

HAWKESWOOD ECOLOGY

Specialists in Ecological Survey and Assessment

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PRELIMINARY ECOLOGICAL APPRAISAL

LAND AT OLD FOUNDRY LANE, PONTARDAWE

ON BEHALF OF

BLUEFIELD LAND LTD

January 2023

Ref: HE/24/2022 Issue 1

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All habitat and protected species surveys present a ‘snapshot’ of conditions existing and species present, or considered having potential to be present, at the time of survey. Many species are mobile and distributions can vary across time. Results and findings presented in this report should be considered with these factors in mind.

Protected species surveys are recognised as having a ‘shelf life’ of two years maximum in normal circumstances. Surveys older than this are unlikely to be accepted by a Local Planning Authority or Natural Resources Wales as viable documentation without just cause.

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SUMMARY

Hawkeswood Ecology carried out a Preliminary Ecological Appraisal (PEA) on land adjacent to Old Foundry Road, Pontardawe, in 2019 (*Preliminary Ecological Appraisal, Land at Holly Street, Pontardawe. Hawkeswood Ecology – July 2019; Issue 2*) as part of a residential development planning application. A ground based Preliminary Roost Assessment of trees on Site and a reptile presence-absence survey were also undertaken at this time. The Site consisted largely of regenerating vegetation, hard-standing and demolition rubble with a small number of trees adjacent to the canal on the northern boundary of the Site.

Hawkeswood Ecology were asked to update the PEA in December 2022 and a site visit was undertaken in January 2023. The principal aim of the survey update was to assess the Site for any significant changes since the original survey. A walk over survey was undertaken and the bat Tree Roost Assessment was repeated to look for any obvious deterioration in the mature trees which could offer Potential Roost Features.

The main significant change in the Site was the continuing development of woody scrub, with areas dominated by young common gorse (not found in 2019), silver birch, alder and goat willow. Buddleia is also present across the Site and abundant locally.

The Site remains derelict with no existing buildings. The scrub has clearly shaded out some of the earlier ruderal vegetation found on the Site with the understory consisting largely of coarse grasses (though see Constraints). Japanese knotweed remains present throughout with a concentration on the northern boundary adjacent to the canal embankment.

The ground based PRA of trees found no significant changes to the condition of trees on Site although there had been continued ivy growth presenting a denser appearance on some trees compared to 2019. No obvious PRF's could be identified although one tree, a mature oak T3 is still considered to be of high potential to support roosting bats and further survey will be necessary if any works are likely to affect it.

In 2019 a reptile presence absence survey was undertaken which proved negative. At that time it was considered the Site was largely isolated from suitable habitat. It is considered this remains the situation and no further reptile survey is recommended.

It is concluded that with the implementation of appropriate mitigation there remain no apparent ecological reasons that would prevent the proposed development going ahead.

1 INTRODUCTION

- 1.1 Hawkeswood Ecology was instructed to update a Preliminary Ecological Appraisal (PEA) and Provisional Roost Assessment (PRA) on land adjacent to Old Foundry Road, Pontardawe (Grid Reference SN 72492 04088), on behalf of Bluefield Land Ltd. It is proposed to develop the Site for residential purposes.
- 1.2 The Site was originally surveyed in 2019 and reported on as '*Preliminary Ecological Appraisal, Land at Holly Street, Pontardawe. Hawkeswood Ecology – July 2019; Issue 2*'. That survey concluded that with the implementation of appropriate mitigation there were no apparent ecological reasons that would prevent the proposed development going ahead.
- 1.3 The objectives of the current updated assessment are:
 - To assess if there has been any significant change on the Site that would override the initial report conclusions;
 - To re-assess the ecological and nature conservation value of the Site;
 - To re-assess the trees on Site for bat roost potential;
 - To assess the potential ecological impacts of the proposed works;
 - To provide recommendations to mitigate the proposed works.
- 1.4 The Site is bounded on three sides by established residential and industrial developments with the northern boundary adjacent to the Swansea Canal which is identified as a Site of Importance to Nature Conservation (SINC); the canal runs on an embankment at this point and is approximately 3 to 4 metres higher than the Site. The Site is near to the Town centre with the nearest significant open space other than the canal being Pontardawe Recreation park around 250 metres east of the Site from which it is separated by industrial developments.
- 1.4 The walk over and PRA were carried out on 12th January 2023.

2 SURVEYOR EXPERIENCE

- 2.1 The surveyor and report author is Eric Hawkeswood. Eric has many years experience of broad habitat and detailed botanical and species surveying. Eric has been an active member of the Brecknock Bat Group since 1999 and been involved in a number of long running surveys within the county. He extensive experience of protected species survey and is a Natural Resources licensed bat ecologist (S092015-1) and also licensed to undertake dormouse survey. He has been a professional in the nature conservation field for thirty four years formerly working as Reserves Manager and Conservation Officer at Gwent Wildlife Trust and Woodland Manager for the Ruperra Conservation Trust. Eric has worked as an Ecological Consultant as joint proprietor of Hawkeswood Ecology since 2001.

3 METHODOLOGY AND CONSTRAINTS

Desktop Study

- 3.1 The South East Wales Biodiversity Records Centre (SEWBReC) was asked to provide records of Protected and Priority Species, Other Species of Conservation Concern, Locally Important Species, Invasive & Non-Native Species, Designated Sites and Phase I habitats sought from a radius of 1 kilometres of the Site. In reporting, the previous study results are also considered and the recent search considered records added to the list or made since that time.

