

Update Ecological Assessment



**Tyler
Grange**

Holt Road, Wrexham
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TG Report No. 10581_R04_JD_MM

Report No:	Date	Revision	Author	Checked
10581_R04	24 th February 2021	-	Hayley Care BSc ACIEEM	Joseph Dance BSc (Hons) MCIEEM

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Summary

- S.1. This report has been prepared by Tyler Grange Group Ltd. on behalf of Bloor Homes North West and Barratt Homes in relation to a parcel of land to the south of Holt Road, Wrexham, Wales (OS Grid Reference SJ 36121 51534), hereinafter referred to as the site. It has been instructed to accompany a re-submission of an outline planning application for residential development within the site of up to 600 dwellings with associated landscape works, public open space and on-site infrastructure. The purpose of this report was to provide an update ecological assessment of selected ecological receptors within the site which could be affected by development.
- S.2. Tyler Grange have previously completed a suite of ecological surveys within the site to accompany the former application, the results of which confirmed the presence of badgers within the site, potential for roosting bats in trees and presence of GCN in off-site ponds.
- S.3. The update surveys completed by Tyler Grange in 2021 and detailed in this report confirmed the continued presence of badger setts within the site, but that the majority of setts would remain unaffected by development. Several minor outlier setts are likely to require closure, and this will need to be done under licence by Natural Resources Wales (NRW).
- S.4. Several trees with low bat roost potential would require removal, and this would need to be completed via sensitive felling techniques. One tree with moderate bat roost potential may require future works/removal to make it safe as it is in poor health. Should detailed designs and public health and safety mandate the loss of this tree, further surveys in relation to roosting bats would be required.
- S.5. Update eDNA surveys of on-site ponds are recommended to confirm if great crested newt (GCN) have colonised the site since previous surveys in 2018 when they were previously absent.
- S.6. Overall, however, the site remains unchanged since previous surveys in 2018 and the recommendations for mitigation and enhancements are still considered valid and appropriate. There remains no overriding ecological constraints which would preclude the principle of development within the site.



Section 1: Introduction and Background

Introduction

- 1.1. This report has been prepared by Tyler Grange Group Ltd. on behalf of Bloor Homes North West and Barratt Homes in relation to a parcel of land to the south of Holt Road, Wrexham, Wales (OS Grid Reference SJ 36121 51534), hereinafter referred to as the site.
- 1.2. The report has been instructed to accompany a re-submission of an outline planning application for residential development within the site of up to 600 dwellings with associated landscape works, public open space and on-site infrastructure.
- 1.3. The location of the site and parameters of proposals sought are shown in Appendix 1.

Background

- 1.4. Tyler Grange Group Ltd. have previously undertaken a suite of ecological surveys within the site to accompany the original outline planning application in 2018. The results of these surveys are presented in report 10581_R02c_Ecological Assessment Report_181218_GP_HB produced by Tyler Grange. The current report must, therefore, be read in conjunction with the previous report to understand the site context and baseline ecological information.
- 1.5. The results of the previous surveys within the site confirmed the following:
 - Statutory/non-statutory nature conservation designations – no impacts expected;
 - Habitats – site largely comprised arable land of limited ecological importance. Any losses of more valuable habitat would be mitigated through the planting of woodland and other green infrastructure;
 - Great Crested Newt – surveys conducted in 2018 confirmed the presence of a medium population of GCN in an offsite pond. A licence from Natural Resources Wales (NRW) was recommended and mitigation strategy implemented before works proceed. An outline mitigation strategy for GCN was provided in the 2018 report;
 - Badgers – widespread badger presence across site, including several setts;
 - Bats – low levels of bat activity around interior and exterior field boundaries and several trees with bat roost potential were identified but were retained under previous proposals;
 - Birds – requirement for nesting bird checks of any suitable nesting habitat to be affected;
 - Reptiles – site unsuitable and surveys in adjacent land confirmed likely absence



