

Cynllun Datblygu Lleol Sir y Fflint 2015-2030

Datganiad Tir Cyffredin
HN1.9 Ffordd Wrecsam, yr Hôb

Chwefror 2021

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Atodiad 1 Adroddiad Ecolegol Pellach Hyd 2019

1. Cyflwyniad

1.1 Paratowyd y Datganiad Tir Cyffredin (DTC) hwn gan Gyngor Sir y Fflint (CSyFf) ar y cyd â'r asiant dros y tîrfeddiannwr. Fe'i paratowyd i gynorthwyo ac i fod yn sail o wybodaeth i Archwiliad Cynllun Datblygu Lleol (CDLI) Sir y Fflint yng nghyswllt y dyraniad tai HN1.8 Ffordd Wrecsam, HCAC. Pwrpas y ddogfen yw pennu'r materion y cytunwyd arnynt rhwng y partion yn ogystal ag unrhyw faterion sydd eto i'w datrys.

2. Cyd-destun y Safle

2.1 Mae'r safle ar ochr orllewinol yr A541 Ffordd Wrecsam yn Abermorddu sef un o bedwar anheddiad, sydd gyda'i gilydd yn ffurfio Canolfan Wasanaeth Leol Haen 2 Yr Hôb / Caergwrle / Abermorddu / Cefn y Bedd (HCAC). Mae'n ffinio a datblygiad tai ac Ysgol Abermorddu i'r de ac y mae gyferbyn â datblygiad tai ar hyd ochr ddwyreiniol yr A541. Ochr orllewinol y safle yw llethrau isaf Mynydd yr Hôb. Mae'r safle yn 3.5ha o dir a gyflwynwyd fel darpar-safle HCAC004.

3. Statws Cynllunio Cyfredol

3.1 Yng Nghynllun Datblygu Unedol (CDU) Sir y Fflint a fabwysiadwyd, mae'r safle y tu allan i ffin anheddiad HCAC, ond yn ffinio ag ef. Fodd bynnag, argymhellwyd neilltuo'r safle yn Adroddiad Arolygydd y CDU, ond ni chafodd ei chynnwys yn y CDU a fabwysiadwyd.

3.2 Rhoddwyd caniatâd cynllunio (052895) ar 12/01/15 am fynedfa gerbydau i Ffordd Wrecsam. Cafodd cais cynllunio amlinellol am hyd at 80 o anheddau ei dynnu'n ôl ar 24/08/18.

4. Cefndir ac Astudiaethau Technegol

4.1 Sail o wybodaeth i neilltuo'r safle yw nifer o Astudiaethau Cefndir a Thechnegol a gynhaliwyd ac a baratowyd gan hyrwyddwyr y safle:

- Dosbarthiad Tir Amaethyddol 2019 [CDLI-EBD-HN1.9.1](#)
- Mantoliad Ecolegol Cychwynnol 2016 [CDLI-EBD-HN1.9.2](#)
- Asesiad Ecolegol Pellach 2016 [CDLI-EBD-HN1.9.3](#)
- Asesiad Ecolegol Pellach 2019 (Atodiad 1)
- Asesiad Canlyniadau Llifogydd 2017 [CDLI-EBD-HN1.9.4](#)
- Adroddiad Modelu Hydrolig 2017 [CDLI-EBD-HN1.9.5](#)
- Strategaeth Draenio Dŵr Wyneb 2017 [CDLI-EBD-HN1.9.6](#)

- Asesiad Tirwedd ac Effaith Gweledol 2017 [CDLI-EBD-HN1.9.7](#)
- Arolwg Topograffig [CDLI-EBD-HN1.9.8](#)
- Asesiad Trafnidiaeth 2017 [CDLI-EBD-HN1.9.9](#)
- Nodyn Technegol Trafnidiaeth 2017 [CDLI-EBD-HN1.9.10](#)
- Arolwg Coed 2016 [CDLI-EBD-HN1.9.11](#)

5. Paramedrau Datblygu

5.1 Neilltuwyd y safle ar gyfer 80 uned, sef dwysedd o 23 uned yr hectar. Mae'r dwysedd is yn adlewyrchu'r angen i osgoi a chlustogi nodweddion ecolegol yn y safle a gerllaw iddi.

5.2 Mae'r safle y tu mewn i Ardal Farchnad Tai Leol Ffin y De fel y'i diffinnir yn Asesiad Marchnad Dai Leol Sir y Fflint sydd, ar y cyd â'r Astudiaeth Hyfywedd, yn mynnu darparu 30% o dai fforddiadwy. Mae Papur Cefndir Tai Fforddiadwy 7 yn nodi y dylid cyflwyno 24 o unedau fforddiadwy ar y safle. O ran maint yr unedau, noda'r Asesiad Marchnad Dai Leol fod 45.6% o'r angen am unedau llai 1-2 gwely, 28.3% am anghenion cyffredinol 3 gwely, 12% am unedau 4 gwely neu fwy, a 14.1% i bobl hŷn.