Preliminary Ecological Appraisal

- 3.2 The Preliminary Ecological Appraisal (PEA) was carried out in line with the guidance issued by The Chartered Institute for Ecology and Environmental Management (2013) and consisted of a walk-over survey of the proposed Site taking into account features within and adjacent to it. However, given the short amount of elapsed time since previous survey and the time the survey was undertaken, a full species list has not been compiled and the survey concentrated on assessing the Site against the previously known condition looking for significant habitat change. Habitats were categorised according to the Phase 1 Habitat Survey guidelines (JNCC, 2010) and the previous Phase 1 Habitat map updated. Site photographs are given in Appendix 1.

Provisional Roost Assessment

- 3.3 Trees previously assessed in 2019 were re-assessed from the ground using binoculars and ladders. An endoscope was also available were safe and feasible. The inspection looked for Potential Roost Features (PRF's) features on the trees that could be used by bats for roosting and shelter and categorised them according to the Bat Conservation Trust 2016 guidelines 'Bat Surveys for Professional Ecologists- Good Practice Guidelines'.
- 3.4 The surveyor noted species, presence of ivy, whether there were cavities, holes or other suitable crevices for bats to roost within, or whether there was any dead wood which may indicate some level of roosting opportunity and attributed an appropriate risk category. The whole Site was searched for any trees that could support roosting bats, however the only trees capable of supporting roosting bats at this time remain the 5 trees assessed in 2019. The bat potential categories are presented in Table 1 below and approximate location of trees assessed shown in Figure 1.

Table 1: Risk Assessment features for bat-roost potential during tree inspection (After *Bat Surveys for Professional Ecologists- Good Practice Guidelines* –Bat Conservation Trust 2016):

Suitability	Roosting	Commuting/Foraging Habitats
Negligible potential	No features likely to be used by roosting bats.	Negligible habitat Features likely to be used by commuting or foraging bats.
Low	Trees with no obvious PRF's to support bats although the size and age may result in limited features that may support bats or only limited features noted in inspection	Suitable habitat but isolated, may be used by small numbers of bats; i.e. isolated tree, small patch of scrub.
Medium	A Tree with one or more PRF's that could be used by bats due to their size, shelter, protection conditions and surrounding habitat but unlikely to support a roost of high conservation status.	Habitat connected to the wider landscape such as trees, water, grassland or scrub.
High	A tree with one or more PRF's that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to size, shelter, protection, conditions and surrounding habitat.	Continuous high-quality habitat connected to the wider landscape likely to be used regularly by commuting and foraging bats. A site near to known roosts.

Notes: PRF's - Potential Roost Features

- 3.5 Evidence such as bat droppings (faeces) was looked for in holes where possible and at the base of the trees, and any holes also examined for urine or fur staining typically found at the access points.
- 3.6 The daytime inspection was carried out with the aid of close focusing binoculars, and endoscope, ladders and a 1,000,000 candlepower spot lamp available.

Constraints

- 3.7 The PEA was undertaken out of the normal season and following a hard cold spell of weather in December 2022 that killed off many plants which were likely to remain visible in the previously mild conditions. However, given the nature of the Site and the recent nature of the previous survey, it is considered that a fair and accurate assessment of the Site was made.

- 3.8 With regard to the PRA, access to the trees was limited by safety factors. However they were suitably assessed by use of binoculars and good views could be had from the adjacent canal bank and demolition rubble on Site and also from beneath. This is considered to largely overcome any constraints.

4 DESKTOP STUDY FINDINGS

- 4.1 From within 500 metres of the Site only one new record is reported dating from 2015 which is of a common pipistrelle maternity roost approximately 300 metres to the south of the Site. Few new records are reported to 1 kilometre with only a small number of records relating to common and soprano pipistrelle not previously reported.

- 4.2 The legal status of the bats recorded is given in Table 2 below:

Table 2: Legal Status of bat species reported

Common Name	Scientific Name	Status
Bats	Chiroptera	EPS, WCA5, S7, LBAP (ANG, DEN, FLI, RCT, SNP, TRA, TRF)
Unidentified Bat	Myotis	EPS, HDir, WCA5, Bonn, Bern, LBAP (ANG, DEN, FLI, SNP, TRA, TRF)
Daubenton's Bat	Myotis daubentonii	EPS, HDir, WCA5, Bonn, Bern, RD2 (UK), LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, SNP, TRA, TRF)
Noctule Bat	Nyctalus noctula	EPS, HDir, WCA5, S7, UKBAP, Bonn, Bern, RD2 (UK), LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, SNP, TRA, TRF, VOG)
Pipistrelle Bat species	Pipistrellus	EPS, WCA5, LBAP (ANG, DEN, FLI, SNP, TRA, TRF)
Nathusius's Pipistrelle	Pipistrellus nathusii	EPS, HDir, WCA5, Bonn, Bern, RD2 (UK), LBAP (ANG, DEN, FLI, SNP, TRA, TRF)
Common Pipistrelle	Pipistrellus pipistrellus	EPS, HDir, WCA5, S7, Bonn, Bern, LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRA, TRF, VOG)
Pipistrelle	Pipistrellus pipistrellus agg.	EPS, HDir, WCA5, S7, Bonn, Bern, RD2 (UK), LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRA, TRF, VOG)
Soprano Pipistrelle	Pipistrellus pygmaeus	EPS, HDir, WCA5, S7, UKBAP, Bonn, Bern, RD2 (UK), LBAP (ANG, BBNP, CLY, DEN, FLI, GWY, PEM, POW, SNP, TRA, TRF, VOG)
Long-eared Bat species	Plecotus	EPS, HDir, WCA5, Bonn, Bern, LBAP (ANG, DEN, FLI, SNP, TRA, TRF)
Brown Long-eared Bat	Plecotus auritus	EPS, HDir, WCA5, S7, UKBAP, Bonn, Bern, RD2 (UK), LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, SNP, TRA, TRF, VOG)

