Wrexham Academy

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Preliminary Ecological Appraisal (Retrospective)

Wrexham AFC Limited

Document prepared on behalf of Tetra Tech Limited.

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EXECUTIVE SUMMARY

Contents	Summary
Site Location	The site is comprised of three red line boundary areas, namely "Block 1", "Block 2", and the "Groundsperson Building" located in Darland School, Chester Road, Rosset, Wrexham, Wales. The sites are centered at Ordnance Survey National Grid Reference (OS NGR) SJ 37388 57674, SJ 37408 57598 and SJ 37587 57534 respectively.
Proposals	The development will include the creation of a new Academy training facility at Darland High School comprised of two new buildings which will include changing rooms as well as a small ancillary office, plant areas, meeting rooms, medical room, medical office, gymnasium and a new classroom. A further building of two shipping containers is proposed in the playing fields to serve the pitches. The development had already begun prior to the site visit.
Scope of this Survey(s)	The purpose of this report is to: • Undertake a desk study to obtain existing information on statutory and non-statutory sites of nature conservation and relevant records of protected / notable species within the site; • Present the results of an Extended Habitat Classification Survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species; and • Present evidence of protected fauna or habitats capable of supporting such species.
Results and Evaluation	**Designated sites:** River Dee and Bala Lake SAC RAMSAR is situated 2.9 km east of the site. No other designated sites were identified within 10 km of the site boundary. **Habitats**: The site was dominated by developed land sealed surface, artificial unvegetated unsealed surface, modified and other neutral grassland. Hedgerows and a ditch were present adjacent to the site. Several scattered trees were present throughout the site. **Protected and notable species**: The site has the potential to support several protected and notable species including bats, nesting birds, badger, amphibians and reptiles. No invasive species were recorded on site.
Retrospective Assessment	No grassland habitats, hedgerows, the adjacent ditch, or trees appear to have been permanently adversely impacted by the works.
Recommendations	**Badger**:

Contents	Summary
	Reasonable Avoidance Measures for badger should be adhered to during the works. Permanent security fencing should not be installed around the entirety of the site during the operational phase unless it has an accessible gap to facilitate mammal passage for species such as hedgehog and badger. **Bat Activity:** A sensitive lighting plan for bats is required for the remainder of the construction phase, and during the operational phases of the development. This should involve construction works being undertaken outside hours of darkness. If this is not possible, construction associated lighting should minimise light spill onto hedgerows, trees and suitable habitats adjacent to the site. The operational design should be developed in accordance with the Institute of Lighting Professionals (ILP) Guidance Note 08/8 Bats and artificial lighting in the UK and also minimise light spill onto hedgerows, trees and suitable habitats adjacent to the site. **Bat Roosting**: Impacts to trees are not anticipated as part of the proposed works but should this change, further surveys such as Ground Level Tree Assessment (GLTA) for roosting bats, and aerial/nocturnal surveys may be required. **Nesting Birds:** If any pruning works to vegetation such as trees/hedgerows are required these should be undertaken outside of the nesting bird season (March – September inclusive). If this is not possible, a nesting bird check will be required to be undertaken by a suitably qualified ecologist 24-48 hours prior to any potentially disturbing works. **Reptiles and Amphibians:** The hedgerows and ditch will be retained to maintain connectivity throughout the site. In the unlikely event that any GCN are found throughout the remaining construction works, the works should stop and a suitably qualified ecologist contacted for advice on how to proceed.
Opportunities for Enhancement	• Retention of existing hedgerows with relaxed management on grassland adjacent to base of the hedge. • Wildflower planting on retained grassland adjacent to Block 2. • Inclusion of fruiting plant species (e.g. elder and rowan) for badgers. • Inclusion of 4 bat boxes and 8 bird boxes on retained features and trees. • Bug hotels/ houses for invertebrate species. • Inclusion of a pond within the design to benefit amphibians such as GCN. • Creation of 2 hibernacula for amphibian and reptile species. • Inclusion of hedgehog houses or brash piles for hedgehog.

1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech was commissioned by Wrexham AFC Limited on 30th August 2024 to undertake a retrospective Preliminary Ecological Appraisal (PEA) of three red line boundary areas, namely "Block 1", "Block 2", and the "Groundsperson Building" located in Darland School, Wrexham, Wales. The appraisal will be used to inform an ongoing planning application.

This report has been prepared by Consultant Ecologist Bronwyn Dennis BSc (Hons) and the conditions pertinent to it are in Appendix A.

1.2 SITE DESCRIPTION

The site is comprised of three red line boundary areas, namely "Block 1", "Block 2", and the "Groundsperson Building" located in Darland School, Chester Road, Rosset, Wrexham, Wales. The sites are centered at Ordnance Survey National Grid Reference (OS NGR) SJ 37388 57674, SJ 37408 57598 and SJ 37587 57534 respectively (Figure 1). For the purpose of the report, Block 1, Block 2 and the Groundsperson Building will henceforth be referred to as "the site".

The site is comprised of hard standing, modified amenity grassland and Darland High School. The surrounding landscape of residential housing to the north and west, and agricultural fields with associated farm buildings to the south and east.

1.3 DEVELOPMENT PROPOSALS

The development will include the creation of a new Academy training facility at Darland High School comprised of two new buildings which will include changing rooms as well as a small ancillary office, plant areas, meeting rooms, medical room, medical office, gymnasium and a new classroom. A further building of two shipping containers is proposed in the playing fields to serve the pitches. The location of one of the shipping containers is currently unknown.

The development had already begun prior to the site visit.

1.4 PURPOSE OF REPORT

The aim of this report is to evaluate the changes to site habitats between pre and during-development, and record evidence of any perceived impacts to known and potential ecological receptors. This was achieved by the following objectives:

- Undertake a desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected / notable species within the site and its zone of influence;
- Present the results of an Extended Habitat Classification Survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species;
- Present evidence of protected fauna or habitats capable of supporting such species; and

- Review previous ecological assessments associated with the site to evaluate whether the development has impacted any ecological receptors.

Scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

Validity

The details of this report will remain valid for a period of 18 months from the date of the survey (to 13/03/2026), after which the validity of this assessment should be reviewed to determine whether further updates are necessary.

2.0 METHODOLOGY

2.1 HISTORIC SURVEYS

Tetra Tech were not aware of any previous reports for the site.

2.2 DESK STUDY

The desktop study comprised two elements:

- A data search obtained from North Wales Environmental Information Service (Cofnod) and the Local Environmental Records Centre for Cheshire, Halton, Warrington and Wirral (RECORD) in September 2024; and
- Online element including a search using :Multi Agency Geographic Information for the Countryside (MAGIC) (https://magic.defra.gov.uk) website and Ordnance Survey (OS),Aerial Imagery (https://www.bing.com/maps) and DataMapWales (Home | DataMapWales (gov.wales).

