesting, building a nest, in or near a nest that contains their young or disturb their dependent young.

A2.15 The Birds of Conservation Concern (BoCC5) (Stanbury et al., 2021) is also taken into consideration when undertaking this appraisal.

A2.16 Technical Advice Note (TAN) 5: Nature Conservation and Planning (September 2009) provides the national planning framework for the consideration of protected species.

Hedgerows

A2.17 Under the Hedgerows Regulations 1997, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. In general, permission will be required before removing hedges that are at least 20 metres in length, over 30 years old and contain certain species of plant. The local planning authority will assess the importance of the hedgerow using criteria set out in the regulations.

Invasive Plants

A2.18 The Invasive Alien Species (Enforcement and Permitting) Order 2019 states that it is an offence to:

- Release, or allow to escape, into the wild any species of animal which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state or is included in Part 1 of Schedule 2.
- Plant, or otherwise cause to grow, in the wild any species of plant which is included in Part 2 of Schedule 2.
- Sell, offer or expose for sale, or have in possession or transport for the purposes of sale, any specimen of a species included in Part 3 of Schedule 2, or (b) publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any specimen of a species included in Part 3 of Schedule 2.

A2.19 It is an offence to cause to grow in the wild, any plant which is included in Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Invasive alien species listed are of special concern because of their invasiveness and ability to establish in several nations across Europe, including the UK. They cause severe problems for native UK species and the environment.

A3 Environmental Damage

A3.1 Any deliberate damage, or damage resulting from negligent actions, to protected species and natural habitats, the conservation status of natural habitats or species and sites of special scientific interest through improper waste management operations, unauthorised discharges into the inland surface water or groundwater, improper usage, storage or transportation of dangerous substances, plant protection products and biocidal products, and/or release of genetically modified organisms into the environment, is an offence in Wales under The Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009.

A3.2 In addition to legislation, there are national and local planning policies pertaining to the protection of biodiversity. The Environment (Wales) Act 2016 makes provision for Biodiversity and Ecological Networks, which introduced an enhanced biodiversity and resilience of ecosystems duty on Local Authorities to consider the need to:

- support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- ensure action meets international responsibilities and obligations for biodiversity and habitats;

- ensure statutorily and non-statutorily designated sites are properly protected and managed;
- safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and
- secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent, and connectivity of ecological networks.

A3.3 Section 7 of the Environment (Wales) Act 2016 provides the government obligation to list habitats and species of principal importance for the purpose of conserving, or enhancing, biodiversity. This list includes habitats and species where conservation and nature recovery planning and action should be directed.