5.3 Yn unol â chanfyddiadau'r AMDL, dylai'r datblygiad fod â chymysgedd o dai yn ôl math a maint. Mae Tabl 5.7 yr Asesiad Marchnad Dai Leol (Cyfoesiad) yn nodi'r dadansoddiad isod ar gyfer anheddau ar y farchnad agored, sy'n rhoi canllaw i'r gymysgedd debygol o anheddau yn ôl math a maint yn y datblygiad:

Table 5.7 Open market dwelling stock and preferences			
Dwelling type/size summary	% Profile of new dwelling stock based on:		
	Current stock	Like	Expect
House 1/2 Beds	12.7	11.7	20.2
House 3 Beds	43.0	26.2	28.8
House 4 or more Beds	22.3	26.7	17.9
Bungalow	17.2	29.6	24.5
Flat	4.2	5.7	8.2
Other	0.7	0.0	0.3
Total	100.0	100.0	100.0
Base	53,825	8,738	7,628

Source: 2014 Household Survey

6. Llwybr Datblygu

6.1 Cafwyd trafodaethau yn ddiweddar rhwng y tirfeddiannwr a'r asiant er mwyn sicrhau dewis gyda datblygwr o ddewis, Castlegreen Homes Ltd. Yn dilyn derbyn cynnig y datblygwr yn ffurfiol gan y gwerthwr yn gynharach yn 2021, mae'r datblygwr wedi cwblhau trafodaethau cyfreithiol ac wedi brasgopio dogfennau. Y bwriad yw cyflwyno Opsiwn am y tir yn syth.

- 6.2 Mae'r datblygwr wedi llwyr ymrwymo i ddatblygu'r safle rhag blaen. Tir glas yw'r safle, ac nid oes i'r safle unrhyw nodweddion annormal nac amodau fyddai'n atal cychwyn y datblygiad yn gynnar, ar amodau a rhwymedigaethau cyfreithiol. Mae'r datblygwr yn rhagweld y bydd yn cychwyn ar y safle ar ôl i ganiatâd gael ei roi (yn amodol ar ryddhau amodau ac unrhyw rwymedigaethau A106) ac yn anelu at adeiladu'r cynllun yn unol ag amserlen gyflwyno debyg i ddatblygiadau ym Mryn -y-Baal a Phenyffordd.
- 6.3 Mae datblygiad y safle, y gwelir manylion amdano yn y llwybr ym Mhapur Cefndir 10 Cyflenwad Tir ar gyfer Tai, wedi ei newid fymryn fel y gwelir yn yr ail golofn isod (yn unol â Phapur Cefndir diwygiedig y Cyngor, Cyflenwad Tir ar gyfer Tai, a gyflwynir cyn y Sesiynau Archwilio). Y drydedd golofn yw'r nifer y rhagwela'r datblygwr fydd yn cael eu cwblhau, seiliedig ar ei fwriad i gyflwyno cais cynllunio cynnar (yn amodol ar broses y CDLI). Mae'n amlwg fod modd cyflwyno'r safle ar y gyfradd yn llwybr diwygiedig y Cyngor, ac o bosib yn gynt.

Blwyddyn	Nifer i'w Cwblhau	Nifer Diwygiedig i'w Cwblhau	Nifer i'w Cwblhau wedi'i Adolygu gan y Datblygwr
2022-23	23		10
2023-24	30	20	30
2024-25	30	30	30
2025-26		30	13

Ystyria'r datblygwr fod modd cychwyn ar y safle yn 2022, yn amodol ar gadarnhau'r dyraniad yn Adroddiad yr Arolygwr. Rhagwelir y bydd y niferoedd cyntaf i'w cwblhau yn cael eu cofnodi yn Ebrill 2023. Byddai'r rhan fwyaf o'r tai ar y safle wedyn yn cael eu codi dros y ddwy flynedd nesaf, gydag unrhyw rai fyddai'n weddill yn cael eu cwblhau y flwyddyn wedyn. Efallai, gyda chyfradd gyflymach o adeiladu, y bydd y datblygiad wedi'i gwblhau cyn 2025-26. Hyd yn oed a chaniatáu am rywfaint o lithriad, mae'n rhagfynegiad rhesymol y byddai'r datblygiad cyfan yn cael ei gyflwyno ymhen 5 mlynedd o fabwysiadu'r CDLI.

7. Seilwaith

Priffyrdd

- 7.1 Bydd modd cyrraedd datblygiad y safle oddi ar Ffordd Wrecsam trwy un ffordd i gerbydau.

Cysylltiadau â Theithio Llesol / Cludiant Cyhoeddus

- 7.2 Dylai'r datblygiad dderbyn cysyniadau Teithio Llesol. Mae Map Teithio Llesol 'De' y Cyngor ac Atodlenni'r Map Rhwydwaith Integredig yn nodi llwybr strategol 'F9' sy'n rhedeg o'r Wyddgrug i Wrecsam er y cyfeirir at hwn fel 'Angen astudiaeth dichonoldeb. Ni ddiffinnir yr union lwybr' ac y mae wedi ei raglennu fel llwybr at y tymor hwy. Mae cynigion yn yr Atodlen MRhI (HOP1) i wella cysylltiadau rhwng Caergwrle a'r Hôb via Lôn Sarn a darparu cyswllt â'r llwybr mwy strategol (F8) sy'n cysylltu Penyffordd – Yr Hôb – Llai. Dylai'r datblygiad ymgorffori llwybrau cerdded a beicio sy'n hwyluso cysylltiadau gyda'r ysgol gerllaw a chyda gwasanaethau a chyfleusterau lleol, a gwella cysylltiadau â'r llwybrau Teithio Llesol.