Approach

- 1.6. As the previous application in 2018 was withdrawn, the current approach in 2021 is to re-submit the previous application. The only change to the proposals previously submitted is minor changes to the orientation of the strategic link road and primary roads in the west of the site. The quantum and parameters of development sought remain unchanged since the 2018 application.
- 1.7. Given the relative recency of the survey work completed within the site and robust nature of the data, it was considered that the only 'update' surveys required for 2021 were:
 - Update walkover of site to confirm type and distribution of habitats present and if they are changed since 2018;
 - Update badger survey of site to confirm status of badgers and setts within site;
 - Update ground-level preliminary roost assessment of trees previously assessed within site;
- 1.8. An update desk study was not considered appropriate in this instance given the recency of the desk study previously completed and the fact that the proposals remain unchanged since previously assessed.
- 1.9. Update bat activity surveys were not considered necessary given that the habitats within the site were largely unchanged since 2018 (albeit decreased in quality somewhat given the extension of arable land in 2021) and the previous surveys only confirmed minor levels of bat activity (common and widespread species around the site's internal and external boundaries).
- 1.10. Update newt surveys are recommended for 2021 to confirm that GCN have not dispersed into the site and colonised the on-site ponds, which would alter the mitigation strategy previously put forward.



Section 2: Methodology and Results

- 2.1 The following update surveys were undertaken on land within the red line boundary of the site on the 27th of January 2021 by experienced ecological consultant Hayley Care BSc, ACIEEM.
- Phase I habitat survey;
 - Update badger survey; and
 - Preliminary Roost Assessment (PRA) of trees for bat roost potential
- 2.2 The weather conditions were optimal being dry and overcast (100% cloud cover), 5°C and with light air (Beaufort scale 1).

Phase I Habitat Survey Methodology

- 2.3 An initial Phase I habitat survey was undertaken on all land within the site boundary in May 2017 and subsequently updated in January 2021.
- 2.4 The Phase I habitat survey methodology was based on guidance set out in the 'Handbook for Phase I habitat survey' (JNCC, 2010). This entailed recording the main plant species and classifying and mapping broad habitat types present. Note was taken of the more conspicuous fauna, and any evidence of, or potential for the presence of protected/notable flora and fauna.
- 2.5 A basic inventory of the habitats and a representative species list was produced. Where access allowed, adjacent habitats were also considered, to assess the site within the wider landscape and to provide information with which to assess possible impacts within the context of the site boundary.

Phase I Habitat Survey Limitations

- 2.6 Not all botanical species could be readily identified during the Phase I habitat survey due to seasonal dieback. However, considering the habitats present on site have changed little since the initial Phase I habitat survey undertaken in May 2017, this is not considered to have negatively impacted the findings of the update survey.

Phase I Habitat Survey Findings

- 2.7 The updated habitat survey found that the site continues to support the following habitats:
- arable;
 - broad-leaved woodland (plantation and semi-natural);
 - tall ruderal vegetation;
 - scattered trees;
 - scrub;



- semi-improved grassland;
- species poor defunct hedgerow; and
- waterbodies.

2.8 For ease of reference, habitat types have been described alphabetically, below. All the features described are shown on Plan 10581 / P01b.

Arable

2.9 As was found in 2017, the site continues to be dominated by arable fields, all of which comprised maize stubble at the time of the update survey. A further two fields in the northwest of the site that were formerly recorded as semi-improved grassland have also been converted to arable.



Figure 1: All arable fields comprise maize stubble



Figure 2: Two former semi-improved grassland fields in the northwest are now arable.