The geographical extent of the search area was related to the significance of sites and species and potential zones of influence. For this site the following search areas were considered appropriate:

- 10 km for sites of International Importance (e.g. Special Areas of Conservation (SAC), Special Protection Area (SPA), Ramsar sites);
- 2 km for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSI), protected or otherwise notable species and non-statutory designated sites of County Importance (e.g. Local Wildlife Sites (LWS));
- 2 km for biological records; and
- 1 km for ancient woodland and mapped priority habitats.

The data search did not cover Tree Preservation Orders (TPOs); or Conservation Areas designated for their special architectural and historic interest.

As this is a retrospective planning application, the original habitats present on site prior to development have been inferred from time-lapsed aerial imagery[1] and pre-construction photographs provided by the client.

2.3 FIELD SURVEYS

The following methodologies have been used to identify the ecological receptors present on or near the site and which are relevant to the proposed development.

2.3.1 Habitats

An Extended Habitat Classification Survey was undertaken on the site on 13th September 2024 by Tetra Tech's Consultant Ecologist Bronwyn Dennis BSc (Hons). The weather conditions were fair and dry with a

[1] Viewed online using the Google Earth timelapse function available at earthengine.google.com/timelapse/

gentle breeze, and temperatures ranging from 16C˚- 18C˚. In order to capture any changes to the site as a result of the ongoing works, all habitat within 10 m of the site boundaries included within the survey.

The habitats present on site were mapped in accordance with the UK Habitat Classification Professional Edition – Version 2.0 (UK Hab Ltd., 2023), hereafter referred to as 'UKHab'. The habitats have been classified to a minimum of UKHab Level 3, to identify the presence of any Habitats of Principal Importance (HPIs) listened under the Natural Environment and Rural Communities (NERC) Act 2006. Where habitats occur in multiple areas of the site or are of different condition, additional polygons of the same habitat have been mapped so that their condition may be assessed independently.

2.3.2 Protected and Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations 2017 (as amended), Schedule 5 of the Wildlife and Countryside Act (W&CA) 1981 (as amended), the Countryside Rights of Way (CRoW) Act 2000, those given extra protection under the Natural Environment and Rural Communities (NERC) Act 2006, and species included in the Denbighshire County Council Local Biodiversity Action Plan (LBAP).

The presence of some species was determined using standard best practice guidance and are listed below.

Badger

The site was surveyed for evidence of badger *Meles meles* setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria *Surveying badgers. An occasional publication of the mammal society – No. 9.* (Harris, et al., 1989).

Hazel Dormouse

The site was surveyed for its suitability to support hazel dormouse *Muscardinus avellanarius* based on best practice guidance (Bright, et al., 2006).

Otter

The site was assessed for its suitability to support otter *Lutra lutra* using *Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No 10* (Chanin, 2003).

Bats

Roosting Bats –Trees

Any suitable trees on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2023) – hereafter referred to as the 'BCT Guidelines'.

Foraging / Commuting Bats

Potential habitat for foraging and commuting bats were assessed on site according to the BCT Guidelines.

Birds

Bird Species identified at the time of survey were noted and nesting birds recorded as seen. An assessment of habitats was undertaken to determine the likely value to breeding and foraging birds.

Great Crested Newt & Common Amphibians

The site was appraised for its suitability to support great crested newt *Triturus cristatus* based on guidance outlined in the Herpetofauna Workers' Manual (Gent & Gibson, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, et al., 2001). This appraisal also considered waterbodies within 500m of the site and their potential to be used for breeding newts.

Habitat suitability and evidence of other common amphibians was recorded on site where relevant.

Reptiles

The site was appraised for its suitability to support reptiles using guidance outlined in the Herpetofauna Workers' Manual (Gent & Gibson, 2003).

Invertebrates

The site habitats were appraised for suitability to support assemblages of invertebrates and commented on in the report as appropriate.

Other Species

The site was also appraised for its suitability to support other protected or notable fauna with regard to the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS42020:2013 Biodiversity – Code of Practice for Planning and Development (BSI, 2013). Evidence of any current or historical presence of such species was recorded.

Invasive Species

Evidence of species listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended, were recorded as seen.

2.4 LIMITATIONS

As this is a retrospective appraisal, determination of the habitats present prior to the development have been informed using aerial imagery, available reports and onsite evidence. Desk based information alone presents an issue when trying to identify small ecological features, or those hidden under a canopy. Therefore, a precautionary approach has been adopted when assessing for the likelihood of important ecological features.

Any absence of desk study records cannot be relied upon to infer absence of a species / habitat as the absence of records may be a result of under-recording within the given search area.

Due to access and time constraints, no HSI surveys were undertaken on waterbodies in proximity to the site. As such it has been assumed all identified waterbodies are of excellent quality and have a strong propensity to support amphibians.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. This survey focuses on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation, from only a single visit. This report cannot, therefore, be considered a comprehensive assessment of the ecological interest of the site.

However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

3.0 RESULTS & EVALUATION

3.1 PROTECTED SITES

European and National designated sites identified within 10 km of the proposed development are presented in Table 1 and Figure 2, with the designation, qualifying features and proximity from the development sites also indicated. Details of local non-designated sites within 2 km and obtained from COFNOD and RECORD are also included.

Table 1. Statutory and non-statutory designated sites identified during the desk study

Site Name	Designation	Distance and direction from Site	Reasons for designation
Sites of International Importance (within 10 km)			
River Dee and Bala Lake	SAC	2.9 km east	Annex II species that are a primary reason for selection of this site: Atlantic salmon *Salmo salar* and Floating water-plantain *Luronium natans*. Annex I habitats present include plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation are also present.
Bala Lake (Llyn Tegid)	RAMSAR	2.9 km east	Ramsar criterion 1: Largest natural lake in Wales, lying deep in a formerly glaciated trough. Ramsar criterion 2: Plant species growing in or beside the lake are mudwort *Limosa aquatica*, six-stamened waterwort *Elatine hexandra*, water sedge *Carex aquatilis* and floating water plantain *Luronium natans*, all of which are scarce in Britain. The latter species is regarded as vulnerable on a global scale. This site is also one of only six sites in Britain for the whitefish or gwyniad *Coregonus lavaretus*; the Welsh population of this fish is genetically distinct. Llyn Tegid is also an unusual habitat for the normally riverine fish grayling *Thymallus thymallus*. The Nationally Rare glutinous snail *Myxas glutinosa* has been rediscovered in the shallow gravels of the lake shore.

Ancient Woodland and Priority Habitats

No ancient woodland parcels were returned from within 1 km of the site.

One parcel of traditional orchards is located 180m west of the site at its closest point. One parcel of lowland fens and reedbeds is located 520 m north-west of the site at its closest point.