- 4.3 Other Protected and Priority Species reported from the search area include a number of new records relating to otter, from both the canal and River Tawe. The nearest record to Site is on the Swansea canal approximately 70 metres from the Site. No other new otter records lie within 350 metres of the Site. Other new records include grass snake reported from approximately 500 metres to the south in 2020, previously unreported slow worm and common lizard records from 2010 and 2012 approximately 550 metres to the north west and south east of the Site.
- 4.4 A number of new records of hedgehogs are made within the search area with the closest to Site remaining that reported in 2019 (approximately 150 metres). No new bird records are reported however a number of new sightings of previously reported species are noted, including kingfisher, dunnock and red kite.

- 4.5 A number of new moth species are identified from survey in 2020 and 2021, the nearest capture area being approximately 600 metres to the west of the Site.
- 4.6 Other Species of Conservation Concern reported are mainly birds with a small number of moth species reported from approximately 900 metres west of the Site. No new bird records are noted although there are later records for grey wagtail and swift with the search area.
- 4.7 A small number of new records of Species of Local Conservation Concern are reported relating to none of which are particularly relevant to the Site although it is possible that the golden ringed dragonfly and beautiful demoiselle damselfly could hawk over the Site.
- 4.8 Sites of Importance for Nature Conservation (SINC) reported are Cwm Du Glen & Glanrhyd Plantation and the Swansea Canal. The Swansea Canal SINC runs along the northern border of the Site.
- 4.9 SEWBreC data is confidential and cannot be released in to the public domain without prior permission in writing from SEWBreC. Hawkeswood Ecology holds the data on the client's behalf for one year (in accordance with conditions) in case of further query. SEWBreC have given this data search a unique reference number, 0223-783, which should be quoted in any communications with them.

5 FIELD SURVEY FINDINGS

Walk-over assessment

- 5.1 The Site was assessed against the 2019 survey outcomes looking for any significant change in habitat that may suggest subsequent changes in Site fauna. See Figure 1, Phase 1 map and Appendix 1 for photographs.
- 5.2 The Site has remained unmanaged since 2019. The main change of any significance is the succession to a very young scrub woodland in the Target Note (TN) 2 area with dominance of locally abundant common gorse and frequently occurring goat willow and silver birch, alder occurs occasionally. The scrub has developed in TN1 also, but as in 2019 it is less advanced than at TN2. Here, gorse, goat willow and silver birch remain amongst the dominant species with alder and buddleia locally frequent.
- 5.3 The demolition rubble (TN5) remains largely bare but here as well, woody scrub is developing with buddleia and silver birch dominating.
- 5.4 Given the time of year that the walk-over was undertaken, flowering plants were not particularly visible. It was note that under the young scrub growth that herb growth was supressed. The vegetation present across the Site was dominated by coarse grasses with cock's-foot abundant, false oat-grass frequent to locally abundant and Yorkshire fog locally abundant. Other grasses included common bent, creeping bent and red fescue.

- 5.5 Amongst the few broad leaved herbs noted were ribwort plantain, wild parsnip, common dock, common nettle and common ragwort. Japanese knotweed remains in the locations reported in 2019.
- 5.6 The northern boundary, marked by a bank and a metalled former access track (TN3) leads to the Swansea canal. Formerly consisting of largely bare ground, TN3 is now dominated by bramble with developing scrub, species noted remain as in 2019 with dog rose, ash, hawthorn, bracken and sycamore present. Herbs noted included cock's-foot, false oat grass, abundant bramble, and occasional male fern. Other species include herb Robert, and male fern.
- 5.7 The canal embankment and adjacent area (TN4) supports mature oak and alder trees with hazel along the towpath boundary. Buddleia is also becoming more frequent in this area. The embankment and land adjacent to it to the demolition rubble is dominated by the presence of Japanese knotweed with buddleia and silver birch present. Japanese knotweed remains the dominant feature in this area.

Bats

- 5.8 The Provisional Roost Assessment (PRA) was undertaken in good weather conditions on 12th January 2023. Access to the trees was better than previously as there was less growth and the timing of the surveys is at the best time of the year with no leaves present.
- 5.9 The area assessed was limited to the north western corner of the Site where four mature common oak and alder were noted. As in 2019, the only other tree of any size to support roosting bats was a semi-mature sycamore which was also inspected; a group of hazel along the canal boundary were also assessed. The results are given in Table 3 below and the approximate location of the trees is plotted in Figure 1.
- 5.10 No significant changes to the condition of the trees assessed was noted during the current assessment. There was a clear increased density of ivy on T4 and T5. The trees remain in the categories previously recorded. T1 and G1 are considered negligible rather than low potential with no PRF's found.