Addysg

- 7.3 Mae'r Cynllun Seilwaith (Papur Cefndir CDLI03) yn rhoi sylwadau am Addysg. Nid yw'r Awdurdod Addysg Lleol wedi gwrthwynebu'r datblygiad arfaethedig yn ffurfiol. Mae'r CDLI yn dal ymlaen â'r agwedd a fabwysiadwyd yn y CDU a'r SPG23 presennol Cyfraniad y Datblygwr at Addysg o ran ceisio cyfraniadau ariannol lle mae datblygiadau newydd yn rhoi pwysau ar lefydd yn yr ysgolion sydd yno eisoes. Trwy ddefnyddio'r fethodoleg hon, bydd yr Awdurdod Addysg Lleol yn y man yn mynnu cyfraniad ariannol o £199,789 i Ysgol Gynradd Sirol Abermorddu a £258,566 i Ysgol Uwchradd Castell Alun. Fodd bynnag, bydd angen adolygu hyn yng ngoleuni gwybodaeth gyfoes adeg y cais cynllunio.

Mannau Agored Cyhoeddus / Seilwaith Gwyrdd

- 7.4 Bydd y datblygwr yn cyflwyno fframwaith seilwaith gwyrdd o ansawdd uchel i'r safle, sef:
- 4,200, msg o fan chwarae a hamdden gan gynnwys:
 - Ardal chwarae gyda chyfarpar
 - Arwyddion / seddi / byrddau picnic / biniau sbwriel
 - Naill ai ar ei ben ei hun neu wedi cyfuno gyda man chwarae Llŷs Clark sydd yno eisoes
 - Tirweddu strwythurol
 - Cadw llwybr deniadol i gerddwyr trwy'r safle, fel bod modd cyrraedd llethrau'r bryn.

8. Materion Eraill

Creu Lleoedd

- 8.1 Dylai'r datblygiad dderbyn yr egwyddorion Creu Lleoedd a ymgorfforir yn PPW10 er mwyn cyflwyno amgylchedd byw cynaliadwy o safon uchel.

Cynllun Dangosol

- 8.2 Yr oedd y cais cynllunio blaenorol yn cynnwys cynllun dangosol o'r safle, ond edrychir ar hwn eto yng ngoleuni asesiad ecolegol mwy diweddar.
- 8.3 Mae'r datblygwr yn gweithio ar gynllun meistr a chynllun wedi'u cyfoesi ar gyfer y safle. Bydd hyn yn cynnwys cynllun meistr a chynllun diwygiedig, a ddylunnir i gymryd i ystyriaeth y cyd-destun lleol ac adroddiadau technegol. Nid oes fersiwn derfynol ar gael eto, ond mae'n adeiladu ar y cais cynllunio blaenorol am y safle a'r sylwadau a dderbyniwyd gan y sawl yr ymgynghorwyd â hwy yn statudol.
- 8.4 Mae'r datblygwr yn cydnabod fod ffin orllewinol y safle yn cynnig ardal ddeniadol o ofod gwyrdd y gellir ei ddefnyddio ynghylch ei nodweddion topograffig ac ecolegol anarferol. Y cynnig felly yw cadw clustog ecolegol rhwng y datblygiad a'r ymyl orllewinol, gan greu man agored cyhoeddus y bydd modd ei ddefnyddio; bydd yn aros ar agor ac yn hygyrch i bawb pan gwblheir y datblygiad.

Sŵn

- 8.2 Cynhelir arolwg sŵn i bennu mesurau lliniaru sŵn ar gyfer y safle ac anheddau unigol.

Strategaeth Draenio Cynaliadwy (SuDS)

- 8.4 Bydd angen agwedd seiliedig ar SuDs at ddraeniad dŵr wyneb y safle, yn unol â Deddf Rheoli Llifddwr 2010. Dylid dylunio'r cynllun yn unol â'r Safonau SuDS Statudol a dylai allu cael ei fabwysiadu gan y Corff Cymeradwyo SuDS (CCS), sef CSyFf.

Ecoleg

- 8.5 Ar ffin ogleddol a gorllewinol y safle, mae safle bywyd gwyllt Caeau Abermorddu. Ar y safle a neilltuwyd, mae glaswelltir wedi ei led-wella a heb ei wella o werth ecolegol, gyda gwrychoedd hynafol o ordyfiant sydd yn gyfoethog o ran rhywogaethau, a dwy ffrwd sy'n uno yng nghornel dde-orllewinol y coetir gwlyb ac yn llifo at y ffin ddeddwreiniol. Dylai'r datblygiad gadw a chryfhau perthi a choed sydd yno eisoes, lle

bo modd, gan eu bod yn nodweddion ecolegol a thirweddol Lle nad oes modd osgoi colli'r nodweddion hyn, bydd angen plannu i wneud iawn am hynny. Wrth ddatblygu'r safle, bydd angen clustogi a gwarchod y Safle Bywyd Gwyllt gerllaw a'r glaswelltir cyfoethog ei rywogaethau yn ogystal â'r ffrydiau a'r ardal gorsiog. Mae'r Mantoliadau Ecolegol cynharach ac Asesiad Ecolegol mwy diweddar (Hydref 2019 - Atodiad 1 [a adawyd allan trwy amryfusedd o ddogfennau'r Cyflwyniad]) yn sail i lunio agwedd o gynllun meistr at gynllun y safle sydd yn cwmpasu mesurau osgoi a lliniaru priodol. Bydd hyrwyddwr y safle yn parhau i weithio gydag Ecolegydd y Cyngor i ddyfeisio cynllun a fydd, yn gyffredinol, yn cyfoethogi bioamrywiaeth ar y safle.

Coed

- 8.6 Bydd angen cadw a gwarchod y coed aeddfed ar y safle. Dylid cadw perthi hefyd, ond lle mae angen eu symud, dylid ail-blannu gan ddefnyddio rhywogaethau brodorol. Mae mwy o gyngor yn yr SPG4 a fabwysiadwyd Coed a Datblygiad.