3.2 HABITATS

The following habitats have been identified through our assessment, a broken-down summary of which can be found in Tables 2, 3 and 4. A UKHab map can be found in Figure 2. The importance assessment has been undertaken as per the CIEEM guidance (CIEEM, 2018).

Table 2. Block 1 Habitats

Habitat	Result	Importance assessment
Developed Land Sealed Surface	The site was dominated by developed land sealed surface. From aerial imagery and pre-construction photographs, the habitat type has not changed due to the ongoing works.	Negligible importance.
Modified Grassland	The site was bordered by modified grassland. The sward height was short c.10 cm with evidence of recent mowing. Species composition was limited due to the timing of the survey however, species identified included White clover *Trifolium repens* (O), Creeping buttercup *Ranunculus repens* (R) and perennial rye-grass *Lolium perenne* (D). From aerial imagery and pre-construction photographs, the habitat type has not changed due to the ongoing works. However, a trench had been dug throughout the modified grassland border to facilitate the ongoing works. Habitat loss as a result of the works appeared to be minimal.	Common and widespread of site importance.
Scattered trees	Three scattered apple trees *Malus* sp. were found adjacent to the site. From aerial imagery and pre-construction photographs, the trees were existing and have not been impacted by the ongoing works.	Local importance.

Table 3. Block 2 Habitats

Habitat	Result	Importance assessment
Artificial Unvegetated Unsealed Surface	The site was dominated by artificial unvegetated unsealed surface. This appeared to be construction associated aggregate which has been used as the foundations of the proposed Block 2 modular building. Based on aerial imagery and pre-construction photographs, the habitat onsite prior to the works consisted of three long-jump pits used by the school. This would have been likely been comprised of sand and rubber. Aerial imagery also indicates that there was some vegetation between the long-jump pits.	Negligible importance.
Other Neutral Grassland	The site was also comprised of other neutral grassland. The sward height was short c.10 cm with evidence of recent mowing. Species composition was limited due to the timing of the survey however, species identified included White clover *Trifolium repens* (O), Creeping buttercup *Ranunculus repens* (R) and perennial rye-grass *Lolium perenne* (D).	Common and widespread habitat of site importance.
Other Native Hedgerow	The hedgerow associated with the ditch and was comprised of elder, hawthorn, oak was approximately 1.5 m high and 1 m width.	Common and widespread habitat of site importance.
Ditch	One drainage ditch was present adjacent to the site. The ditch was holding water at the time of survey, but the survey was	Local importance.

Habitat	Result	Importance assessment
	undertaken following a period of heavy rainfall. The water was stagnant and there was limited vegetation present on the banks. Although the ditch falls outside of the work boundary, Heras fencing has been erected alongside the ditch. There was an old mammal path observed during the survey leading out of the ditch and towards the site. However, as this is no longer accessible due the fencing, it is likely that the fencing has caused temporary disturbance to a mammal commuting route. Based on aerial imagery and pre-construction photographs, there have been no other impacts to the ditch during the ongoing works.	
Scattered trees	Several mature scattered silver birch *Betula pendula* trees were noted adjacent to the site. Based on aerial imagery and pre-construction photographs, the scattered trees have not been impacted by the ongoing works.	Local importance.

Table 4. Groundskeeper Building Habitats

Habitat	Result	Importance assessment
Modified Grassland	The area comprised frequently mown amenity grassland dominated by perennial rye grass, Yorkshire fog *Holcus lanatus* and with herbs including daisy *Bellis perennis* and ribwort plantain *Plantago lanceolata.* From aerial imagery and pre-construction photos, this area has not undergone any significant changes during the ongoing works.	Common and widespread of site importance.

3.3 PROTECTED AND NOTABLE SPECIES

Data purchased from COFNOD and RECORD confirmed the presence of several protected and notable species within 2km of the site. Relevant data within the previous ten years are discussed in Table 5 below.

Protected and notable species identified as a receptor for the site are detailed in Table 5. For species with legal protection arising from persecution, such as badgers, some details are purposefully omitted, but can be provided on request to inform the masterplan.

Table 5. Field Survey and Desk Study Results of Protected and Notable Species

Species	Legal protection	Result	Importance assessment
Badger	Protection of Badgers Act 1992; Wildlife and Countryside Act 1981 (as amended) Schedule 6.	[redacted] No badger setts were identified within the site during the survey however [redacted] The site was dominated by modified grassland and is in a highly disturbed area. Therefore, it is unlikely that the site will be used for sett creation. It is likely, however, to be used as part of a wider foraging and commuting resource. The woodland in the centre of the site is waterlogged throughout and does not provide suitable sett digging habitat although was noted as suitable for foraging.	Species likely to utilise the site for foraging and commuting with potential to create setts within/adjacent the site – local importance.
Hazel Dormouse	Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5 & 6; Natural Environment and Rural Communities 2006 Section 41.	No hazel dormouse records were returned during the desk study within the previous ten years and within 2 km of the site. There were limited opportunities for hazel dormouse within the site as the site was dominated by modified grassland and lacked connected hedgerows or woodland. Therefore, it is considered unlikely that hazel dormouse are present within the site. Hazel dormouse are not considered further within this report.	Species considered unlikely to be important at local level. Species listed as a species of principal importance in Wales.

Species	Legal protection	Result	Importance assessment
Otter	Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5 & 6; Natural Environment and Rural Communities 2006 Section 41.	One record for otter was returned during the desk study within the previous ten years and within 2 km of the site. The record was located approximately 900 m north of the site and was from 2014. No evidence of otter was observed during the survey. One drainage ditch was identified within 10 m of the site. The site could provide suitable commuting habitat for otter, however, it is considered unlikely that otter would disperse onto site due to limited foraging opportunities. Otter are not considered further within this report.	Limited habitat within the site and therefore considered unlikely to be present – considered unlikely to be important at local level. Species listed as a species of principal importance in Wales.
Water vole	Wildlife and Countryside Act 1981 (as amended) Schedule 5; Natural Environment and Rural Communities 2006 Section 41.	No water vole records were returned during the desk study within the previous ten years and within 2 km of the site. No evidence of water vole was observed during the survey. One drainage ditch was identified within 10 m of the site. The ditch was unvegetated and lacked connectivity to water courses in the wider area. Therefore, it is considered unlikely that water vole are present within the site. Water vole are not considered further within this report.	Species unlikely to be present within the site – considered unlikely to be important at local level. Species listed as a species of principal importance in Wales.
Bats	Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5 & 6; Natural Environment and Rural Communities 2006 Section 41.	A total of six records for bats were returned within the previous ten years and within 2 km of the site. Species included common pipistrelle *Pipistrellus pipistrellus,* soprano pipistrelle *Pipistrellus pygmaeus,* noctule *Nyctalus noctula*, brown long-eared *Plecotus auritus*, and Daubenton's bat *Myotis daubentonii*. The most recent and closest record was in 2019 for common pipistrelle, noctule and brown long-eared bat identified during passive monitoring of a building located approximately 430 m south-east of the site. <u>Roosting:</u> No buildings were present within the site. Scattered mature trees were recorded throughout the site. Several trees were noted with PRF-I and PRF-M (potential roosting features individual/multiple). The trees were not proposed to be impacted during the works. <u>Foraging and Commuting:</u> During the survey low suitability habitat for foraging and commuting bats was recorded provided by the hedgerows and scattered trees.	Species likely to be present within the site however, further surveys would be required to confirm species presence and importance. Common pipistrelle, soprano pipistrelle, noctule, Daubenton's and brown long-eared bats are listed as a species of principal importance in Wales.