Review of Preliminary Ecological Appraisal, Land at Old Foundry Road, Pontardawe.
Hawkeswood Ecology – January 2023; Issue 1

Table 3: Assessment of Bat Roost Potential in Trees on Site:							
Tree no	Species	Ivy*	Cavities	Dead Wood	Approx height (m)	Bat presence / Recommendations	Roost potential
T1	Sycamore	N	None visible	None	7	Young semi-mature sycamore in good condition with no PRF's visible.	Negligible
T2	Pedunculate oak	L/M	No	No	20/25	Mature tree in apparently good condition with no obvious PRF's. Considered to be of medium potential due to size and age.	Medium NO CHANGE
T3	Pedunculate oak	M/D	Numerous crevices on underside of branches	No significant branches	20	Mature tree with some form of growth defect leading to longitudinal crevices on underside of branches. These could support roosting bats.	High NO CHANGE
G1	Hazel / Hawthorn	N/M	None	None	7-9	Group of mature shrubs, no obvious PRF's.	Negligible
T4	Alder	D	Nothing obvious	Broken branch at 3 metres facing SW	15	Mature alder with no obvious features but a broken limb and small area of rot. Ivy cover could be hiding cavities, tree considered medium potential due to size, age and presence of ivy. Ivy growth denser than previously.	Medium
T5	Goat willow	D	Nothing obvious	No significant branches	15	Mature tree with no PRF's visible but medium to dense ivy cover. Multi stemmed from ground with three main stems. Appears to be in relatively good condition, considered medium due to age, size and ivy cover. Ivy growth denser than previously.	Medium

PRF = Potential Roost Feature

*Ivy: N = none

L = light cover

M = medium cover

D = dense cover

Fauna

- 5.11 Only birds (and feral cats ‘housed’ on Site) were observed during the survey. Redwing were present foraging in the scrub alongside blackbirds. House sparrow and goldfinch were also seen. Lesser black backed gulls were noted overflying.
- 5.12 There remains the possibility that otters could utilise the vegetated bank at Target Note 4 for lying up but there was no evidence of this during the walk-over. The Site does not support suitable habitat for great crested newt, dormouse or water vole.
- 5.13 A reptile survey was undertaken in 2019 which proved negative. The constraints considered at that time are still relevant and the presence of reptiles is considered unlikely.
- 5.14 The succession to woody scrub, particularly with the presence of gorse which was previously absent, offers improved nesting opportunities for birds across the Site and this should be considered in any mitigation proposals. The Site remains too disturbed to support ground nesting birds. It is considered that the Site still does not represent an important foraging resource in this area with many similar and more diverse sites available in the locality.
- 5.15 Bats may forage over the Site and there is some potential for them to use T3 for roosting purposes. Hawkeswood Ecology understands this tree is to be retained as it stands on the canal embankment although it may be subject to some pruning; recommendations are made in Section 9 should this prove necessary. The development of the Site could lead to further opportunities for bats and this potential for enhancement should be taken into account.

Summary

- 5.16 The Site is now developing to a young secondary woodland with the open ground flora rapidly being submerged by woody scrub. In terms of protected species, its value is considered limited with restricted potential for birds and bats to be present on the Site.

6 ECOSYSTEM RESILIENCE

- 6.1 Under the Environment (Wales) Act 2016 Local Planning Authorities (LPA’s) and other public bodies must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems. LPA’s are directed to consider the resilience of ecosystems early in the planning process to aid assessment of the impacts of any proposed development upon biodiversity.
- 6.2 The premise for Ecosystem Resilience is laid out in Section 4 of The State of Natural Resources Report, a 2018 document produced by Natural Resources Wales (NRW) on behalf of the Welsh Government. It lays out a framework for assessing ecosystem resilience. However, despite the duty placed on LPA’s, there is no currently agreed format for this assessment.
- 6.3 Section 4 names five attributes that NRW consider ‘building blocks’ of ecosystem resilience, these are:
- Diversity

- Extent
- Condition
- Connectivity
- Adaptability

6.4 These factors are considered below, however, none of them are considered ‘stand alone’ and all interrelate to some extent. It is also important to note that it is the responsibility of the LPA to assess Ecosystem Resilience and that any Site based report is not able to make judgements on a wide scale. It should also be acknowledged that there is as yet no agreed format to undertake such an assessment.

Diversity

6.5 The habitats on Site remain largely uniform with little variation across the Site but there is a clear succession to young secondary woodland with an apparent decrease in the suitability of the Site for a diverse range of ground flora species. Away from the regenerating vegetation is an area dominated by Japanese knotweed over which is a partial tree canopy. It is likely that the habitat is now less diverse with the closing canopy in places, than when originally surveyed in 2019. The colonising woody vegetation has developed rapidly on the Site and its progression to becoming a closed canopy young secondary woodland is advanced.

6.6 The adjacent Swansea Canal is a linear habitat and identified as a SINC and is best identified in the UK Biodiversity Action Plan as part of the broad habitat lakes and standing water. These habitats are considered to be naturally diverse and have a good maintenance of variation. The canal is a man-made habitat and performs an important function for wildlife as a green corridor allowing transport of animals and plants across a wide area. The Canal lies at a higher level than the Site and it is considered that the proposed development would have no direct impact upon the diversity of this habitat although there may be effects such as increased disturbance.

Extent

6.7 The Site is approximately 0.75Ha, a small site that is relatively isolated in the built environment. It does not support a wide variety of species and is fragmented by paths and hard standing.

6.8 The adjacent Swansea Canal is a linear feature which is itself broken by road crossings and lowered bridges. The proposed development will not alter this situation.

Condition

6.9 The Site can best be considered to be in an early successional phase towards secondary woodland. A lack of any form of management has and will lead to a climax vegetation dominated by species poor secondary woodland.

6.10 The dominance on parts of the Site of Japanese knotweed does offer a threat to the adjacent Swansea Canal which offers a route for invasive species to further spread along the valley.