Parcio

- 8.7 Dylid gwneud darpariaeth barcio yn y datblygiad yn unol â'r safonau parcio cyfredol yn SPG11 Safonau Parcio.

Gofod o Gwmpas Anheddau

- 8.8 Bydd y datblygiad yn sicrhau bod digon o ofod rhwng anheddau presennol a rhai arfaethedig, a digon o lefydd amwynder preifat mewn anheddau yn unol â'r SPG2 presennol Gofod o Gwmpas Anheddau er mwyn sicrhau y sefydlir safonau byw neu amwynder digonol.

9. Casgliad

- 9.1 Mae'r Cyngor a'r tirfeddiannwr yn ystyried bod y dyraniad yn gynaliadwy, hyfyw a bod modd ei gyflawni.

Andrew Roberts Andrew Roberts, Rheolwr Gwasanaeth Strategaeth, Cyfarwyddiaeth
Amgylchedd, CSyFf 19/02/21



Nial Casselden, Fisher German, Asiant ar ran y Tirfeddianwyr

19/02/21



Land at Wrexham Road, Abermorddu

Further Ecological Assessment

Reptile, Breeding Bird and Botanical Survey

7th October 2019

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1 Introduction

1.1 Background

Kingdom Ecology have carried out further ecological surveys of an area of agricultural land located on the western edge of the village of Abermorddu near Wrexham. The further surveys have been completed to build upon the findings of initial ecology surveys carried out at the site January-July 2016.

Further surveys undertaken in 2019 have comprised of reptile surveys, update badger surveys, bird survey and further botanical surveys of grassland habitats at the site.

Surveys previously undertaken at the site in 2016 have included an initial site walkover survey/phase 1 habitat survey plus presence/absence survey of a pond located within 500m of the site using egg search, torch, bottle trap and eDNA techniques plus a suite of bat activity surveys.

Further field surveys have been carried out from March to July 2019. Surveys were carried out by Richard Roe (BSc, MSc, MIEEM, CEnv). Richard has extensive experience of undertaking habitat and protected species surveys as a professional ecological consultant with over eighteen years' experience.

1.2 Purpose of Report

This report provides and outlines the findings of the additional reptile surveys, badger, bird survey and further botanical surveys carried out at the site in 2019.

The report evaluates the conservation importance of identified species assemblages, identifies habitat features within the site which may be of importance to the species concerned and goes on to make recommendations for further works, mitigation and additional ecological enhancement measures where relevant.

1.3 Protected Species Legislation

1.3.1 Badgers

Badgers are afforded protection under the Protection of Badgers Act (PBA) 1992; this act was introduced on welfare grounds. The Act is based primarily on the need to protect badgers from baiting and deliberate harm or injury. Badgers are not considered to be a species of any conservation concern. However the Act contains restrictions that apply more widely and can have implications where badgers and development come into conflict.

All the following are considered criminal offences:

- to wilfully kill, injure, take, possess or cruelly ill-treat a badger;
- to attempt to do so; or
- to intentionally or recklessly interfere with a sett.

Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. It is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the sett is not damaged or obstructed.

1.3.2 Birds

All wild birds in England and Wales are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird, or take, damage or destroy the nest (whilst being built or in use) or its eggs.

1.3.3 Reptiles

All native reptiles are protected in the UK under the Wildlife and Countryside Act 1981 (as amended). The law makes it an offence to intentionally kill, injure, sell or advertise to sell any of the six native species.

The smooth snake and the sand lizard are afforded further protection under the 1981 Act, by making it an offence, to possess, handle, capture or disturb them.

1.3.4 Environment (Wales) Act 2016

Section 6 of the Environment (Wales) Act 2016 places a legal obligation on public bodies in Wales to 'maintain and enhance biodiversity' whilst carrying out their functions.

Section 7 of that Act requires Welsh Ministers to publish and maintain lists of species and types of habitats in Wales that are regarded as of 'principal importance' for the purpose of maintaining and enhancing that biodiversity.

This section of the Act replaces the biodiversity duty originally outlined in Section 42 of the NERC Act 2006.

The presence at any proposed development site, of any priority habitat or priority species identified on these lists is of importance within the local authority planning process.

2 Field Survey Methods

2.1 Survey Aims and Objectives

Further field surveys have been carried out in 2019 to:

- to determine whether the site supports a significant reptile population (common reptiles have been recorded within habitats within the wider locality)
- confirm the continued absence of badger setts from the site;
- determine and assess bird assemblages using woodland and scrub habitats within the site and around the site boundaries;
- to further appraise the botanical value of grassland habitats at the site.

These field surveys were largely undertaken in conjunction with one another with the badger, reptile, breeding bird and botanical surveys carried out at the same time over multiple site visits. Methodologies for each of these assessments are provided below.

The findings of the assessments will be used to inform the proposed layout of new housing at the site and to inform any further ecological mitigation/compensation measures.

2.2 Further Surveys

2.2.1 Reptiles

Reptile surveys were carried out during the 2019 field season comprising of artificial refugia searches and visual surveys. Surveys were carried out following methods described in the Herpetofauna Workers' Manual (JNCC, 2003) and Froglife Advice Sheet 10, 'Reptile Surveys' (Froglife 1999).

Artificial Refugia Survey

Reptiles must bask in the morning and evening before becoming active. Artificial refugia surveys take advantage of this need by providing artificial basking and sheltering habitat. The artificial refugia used for this survey comprised of black corrugated roofing sheets measuring 0.5m x 0.5m.