Species	Legal protection	Result	Importance assessment
Birds	Wildlife and Countryside Act 1981 (as amended).	COFNOD returned 391 records and RECORD returned 97 records for bird species from within the previous 10 years and within 2 km of the site. The records pertained to 89 different species. Notable species included blackcap *Sylvia atricapilla*, bullfinch *Pyrrhula pyrrhula*, buzzard *Buteo buteo*, chiffchaff *Phylloscopus collybita* , collared dove *Streptopelia decaocto*, curlew *Numenius arquata*, garden warbler *Sylvia borin*, goldcrest *Regulus regulus*, great spotted woodpecker *Dendrocopos major*, green woodpecker *Picus viridis*, grey wagtail *Motacilla cinerea*, kestrel *Falco tinnunculus*, lapwing *Vanellus vanellus*, mistle thrush *Turdus viscivorus*, nuthatch *Sitta europaea*, raven *Corvus corax*, red kite *Milvus milvus*, redstart *Phoenicurus phoenicurus*, reed bunting *Emberiza schoeniclus*, skylark *Alauda arvensis*, snipe *Gallinago gallinago*, song thrush *Turdus philomelos*, sparrowhawk *Accipiter nisus*, starling *Sturnus vulgaris*, stonechat *Saxicola rubicola,* swallow *Hirundo rustica*, swift *Apus apus*, treecreeper *Certhia familiaris*, wheatear *Oenanthe 14enanthe*, woodcock *Scolopax rusticola*, woodpigeon *Columba palumbus,* wren *Troglodytes troglodytes*, yellow wagtail *Motacilla flava* and yellowhammer *Emberiza citronella*. The hedgerows and scattered trees adjacent to the site would provide suitable nesting areas for several common passerine species. The modified grassland is in a heavily disturbed area due to Darland High School and the use of grassland for amenity. Therefore, the grassland habitats within and adjacent to the site would be unsuitable for ground nesting or farmland bird species.	Site importance due to suitability being limited to the scattered trees. A number of species returned during the desk study and potentially present within the site are listed as a species of principal importance in Wales.
GCN and Common Amphibians	*GCN*: Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5; Natural Environment and Rural Communities 2006 Section 41.	There were 14 records for amphibians within the previous ten years and within 2 km of the site returned during the desk study. Of these 5 pertained to GCN records. Other species included palmate newt *Lissotriton helveticus,* smooth newt *Lissotriton vulgaris* and common frog *Rana temporaria.* The terrestrial habitats within the site were largely unsuitable for terrestrial phase GCN as the site was dominated by frequently managed modified and other neutral grassland which had a short sward. However, the hedgerows adjacent to the site contained ground vegetation suitable for GCN and may form a commuting resource for GCN, with brash and leaf litter below the hedgerow providing opportunities for shelter.	Local importance due to suitability in some areas of the site for common amphibians. GCN and common toad are listed as species listed as a species of principal importance in Wales.

Species	Legal protection	Result	Importance assessment
		The ditch adjacent to the site may be suitable for GCN, although it lacked suitable marginal vegetation for egg-laying	
Reptiles	*Adder, grass snake, slow worm and common lizard*: Wildlife and Countryside Act 1981 (as amended) Schedules 5; Natural Environment and Rural Communities 2006 Section 41.	There were four grass snake *Natrix Helvetica* records returned within the previous ten years and within 2 km of the site returned during the desk study. The closest record was located approximately 350 m southeast of the site and was recorded in 2014. The site had limited suitability for reptiles due to the short sward and managed grassland. The hedgerows adjacent to the site could provide a commuting resource, with brash and leaf litter beneath the hedgerow providing opportunities for shelter.	Local importance - Suitability in some areas of the site that may provide suitable habitat. Common lizard are listed as a species of principal importance in Wales.
Invertebrates	Some invertebrates are protected under Conservation of Habitats and Species Regulations 2017 and Wildlife and Countryside Act 1981 (as amended). Many invertebrates are also listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006).	A total of 85 records for invertebrates were returned within the previous ten years and within 2 km of the site. Of these, 25 species returned are included as UK BAP species. These included dingy skipper *Erynnis tages*, garden tiger *Arctia caja,* buff ermine *Spilosoma lutea,* grey dagger *Acronicta psi,* beaded chestnut *Agrochola lychnidis,* green-brindled crescent *Allophyes oxyacanthae,* dusky brocade *Apamea remissa,* centre-barred sallow *Atethmia centrago,* mottled rustic *Caradrina Morpheus,* sallow *Cirrhia icteritia,* small square-spot *Diarsia rubi,* figure of eight *Diloba caeruleocephala*, dusky thorn *Ennomos fuscantaria,* ghost moth *Hepialus humuli,* rosy rustic *Hydraecia micacea*, shoulder-striped *wainscot Leucania comma*, dot moth *Melanchra persicariae*, powdered quaker *Orthosia gracilis*, large wainscot *Rhizedra lutosa*, white ermine *Spilosoma lubricipeda*, blood-vein *Timandra comae*, cinnabar *Tyria jacobaeae*, oak hook-tip *Watsonalla binaria*. Habitats on site are likely to support a range of common invertebrates. The scattered mature trees and boundary hedgerow features are considered to be more suitable for invertebrate assemblages than the improved grassland fields.	Local Value for common assemblages of invertebrate species. Cinnabar are listed as a species of principal importance in Wales.
Hedgehog	Protected in the UK under the Wildlife and Countryside Act 1981 (as amended)	A total of 138 records for hedgehog were returned within the previous ten years and within 2 km of the site. The hedgerows and woodland within the site would be suitable for foraging and commuting hedgehog.	Local importance

Species	Legal protection	Result	Importance assessment
Invasive species	Wildlife and Countryside Act 1981 (as amended) Schedule 9; Environmental Protection Act 1990.	No records for invasive non-native species (INNS) were returned in the desk study from within the previous 10 years and within 2 km of the site. No Schedule 9 species under the Wildlife and Countryside Act 1981 were identified within the site.	N/A

4.0 RETROSPECTIVE IMPACTS AND RECOMMENDATIONS

In review of aerial imagery and pre-construction photographs, the ongoing development has not resulted in the direct loss of any significant habitats. There has been temporary disturbance to the modified grassland surrounding Block 1 and the Groundskeeper building, and the other neutral grassland surrounding Block 2. Although pre-construction surveys could not be undertaken, given the small-scale nature of the works, it is unlikely that any significant impacts have occurred due to the works. Furthermore, advice was given immediately following the site visit and has been implemented during the remainder of the works. Impacts, mitigation required/ implemented, and enhancement opportunities are detailed below in **Table 6. Mitigation and Further Survey / Assessment**. These should be assumed as likely requirements to inform a planning application, unless otherwise stated.

