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CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN: BIODIVERSITY & ECOLOGICAL DESIGN STRATEGY

At

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1 INTRODUCTION

1.1 Author and qualifications

This report is compiled and written by Harry Fox BSc MRes, United Environmental Services (UES) Graduate Ecologist.

The report has been approved by Tom Kenwright BSc MSc ACIEEM, UES Senior Ecologist. Tom holds a level 5 Botanical Society of Britain and Ireland (BSBI) Field Identification Skills Certificate (FISC), which certifies him as competent to undertake Phase 1 Habitat and National Vegetation Classification (NVC) surveys. Tom is licensed by Natural Resources Wales (NRW) 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 NRW to disturb, take and handle great crested newts (GCNs) *Triturus cristatus* under licence number S095290/1.

1.2 Development proposals and previous survey information

A planning application has been submitted (reference P/2025/0430) for the creation of a Green Eco-Heritage Zone and the construction of a single B8 warehouse unit with integral offices, new vehicular access, car and HGV parking, servicing and storage, landscaping, heritage and ecology mitigation and ancillary development. All works associated with construction will be limited to the area known as the Industrial Unit Compound. The Eco-Heritage Park comprises the remainder of the site and will be subject to ecological restoration and enhancement measures, with sections made accessible to the public.

Extensive ecological baseline surveys were undertaken by UES between 2022 and 2025, including habitat classification (Phase 1 and NVC), protected species assessments (bats, amphibians, badgers *Meles meles*, birds, reptiles, otter *Lutra lutra*, water vole *Arvicola amphibius*), and invasive species mapping. These surveys and their results are summarised in the accompanying Ecological Impact Assessment (EcIA) that has been prepared for the site (report reference UES03918/30).

1.3 Objectives and scope

This Construction Management Plan:Biodiversity (CEMP:Biodiversity) and Ecological design strategy (EDS) details the mitigation measures that will be implemented to protect habitats and wildlife during the construction phase of the development, including the enhancement / restoration works within the Wider Eco-Heritage Park.

This document has been prepared in part to provide some of the information requested within the proposed condition suggested in consultation comments provided by NRW on the 14th July 2025 (reference CAS-282028-F0S5). When considering the proposed condition, this document should be read in conjunction with the CEMP prepared for the site by FI Construction (25th July 2025). Proposed Condition 1 reads as follows:

"Condition 1: No development or phase of development, including site clearance, shall commence until a site wide Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority. The CEMP should include the following information:

- *Construction methods: details of materials, how waste generated will be managed;*
- *General Site Management: details of the construction programme including timetable, details of site clearance; details of site construction drainage, containment areas, appropriately sized buffer zones between storage areas (of spoil, oils, fuels, concrete mixing and washing areas) and any watercourse or surface drain.*
- *Biodiversity Management: details of tree and hedgerow protection; invasive species management; species and habitats protection, avoidance and mitigation measures.*
- *Soil Management: details of topsoil strip, storage and amelioration for re-use.*
- *CEMP Masterplan: details of the extent and phasing of development; location of landscape and environmental resources; design proposals and objectives for integration and mitigation measures.*
- *Control of Nuisances: details of restrictions to be applied during construction including timing, duration and frequency of works; details of measures to minimise noise and vibration from piling activities, for example acoustic barriers; details of dust control measures;*
- *Resource Management: details of fuel and chemical storage and containment; details of waste generation and its management; details of water consumption, wastewater and energy use.*
- *Traffic Management: details of site deliveries, plant on site, wheel wash facilities.*
- *Pollution Prevention: demonstrate how relevant Guidelines for Pollution Prevention and best practice will be implemented, including details of emergency spill procedures and incident response plan.*
- *Details of the persons responsible"*

1.4 Structure of the report

This report sets out the baseline ecological information and the key ecological receptors that this report focuses on, before detailing the mitigation measures that will be implemented to protect these receptors.

This report should be read in conjunction with the Landscape & Ecological Management Plan (LEMP) (report reference UES03918/32) and EcIA (report reference UES03918/30) that have been prepared for the site, in addition to Appendices 1-7, which provide context and visual representation of the data relevant to site.

2 BASELINE ECOLOGICAL INFORMATION

Historically, the site was known to support a mosaic of habitats including open flower-rich grasslands, scrub, woodland, ponds and open mosaic habitat on previously developed land. As such, the site was designated as part of a Local Wildlife Site (LWS). Since the sites designation as an LWS, it has been subject to declining levels of management and has remained almost completely unmanaged for a number of years. This lack of management has allowed encroaching scrub to dominate at the expense of more notable habitats, reducing the sites structural and botanical diversity.

The site now comprises large homogenous areas of self-seeded scrub, with small areas of semi-improved grassland limited to glades and pathways throughout. The River Clywedog flows along part of the southern site boundary and the Redwither Brook flows along the south-western boundary. Both watercourses are bordered by a band of riparian woodland. Numerous historic munitions buildings are present across the site, and a number of ponds were known to historically be present, only two of which are considered to still function as aquatic habitat (Ponds 3 and 4 – see Appendix 4). Other habitats present on site include hardstanding access tracks and small areas of marshy grassland, tall ruderal vegetation, bare ground, scattered broadleaved trees and ephemeral / short perennial vegetation.

A suite of ecological survey work has been undertaken on the site by UES across 2022 – 2025, as summarised in the accompanying EcIA (report reference UES03918/30). The EcIA identified various impacts due to the presence, or potential presence, of protected or otherwise notable species or habitats within the site boundary or the surrounding area.

The following ecological receptors have been identified as having the potential to be impacted by the development proposals:

- **Amphibians**: The site supports a medium population of GCNs, with breeding activity concentrated in Pond 3. Pond 4 has shown intermittent use by very low numbers of GCNs, while other ponds on site are either unsuitable or no longer functional. The terrestrial habitats on site include woodland, scrub, and small areas of semi-improved grassland, which offer moderate to high quality foraging, commuting, and hibernation opportunities.

- **Badgers**: The site supports habitats of moderate to high suitability for badger foraging and commuting, with dense scrub and woodland offering potential sett-building opportunities. Four potential badger setts were identified during the 2024 scoping survey, but monitoring confirmed that three of these setts are inactive (see Appendix 5). The fourth potential sett does not appear to be active, but was not surveyed as it lies a sufficient distance from the proposed Industrial Unit Compound working area and can be retained and unaffected by the proposals.

- **Bats**: Moderate levels of bat activity were recorded during bat activity surveys, with bats exhibiting foraging and commuting behaviours. Bat activity was recorded across the entire site but was generally highest along the riparian woodland, tree lines, and commuting corridors through the centre of the site, where there are pathways and glades in the dense scrub. The woodland and tree lines associated with the ponds on site also provided hotspots of activity.

  During the bat scoping survey and the subsequent bat presence / absence surveys of buildings, a minimum of three species of bat were found across nine roosts, all of which

are considered to be day roosts used on an occasional basis by a single or very low number of bats. No evidence of roosting bats was observed within the trees on site.

- **Breeding birds**: The site supports a diverse assemblage of breeding birds, with 35 species confirmed or likely breeding and a further 18 possibly breeding on site or within 50m of the site boundary. Fourteen of the confirmed/likely breeders are species of conservation concern, including two Schedule 1 species; Cetti's warbler *Cettia cetti* and kingfisher *Alcedo atthis*. Both species were recorded on single occasions and are not considered to be breeding on site. Given the limited amount of suitable habitat and the distance of at least 10m between the Industrial Unit Compound and the watercourses, it is anticipated there will be no direct impacts or loss of habitat for either of these species, even if they begin breeding on site prior to the commencement of development works.