50 artificial refugia were deployed on the 30th March 2019 in suitable locations and habitats across the site. The survey focused on boundary habitats with refugia deployed alongside a drainage ditch and scrub along the eastern boundary and on the edges of scrub habitats located around the northern and western boundaries of the site. These locations offered suitable basking locations adjacent to suitable areas of cover.

The refugia were allowed to bed down for 1 week before being checked for the presence of reptiles. The refugia survey was carried out between 08:00-11:00 and 16:00-20:00. Survey was carried out on 7 dates from the 6th April up until the 25th May 2019. Survey took place during periods of sunshine with temperatures recorded between 12 and 16°C. Survey avoided taking place during wet or windy weather conditions.

Visual Survey

Visual surveys were undertaken in conjunction with and in addition to the artificial refugia checks. These surveys involved slowly walking across the study area during suitable weather conditions, watching for basking reptiles and searching beneath other refugia such as logs, stones, discarded corrugated sheeting etc for sheltering reptiles.

2.2.2 Badger Assessment

The site boundaries of the site were repeatedly walked as part of the further ecological site visits carried out March-May 2019.

All linear features such as hedgerows, fence lines and drainage ditches were and searched for evidence of badgers. Suitable sett habitat such as scrub and woodland were also actively searched for badger field signs, where accessible. Badger field signs include prints, latrines, foraging signs, snagged hair or badger setts.

2.2.3 Breeding Bird Assessment

Bird surveys were undertaken in conjunction with the reptile surveys, therefore the surveys were carried out mid-morning and early evening. Eight survey visits were undertaken in total between the 30th March and the 25th May 2019. Surveys were carried out under suitable calm, dry weather conditions with unrestricted visibility.

The surveys comprised of walked transects around the boundaries of the site.

Observations of birds within and adjacent to the site comprising of song, call or sighting were recorded and were marked on a habitat map of the site. The surveyor was aided with binoculars.

From the survey data, a list of bird species recorded at the site was drawn up along with an evaluation regarding the value of various habitats at the site for the bird assemblages present.

2.2.4 Further Botanical Assessment

Habitats recorded during the original 2016 surveys were revisited during the April/May 2019 site visits with a further visit undertaken in mid-August. The survey produced an updated botanical description of key habitats. This assessment focused on the grassland habitats at the site.

3 Results

3.1 Site Description

The study area is located adjacent to Wrexham Road on the western edge of the village of Abermorddu, near Wrexham, LL12 9DG (Ordnance Survey Grid SJ 308568). The site measures approximately 3.5ha in area.

Wrexham Road runs along the eastern boundary of the site. The playing fields of Abermorddu CP School are located immediately to the south of the site. Further agricultural land lies to the north and west of the site. A small unnamed brook flows along part of the site's western boundary and passes through the site.

The site largely comprises of two grassland fields with associated boundary features. The site slopes down from the west towards Wrexham Road on the site's eastern boundary.

The site is managed as grazed pastureland but is also used regularly by local dog walkers.

Wider habitats comprise of the village of Abermorddu and further pasture. The River Alyn is located approximately 300m to the east of the study site. The site location is shown on Figure 1 in the Appendix.

3.1.1 Caeau Abermorddu Local Wildlife Site

The non-statutory designated Caeau Abermorddu Local Wildlife Site (LWS) runs along the western and northern boundary of the study site with a small part of the LWS located within the study site itself (See Figure 1).

The LWS is 4ha in size and has been designated for the habitats present which include pasture/meadow, marsh, scrub and wet woodland.

The complete site description is as follows:

'Elongated, narrow site along a hillside with semi-improved acid grassland, marshy grassland, wet woodland and semi-improved neutral grassland. The marshy grassland at the bottom of the slope next to the Wrexham Road is dominated by sharp-flowered rush, creeping bent, lesser pond sedge, Yorkshire fog with oval sedge and ragged robin. Above this marshy grassland is a slope with acid grassland dominated by common bent and frequent heath bedstraw, bitter vetch, creeping soft grass, sweet vernal-grass and sheep's fescue. The small patch of alder dominated woodland comprises elder and holly in the shrub layer and yellow archangel, opposite-leaved golden saxifrage, bramble and meadowsweet. Next to the wood is a stand of blackthorn scrub. At the southern end of the site is a semi-improved neutral grassland with cat's-ear, black knapweed, autumn hawkbit, harebell, mouse-ear hawkbit, ribwort plantain and sweet vernal-grass'.

3.2 Field Survey

3.2.1 Reptile Survey

Surveys were undertaken on various dates between the 30th March and the 28th May 2019. Survey dates and conditions for each survey date are provided in Table 1 in the Appendix.

50 reptile refugia were deployed on the scrub/grassland interfaces around the site boundaries (refugia locations shown on Figure 3 in the Appendix) In summary, no reptiles were recorded at the site whatsoever. Small numbers of toads (maximum count of 4 toads on the 6th and 16th May 2019) were infrequently recorded under the reptile mats.

Habitats at the site are not considered to be of optimal value for reptiles. The bulk of the site comprises of open, closely grazed pasture however suitable refuge habitat is offered within scrub habitats around the fringes of the site with suitable basking location offered near the scrub/grassland interfaces.

3.2.2 Badgers

No badger setts or badger field signs were identified during the site survey.

3.2.3 Bird Survey

Bird surveys were undertaken in conjunction with the deployment of reptile mats and the completion of reptile surveys.