Connectivity

6.11 The Site is relatively isolated from suitable biodiversity rich areas and this is reflected in the presence of fairly typical urban species. Its only connectivity to other green areas lies in the

presence of the adjacent Swansea Canal SINC; this, however, gives only limited opportunities for colonization as the towpath between the Site and water is heavily used as a pedestrian route, stone surfaced and pretty much devoid of vegetation in parts. Although not an insurmountable barrier to larger mammals such as fox, the whole towpath feature is not particularly suitable for animals such as reptiles, severely limiting opportunities for the Site to be colonized by them.

- 6.12 For species such as bats, the Swansea canal provides a good commuting and foraging area and bats are likely to use the Site for foraging as it lies by the canal. The same argument can be used for birds. In both cases the development has the potential to provide a more varied habitat by use of appropriate landscaping and planting. The development will not be detrimental to the connectivity of the Site or the canal.

Adaptability

- 6.13 NRW comments that:
‘Adaptability differs from the other attributes because it is part of the definition of resilience rather than an attribute that supports it. However, its inclusion in the Environment (Wales) Act is important because it emphasises one of the most important features of resilience: dynamism and the ability to adapt to change.’
- 6.14 NRW also comments that *‘Adaptability cannot yet be quantified in an equivalent way to the other attributes and so we have not used it in the assessment of resilience in this State of Natural Resources Review’*. As such this cannot be considered in this report.

7 DISCUSSION AND IMPACT ASSESSMENT

- 7.1 The Site was previously surveyed in 2019 when a PEA and reptile presence-absence surveys were undertaken. The current walk over was carried out following a request from Neath Port Talbot Biodiversity Unit to update the earlier works following changes to the granted planning application.
- 7.2 The walk-over was carried out at a period when many plants and animals are not visible or present, as such the intention was to gain an understanding of any significant change that may have taken place that could materially affect the plants and animals present on Site. Given that only 2.5 years have passed since the previous survey no major changes were considered likely to have occurred.
- 7.3 The main and only significant change on Site is the progression to young scrub woodland, particularly in the southern section of the Site. Also of interest here was the presence of locally abundant gorse which was not seen in the earlier survey (and not seen in photographs taken at that time when re-assessed now). The gorse has become dominant over parts of the Site along with dense growth of goat willow, silver birch, alder and buddleia.
- 7.4 It is clear that the closing canopy is also suppressing the ground vegetation with bramble and coarse grasses dominating. Given the survey timing, the presence of many flowering species could not be

ascertained, however it is likely that the ground flora species diversity is declining as the canopy closes.

- 7.5 The Site may have increasing value for nesting birds and foraging birds, including redwing, a Schedule 1 species, a small party of which were noted foraging on Site. Recommendations are made in relation to birds in Section 9. Any landscape plan should take account of the potential for foraging animals and provide species that are of value to native wildlife such as berry and seed bearing species. This will also aid ecosystem resilience.
- 7.6 Whilst the Site still offers potentially suitable habitat for reptiles, its value is decreasing as the scrub woodland and scrub regeneration progresses. It is still considered that the conclusions made following survey in 2019 '*Reptile Presence Absence Survey, Land at Holly Street, Pontardawe, Issue 2. Hawkeswood Ecology – August 2019 Issue 2*' remain relevant and the Site's isolation from other suitable habitat nearby is likely to have prevented colonisation. No further survey is considered necessary.
- 7.7 The Site may have potential for hedgehog and is likely to retain its value for them post development, measures should be taken in the Site design to ensure that passage of hedgehog across the Site is possible, recommendations are made in Section 9.
- 7.8 The Site lies at a lower level than the Swansea Canal Site, the canal runs through this area on an embankment of around 3 to 4 metres height from the mean level of the Site. Obvious advantages to this are that control of direct impacts of the proposed development can better be contained and managed with little threat of detrimental incidents, such as pollution spills, contaminating the canal.
- 7.9 When this is considered alongside Ecological Resilience, the proposals are unlikely to have any impact upon the SINC. Indirect impacts post-development are considered in Section 9, Recommendations. These include artificial light and the potential for increased predator (i.e. cat) populations.
- 7.10 It is apparent that feral cats are on Site with two cat houses placed on Site, the cats are being fed but are left to roam across the Site. Two animals were seen during the walk-over. The presence of cats here is likely to have a significant effect on any populations of birds, small mammals and reptiles were they to be present. They alone probably reflect a significant negative threat to wildlife on Site.
- 7.11 Japanese knotweed remains across the Site with a dense stand around the canal embankment in the north eastern part of the Site.
- 7.12 In summary, it is considered that the Site is still not of any particular biodiversity importance and has only limited value to support some protected species, recommendations are made in Section 9 to address this.

Characterisation of Impact

- 7.13 The proposed development will remove the existing on-Site habitats. The Site has low diversity and has poor connectivity to surrounding areas. It may be of some local value to foraging birds and bats, although it is of limited size and has a poor habitat mosaic, and one tree has been identified as showing potential roost features for bats; this tree is to be retained. The Site is therefore considered to be of **no significance** in a local or wider context.

Predicted Development Impacts

- 7.14 Post construction there is potential for disturbance to surrounding habitats and the increased presence of pet cats, which are a main predator of many native species and probably the largest predator of bird and bat populations in the UK. Some recommendations are made to address these issues in Section 9. However, with current knowledge of the Site and its locality it is considered that the loss of habitats on Site and their potential to support protected species will be of **minor significance** in a Site context but of **no significance** in a local or regional context on the ability of populations of protected species to survive and breed.