2.10 Arable land is considered to be of negligible ecological importance.



Broad-leaved woodland (plantation and semi-natural)

- 2.11 The site continues to contain areas of mature semi-natural broadleaved woodland to the north-west of the site. The woodland contains species such as willows *Salix* sp., poplars *Populus* sp., elder *Sambucus nigra* and ash *Fraxinus excelsior*, rowan *Sorbus aucuparia* and sycamore *Acer pseudoplatanus*, with ground flora dominated by nettle *Urtica dioica*, cleavers *Galium aparine*, rosebay willowherb *Chamerion angustifolium* and bramble *Rubus fruticosus*.
- 2.12 There is also an area of plantation woodland to the north of the site, planted as part of the development of the new A534 road which runs along the north of the site. Species in this area include immature hawthorn *Crataegus monogyna*, silver birch, oak *Quercus* sp., rowan, holly *Ilex aquifolium* and cherry *Prunus avium*.
- 2.13 Broadleaved woodland is a habitat of principal importance, listed in Section 7 of the Environment (Wales) Act 2016. The woodland forms a well-developed green corridor across the site, providing a connection between onsite and offsite habitats. Woodland is considered to be of local ecological importance.

Tall Ruderal vegetation

- 2.14 Small amounts of ruderal vegetation are present around the western and northern site boundary. These areas are dominated by rosebay willowherb, bramble and bracken *Pteridium* sp. Ruderal vegetation scattered throughout the site supports common and widespread species and is considered to be of negligible ecological importance.

Scattered trees

- 2.15 The site contains mature scattered trees along the field margins and within the arable field to the northeast. Species include oak, sycamore, elm *Ulmus minor*, holly, beech, ash, copper beech *Fagus sylvatica*, and elder.
- 2.16 Mature trees are considered to have at least local ecological importance being not replaceable in the short to medium term. Younger and semi-mature trees can be replaced in the short term and are considered to be of site ecological importance.



Figure 3: Scattered trees are present throughout the arable fields and hedgerows



Scrub

- 2.17 Scattered scrub is present across the site, but mostly among the field of semi-improved grassland at the north of the site. Species recorded include hawthorn, bramble and gorse *Ulex europaeus*. Scrub is a common and widespread habitat locally and nationally and is therefore considered to have site ecological importance.



Figure 4: Areas of scrub and semi-improved grassland are present in the north

Semi-improved Grassland

- 2.18 One field of semi-improved grassland is present in the north of the site which is bounded by scrub and fencing. Two further areas of semi-improved grassland are present within arable fields; one small area in the northwest of the site and a larger rectangular area along the eastern site boundary.
- 2.19 The grassland sward is dominated by grasses including Yorkshire fog *Holcus lanatus*, cock's-foot *Dactylis glomerata*, and perennial ryegrass *Lolium perenne* and forbs including white campion *Silene latifolia*, creeping buttercup *Ranunculus repens* and clover species are present. The area of grassland in the east of the site also comprises stands of tall ruderals including mugwort *Artemisia vulgaris*, willowherb species *Epilobium* sp, hogweed *Heracleum sphondylium*, broadleaved dock *Rumex obtusifolius* and ragwort species *Senecio* sp.





Figure 5: An area of rough semi-improved grassland with ruderals lies within the southeast corner of the site's northeast field



Figure 6: Semi-improved grassland lies between arable land in the northeast

- 2.20 Field margins containing grasses are also present – ‘arable field margins’ are a habitat of principal importance, listed in Section 7 of the Environment (Wales) Act 2016. However, the grassland on site is species-poor, supporting common and widespread species, and is therefore considered to have site ecological importance.

Species poor defunct hedgerow

- 2.21 The fields across the site are bordered by defunct hedgerows which are dominated by hawthorn but with some holly on the eastern boundary. Bramble, ivy, hazel *Corylus avellana* and dog rose *Rosa canina* are found along its length, in places, as well as some scattered trees.
- 2.22 The hedgerows are defunct and may offer suitable foraging, nesting and commuting habitat for a range of wildlife, including birds, bats and small mammals. Hedgerows are a habitat of principal importance, listed in Section 7 of the Environment (Wales) Act 2016, and they are considered to be of site ecological importance.