Thirty bird species were recorded at the site or passing through the site. Recorded species and the habitats in which they were identified are shown in Table 2 in Appendix.

Usage of habitats at the site can be summarised as follows:

- The open grassland habitats at the site offer limited nesting or refuge habitat however these areas were occasionally used by foraging corvids and starlings.
- The housing along Wrexham Road supports several colonies of house sparrow. House sparrows were observed to regularly use the hedgerow and bramble scrub habitats along Wrexham Road as well as intermittently using other areas of scrub/trees at the site boundaries and along the central watercourse.
- The tall woody scrub around the site's northern and western boundaries was used by a variety of birds including several warbler species (black cap, chiffchaff, lesser white throat and whitethroat). Displaying males were recorded on multiple survey visits suggesting that these species are likely to be breeding within these habitats. The boundary scrub plus the block of woodland on the western boundary are considered to be the features of greatest value to breeding birds at the site.

- The woodland along the site's western boundary supports common woodland bird species including green woodpecker, chiffchaff, blackcap and Treecreeper.
- The wooded stream that passes through the centre of the site supports common woodland/garden bird species.
- Robin, blackbird, wren, dunnock and common tits were ubiquitously recorded within scrub and hedgerow habitats at the site.

3.2.4 Further Botanical Survey

Further botanical surveys of the grassland habitats were undertaken in conjunction with the other field surveys completed at the site. This allowed species to be recorded in mid-Spring through to early summer. An additional visit to the site was also undertaken in August 2019.

The site comprises of a large open grassland field which occupies the central, northern and eastern parts of the site (Target Note 1 on Figure 2). A smaller pasture field is located in the site's southwest corner and is divided from the remaining larger field by a tree-lined brook (Target Note 2 on Figure 2).

The land slopes down from the west towards Wrexham Road, with an area of wetter ground near the northeast corner of the site (Target Note 3). The site is currently grazed by a small herd of cattle (10-15 animals).

The grassland habitats are considered to be relatively species-rich albeit heavily grazed. With the greatest richness considered to be within the northern half of the large pasture field (Target Note 1) where plant species present within the dry grassland habitats in the adjacent Local Wildlife Site (LWS) have extended into the study site itself.

The dry, neutral grassland within the adjacent LWS (Target Note 5) includes frequent sweet vernal grass, red fescue, field wood-rush, pignut, bulbous buttercup and bluebell with occasional, rough meadow-grass, soft brome, cock's foot and soft meadow-grass.

Within the study site, the grassland species within the larger north field (Target Note 1) are similar in composition to the unimproved neutral grassland present within the LWS albeit less diverse and more intensively grazed.

The grassland at Target Note 1 comprises of frequent Yorkshire fog, creeping bent, sweet vernal grass and rough meadow grass with occasional red fescue, field wood-rush, soft brome, crested dog's tail and cock's foot. Sedges and rushes are more frequent within the wetter eastern half of the field and include occasional common yellow sedge, oval sedge, hairy sedge, soft rush, and hard rush.

Forbs present within the grassland include frequent marsh thistle, tormentil, common sorrel and creeping buttercup plus occasional germander speedwell, bird's foot trefoil, yarrow, red clover, white clover, common mouse-ear, pignut, cuckoo flower, bluebell, bulbous buttercup, meadow buttercup, common ragwort, broadleaved dock and creeping thistle.

There is a small area of marshy grassland habitat located at the north east corner of the site (Target Note 3) which supports frequent tufted hair-grass, creeping buttercup, Yorkshire fog, meadow sweet, marsh thistle with occasional cuckoo flower, marsh valerian, sharp flowered rush and soft rush.

The smaller field at the southwest corner of the site (Target Note 2) supports a greater frequency of species indicative of agricultural improvement with perennial rye-grass found throughout and fewer forbs with rare red clover, common sorrel, meadow buttercup and bulbous buttercup. This field is more intensively grazed than elsewhere at the site.

Between the small field and Wrexham Road, the grassland supports a greater density of ruderal herbs with frequent creeping thistle plus common ragwort and broadleaved dock (Target Note 4). There are larger stands of encroaching bramble scrub with nettle which has developed alongside the adjacent stream, and the eastern hedgerow.

Recorded habitats are shown on Figure 2 in the Appendix. Photographs of the grassland habitats are also shown in the Appendix.

An additional species list for the site has been provided by Amanda Davies of Flintshire County Council. This list includes species recorded at the site in 2011 and 2018. The 2018 species list is comparable with the species recorded in 2019. A copy of the 2018 species list is provided in Table 3 in the Appendix.

4 Summary and Recommendations

4.1 Summary and Evaluation

4.1.1 Badgers

No evidence of badger has been recorded at the site during either the 2016 or 2019 surveys. Nevertheless, badgers are known to be present in the surrounding countryside.

It is recommended that further badger sett surveys are conducted immediately in advance of any development of the site.

4.1.2 Reptiles

The reptile survey did not identify any reptiles at the site. As no reptiles were recorded, it is considered unlikely that a significant population of reptiles is present. However, small numbers of reptiles may occasionally use habitats at the site.

The adjacent LWS supports good quality reptile habitat within areas of marsh, south facing slopes, bracken and less intensively grazed grassland. Therefore, any reptiles within the adjacent LWS could occasional use habitats around the edges of the study site albeit in low numbers.

4.1.3 Breeding Birds

Birds recorded at the site were generally commonly occurring woodland and garden bird species however some birds listed as Birds of Conservation Concern (BoCC) were recorded at the site. This included house sparrow, starling and song thrush on the BoCC Red List; plus dunnock, mallard, swift and tree creeper recorded from the BoCC amber list.