Table 6. Mitigation and Further Survey / Assessment

Ecological Receptor	Retrospective impact assessment	Mitigation required/ implemented	Opportunity for enhancement
Designated sites	Given the distance between the site and designated sites and the small-scale nature of the works, it is highly unlikely that the works will impact the designated sites identified. No further survey is required.	No mitigation is currently required.	N/A
Habitats	The habitats within the site were common with limited botanical value (dominated by modified grassland). The hedgerows were not assessed for their 'importance' as per the Hedgerow Regulations however the hedgerows may qualify as a habitat of principal importance as per the following definition: "A hedgerow is defined as any boundary line of trees or shrubs over 20 m long and less than 5 m wide, and where any gaps between the trees or shrub species are less that 20 m wide (Bickmore, 2002). Any bank, wall, ditch or tree within 2 m of the centre of the	Retention of hedgerow, ditch and scattered trees.	The inclusion of wildflower planting within areas of retained grassland, particularly between the base of the hedgerow and the Block 2 would provide beneficial resources for invertebrates and in turn bats. A relaxed mowing regime within this area would also provide more cover for commuting reptiles and amphibians within the site.

Ecological Receptor	Retrospective impact assessment	Mitigation required/ implemented	Opportunity for enhancement
	hedgerow is considered to be part of the hedgerow habitat, as is the herbaceous vegetation within 2 m of the centre of the hedgerow. All hedgerows consisting predominantly (i.e. 80% or more cover) of at least one woody UK native species are covered by this priority habitat, where each UK country can define the list of woody species native to their respective country." The hedgerow falls outside of the site boundaries and has not been impacted during the works. It is not due to be impacted by the proposals.		
Badger	[redacted] within modified and other neutral grassland, the ditch and the hedgerow. [redacted]	Immediately following the site visit, it was recommended that works should continue under precautionary methods of working for badger. These measures include: • Materials and chemicals should be stored within suitability located site compounds and these should be fenced to ensure that no badgers can obtain access. • It is also recommended that any excavations or trenches created as part of the proposed development are either covered when unattended, created with a shallow angled side, or a plank of wood or similar is placed within the excavations in such a manner as to afford a ready escape route	The inclusion of fruiting plant species (e.g. elder *Sambucus nigra* and rowan *Sorbus aucuparia*) as part of the development's enhancement measures would create further opportunities for badger foraging across the site.

Ecological Receptor	Retrospective impact assessment	Mitigation required/ implemented	Opportunity for enhancement
		to avoid badger (or any other animal) becoming trapped. • Excavations should be subject to daily checks before works commence. • All site staff should be made aware of the presence and potential presence of protected species as part of site induction material. • Should a protected species or field evidence of a protected species be observed on site, works should pause in this area and the project ecologist must be consulted to provide further survey, guidance or revised avoidance and mitigation strategies. • Connectivity throughout site should be maintained to allow badger foraging to continue.	
Bats	**Roosting Bats** No trees have been or are due to be impacted as part of the works. If any of the trees within the site and along the site boundary are proposed for removal or the proposed construction is to take place within a canopy and a half's distance of the trees, further bat assessment in line with the with 'Bat Surveys for Professional Ecologists Good Practice Guidelines' (Collins, 2023) is	Should a bat roost be discovered then a European Protected Species Mitigation Licence (EPSML) will be required to allow the disturbance or lawful felling of these trees. Retaining connectivity with the use of hedgerows and other boundary features to maintain commuting and foraging habitats for bats.	Inclusion of at least 4 bat boxes on retained trees will form a valuable enhancement for roosting bats. Example of a suitable box: Vincent Pro Bat Box (available at https://www.nhbs.com/vincent-pro-bat-box) or equivalent. Bat boxes should be sited 3-4 m high. The boxes should be high enough to avoid direct illumination, placed out of the way

Ecological Receptor	Retrospective impact assessment	Mitigation required/ implemented	Opportunity for enhancement
	recommended. This should include a detailed aerial inspection of the PRFs as well as presence / absence surveys (i.e., close up endoscopic inspections or nocturnal survey). The detailed endoscopic surveys (including roped aerial assessment) will be completed by National Resources Wales (NRW) licenced bat ecologists on trees with sub features that are considered PRF-M or trees that need further assessment (FAR). As the mature trees are likely to provide suitability for a range of bat roosts (including hibernation, maternity and mating) the presence / absence surveys should be spaced out through the season in order to account for the seasonality of use and the number of survey effort should reflect the season ability of use (with minimum of three surveys depending on the initial PRF assessment). If no signs of bat occupancy are found the tree can be felled using Reasonable Avoidance Measures. **Foraging and Commuting** As the site is considered to provide low suitability for commuting and foraging bat, a nighttime bat walkover (NBW) would have been recommended to be undertaken prior to the works beginning to confirm species	It is recommended that retained boundary habitats (hedgerows and trees) are protected from disturbance through implementation of a wildlife-friendly lighting scheme the remainder of the construction phase, and during the operational phases of the development. Throughout the remainder of the construction phase, works should be undertaken outside hours of darkness. If this is not possible, construction associated lighting should minimise light spill onto hedgerows, trees and suitable habitats adjacent to the site. The operational design should be be developed in accordance with the Institute of Lighting Professionals (ILP) Guidance Note 08/8 Bats and artificial lighting in the UK (ILP, 2023) and also minimise light spill onto hedgerows, trees and suitable habitats adjacent to the site.	of strong winds and positioned south-east to south-west where they can get sun for part of the day. Once installed, any disturbance including maintenance of a bat box must be done under supervision of a licenced ecologist.