- **Hedgehogs:** Although no direct evidence of hedgehog *Erinaceus europaeus* activity was recorded during ecological surveys, the presence of suitable habitats combined with local records, suggests that hedgehogs may use the site on an occasional or transient basis for foraging, commuting, and hibernation.

- **Otters**: Otters are known to use parts of the River Clywedog and Redwither Brook within the wider landscape, with multiple records returned from within 2km of the site, including one from approximately 360m away. Both watercourses at the site boundary provide suitable foraging and commuting habitat. The remains of a dead otter and a potential degraded otter spraint were observed on site in 2025, however no other evidence of otter activity has been observed. It is considered that otters use the watercourses at the site boundaries in a transitory capacity for commuting or occasional foraging, but are not currently using the site for breeding or regular shelter.

- **Invasive species:** Three invasive non-native plant species have been recorded on site: Himalayan balsam *Impatiens glandulifera*, Japanese knotweed *Reynoutria japonica* and montbretia *Crocosmia* × *crocosmiiflora*. These species are present in discrete areas, predominantly along the watercourses at the site boundaries, and within the south-western and south-eastern sections of the site.

- **Dense scrub:** The majority of the site is dominated by dense self-seeded scrub, comprising a mix of species. The majority of the scrub is semi-mature and is dominated by either bramble *Rubus fruticosus agg.,* blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna*, goat willow *Salix caprea* or grey willow *Salix cinerea*. The eastern section of the site contains an area of mature hawthorn scrub. Unlike the majority of the scrub on site, the mature scrub's structure mimics woodland with the mature shrubs forming a distinct canopy layer but without a dense understory. This has allowed for a more diverse ground flora.

- **Ponds:** Six ponds are present on site (see Appendix 4 – Pond Plan), however only Ponds 3 and 4 currently hold standing water for most or all of the year. Pond 3a holds standing water, but is a series of three small, connected water-filled tanks of limited ecological value. All other ponds are dry and no longer function as aquatic habitats.

- **Watercourses:** Two watercourses are present at the site boundaries; the River Clywedog at the southern boundary and Redwither Brook at the south-western boundary.

- **Woodland:** A band of mature riparian woodland runs along the banks of the River Clywedog on the southern site boundary and along some of the Redwither Brook at the south-western boundary.

The LEMP that has been prepared for the site details the measures that will be implemented to compensate for the loss of habitats as a result of the proposed development, in addition to providing a long-term management plan, details of proposed ecological enhancements and ongoing monitoring surveys.

3 ECOLOGICAL DESIGN STRATEGY

This section of the report details how impacts on the previously detailed ecological receptors will be avoided or mitigated during the development. It has been split into subsections which address the design and working methods that will be implemented to protect each ecological feature.

3.1 Habitats

3.1.1 Woodland and dense scrub

Retained woodland and scrub

All areas of woodland and large areas of dense scrub on site will be retained and enhanced by the development proposals. Retained areas will be protected throughout the construction phase of the development in accordance with BS5837 (2012): Root protection areas (RPAs) will be adequately protected by appropriately designed protective barriers and ground protection, where necessary, throughout the entire development process.

Woodland and scrub removal

Where woodland, scrub and other areas of dense vegetation are to be removed, it will be undertaken outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and vegetation removal works need to take place during this period, a pre-commencement nesting bird check will be undertaken by an appropriately experienced ecologist within a maximum of 48 hours prior to the works. In the event that an active nest is observed, a sufficient buffer zone (At least 5m, to be determined by the species and advised by the ecologist) will be set up around the nest. No works will take place within this buffer zone until it can be confirmed by an appropriately experienced ecologist that the nest is no longer active.

The proposed losses are to be compensated through the habitat restoration and enhancement works within the Eco Heritage Zone, as detailed in the LEMP.

3.1.2 Scattered trees

Tree removal

Numerous trees will be felled as part of the proposed construction and enhancement works (see AIA - Tree Removal Plan - 268/AIA/T/200 to 219). Tree removal and arboricultural works should be undertaken outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and works need to take place during this period, a pre-commencement nesting bird check must be undertaken by an appropriately experienced ecologist within a maximum of 48 hours prior to the works.

Retained trees

A small number of existing scattered trees will be retained within the Industrial Unit Compound, all of which will be protected in accordance with BS5837:2012 during construction works.

Any arboricultural works required during the operational phase of the development (for example, the preservation of public safety) should be undertaken by an appropriately qualified arboriculturist, outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and arboricultural works need to take place during this period, a pre-commencement nesting bird check must be undertaken by an appropriately experienced ecologist within a maximum of 48 hours prior to the works.

3.1.3 Pond and watercourses

Retained ponds and watercourses

Ponds 2, 3, 3A & 4 will be retained as part of the development proposals and all except 3A will be subject to enhancement measures and ongoing management (as detailed within the accompanying LEMP). None of the retained ponds lie within close proximity to the Industrial Unit Compound, and as such, there is very limited potential for the proposals to adversely impact these aquatic habitats.

The Redwither Brook and River Clywedog demarcate part of the boundaries of the wider Eco Heritage Park and will remain unaffected by the development proposals due to the implementation of a minimum 10m buffer along their length.

Despite the limited potential for impacts, industry standard best practice pollution prevention measures (see Environment Agency's Pollution Prevention Guidelines for further details) will be implemented throughout the construction phase of the development, in order to minimise the risk of pollution of aquatic habitats to the lowest practicable levels. As a minimum, these measures will include:

- All material storage and disposal areas will be located as far away as possible from retained ponds, ditches and watercourses.

- Any necessary fuel and oil will be stored in accordance with the Control of Pollution (Oil Storage) (England) Regulations 2001. Refuelling will only be undertaken in a designated area, designed to contain contaminated run-off, and by trained personnel. Emergency spill kits will be available on each machine.

- Waste segregation areas will be established utilising containers of an appropriate design to ensure that no waste can escape.

- Contractors and on-site staff will adhere to best practice measures and will follow relevant pollution prevention guidelines (PPGs) at all times.

- Site staff will be provided with the knowledge and the means to contain and clean up and spills.

To specifically reduce the potential impact from pollution events from the use of concrete and cement, the following mitigation measures will be implemented during the construction phase of the development:

- The washing and cleaning of any concrete / cement mixing equipment and tools will be undertaken off site, or in a designated area on site, located as far away as possible from the watercourse, ponds and ditch.

- Concrete and cement mixing will only be undertaken in a designated area of the site. This area should be sited on an impermeable surface e.g. on hardstanding and not on bare ground or grassland. Where possible, this designated mixing area will be located away from any surface water drains and will be located as far away as possible from the ponds, watercourses and ditch.

- Any surplus concrete or cement will be removed from site and will be disposed of offsite and transported using a registered waste carrier.

- Any used cement bags will be sealed after use, stored appropriately to prevent leaks or dust (preferably in a waterproof building or storage container) and disposed of legally off site, never buried or burned.

It is considered that the proposed buffer zone, when implemented in conjunction with the aforementioned pollution prevention measures, is sufficient to mitigate and reduce potential pollution and disturbance impacts on watercourses and ponds to the lowest practicable level.

Pond removal

The remnants of Ponds 1 & 1A (see Appendix 4) are due to be removed in order to facilitate the development. Both of these features have dense scrub cover and are dry for most of the year, only holding small depths of standing water in the winter or immediately following a prolonged heavy rainfall. These features do not hold sufficient standing water to be used by breeding amphibians, and they no longer function as permanent aquatic habitats. As such, no specific mitigation measures are required for works associated with the removal of these features, and the mitigation measures that are to be implemented to protect amphibians during the works, outlined in section 3.2, will serve to protect GCNs and other amphibians.