The site is considered to support a moderately diverse range of relatively common bird species which are likely to breed and forage within habitats at the site.

Habitats of greatest value are considered to be the scrub, woodland and hedgerow habitats around the site's boundaries.

4.1.4 Further Botanical Surveys

The grassland habitats are considered to be relatively species-rich albeit with some organic enrichment due to cattle grazing. The greatest species richness is considered to be within the northern half of the larger pasture field at the site (Target Note 1) where plant species present within the adjacent Local Wildlife Site extend into the study site itself.

The grasslands are considered to grade from high-quality, unimproved neutral grassland within the adjacent Local Wildlife Site, through to moderately diverse semi-improved grassland within the north half of the site, through to species-poor, semi-improved grassland habitats at the southwest corner of the site.

4.2 Recommendations

4.2.1 Habitats

It is considered that the grassland habitats within the northern half of the site are those of greatest biodiversity value and that these offer opportunities to provide biodiversity enhancement.

This area of grassland is moderately diverse and has not suffered the ill effects of intensive agriculture. This grassland could be relatively easily restored and managed to provide further unimproved neutral grassland habitats of a similar quality to that offered within the adjacent Local Wildlife Site.

It is recommended that any development seeks to retain a significant area of the ecologically valuable grassland habitats within the northern half of the site and that these are managed to enhance their biodiversity value. The retention and ecological improvement of an appropriate area of land would provide suitable mitigation for the loss of less valuable grassland habitat to any development.

In order to endure the protection and appropriate management of the mitigation grassland, the retained area of habitat could be gifted to the local Wildlife Trust (or other appropriate local conservation organisation) or offered on a long-term lease with the organisation paid a commuted sum at the start of the development to fund the long-term management of the grassland habitats (e.g. to provide a minimum of 30 years of habitat management). This would allow the potential expansion of the adjacent Caeau Abermorddu Local Wildlife Site to encompass the grassland mitigation area.

A suitable habitat management plan would need to be produced for the grassland area. This could be undertaken in collaboration with the potential conservation management organisation and could comprise of managing the field as a hay meadow or allowing low intensity grazing of the field for certain periods of the year.

Other areas of biodiversity value include the boundary features, woodland and scrub along the northern and western boundaries of the site; the hedge, ditch and scrub along the site's eastern boundary with Wrexham Road; and the tree lined brook that runs through the centre of the site.

As well as being of conservation value in their own right, these features provide refuge, breeding and foraging habitat for a variety of local wildlife including a moderately diverse assemblage of common bird species. These features also form an unbroken network of wildlife habitats forming potentially important dispersal corridors around and through the site.

It is recommended that any development seeks to retain these features where practicable with an appropriate buffer area retained between the retained features and any development (including the gardens of any housing).

The proposed development will need to ensure that there are no negative impacts on habitats surrounding the site, particularly within the adjacent Local Wildlife Site.

Potential impacts could include alterations to drainage and hydrology which could impact upon the adjacent wetland habitats immediately to the north of the site.

It is therefore recommended that an appropriate drainage plan is produced. This could include the directing of rain water from building roofs towards the wetland areas and could include the capture and management of untreated water from vehicle driveways and areas of hardstanding to avoid pollution.

Measures should also be put in place to avoid the spread of non-native flora from residential gardens or the inappropriate disposal of garden waste in to areas which could impact the adjacent Local Wildlife Site habitats.

This can be achieved by the careful design of the site layout; maintenance of an appropriate buffer area between key site boundaries and the development and avoiding locating rear gardens of properties directly onto the Wildlife Site or the adjacent buffer area.

Further recommendations have already been provided within previous ecological reports for the site and these are considered to still be appropriate (See Kingdom Ecology Report: '*Land at Wrexham Road, Abermorddu, Further Ecological Assessment (Bat Activity and Great Crested Newt)*, 9 July 2016' and Kingdom Ecology Report: '*Wrexham Road, Abermorddu, Preliminary Ecological Appraisal*, 27 January 2016')

Recommendations within these previous reports include the provision of bat and bird boxes at the site, the timing of vegetation clearance works to avoid the nesting bird season, the retention of appropriate buffers around boundary features, the production of a bat friendly lighting plan and a requirement to undertake further bat assessments of any mature trees should their removal be envisaged.

5 Appendix

Table 1- Survey Dates and Weather Conditions

Visit Date	Temperature °C	Weather
30/03/19	12	Calm, dry, sunny with high cloud.
06/04/19	12	Calm, dry, sunny with high cloud.
09/04/19	12	Light breeze, 50% cloud, sunny spells, dry.
19/4/19	14	Light breeze, sunny, clear, dry.
06/05/19	12	Calm, 50% cloud, sunny spells, dry.
16/05/19	15	Calm, dry, sunny, clear.
25/05/19	16	Light breeze, 60% cloud, sunny spells, dry.
26/05/19	16	Light breeze, 60% cloud, sunny spells, dry.