Ecological Receptor	Retrospective impact assessment	Mitigation required/ implemented	Opportunity for enhancement
	and how they are using the site. Please see mitigation.		
Birds	The habitats within the site were noted for their suitability for common passerine species which may nest within trees or hedgerows on site. An old nest was observed during the site visit within one of the mature birch trees. The onsite trees and adjacent hedgerows have not been impacted during the works.	Immediately following the site visit, it was recommended that any works affecting potential bird nesting habitat (i.e., any tree/hedgerow pruning) should be carried out outside the main bird breeding season (considered to be March to September inclusive). It was advised that if this is not possible, then it is recommended that an Ecological Clerk of Works conducts a check for nesting birds of any vegetation / potential nesting features to be cleared on site 24-48 hours in advance of any works commencing. If a nesting bird is identified, the ecologist will advise on suitable working methods and exclusion zones to restrict works and/or vehicular access in the area until the chicks have fledged, or the nest becomes otherwise inactive. Measures will depend on the nature of the works in that area as well as the bird species identified to be nesting.	Provision of 8 bird boxes within suitable areas (retained trees) on or adjacent to site.
GCN and Common Amphibians	No further surveys are recommended providing the ditch and hedgerows are retained.	Retention of hedgerows, ditch and connectivity throughout the site. In the unlikely event that a GCN is found during the works, the works must stop, and	Inclusion of a pond within the design would form a valuable enhancement for several species.

Ecological Receptor	Retrospective impact assessment	Mitigation required/ implemented	Opportunity for enhancement
	The grassland habitats within the site were considered suboptimal for terrestrial phase GCN and no ponds were identified within the site. There are opportunities for commuting and shelter beneath the adjacent hedgerow.	a suitably qualified ecologist contacted for further instruction on how to proceed.	Implementation of 2 hibernacula adjacent to the ditch to provide refuge and shelter for amphibians. This would also provide suitable hibernation habitat. Retention and enhancement planting of hedgerows would form commuting and dispersal corridors for these species.
Reptiles	No further surveys are recommended as habitats within the site were considered negligible for this species (site dominated by short sward modified grassland).	Retention of hedgerows and connectivity throughout the site.	Retention and enhancement planting of hedgerows would form commuting and dispersal corridors for these species. The Implementation of 2 hibernacula adjacent to the ditch will also enhance the site for reptiles.
Invertebrates	No further surveys are recommended, habitats within the site were common and widespread.	Retention of hedgerows.	Increasing botanical diversity of the grassland on site (e.g. wildflower planting) can increase the site suitability for notable invertebrate species. Bug hotels / houses could also be created.
Hedgehog	Species considered likely to be present within the site and may use the site as a foraging and commuting resource. No further surveys considered appropriate.	Best practice measures adopted during works for badger will also protect any hedgehogs potentially using the site. It is also recommended that security fencing is not installed around the entirety of the site during the operational phase as the fencing may cause habitat fragmentation for species such as hedgehog and badger or may cause the animals to become trapped within the site. Fencing with an accessible gap for	Inclusion of hedgehog houses or brash piles throughout the site would form valuable hibernation and resting habitat for hedgehog.

Ecological Receptor	Retrospective impact assessment	Mitigation required/ implemented	Opportunity for enhancement
		mammal passage could be used if necessary. Security fencing was already present prior to the site visit, however, there was still access via hedgerow bases.	

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FIGURES

Figure 1 – Site Location Plan

Figure 2 – UKHab Map



Site Location Plan

Wrexham Academy

Wrexham AFC Limited

Legend

Site Boundary

Site Boundary 30m Buffer

Notes:

Drawn by: AARON.HOWARD

Checked by: Bronwyn Dennis

Figure No. 1

Revision No. A

24 September 2024

0 20 40 60 80 Meters

Scale 1:1,500 @A3

British National Grid

NGR: 337490E 357603N

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UK Hab Habitat Plan

Wrexham Academy

Wrexham AFC Limited

Legend

- Site Boundary
- g3c - Other neutral grassland
- g4 - Modified grassland
- u1b - Developed land, sealed surface
- u1c - Artificial unvegetated unsealed surface

Symbology defined by UK Habs. https://ukhab.org/ukhab-documentation/

Notes:

Drawn by: AARON.HOWARD

Checked by: Bronwyn Dennis

Figure No. 2

Revision No. A

24 September 2024

0 10 20 30 40 Meters

Scale 1:1,000 @A3

British National Grid

NGR: 337490E 357603N

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APPENDICES

APPENDIX A: REPORT CONDITIONS

APPENDIX B: KEY LEGISLATION

APPENDIX C: SITE PHOTOGRAPHS AND DESCRIPTIONS

APPENDIX D: WYA-AFL-ZZ-ZZ-DR-A-20005 – WREXHAM ACADEMY – SITE PLAN REV P03

APPENDIX A: REPORT CONDITIONS

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The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

APPENDIX B: KEY LEGISLATION

Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Birds Directive

The EC Directive on the Conservation of Wild Birds (791409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Conservation of Habitats and Species Regulations 2017 (as amended)

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by Ministers, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.

The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:

https://www.legislation.gov.uk/uksi/2018/1307/note/made

The 2019 amendments related to the EU exit. Most of these changes involved transferring functions from the European Commission to the appropriate authorities in England and Wales. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant. The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change.– see here for full details:

https://www.legislation.gov.uk/ukdsi/2019/9780111176573

The Regulations make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5.

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to: intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant; unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Environment Protection Act 1990

The Act imposes a classification of soil and other waste containing viable propagules of invasive non-native plant species as controlled waste. This has been applied to Japanese Knotweed *Reynoutria japonica*, with the result that waste containing this species must be disposed of in accordance with the duty of care set out in section 34 of the Act.

Protection of Badgers Act 1992

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: “any structure or place which displays signs indicating current use by a badger”.

Natural Environment and Rural Communities Act 2006

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.

Hedgerow Regulations 1997

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

Birds of Conservation Concern

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2021 (Eaton *et al*, 2021) and identified 70 red list species, 103 amber species, and 72 green species. The criteria are complex, but generally:

Red list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.

Amber list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.

Green list species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed.

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level),and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP’s may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.

Wild Mammals (Protection) Act 1996

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.

Planning Policy Wales

The national planning policy guidance is found principally in Planning Policy Wales Edition 12 (PPW) dated February 2024 (Welsh Government, 2024). The document is supported by a series of Technical Advice Notes (TANs) with the most relevant for ecology being TAN 5: Nature Conservation and Planning (Welsh Government, 2009), which provides advice on how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. A summary of the main points relevant to the ecological assessment of the development is provided below.

Paragraph 6.4.2 states that local planning authorities, along with other public bodies, as part of the Environment (Wales) Act 2016 have a duty to take reasonable steps, consistent with the proper exercise of their functions, to further the conservation and enhancement of biodiversity and help maximise contributions to achieve well-being goals.