3.2 Amphibians

The results of the GCN surveys indicate that the site supports a medium-sized population, with peak counts of one individual in Pond 4 and 48 individuals in Pond 3. No GCNs were recorded in onsite Ponds 1, 1A, 2, or 3A, with negative eDNA retuned for all these waterbodies during the most recent surveys.

The proposed development avoids direct impacts to all known breeding ponds and retains the majority of suitable terrestrial habitat. However, some habitat loss will occur within the proposed Industrial Unit Compound, and there remains a risk of impacts during construction. Scrub clearance for grassland restoration within the wider Eco-Heritage Park also presents risks and will involve the short-term removal of terrestrial habitat.

As GCNs are known to be present on site and could adversely be impacted by the proposals, a European protected species (EPS) mitigation licence will need to be granted by NRW to allow the works to commence. This EPS licence can only be granted once planning permission has been secured and will need to be in place prior to the start of any works on site that could impact GCNs. NRW aim to process licence applications within 40 working days.

An Amphibian Conservation Plan (ACP) has been prepared to detail the mitigation and compensation measures that will be implemented to protect GCNs and other amphibian species during the proposed development works (see report reference UES03918/50).

Full details of the mitigation measures that will be implemented to protect GCNs and other amphibians are detailed within the ACP report and include:

- Installation of one-way fencing around the proposed construction area, including ongoing monitoring of the fence's functionality.
- Phased vegetation clearance to allow amphibians to leave the proposed working area on their own accord.
- Supervision by a licenced ecologist of any works with the potential to adversely impact GCNs.
- A toolbox talk to contractors prior to the commencement of ground works.
- Reasonable avoidance measures during the construction, habitat creation and enhancement works.

In the unlikely event any GCNs or other amphibians are found within the working area during the development works, they will be captured by hand and translocated to suitable area of cover outside of the working area but within the wider Eco-heritage Park.

During the operational phase of development, gully pots will be installed on site and will either be set back, covered with a mesh to prevent amphibians from falling within, or will be fitted with a means of escape such as an amphibian ladder.

3.3 Badgers

The site provides habitats of moderate to high suitability for badger foraging and commuting, with areas of dense scrub and woodland also offering opportunities for sett construction. Four potential badger setts were identified during the 2024 scoping survey, but subsequent monitoring confirmed that Setts 1, 3, and 4 are not in use by badgers (see Appendix 5). Sett 2, located at a sufficient distance from the proposed development, was not monitored due to its apparent inactivity and low likelihood of regular use. As such and due to a lack of potential impacts, there is no requirement to secure a licence from NRW allow their disturbance or destruction as part of the development works.

The development footprint avoids Sett 2 and a 20m buffer zone has been embedded into the landscaping and habitat enhancement works around the potential badger sett. The majority of the site is being retained and enhanced, with proposed habitat mosaics designed to support faunal movement and foraging. As such, direct impacts to badgers are not anticipated. However, if badgers are using the working areas within the site for foraging or commuting purposes during the construction phase of the development, they are at risk of direct harm through becoming trapped in excavations or by being exposed to harmful materials.

Given the known use of the site by badgers, albeit potentially limited to a transitory capacity, and the potential occasional use of Sett 2, a precautionary approach will be adopted during construction works.

Prior to the commencement of works, the proposed working area will be subject to a targeted inspection, and any areas of scrub that are to be removed that cannot be adequately searched will be removed under ecological supervision. This will ensure that any previously unidentified or newly established setts are identified and appropriately protected. Should a suspected sett be found, the affected area will be retained, and a suitable buffer zone established to prevent damage or disturbance until the appropriate surveys can be undertaken to establish whether the sett is in use as an active badger sett or not. If the sett is found to be in use by badgers,

works within close proximity to the sett will not commence until a licence from NRW can be secured to allow the closure of the sett.

The following reasonable avoidance measures will be implemented during the construction phase of the development:

- Contractors working on site will be briefed as to the potential presence of badgers on the site, and their individual and collective responsibilities under the legislation.
- Prior to the clearance of any dense scrub, a pre-commencement check will be carried out by a suitability qualified ecologist, to confirm that no badger setts have been obscured by vegetation or newly established since the initial scoping surveys.
- Any site lighting will be directed away from retained habitats.
- The site manager will carry out a site walkover each week to check the site for new evidence of badger setts or digging. If new evidence is found, ecological advice is to be sought immediately.
- Where possible, any open excavations will be filled in before the site is closed in the evenings. If this is not possible and excavations are to be left open overnight, then either the edge of the excavation will be cut at a 45-degree angle to allow animals to exit unaided, or a plank will be left in the holes as a means of escape.
- Excavations will be checked prior to infilling in order to ensure that no animals are present. If animals are present, then the site manager will be informed, and a suitably experienced ecologist will be called for advice.
- Chemicals and materials which have the potential to harm wildlife such as fuels, concrete mix, solvents, nails, reels of wire etc, will be stored in a way which removes any risk of badgers (or other wildlife) coming into contact with them.
- Barbed wire or other similar materials will not be used on the site.
- Any temporary exposed pipe systems will be capped or blocked so that badgers are prevented from gaining access during non-operational hours.

<u>External lighting</u>

External lighting in use during the operation phase of the development will be restricted to the immediate vicinity of the proposed industrial unit, including the access road, parking areas, and service yard. Given the location of the development area well away from the highest quality habitats, and the overall size of the retained and enhanced areas of habitat, any light spill will be limited to newly created habitats within or immediately adjacent to the development footprint.

To minimise impacts on nocturnal wildlife, any external lighting installed will be designed in accordance with badger-sensitive principles. This will include the use of directional luminaires, shielding, and timing controls where feasible, ensuring light spill is reduced to the lowest practicable level.

3.4 Bats

All existing buildings and structures will be retained and will be unaffected by the proposed works. Accordingly, there will be no direct impact on the nine confirmed bat roosts identified within these buildings, nor on any additional structures that may be used by roosting bats on an occasional or transient basis but were not detected during the presence/absence surveys.

All trees and shrubs with the potential to be affected by the proposed development were subject to detailed assessment to determine their suitability for use by roosting bats and to search for evidence of current use. This included all vegetation identified for potential removal as part of scrub and tree clearance works. No evidence of roosting bats was observed within any of the trees surveyed.

A Bat Conservation Plan (BCP) has been prepared to detail the mitigation and compensation measures that will be implemented to protect bats during the proposed development works (see report reference UES03918/52).

Bats in buildings

As there will be no adverse impacts to any buildings or other structures on site, there is no need / potential to implement any mitigation measures with regards to bat roosts in buildings.

Bats in trees

To facilitate construction, only five trees with bat roosting potential (T8, T10, T11, T12, and T25) are proposed for removal (Appendix 3). Each of these trees was assessed as having low suitability for roosting bats, with potential roost features (PRFs) limited to those capable of supporting individual bats on an occasional basis, being unsuitable for roosts of high conservation significance such as maternity or hibernation. None of these trees were found to support roosting bats during the surveys, and as such, an EPS Mitigation Licence is not required for their felling.

Bats are known to use trees in a very transient way, and their remains some, albeit low potential for bats to use the trees in the future and at the time of the felling and arboricultural works.

In accordance with Bat Conservation Trust (BCT) guidelines, precautionary measures will be implemented for all trees due to be felled that have been assessed as having low roosting suitability. These measures will include either soft felling techniques or pre-commencement inspections.

Soft felling will involve sectional removal of the tree, with any sections containing PRFs carefully lowered to the ground. These sections will be placed with PRFs facing upwards and left undisturbed overnight, before being removed from site no sooner than 24 hours later. Alternatively, PRFs may be inspected immediately prior to felling or pruning using an endoscope to confirm bat absence. In the unlikely event that a bat is encountered, works within the vicinity of the tree will cease immediately and an EPS mitigation licence will be sought from NRW to allow the removal of the roost.