Table 2- Bird Survey Results

Species	BoCC Status	Where recorded
blackbird		Scrub and woodland habitats
blackcap		Scrub and woodland habitats
blue tit		Scrub habitats
buzzard		Over site
carrion crow		Foraging in grassland
chaffinch		Scrub habitats and along brook
chiffchaff		Scrub habitats
coal tit		Woodland
duncock	Amber	Scrub habitats and bramble
goldcrest		Scrub at north of site
goldfinch		Along brook and east hedge
great tit		Scrub and woodland habitats
green woodpecker		Woodland

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Species	BoCC Status	Where recorded
house sparrow	Red	Mainly in hedgerow on east boundary
jackdaw		Foraging in grassland
Jay		Woodland
lesser whitethroat		Scrub on western boundary
long-tailed tit		Scrub and hedgerow
magpie		Woodland
mallard	Amber	Over site
robin		Scrub and woodland habitats
song thrush	Red	Woodland
sparrow hawk		Over site
starling	Red	Hedgerows on east boundary and foraging in grassland
swallow		Over site
swift	Amber	Over site
tree creeper	Amber	Woodland
whitethroat		Scrub on western boundary
wood pigeon		Scrub and woodland habitats

Table 3- Abermorddu Species List June 2018 (provided by Flintshire County Council)

Latin name	Common name	DAFOR
Grassland plus Ditch and Hedge margins		
<i>Achillea millefolium</i>	Yarrow	O
<i>Acer psuedoplatanus</i>	Sycamore	Hedges
<i>Adjuca reptans</i>	Bugle	R
<i>Agrostis stolonifera</i>	Creeping Bent	F
<i>Angelica sylvestris</i>	angelica	R
<i>Anthoxanthum odoratum</i>	Sweet vernal grass	F
<i>Anthriscus sylvestris</i>	Cow parsley	O
<i>Bromus hordeaceus</i>	Soft Brome	O
<i>Cardamine pratensis</i>	Cuckoo flower	R
<i>Carex hirsuta</i>	Hairy sedge	O
<i>Centaurea nigra</i>	Black knapweed	R
<i>Cerastium fontanum</i>	Mouse eared chickweed	O
<i>Cirsium arvense</i>	Creeping thistle	LF
<i>Cirsium palustris</i>	Marsh thistle	F
<i>Conopodium majus</i>	Pignut	O
<i>Crataegus monogyna</i>	Hawthorn	H
<i>Cynosurus cristatus</i>	Crested dogs tail	R

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Latin name	Common name	DAFOR
<i>Dactylis glomerata</i>	Cocks foot	R
<i>Dryopteris felix maas</i>	Male fern	R
<i>Epilobium hirsutum</i>	Great Willowherb	Ditch
<i>Festuca rubra</i>	Red Fescue	R
<i>Filipendula ulmaria</i>	Meadowsweet	O
<i>Galium aparine</i>	Cleavers	O
<i>Galium palustre</i>	Common Marsh bedstraw	R
<i>Heracleum sphondylium</i>	Hogweed	R
<i>Holcus lanatus</i>	Yorkshire fog	F
<i>Hyacinthoides non scriptus</i>	Bluebell	O
<i>Juncus acutiflorus</i>	Sharp flowered rush	O
<i>Juncus effusus</i>	Soft rush	F
<i>Juncus inflexus</i>	Hard rush	R
<i>Lolium perenne</i>	Ryegrass	Southern Field - A
<i>Lotus corniculatus</i>	Birds foot trefoil	F
<i>Luzula campestris</i>	Field Wood-rush	R
<i>Lychnis flos-cuculi</i>	Ragged robin	R
<i>Mentha aquatica agg</i>	Water mint	D
<i>Poa pratensis</i>	Smooth meadow grass	O
<i>Poa trivialis</i>	Rough meadow grass	F
<i>Plantago lanceolata</i>	Ribwort plantain	O
<i>Potentilla anserina</i>	Silverweed	R
<i>Potentilla erecta</i>	Tormentil	F
<i>Pteridium aquilinum</i>	Bracken	LA
<i>Ranunculus acris</i>	Meadow buttercup	R
<i>Ranunculus bulbosus</i>	Bulbous buttercup	R
<i>Ranunculus repens</i>	Creeping buttercup	F
<i>Rubus fruticosus agg</i>	Bramble	LA
<i>Rumex acetosa</i>	Common sorrel	F
<i>Rumex sanguineus</i>	Wood dock	R
<i>Sambucus nigra</i>	Elder	Hedges
<i>Senecio jacobaea</i>	Ragwort	R
<i>Silene dioica</i>	Red Campion	O
<i>Taraxacum agg</i>	Dandelion	R
<i>Trifolium repens</i>	White clover	O
<i>Trifolium pratense</i>	Red clover	O
<i>Urtica dioica</i>	Stinging nettle	LA
<i>Veronica beccabunga</i>	Brooklime	Ditch
<i>Veronica chamaedrys</i>	Germander speedwell	F
<i>Veronica officinalis</i>	Heath Speedwell	R
Also recorded in 2011		
<i>Lathyrus pratensis</i>	Meadow Vetchling	
<i>Dactylorhiza fuchsii</i>	Common spotted orchid	
<i>Eupatorium cannabinum</i>	Hemp agrimony	
<i>Rhinanthus minor</i>	Yellow rattle	
<i>Stellaria graminea</i>	Lesser Stitchwort	

PHOTOGRAPHS

Photograph 1 - Bluebells at northern half of site grassland looking towards northeast corner of site (May 2019)



Photograph 2- Grassland at southwest corner of Site (May 2019)



Photograph 3 - Grassland and ruderal herb Southeast at corner of site, looking north (August 2019)



Photograph 4- Northern half of Site, looking north (August 2019)



Photograph 5 - Grassland habitats in LWS (May 2019)



Photograph 6- Wetland habitats in adjacent LWS (May 2019)







FIGURE 3- Reptile Survey Extent



Google Earth



Locations of reptile refugia
deployment and survey
transect