Paragraph 6.4.3 states that the planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement. Recognising that development needs to take place and some biodiversity may be impacted, the planning system should ensure that overall, there is a net benefit for biodiversity and ecosystem resilience, resulting in enhanced well-being. Addressing the consequences of climate change should be a central part of any measures to conserve biodiversity and the resilience of ecosystems. Development plan strategies, policies and development proposals must consider the need to:

- support the maintenance and enhancement of biodiversity, and the resilience of ecosystems;
- ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats, including the most recent targets set out in the 2022 UN Global Biodiversity Framework;
- ensure statutorily and non-statutorily designated sites are properly protected and managed and their role at the heart of resilient ecological networks is safeguarded;
- safeguard protected species and species of principal importance and existing biodiversity assets from direct, indirect or cumulative adverse impacts that affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water, air and soil, including peat; and
- secure the maintenance and enhancement of ecosystem resilience and resilient ecological networks by improving diversity, extent, condition, and connectivity.

Paragraph 6.4.4 states that biodiversity and ecosystem resilience considerations should be taken into account at an early stage in both development plan preparation and when proposing or considering development proposals. All reasonable steps must be taken to maintain and enhance biodiversity and promote the resilience of ecosystems which should be balanced with the wider economic and social needs of business and local communities. Where adverse effects on biodiversity and ecosystem resilience cannot be avoided, minimised or mitigated/restored, and as a last resort compensated for, it will be necessary to refuse planning permission.

Paragraph 6.4.5 states that planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions, and that development should not cause any significant loss of habitats or populations of species (not including non-native invasive species), locally or nationally and must work alongside nature and it must provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems. A net benefit for biodiversity is the concept that development should leave biodiversity and the resilience of ecosystems in a significantly better state than before, through securing immediate and long-term, measurable and demonstrable benefit, primarily on or immediately adjacent to the site. The step-wise approach outlined below is the means of demonstrating the steps which have been taken towards securing a net benefit for biodiversity. Planning authorities must also take account of and promote the resilience of ecosystems, in particular the following attributes, known as the DECCA Framework. The diversity between and within ecosystems; the extent or scale of ecosystems; the condition and connections between and within ecosystems and the adaptability of ecosystems must be taken into account.

Paragraph 6.4.6 states that planning authorities must also have regard to the list of habitats and species of principal importance under Section 7 of the Environment (Wales Act 2016, the SoNaRR and Area Statement published by NRW and Section 6 of the Environment (Wales) Act).

Paragraph 6.4.8 states that a proactive and creative approach towards facilitating the delivery of biodiversity and ecosystem resilience outcomes is to be taken in accordance with Section 6 of the Environment (Wales) Act. Taking reasonable steps to maintain and enhance biodiversity in the exercise of their function at plan level and coordinated across regions and sub-regions. The step-wise approach will help decision makers in securing net benefit in biodiversity, with the onus on developers to bring forward proposal in a way which will achieve a net benefit for biodiversity using the step wise approach (refer to Figure 12).

Paragraph 6.4.9 states collaborative arrangements will be required to identify, capture and monitor net benefits for biodiversity across larger areas.

Paragraph 6.4.10 states that the broad framework for implementing the Section 6 Duty, securing net benefit for biodiversity and building resilience through the planning system included addressing the following attributes – Diversity, Extent, Condition, Connectivity and Adaptability to change.

Paragraph 6.4.11 and 6.4.15 states that planning authorities must follow the step-wise approach to maintain and enhance biodiversity, build resilient ecological networks and deliver net benefits for biodiversity by ensuring any adverse environmental effects are firstly avoided, then

minimized, mitigated and as a last resort compensated for. Enhancement delivering a biodiversity benefit to be secured primarily on site or immediately adjacent to the site over and above that required to mitigate or compensate for any negative impact. Proposals in statutory designated sites are, as a matter of principle, unacceptable and must be excluded from site searches. This principle also extends to protected species and habitats which are irreplaceable and must be safeguarded. Each stage of the step-wise approach must be accompanied by a long term management plan of agreed and appropriate avoidance, minimization, mitigation/restoration and compensation measures alongside the agreed enhancements measures.

Paragraph 6.4.12 states that evidence must be provided in the Green Infrastructure Statement that the step-wise approach has been followed, providing a scheme of enhancements to ensure a net benefit for biodiversity.

Paragraph 6.4.13 states that development proposals must demonstrate how attributes of resilience and connectivity will be improved, as far as this is reasonably practical.

Paragraph 6.4.16 states that pre-application surveys, research and data searches by developers will be necessary to establish the baseline state of biodiversity and ecosystem resilience on site. Potential applicants should not conduct any pre-emptive site clearance work before submitting a planning application. In such cases, habitat status will be presumed to be good in the absence of any evidence to the contrary.

Paragraph 6.4.17 where sites are already allocated in an adopted development plan it may not be possible to following the step-wise approach in a sequential way. However, when plans are to be reviewed then allocations should be considered afresh against the step-wise policy and the present biodiversity condition and role in enhancing ecosystem resilience.

Paragraph 6.4.18 – 6.4.23 states that all designated sites must be able to continue to protect the biodiversity and features for which they were designated and contribute to the resilience of ecosystems at the appropriate scale. This ability should not be compromised by inappropriate development or other activity. Statutorily designated sites must be protected from damage and deterioration, with their important features conserved and enhanced by appropriate management. The contribution of the designated site to wider resilient ecological networks should be recognised and captured as part of a strategic approach to planning policy and decision making. Planning authorities should consider opportunities to restore networks of habitats to a healthy condition identified as a result of undertaking the Green Infrastructure Assessment.

Paragraph 6.4.21 states 'Planning authorities must follow a step-wise approach to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort compensated for; enhancement must be secured wherever possible'.

Paragraph 6.4.34 states that where peat is identified within proposed developments considerable weight should be given to its protection.

Paragraph 6.4.35 states that statutorily protected species protected under European or UK legislation, or under Section 7 of the Environment (Wales) Act 2016 are material considerations if a development would result in disturbance or harm to the species or its habitat, and the range and population of the species should be sustained.

Paragraphs 6.4.37 – 6.4.43 also gives emphasis to the importance of trees, hedgerows, groups of trees and areas of woodlands. Planning authorities must promote the planting of new trees, hedgerows, groups of trees and areas of woodland as part of new development. Replacement planting shall be at a ratio of at least 3 trees of a similar type and compensatory size planted for every 1 lost. Where a woodland or a shelterbelt area is lost the planting rate must be at a minimum of 1600 trees per hectare for broadleaves, and 2500 trees per hectare for conifers.

Paragraph 6.4.44 states that ancient woodland and semi-natural woodlands and individual ancient, veteran and heritage trees and ancient hedgerows are irreplaceable natural resources, and have significant landscape, biodiversity and cultural value. Such trees, woodlands and hedgerows are to be afforded protection from development which would result in their loss or deterioration unless very exceptionally there are significant and clearly defined public benefits; this protection must prevent potentially damaging operations and their unnecessary loss. In the case of a site recorded on the Ancient Woodland Inventory, authorities should consider the advice of NRW.'