Given the low suitability of these trees and their unsuitability to support maternity or hibernation roosts, no seasonal timing restrictions are required for their removal.

The proposed ecological enhancement and restoration measures will follow the principles

outlined in the landscaping plan (Appendix 6), but will remain partly adaptive and informed by the outcomes of early-stage grassland restoration. All works will be undertaken under ecological supervision, allowing for minor deviations where site conditions warrant it. Retention of trees with bat roosting potential will be prioritised wherever feasible, however should the removal of any such trees become necessary, the mitigation measures set out in Table 1 will be implemented in full.

Table 1 – Summary of bat roosting potential and mitigation measures required in the event of felling

Bat roosting potential	Tree number	Mitigation measures required
Negligible	T7, T9, T14 and all other unnumbered trees within the survey area.	Fell without restriction.
Low	T1, T2, T3, T4, T5, T6, T8, T10, T11, T12, T15, T16, T18, T19, T20, T22, T23, T25, T27, T29, T30, T31, T33, T64, T65	Soft felling techniques or pre-commencement inspection.
Moderate	T13, T17, T24, T28,	Soft felling techniques or pre-commencement inspection.
Moderate	T21, T26, T32,	Soft-felling techniques only. Trees are not suitable for pre-commencement inspection as the PRFs cannot be fully inspected with an endoscope or the trees are unsafe to climb.

Additional ecological enhancement and ongoing habitat management will be undertaken across the wider Eco-heritage Park, including within areas of woodland located in the southern and western sections of the site. Trees within these areas have not been subject to bat roosting assessments due to the absence of anticipated adverse impacts from the proposed development.

These areas of woodland and scrub will broadly be retained in their current condition, however selective thinning and coppicing will be implemented to ensure that the woodland's canopy and understory layers do not become overcrowded at the detriment of the ground flora layer. The requirement for selective thinning or coppicing will be dependent on changing conditions within the woodland and will be informed by ongoing monitoring surveys and based upon the advice of the Ecological Cooperative (see accompanying LEMP report for full details).

Prior to any tree removal outside of the previously surveyed area, the project ecologist will confirm that no PRFs are present. Where PRFs are identified, the associated trees will be retained and, where feasible, alternative specimens will be selected for removal. In the unlikely event that a tree with bat roosting potential must be felled or undergo arboricultural works, such as the removal of a diseased or hazardous specimen, it will be subject to further bat

surveys to inform appropriate mitigation measures. These surveys will be undertaken in accordance with industry standard guidelines relevant at the time.

External lighting

External lighting will be restricted to the immediate vicinity of the proposed industrial unit, including the access road, parking areas, and service yard. Given the location of the development area well away from the highest quality habitats, and the overall size of the retained and enhanced areas of habitat, any light spill will be limited to newly created habitats within or adjacent to the development footprint.

To minimise impacts on nocturnal wildlife, any external lighting installed will be designed in accordance with bat-sensitive principles. This will include the use of directional luminaires, shielding, and timing controls where feasible, ensuring light spill is reduced to the lowest practicable level.

3.5 Breeding birds

Arboricultural works and vegetation removal (including habitat enhancement works) should be undertaken outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and works need to be undertaken during this period, a targeted breeding bird nest check survey will be conducted within 48 hours prior to the start of the of the works. If areas of vegetation are considered to be too dense to be confidently surveyed, such as dense bramble scrub, an ecological clerk of works will be appointed to oversee the clearance works using hand tools.

If any breeding birds are found to be present within the working area, the works in this locality will stop immediately and a no works buffer zone of at least 5m (potentially larger depending on the species and at the discretion of the appointed ecologist) will be implemented around the nest until after the young have fledged, as confirmed by the project ecologist.

3.6 Otters

The proposed development avoids direct impacts to both watercourses on site, with a minimum 10m buffer zone retained. As such, direct impacts to otters or their habitats are not anticipated. However, there remains a low risk of indirect disturbance during construction, including noise, pollution, and increased activity within proximity of the watercourses.

Pollution prevention protocols within the CEMP that has been prepared for the site and detailed in section 3.1.3 above will reduce the risk of adverse impacts of pollution of the watercourse to the lowest practicable level.

If any works are to be undertaken within close proximity to the 10m buffer zone to the watercourses at the site boundaries, the buffer zone in proximity to the working area will be demarcated with excision tape or temporary fencing and will be demarcated with signage to alert all contractors that there is to be no works or entry into the buffer zone.

In the unlikely event that the proposals change and any works are to be undertaken within 10m of either watercourse, a pre-commencement check will need to be undertaken of the areas to be impacted, to ensure that no otter holts are present. This pre-commencement check will be undertaken by a suitability qualified ecologist immediately prior to the works. There will be no works undertaken within the buffer zone within the period between sunset and sunrise.

External lighting

External lighting will be restricted to the immediate vicinity of the proposed industrial unit, including the access road, parking areas, and service yard. Given the location of the development area well away from the highest quality habitats, and the overall size of the retained and enhanced areas of habitat, any light spill will be limited to newly created habitats within or adjacent to the development footprint.

To minimise impacts on nocturnal wildlife, any external lighting installed will be designed in accordance with otter-sensitive principles. This will include the use of directional luminaires, shielding, and timing controls where feasible, ensuring light spill is reduced to the lowest practicable level.

3.7 Invasive species

Preventing spread

The Himalayan balsam, Japanese knotweed and montbretia on site are present in discrete areas or specific parts of the site, predominantly along the watercourses at the site boundaries. No invasive species have been observed within the proposed development footprint. As such, there is considered to be no risk of spread or disturbance as a direct result of the development proposals. The built compound and associated works are spatially separated from all known invasive species locations, and no ground disturbance is proposed within affected areas, including during ecological enhancement measures within the wider Eco-Heritage Park.

Given the absence of invasive species within the proposed working areas, there is no requirement to implement any specific mitigation measures with regards to invasive species. However, given the presence of invasive species within the wider site, the following prevention / surveillance measures will be implemented during all phases of the development:

1. In order to avoid contamination around the site, all site operatives will receive training in invasive species identification and best practice procedures for avoidance of spreading any species throughout the site.

2. New contamination of the site will be avoided by maintaining site security to minimise the risk of fly-tipping waste onto the development site and not importing infested topsoil for use on site, and washing wheels and caterpillar tracks of vehicles entering the site that have previously been used on sites known to contain invasive species.

3. Contractors will remain vigilant and report any potential invasive species within the working area to the site manager, who will arrange for an exclusion zone of at least 3m to be implemented around the contaminated area. The species will then be subject to appropriate control or eradication measures prior to resumption of works in this area, as advised by the project ecologist or a specialist invasive species contractor.

Himalayan balsam treatment

Due to its abundance, dispersal capability, and upstream seed sources, it is anticipated that it will likely not be possible to entirely eradicate Himalayan balsam from the wider site. However, ongoing control and removal measures will be implemented to reduce its abundance and prevent further spread across the site.

This will be achieved though through the pulling and removal of plants from May-June inclusive, when plants are readily identifiable but yet to set seed. Pulling and removal will be undertaken annually for the first five years, after which a review of the effectiveness will be undertaken to determine if measures are working and worth continuing or altering the frequency. This will start in the next appropriate season following the commencement of construction works or site clearance within Phase 1 of the development.

Given the large amount and widespread distribution of Himalayan balsam within the wider site, coupled with it being an annual, it is not considered appropriate to use chemical treatment methods, as this is likely to be ineffective and have adverse impacts on non-target species though herbicide drift.