8 RELEVANT LEGISLATION AND POLICIES

Birds

- 8.1 Part I of the Wildlife and Countryside Act 1981 (as amended) makes it an offence (with certain limited exceptions and in the absence of a licence) intentionally to kill, injure or take any wild bird, or intentionally to damage, take or destroy its nest whilst being built or in use, or to take or destroy its eggs. Consequently, even common birds such as blackbirds or robins, and their nests and eggs are protected in this way. Any works involving removal or other management of trees or shrubs must be undertaken outside the breeding bird season (March- August).
- 8.2 Further, section 1(5) of Part 1 of the W&C Act states any person intentionally disturbing any wild bird included in Schedule 1 whilst it is building a nest or is in or near a nest containing eggs or young or disturbs the young of such a bird is committing an offence and liable to a special penalty.
- 8.3 The Conservation of Habitats and Species Regulations 2017 (as amended) has strengthened the protection of wild birds and their habitats. The Regulations now serve “To help preserve, maintain and re-establish habitats for wild birds.”
- 8.4 Under the amended Regulations, Local Planning Authorities (as well as national statutory conservation bodies such as Natural Resources Wales) are required to protect and create bird habitat.

Bats

- 8.5 All UK bat species are protected under the Wildlife and Countryside Act 1981. Schedule 5 of this act makes it illegal to intentionally kill, injure or take these animals. It is also an offence to intentionally damage or destroy their place of rest. In 2007 the offences of killing, injuring or taking species under Section 9(1), 9(2) and 9(4)a of European Protected Species listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) were removed to avoid duplication with their protection under Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora (The Habitats Directive) as amended.

The regulations remove the defence of inadvertent or accidental damage to roosts and make the offence ‘absolute’.

- 8.6 They are also protected under the Conservation of Habitats and Species Regulations (2017) as amended which requires the United Kingdom government to provide European Protected Species with strict protection. This legislation consolidates amendments made to the earlier 2010 act. This legislation states in Part 3, Protection of Species, paragraph 43(1) that a person who:
- (a) deliberately captures, injures or kills any wild animal of a European Protected Species,
 - (b) deliberately disturbs wild animals of any such species,
 - (c) deliberately takes or destroys the eggs of such an animal, or
 - (d) damages or destroys a breeding site or resting place of such an animal,
- is committing an offence.
- 8.7 Further, with regard to disturbance of EPS, Paragraph 43(2) that disturbance is an act which is likely to:
- (a) to impair their ability—
 - (i) to survive, to breed or reproduce, or to rear or nurture their young, or
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
 - (b) to affect significantly the local distribution or abundance of the species to which they belong.
- 8.8 In the case of a development involving the loss or modification of a habitat which may affect an EPS the above legislation must be considered and it may be necessary to apply to Natural Resources Wales for a European Protected Species Derogation Licence EPSL.
- 8.9 The introduction of the Conservation of Habitats and Species Regulations 2017, has removed the defence of killing or injuring a protected species during a lawful operation, thus even in an instance where planning permission is granted, the presence of EPS must be considered and mitigated for prior to commencement of works. Under the above regulations, a derogation licence can only be given if three tests are satisfied:
- The action proposed is in the interest of preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance to the environment;
 - That there is not a satisfactory alternative;
 - That the action proposed will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
- 8.10 Failure to satisfy the regulations and obtain an EPSL where required is likely to result in prosecution and can lead to severe fines of up to £5000 per animal and possible imprisonment.
- 8.11 Eight species of bat are listed under section 7 of the Environment Wales Act (2106). Section 7 of the Act provides a list of living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. This is a list of species considered at threat within Wales and in need of conservation management to maintain and enhance population numbers.
- 8.12 A duty is placed on the Local Authority by the Welsh Assembly Government to maintain and enhance populations of species listed in Section 7.

Hedgehogs

- 8.13 Hedgehogs are protected under the Wildlife and countryside Act 1981 (as amended) as a Schedule 6 species and Wild Mammals Protection Act (1996) from capture, deliberate killing and cruel treatment.

Invasive Species

- 8.14 Japanese knotweed is listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended); as such it is an offence to allow it to spread in the wild. The removal from Site of plant material or contaminated soils must be undertaken by an appropriately licensed carrier and it can only be removed to an authorised and properly licensed waste control site.

9 RECOMMENDATIONS

Introduction

- 9.1 The recommendations below are those given in 2019, updated and added to where necessary to take account of revised guidance and legislation.
- 9.2 Any works on trees and shrubs and vegetation clearance should be undertaken outside the accepted bird breeding season of March to August. There is no licence for the destruction of active bird nests and nest translocations invariably fail. Any active nest found will be protected by a buffer zone until such time as it is no longer in use. Nest searches during the breeding season are not generally recommended and are difficult to guarantee being successful in many circumstances.
- 9.3 The Site may have potential to support otters as there are recent records from the canal. The walk-over and previous survey found no evidence of otters using the Site. However, due to the proximity of the canal, prior to commencement of works, a search of the canal embankment for any indications of otters will be undertaken. Should otter be found, there may be a requirement to obtain a derogation licence from NRW to allow works to proceed.
- 9.4 Trees and shrubs on the canal embankment are to be retained. Should any work be undertaken on the pedunculate oak (T3) there may be a requirement for further survey in relation to bats. This tree supports a number of potential roost features and is considered to have high potential to support roosting bats. Further survey may consist of a climbing survey or observation survey prior to felling.
- 9.5 Two trees on Site, T4 and T5, mature alder and goat willow, are likely to be removed. No obvious PRF's were noted on these but both supported ivy. It is recommended that these trees are inspected immediately before felling and then allowed to lie for at least 24 hours prior to being cut up.
- 9.6 Artificial lighting can create many problematic issues particularly with light spill into adjacent habitats i.e. the Swansea Canal. Whilst issues relating to impacts on bats are well known, the impact of light on invertebrates is also now being widely researched and showing many negative features. Impacts can be direct with invertebrates attracted to light where preyed on by bats that are not particularly light averse such as pipistrelle species and noctules. Indirect impacts include a paucity of invertebrates in adjacent dark areas as flying invertebrates are drawn to the lights. This

can impact upon the foraging success of light averse bat species such as brown long-eared and *Myotis* species bats.