Figure 7: Species poor defunct hedgerows are present across the site

Waterbodies

- 2.23 There is a ditch at the north-west of the site. During both the initial site visit in 2017 and the update 2021 survey, a very small area (~2m x 0.4m) at the western edge was damp, but the rest was dry. The ditch is heavily shaded by trees and was completely dry during a site visit on the 5th June 2018.
- 2.24 There are two ponds in the middle of the woodland on site (see Plan 10581 / P01b). During the initial site visit in 2017, these ponds were dry. At the start of the newt surveys in April 2018, both ponds were wet, but the smaller of the two had dried out by late May 2018 (see GCN survey in Appendix 5 of original ecological assessment). Both ponds were holding water in 2021.
- 2.25 Ponds are considered a habitat of principal importance, listed in Section 7 of the Environment (Wales) Act 2016. Although ephemeral in nature, the ponds provide a stepping-stone between offsite habitats – they are considered to have local ecological importance.



Figure 8: Drainage ditch lies in the northwest





Figure 9: Large pond P1 in Jan 2021



Figure 10: Small pond P1 in Jan 2021

Other Notes

- 2.26 The muckheap area and associated ephemeral/short perennial vegetation that was located along the south eastern site boundary during the 2017 survey is currently no longer present.

Badger Survey Methodology

- 2.27 The site has been surveyed previously for badger on two occasions; initially on 1st June 2017 by Lisa Davies and Kyle Mellish, and then updated on the 5th June 2018 by Steven Coyne and Georgina Palmer. The 2018 survey identified the presence of two active annex setts along the eastern site boundary and badger activity across the site as a whole. As the findings of these surveys are now several years old, an update survey to assess how badgers are currently using the site was undertaken on the 27th January 2021 by experienced ecological consultant Hayley Care.
- 2.28 The site and accessible adjacent habitats within 30m were surveyed for signs indicating use by badgers. Typical badger field signs include:
- Setts;
 - Tracks that were confirmed as badger pathways;



- Latrines and dung pits;
- Hairs;
- Prints;
- Scratches on trees and
- Feeding signs (e.g. snuffle holes, dug out wasp nests and feeding remains).

2.29 Any sett found was examined and assigned to one of four categories of importance to the badger clan, as defined by Harris et al. 1989 and used in various National Badger Surveys (Wilson et al. 1997 and Cresswell et al. 1990). The number of holes comprising each sett was recorded and setts classified as disused, partially used, or well-used. Sett descriptions and categories of use are set out in Table 1 and Table 2.

Table 1: Classification of Badger Setts

Type of Badger Sett	Description
Main	These usually have a large number of holes with large spoil heaps, and the setts generally look well used. There will be well-used paths to and from the sett and between sett entrances. Although normally the breeding sett is in continuous use, it is possible to find a main sett that has become disused due to excessive digging or some other reason; it should be recorded as a disused main sett.
Annex	These are often close to a main sett, usually less than 150m away, and are usually connected to the main sett by one or more obvious well-worn paths. They usually have several holes but may not be in use all the time even if the main sett is very active.
Subsidiary	These often only have a few holes. They are usually at least 50m from a main sett, and do not have an obvious path connecting with another sett. They are not continuously active.
Outlier	These usually have only one or two holes, often have little spoil outside the hole, with no obvious path connecting with another sett and are only used sporadically. When not in use by badgers, they are often taken over by foxes or even rabbits. However, they can still be recognised as badger setts by the shape of the tunnel (not the actual entrance hole), which is usually at least 250mm in diameter, and is rounded or a flattened oval shape. Fox and rabbit tunnels are smaller and often taller than broad.

Table 2: Indicators of use of badger setts

Classification of Use	Description
Well-used	Clear of debris and vegetation, obviously in regular use.
Partially used	Not in regular use, with leaves or twigs in entrance or moss and other plants growing around the entrance.
Disused	Partially or completely blocked entrances, unable to be used without a considerable amount of clearance.