Japanese Knotweed treatment

As part of the ecological enhancement measures undertaken within the Eco-Heritage Park, the Japanese knotweed on site will be subject to eradication measures, starting the next appropriate season following the commencement of construction works or site clearance within Phase 1 of the development. Complete eradication of Japanese knotweed is anticipated to take a number of years and will continue beyond the completion of Phase 1.

The following steps will be undertaken to eradicate the Japanese knotweed:

- The stands of Japanese knotweed on site will be demarcated with fencing or exclusion tape, including a 3m buffer zone.

- All stands of Japanese knotweed will be sprayed with an appropriate herbicide treatment, at an appropriate concentration. Stem injection is usually the preferred method of chemical control, however it is not appropriate in this case due to the large quantity of Japanese knotweed that is present on site.

- Due to the proximity of the stands to the Redwither Brook and The River Clywedog, the Environment Agency's consent will be required prior to spraying. This should be sought through completion of form AqHerb01. The herbicide treatment should be appropriate and approved for use near water, such as a glyphosate or 2,4-D amine-based herbicide.

- Chemical treatment is most effective when applied to mature uncut growth as this provides the greatest surface area for herbicide to be translocated down to the rhizomes.

- Herbicide treatment is most effective when applied in the period of August to October, and will be undertaken following the commencement of construction works or site clearance within Phase 1 of the development.

- From Year 2 onwards, herbicide will be applied in both spring (March or April) and late summer / early autumn (August – October inclusive). Herbicide application will be repeated annually until no further regrowth is observed, likely required for 3-5 years.

Works to eradicate the Japanese knotweed will be undertaken by a suitably trained and qualified operative holding the appropriate certification and licences where applicable. Herbicide application works must be undertaken by an operative certified to use and apply herbicides (i.e. NPTC PA1 and PA6).

If the advice of an invasive species removal specialist if sought, alternative methods and timings may be implemented, which is considered acceptable.

Montbretia treatment

As part of the ecological enhancement measures undertaken within the Eco-Heritage Park, the montbretia on site will be subject to eradication measures, starting the next appropriate time period following the commencement of construction works or site clearance within Phase 1 of the development.

The following steps will be undertaken to eradicate the montbretia:

- The stands of montbretia on site will be demarcated with fencing or exclusion tape, including a 1m buffer zone.
- Montbretia plants will be removed by digging and removal of all vegetative material and corms. This can be undertaken any time of year, however it will be undertaken during the active growing phase (May to September inclusive) for best visibility and root access.
- Excavation will be carefully undertaken to ensure the removal of the entire plant, including all corms and rhizomes. If needed, soil will be sifted to ensure the removal of all fragments.
- Excavated material will be treated as controlled waste and disposed of accordingly via a licenced handler or at a licenced facility.
- A check for regrowth will be undertaken of all removed stands the following growing season (May to September inclusive). Any regrowth present will be removed according to the same methodology detailed above.

Future contamination, monitoring and responsibility

Despite treatment efforts, invasive species, particularly Himalayan balsam, may re-emerge on site due to the germination of dormant seeds or future contamination, especially from watercourses present at the site boundaries. Given these factors, re-infestation is considered a potential, and complete eradication is not deemed feasible. However, the control measures outlined above are expected to reduce onsite populations to the lowest practicable levels.

As part of the long-term management plan, annual site inspections will be undertaken of the created and retained ecology areas by Enfys Ecology, North Wales Wildlife Trust and / or the project ecologist (members of the Ecology Cooperative). This annual inspection will include a search for new growth of invasive species. Any invasive species observed will be subject to the same control and eradication measures detailed above. If new invasive species are observed, advice on the appropriate control and eradication measures will be sought from a suitability qualified ecologist or invasive species specialist.

4 REQUIREMENT FOR ECOLOGICAL CLERK OF WORKS

The below table details all mitigation measures that will need to be undertaken by, or under the supervision of, an appropriately experienced (and licensed where necessary) ecologist. This table includes all future works detailed in this document, the LEMP, the Amphibian Conservation Plan and the Bat Conservation Plan.

Table 2 – Requirements for ecological clerk of works or further involvement of an ecologist

Activity	Description	Timing
Mitigation measures detailed within this EDS		
Root protection areas of retained trees and vegetation.	Retained trees and areas of woodland and dense scrub will be protected throughout the construction phase of the development in accordance with BS5837 (2012): RPAs will be adequately protected by appropriately designed protective barriers and ground protection, where necessary, throughout the entire development process.	Throughout the development.
Initial vegetation removal along amphibian fence line.	Undertaken under the supervision of a licenced ecologist, or an ecologist appointed as an accredited agent who is deemed sufficiently experienced by the licence holder. The vegetation will be cut / mown to a height of approximately 5-10cm, to facilitate a detailed finger-tip search for amphibians without any risk of harm.	No timing restrictions but must be prior to any other clearance works on site associated with the proposed development.
Removal of remaining vegetation along amphibian fence line and fingertip search.	Removal or remaining vegetation below 5-10cm in height following a fingertip search where necessary by licenced ecologist or accredited agent.	No timing restrictions but must be prior to any other clearance works on site associated with the proposed development. Can only be undertaken following approval of EPS mitigation licence.
Installation of one-way amphibian fencing.	Following a detailed inspection of the fence route and a finger-tip search by the supervising ecologist, the groundbreaking works and installation of the amphibian fencing will proceed. It is considered that an ecologist does not need to be in attendance during fence installation, however the fence must be checked and deemed satisfactory by a suitability qualified ecologist upon the completion of its installation.	No timing restrictions but must be prior to any other clearance works on site associated with the proposed development. Can only be undertaken following approval of EPS mitigation licence.
Checks of one-way amphibian fencing.	To be checked monthly by the project ecologist (from installation until removal).	Monthly, for as long as the fence is installed.
Phased vegetation	Given the limited potential for GCNs to be present within the proposed working	No specific timings.

clearance within one-way fencing are. Toolbox talk.	area and the limited risk of impacts from vegetation clearance works, it is considered that vegetation clearance works to a minimum height of 10cm within the one-way fencing can take place without the need for ecological supervision (unless it is required to protect other taxa such as nesting birds or badgers). Following the clearance of vegetation to a minimum height of 10cm, no further works will take place for a period of at least 48 hours, to allow amphibians to exit the working area of their own accord. Following this 48-hour period, a licenced ecologist or a suitability qualified accredited agent will attend site to provide a toolbox talk to contractors, to undertake a fingertip search and removal of potential refugia, and to oversee the removal of large stumps and other sensitive features where deemed necessary.	
Scrub removal to facilitate restoration of wildflower grassland and Pond 2.	To a height of 5cm using hand-tools or machinery but not disturbing the soil. Any scrub clearance within 100m of Ponds 3 and 4 will be under ecological supervision. Including collection and removal of all arisings.	September to October during the first available period following the commencement of any works associated with the clearance or construction of the Industrial Unit Compound area.
Ground works to prepare proposed wildflower grassland areas for seeding.	Removal of large stumps and 5cm layer of topsoil under ecological supervision, following finger-tip search of any potential refugia and around large stumps. A period of at least 48 hours must be left between scrub clearance and ground works.	October to November, immediately following scrub removal. Can be continued in early March if needed.
Implementation of reasonable avoidance measures to protect amphibians.	To be implemented during all construction works and wider site enhancement works.	At all times.
Removal of one-way amphibian fencing.	Removed in suitable weather conditions under ecological supervision.	Following the completion of the development works within the fenced area.
Installation of features to prevent	The use of gully pots, drainage grids or similar features will be avoided where possible. If any of these features are	Prior to the operational phase of the development / occupation of the building.