- 9.7 As such, should street lighting be proposed on Site a lighting plan showing predicted lux values and light spill should be provided along with mitigation measures proposed to prevent light spill to the canal corridor and embankment.
- 9.8 Any domestic lighting will be placed at a level lower than three metres, be cast to the ground with no up-lighting and will ideally be on a time switch to ensure light scatter is limited in duration. It should only be used in areas where safety is a consideration. Road lighting should be a direct light, such as LED.
- 9.9 The use of close board fencing can isolate areas of garden, particularly impacting on hedgehogs. If the use of such fencing is proposed, boards cut will be cut out to give a minimum 15x15cm gap at the bottom, or more preferably be fitted to leave a minimum 15cm gap at ground level for the length of the fence.
- 9.10 Integral bat and bird boxes will be used in the new construction. Bat tubes will be located on buildings near the canal corridor, and bird boxes, in particular swift and house sparrow boxes on a number of houses throughout the development. Typical examples are shown in Figure 2. The locations of bat and bird mitigation will be such that they are not vulnerable to attack from cats. The boxes should be in positions where cats cannot gain access and there should be no suitable perching sites local to the boxes where cats can attack emerging bats.
- 9.11 Japanese knotweed has been identified on Site. A plan should be provided for the eradication and safe removal of this plant from the Site. All plants and contaminated material should be treated and contained on Site or removed and taken to an appropriately licensed disposal site to prevent the further spread of this species.
- 9.12 Any landscaping plan should introduce native species reflecting those present in the local area (all native species should be of local provenance) or species with known value to British wildlife. Plantings should include species known to be valuable to foraging birds and bats such as those producing berries and attractive to insects, i.e. heather, hawthorn, pyracantha and hazel.
- 9.13 An area will be identified where chemicals and building materials can be safely stored and bonded to prevent escape into nearby watercourses. There will be control measures undertaken no pollution or dust contamination impacts the adjacent SINC. These measures will be clearly outlined in a Construction Environmental Management Plan (CEMP).
- 9.14 Hedgerow and Tree roost protection zones (RPZ) will be outlined in the Construction Environmental Management Plan; no vehicles or mechanical works will be allowed in the RPZ areas. The canal embankment will be protected through the development. Only personnel carrying out Japanese knotweed control will be allowed to enter this area.

10 CONCLUSIONS

- 10.1 The Site was surveyed in 2019 and the earlier survey should be read in conjunction with this report.
- 10.2 The Site is progressing to young secondary woodland with dense woody scrub in places, all growth is young and less than ten years, Japanese knotweed remains on Site and is present across it. Its value for protected species is limited to foraging bats and birds with limited potential for roosting and breeding. There is limited potential for otters to use the Site and recommendations are made in relation to this.
- 10.3 Further works that could impact upon bats, in particular any management works to T3, may need further survey prior to commencement.
- 10.4 The proposed development is unlikely to adversely impact upon habitats or protected species if the recommendations made in Section 9 are implemented.

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**FIGURE 1:
PHASE 1 HABITAT MAP (UPDATED 2023)**

Phase 1 Map amended in 2023

Note: Target Notes relate to 2019 survey.
2023 overlays (block green, hatched green)
relate to scrub woodland and developing
dense scrub.