Related to these Biodiversity and Ecological Network policies, Section 6.2 gives weight to the protection and enhancement of multi-functional green infrastructure, which is important for sustainable management of natural resources. Green infrastructure should be incorporated into development through appropriate site selection and use of creative design.

Circular Letter CL-05-04 reaffirmed the Welsh Government's commitment to ensuring that designated sites and species of nature conservation importance are protected from damage and deterioration, with their important features conserved by appropriate management. The letter advised that under specific circumstances a pre-commencement condition should be attached to planning consents requiring the applicant to provide the LPA with a copy or their European Protected Species (EPS) Licence (once issued by NRW). The Circular Letter was withdrawn in March 2018 in an attempt to reduce the number of pre-commencement conditions, with LPA's advised to instead use a replacement informative (to be attached to all relevant consent notices) to avoid unnecessary duplication controls of other legislation.

DENBIGHSHIRE COUNTY COUNCIL, LOCAL DEVELOPMENT PLAN, 2006 – 2021, Adopted June 2013	
Policy VOE 5 – Conservation of natural resources.	Development proposals that may have an impact on protected species or designated sites of nature conservation will be required to be supported by a biodiversity statement which must have regard to the County biodiversity aspiration for conservation, enhancement and restoration of habitats and species. Where the overall benefits of a development outweigh the conservation interest of a locally protected nature site, mitigation and enhancement measures in or adjacent to these sites should be an integral part of the scheme. If necessary, measures required to mitigate likely adverse effects on the qualifying features of statutory designated sites should be put in place prior to the commencement of development. Measures required to offset any likely adverse effects will be secured by planning conditions and/ or planning obligations. Planning permission will not be granted for development proposals that are likely to cause significant harm to the qualifying features of internationally and nationally designated sites of nature conservation, priority habitats,

	priority species, regionally important geodiversity sites, or to species that are under threat.

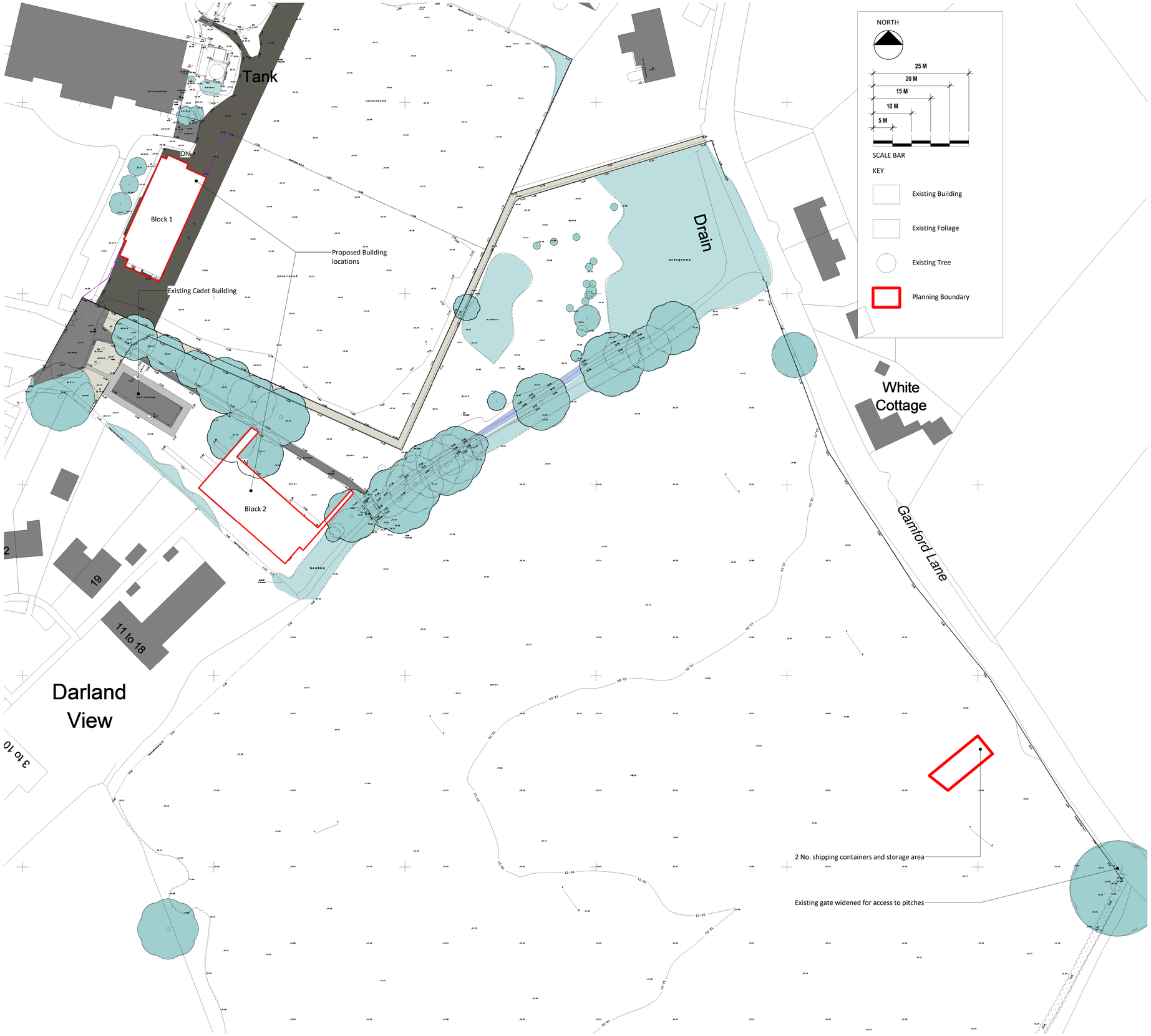
APPENDIX C: SITE PHOTOGRAPHS AND DESCRIPTIONS

Description	Site Photographs
"Block 1" – developed land sealed surface bordered by modified grassland	
"Block 2" – artificial unvegetated unsealed surface surrounded by other neutral grassland and scattered trees	

“Groundskeeper Building” – modified grassland	
Adjacent hedgerow, the associated ditch is located behind the hedgerow	

APPENDIX D: WYA-AFL-ZZ-ZZ-DR-A-20005 – WREXHAM ACADEMY – SITE PLAN REV P03

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1 **Site Plan - Planning**
1 : 500

NOTES
All dimensions and levels to be checked on site

Any descrepancies are to be reported to the Architect before any work commences

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rev no.	rev date	rev by	description
P03	02.10.2024	WR	REVISED PLANNING
P02	02.08.2024	WR	PLANNING ISSUE
P01	19.07.2024	WR	DRAFT PLANNING ISSUE

project
Wrexham Youth Academy

location
Darland High School

Employer
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key plan

drawing title
Wrexham Academy - Site Plan

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