amphibians being trapped in gully pots, grids and similar features during the operational phase of the development.	required as part of the site's water management system, these will either be fitted with a mesh cover to prevent amphibians from falling in or equipped with escape structures such as amphibian ladders. Following installation an inspection of the suitability of these features will be undertaken by an ecologist.	
Nesting bird checks.	A pre-commencement nesting bird check will need to be undertaken by an ecologist within 48 hours prior to any vegetation clearance works, including tree felling, scrub removal, and arboricultural works.	Only for works undertaken between March and August inclusive.
Pre-commencement check for badgers.	Prior to the commencement of works, the proposed working area will be subject to a targeted inspection, and any removal of scrub that cannot be adequately searched will be undertaken under ecological supervision.	Prior to the commencement of any scrub clearance works.
Implementation of reasonable avoidance measures to protect badgers.	To be implemented during all construction works and wider site enhancement works.	At all times
Soft felling techniques or pre-commencement inspection of trees identified as having bat roosting potential.	Soft felling techniques are to be implemented of any trees assessed has having bat roosting potential. Alternatively, to avoid the need for soft-felling techniques, where possible, an ecologist can undertake a pre-commencement inspection of the potential roosting features within the tree.	At all times.
Pre-commencement inspection of any trees due to be felled with the wider Eco-Heritage Park	Prior to any tree removal outside of the previously surveyed area, the project ecologist will confirm that no PRFs are present. Where PRFs are identified, the associated trees will be retained and, where feasible, alternative specimens will be selected for removal. In the unlikely event that a tree with bat roosting potential must be felled or undergo arboricultural works, such as the removal of a diseased or hazardous specimen, it will be subject to further bat surveys to inform appropriate mitigation measures. These surveys will be undertaken in accordance with industry standard guidelines relevant at the time.	At all times.
Measures to protect the 10m	If any works are to be undertaken within close proximity to the 10m buffer zone	At all times during the construction phase of the development.

buffer zone to the watercourses	to the watercourses at the site boundaries, any sections of the buffer zone in proximity to the working area will be demarcated with excision tape or temporary fencing and will be demarcated with signage to alert all contractors that there is to be no works or entry into the buffer zone.	
Pre-commencement check for otters.	In the unlikely event that the proposals change and any works are to be undertaken within 10m of either watercourse, a pre-commencement check will need to be undertaken of the areas to be impacted, to ensure that no otter holts are present. This pre-commencement check will be undertaken by a suitability qualified ecologist immediately prior to the works. There will no works undertaken within the buffer zone within the period between sunset and sunrise.	During the construction phase of the development.
Prevention and surveillance measures to prevent new colonisation and spread of invasive species.	As detailed in Section 3.7. To include training all site operatives in invasive species identification and best practice procedures for avoidance of spreading any species throughout the site.	Immediately prior to and during the construction phase of the development.
Identification and demarcation of all stands of Japanese knotweed and montbretia.	As detailed within section 3.7	Starting the next appropriate time period (May to September inclusive) following the commencement of construction works or site clearance within Phase 1 of the development.
Eradication of montbretia.	Excavation of montbretia as detailed within section 3.7.	Starting the next appropriate time period (May to September inclusive) following the commencement of construction works or site clearance within Phase 1 of the development.
Eradication of Japanese knotweed.	Herbicide treatment of Japanese knotweed as detailed within section 3.7.	Starting the next appropriate time period (August to October inclusive) following the commencement of construction works or site clearance within Phase 1 of the development.
Eradication of Himalayan balsam.	Annual removal of plants, as detailed within section 3.7.	May to June inclusive.

5 CONCLUSION

Once implemented, the ecological measures set out in this document will ensue that protected species and ecologically valuable habitats on and immediately adjacent to the proposed development site are safeguarded throughout the construction phase of the development.

Full details of compensatory habitat creation and enhancement are provided within the accompanying LEMP that has been prepared for the site.

APPENDICES

Appendix 1 – 2025 Phase 1 Habitat Plan

Target Note 1 - Pond 1 and location of common frog *Rana temporaria*

Target Note 2 - Pond 1A

Target Note 3 - Pond 2

Target Note 4 - Pond 3

Target Note 5 **-** Pond 3A

Target Note 6 **-** Pond 4

Target Note 7 **-** Ephemeral pool and marshy vegetation

Target Note 8 **-** Large rubble piles

Target Note 9 **-** Small stand of Japanese knotweed *Reynoutria japonica*

Target Note 10 **-** Large stand of Japanese knotweed

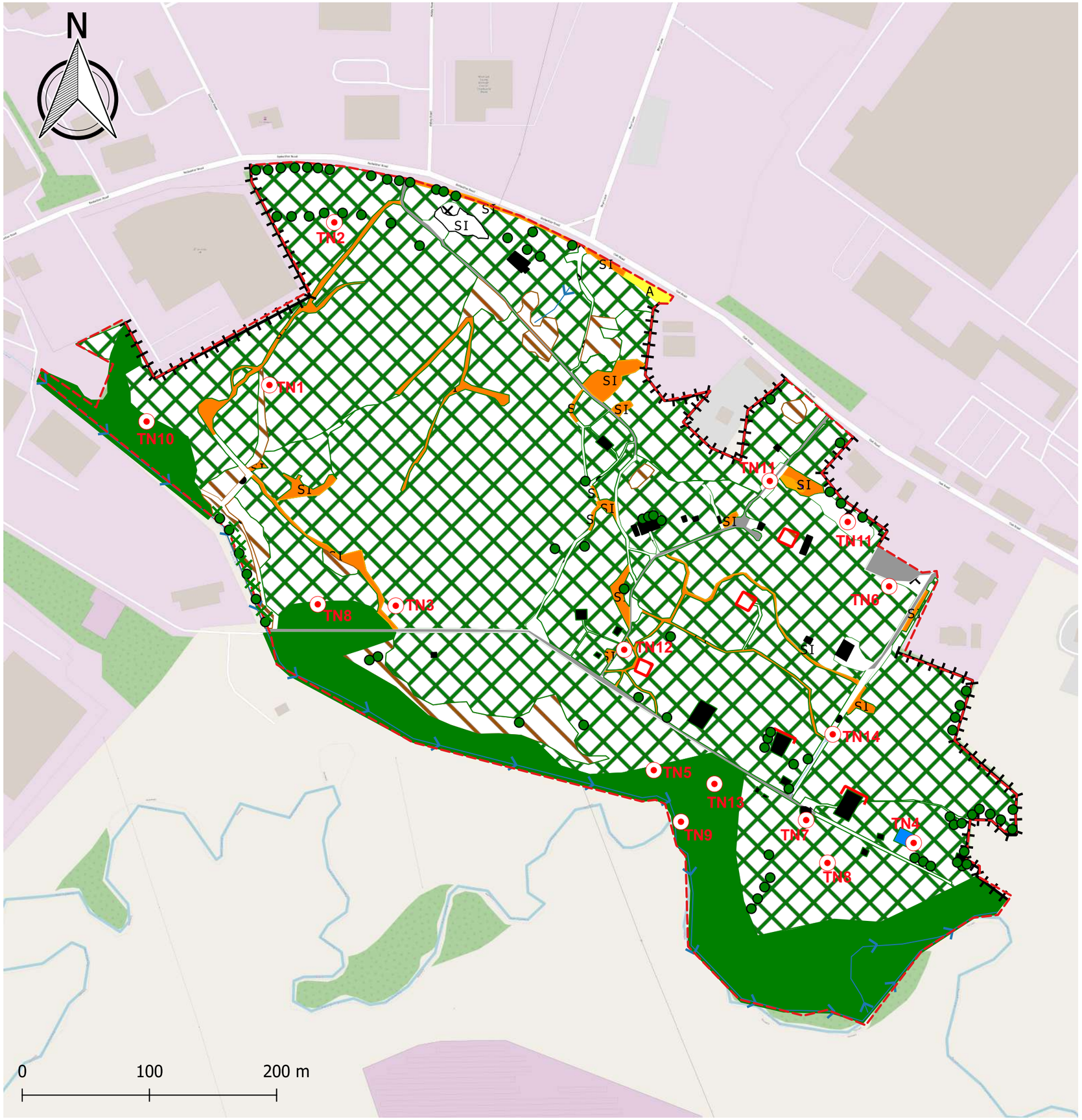
Target Note 11 **-** Areas of recently cleared ground