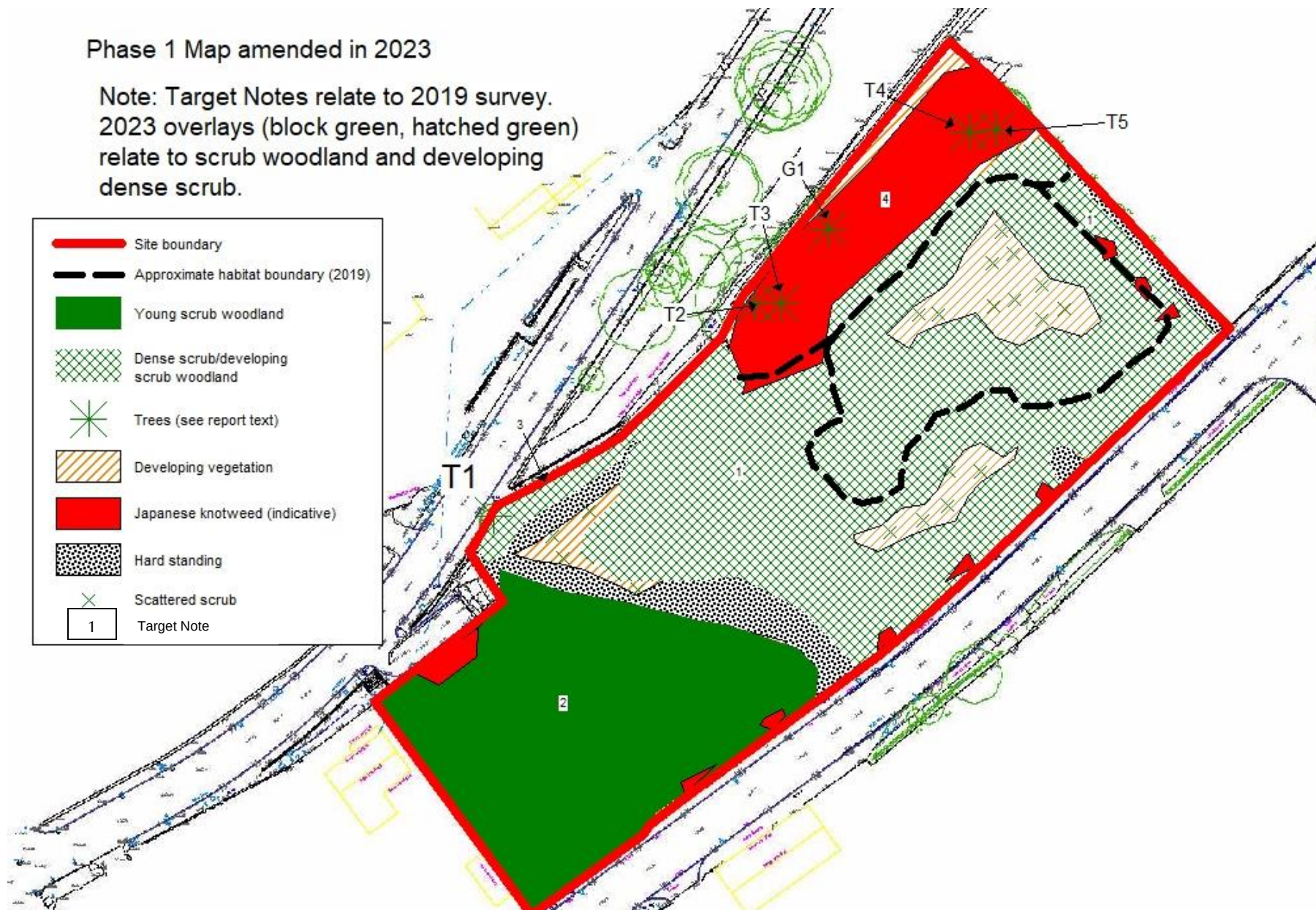


FIGURE 2
TYPICAL INTEGRAL BIRD AND BAT BOXES



Free Access Bat Box A

- Available in all brick types
- Discrete single bat brick
- Easy to install
- Allows bats to create a natural home habitat within the cavity of the building



Enclosed Bat Box B

- Designed specifically for the pipistrelle bat
- Available in all brick types
- Discrete home for bats
- Various sizes
- Several roosting zones are created inside the box
- Bats are contained within the bat box itself
- Maintenance free with entrance at the base
- Ideal for new build & conservation work



Enclosed Bat Box C with engraved motif

- Designed specifically for the pipistrelle bat
- Available in smooth blue, smooth gold & smooth red
- Attractive "bat" motif
- Discrete home for bats
- Various sizes
- Several roosting zones are created inside the box
- Bats are contained within the bat box itself
- Maintenance free with entrance at the base
- Ideal for new build & conservation work



Typical House Sparrow box to be fitted under eaves



Triple Swift Cavity nest box

APPENDIX 1
PHOTOGRAPHS



Views across the same area of TN 1, looking south, 2019 (top) and north, 2023 (bottom)



The more developed vegetation at TN2 2019



TN 2 in 2023 with developing scrub woodland



Looking along the hard standing adjacent to TN3, 2019 top, 2023 bottom



The demolition rubble pile, 2019 top, 2023 bottom



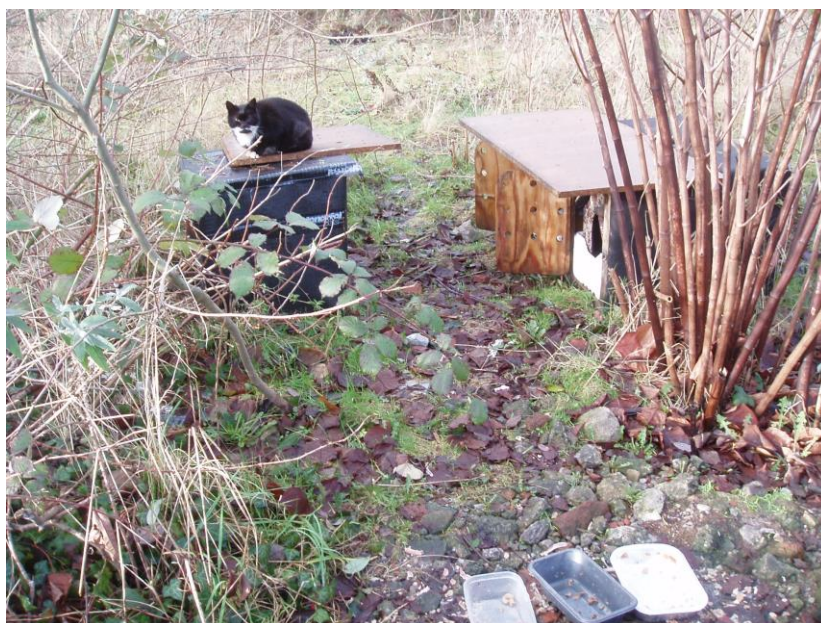
Trees T2,3, 4 and 5 plus G1



Typical deformity on T3 branches (as 2019)



Japanese knotweed on road frontage



Cats and cat homes

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