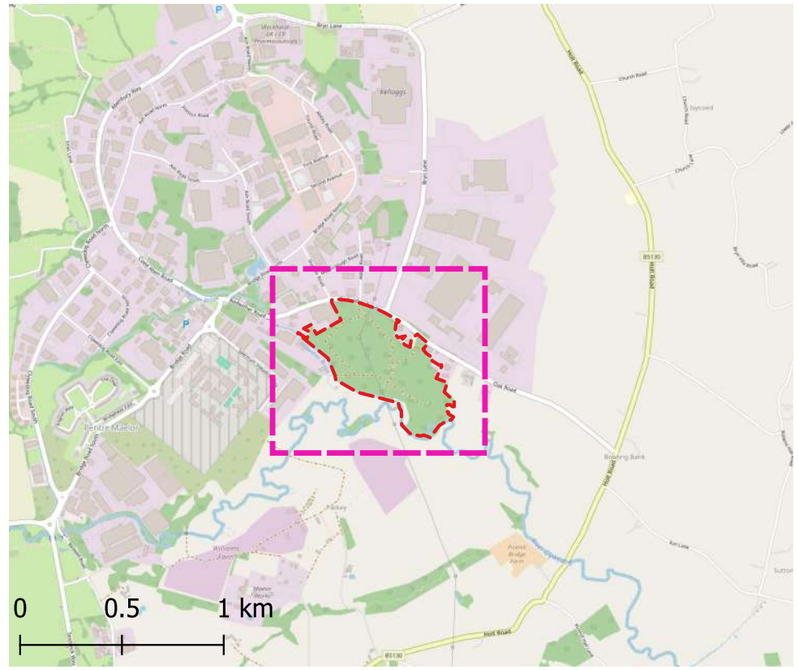
Target Note 12 **-** Juvenile smooth newt *Lissotriton vulgaris* observed beneath refugia

Target Note 13 **-** Yellow archangel *Lamium galeobdolon*

Preliminary Ecological Appraisal

Site: The Oaks, Wrexham
NGR: SJ 38699 49320
Author: Tom Kenwright
Date: 15/05/2025





KEY:

- A1.1.1 - Broadleaved woodland - semi-natural
- A2.1 - Scrub - dense/continuous
- A3.1 - Broadleaved scattered trees
- SI B2.2 - Semi-improved neutral grassland
- B5 - Marsh/marshy grassland
- SI B6 - Poor semi-improved grassland
- C3.1 - Ruderal tall herb and fern
- G1 - Standing water
- G2 - Running water
- A J1.2 - Amenity grassland
- J1.3 - Ephemeral/ short perennial
- J2.4 - Fence
- J2.5 - Wall
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Hardstanding
- Survey boundary
- Target Notes
- Artifical watercourse created by burst water pipe

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Appendix 2 – GCN fencing plan

GCN Fencing Plan

Site: The Oaks, Wrexham Industrial Estate
NGR: (SJ) 38653 49314
Author: Harry Fox
Date: 01/09/2025

north

REDWITHER ROAD

OAK ROAD

Power Station

The Oaks

Pond

Pumping Station

Redwither Brook

Clywedog

see continuation

LANDSCAPE MASTERPLAN

0 10 20 30 40 50 60 70 80 90 100

SCALE 1:1250 (A1)
SCALE 1:2500 (A3)
METRES

Location Plan



Legend

- One-way GCN fencing
- Survey Boundary

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Project	THE OAKS, OAK ROAD WREXHAM INDUSTRIAL ESTATE	Dwg No	311/LAND/L/104	Revision	P03	
Title	LANDSCAPE MASTERPLAN PROPOSED SITE AND NATURE RESERVE YEAR FIFTEEN	Scale	1:1250 @ A1 / 1:2500 @ A3	Date	22/08/2025	

Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XXXX	MD
P02	19/05/2025	PLANNING APPLICATION	MD	XX	MD
P03	22/08/2025	PLANNING APPLICATION & LEMP	MD	XX	MD

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Appendix 3 – Bat survey of trees results plan

GLTA/ATA Results Plan

Site: The Oaks, Wrexham Industrial Estate
NGR: (SJ) 38653 49314
Author: Harry Fox
Date: 26/08/2025

north

REDWITHER ROAD

OAK ROAD

T64 T65 T10 T9 T8 T11 T12 T23 T25 T24 T22 T18 T19 T15 T14 T16 T17 T20 T21 T13 T2 T1 T3 T4 T5 T7 T6 T26 T28 T27 T29 T30 T31 T33 T32

Pumping Station

Power Station

Pond

see continuation

LANDSCAPE MASTERPLAN

0 10 20 30 40 50 60 70 80 90 100

SCALE 1:1250 (A1)
SCALE 1:2500 (A3)
METRES

Location Plan



Legend

- Low roosting potential tree
- Moderate roosting potential tree

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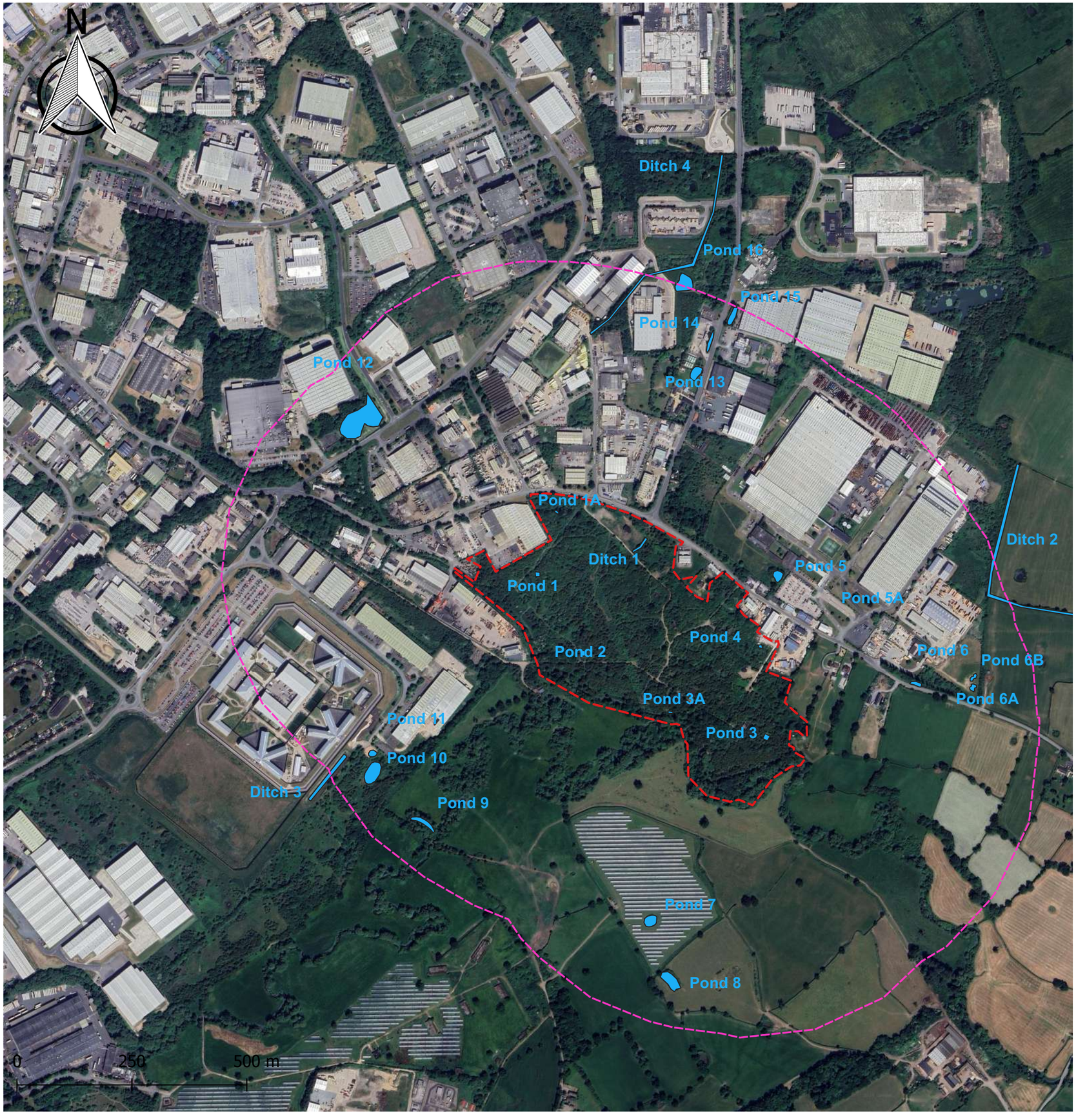
Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XXXX	MD
P02	19/03/2025	PLANNING APPLICATION	MD	XX	MD
P03	22/08/2025	PLANNING APPLICATION & LEMP	MD	XX	MD

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Appendix 4 – Pond plan

500m Pond Plan

Site: The Oaks, Wrexham
NGR: SJ 38699 49320
Author: Tom Kenwright
Date: 04/04/2023





KEY:

- Survey boundary
- Waterbodies
- 500m buffer zone to survey boundary

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Appendix 5 – Badger site plan

Sett Location Plan

Site: The Oaks, Wrexham Industrial Estate
NGR: (SJ) 38653 49314
Author: Harry Fox
Date: 26/08/2025

north

REDWITHER ROAD

OAK ROAD

Sett 1

Sett 2

Sett 3

Sett 4

Pumping Station

Pond

The Oaks

250m

200m

100m

50m

see continuation

LANDSCAPE MASTERPLAN

0 10 20 30 40 50 60 70 80 90 100

SCALE 1:1250 (A1)
SCALE 1:2500 (A3)
METRES

Location Plan



Legend

- Inactive setts removed
- Retained sett

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Project	THE OAKS, OAK ROAD WREXHAM INDUSTRIAL ESTATE	Dwg No	311/LAND/L/104	Revision	P03
Title	LANDSCAPE MASTERPLAN PROPOSED SITE AND NATURE RESERVE YEAR FIFTEEN	Scale	1:1250 @ A1 / 1:2500 @ A3	Date	22/08/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XXXX	MD
P02	19/03/2025	PLANNING APPLICATION	MD	XX	MD
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Appendix 6 – 15 year landscaping plan

north

REDWITHER ROAD

OAK ROAD

Power Station

Works

Tank

Drain

33.0m

The Oaks

Redwither Brook

FB

Pumping Station

Pond

Clywedog

AFON CLYWEDOG / RIVER CLYWEDOG

CR

Co Const, P Const & ED Bdy

see continuation

LANDSCAPE MASTERPLAN

0 10 20 30 40 50 60 70 80 90 100

SCALE 1:1250 (A1)
SCALE 1:2500 (A3) METRES

The masterplan indicates the proposed removal of scrub and restoration of grass and wildflower habitat that could be gradually achieved over a ten year period.

A phased approach to the habitat restoration would minimise disturbance to local fauna and allow wildlife to relocate as scrub is cleared.

The approach to habitat restoration is detailed in the Landscape and Ecological Management Plan.

Trees of good form and condition and trees with bat roost features that are encountered during the scrub clearance works will be retained where appropriate to provide longevity to the tree population and for biodiversity and habitat benefit. This will also retain visual and habitat links to the woodland and scrub habitat to the perimeter of the site.

Notes

1. Dimensions are given in metres and millimetres as stated on the drawing.
2. Centre of site is located at approximately grid reference SJ 38740 49238.
3. Drawing must be reproduced in colour.

Location Plan



Legend

- EXISTING TREES TO BE RETAINED
- EXISTING TREES - ROOT PROTECTION AREA
- EXISTING AREAS OF SCRUB HABITAT TO BE RETAINED
- EXISTING WATER FEATURE TO BE REMOVED
- TREE WITH NEGLIGIBLE BAT ROOST POTENTIAL
- TREE WITH LOW BAT ROOST POTENTIAL
- TREE WITH MODERATE BAT ROOST POTENTIAL

DEVELOPMENT SITE

- PROPOSED UNIT/BUILDING
- PROPOSED NATIVE SPECIES STANDARD DECIDUOUS TREE
- PROPOSED NATIVE SPECIES SHRUB PLANTING
- PROPOSED ORNAMENTAL SHRUB AND HERBACEOUS PLANTING
- PROPOSED NATIVE MIXED SPECIES HEDGING
- PROPOSED NATIVE SPECIES WILDFLOWER AND GRASS MIX
- PROPOSED NATIVE GRASS MIX
- PROPOSED SHORT AMENITY GRASS MIX
- PROPOSED SWALE / ATTENUATION
- PROPOSED FOOTPATHS
- PROPOSED SITE ROADS AND PARKING

NATURE RESERVE

- EXISTING PUBLIC RIGHT OF WAY
- PROPOSED PERMISSIVE FOOTPATH
- EXISTING AREAS OF SPECIES RICH GRASSLAND
- EXISTING AREAS OF EPHEMERAL / SHORT PERENNIAL VEGETATION
- EXISTING WATER FEATURE RETAINED
- AREA TO BE RESTORED TO SPECIES RICH GRASSLAND
- AREAS TO BE CREATED AS DISTURBED GROUND
- PROPOSED POND - ALLOWED TO COLONISE NATURALLY (1m DEEP)
- PROPOSED POND - TO BE PLANTED WITH NATIVE SPECIES MARGINAL PLANTING (1.5m and 2.5m DEEP)

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		Revision	P05.1
		Date	1/12/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XXXX	MD
P02	19/05/2025	PLANNING APPLICATION	MD	XX	MD
P03	22/08/2025	PLANNING APPLICATION & LEMP	MD	XX	MD
P04	04/09/2025	PLANNING APPLICATION	MD	XX	MD
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Appendix 7 – Legislation

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.

Badger

European badgers *Meles meles* and their habitat are protected under The Protection of Badgers Act 1992 and are also included on Schedule 6 of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention. The legislation affords badgers protection against deliberate harm or injury making it an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger (or attempt to do so)
- To interfere with a sett by damaging or destroying it
- To obstruct access to, or entrance of, a badger sett
- To disturb a badger whilst it is occupying a sett

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

Works that disturb badgers whilst they are occupying a sett are illegal without a licence. Disturbance can occur even without direct interference or damage to the sett in question. In general, the following activities are likely to require a licence:

- Use of heavy machinery or significant earth moving within 30m of a sett
- Use of lighter machinery (usually any wheeled vehicles) within 20m of a sett
- Any digging, chain saw use or scrub clearance within 10m of a sett

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.