Badger Survey Limitations

- 2.30 The survey was limited to land within the red line boundary with views where possible to land within 30m. There was evidence of further sett entrances in the steep wooded embankment along the eastern site boundary, but these could not be fully accessed during the survey due to it being off site and down a steep slope. The survey was also undertaken in January, a time of year when badgers are less active and as such this should be taken into account when considering assessing levels of activity identified. However, the time of year is optimal for finding sett entrances due to the back of vegetation at this time.

Ground Based Assessment of Trees for Bat Roost Potential Methodology

- 2.31 An initial daytime assessment of trees was made on the 5th June 2018, undertaken by Georgina Palmer (Senior Ecologist) and Steven Coyne MCIEEM (Consultant Ecologist; NE bat survey licence CL18). A subsequent update assessment was undertaken on the 27th January 2021 by experienced ecological consultant Hayley Care BSc, ACIEEM.
- 2.32 The purpose of the initial and update survey was to assess trees on site for bat roosting potential that may be subject to potential future loss. The initial ground-based survey was aided by the use of binoculars, a high-powered torch, telescopic inspection camera and digital video endoscope, with the subsequent update survey aided by binoculars. All of the trees previously identified as being lost within the development footprint in 2018 were re-assessed for bat roost potential. The update survey especially focused on whether any new potential roost features had been created (or were no longer present) to enable an update assessment of the trees.
- 2.33 Table 4 and Table 5 show the tree features assessed and inspected during the surveys and the categorisation of trees regarding their potential to be used by roosting bats.

Table 4: Common features used by bats for roosting and field signs that may indicate use by bats, as detailed in Hundt (2016)

Features of Trees Used as Bat Roosts	Signs Indicating Possible Use by Bats
Natural holes	Tiny scratches around entry points.
Woodpecker holes	Staining around entry points.
Cracks/splits in major limbs	Flies around entry points.
Loose bark	Smoothing of surfaces around cavity.
Behind dense, thick stemmed ivy	Bat droppings in / around / below entrance.
Hollows/cavities	Audible squeaking at dusk or in warm weather.
Within dense epicormic growth	Distinctive smell of bats.
Bird & bat boxes	-



Table 5: Classification of trees modified from Hundt (2016)

BCT Tree Category	Description
High Potential	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time.
Moderate potential	A structure or tree with one or more potential roost sites 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.
Low potential	A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Negligible potential	Negligible habitat features on site likely to be used by roosting bats

Tree PRA Limitations

- 2.34 The update survey was undertaken without the aid of telescopic inspection camera and digital video endoscope and as such it was not possible to always determine how deep a potential cavity or feature may extend from the ground. However, the baseline tree assessment is formed from previous survey data which did use this equipment and this, combined with the use of binoculars, enabled the surveyor to identify any new features that could offer bat roost potential and enable classification assessment as required. Additionally, the update survey was undertaken at the optimal time of year, with lack of foliage on trees enabling any potential root features to be identified which otherwise may be obscured. As such, a high degree of certainty is placed on the assessment results.

Tree PRA Findings

- 2.35 All of the trees previously identified as being potentially lost within the development footprint in 2018 were re-assessed for bat roost potential. Tables 6 and 7 below detail the updated assessment results which are also displayed on plan 10581 / P07a.
- 2.36 Three trees were assessed as now being of low potential from previously negligible (T10, T11 and an ash in G10) and three trees graded as moderate potential from previously low (T24, T27 and T35). The remaining trees have kept the same category as was assigned in 2018.
- 2.37 All other trees within the development footprint will not be impacted by development, so were not subject to ground-based tree assessment.

Table 6: Updated assessment of trees lost within the development footprint with potential to support roosting bats.

Tree Ref.	Species	Grid Ref.	BCT Category		Notes on Potential Roosting Features	Impact
			2018	2021		
T10	Ash	SJ35945127	Neg	Low	Ivy cover potentially obscures potential roost features and there looks	Retained



					to be some rot damage in the trunk.	
T11	Sycamore	SJ35955127	Neg	Low	Small fold in limb on east limb facing north. The extent of the fold's depth cannot be seen from the ground.	Retained
T12	Ash	SJ35975127	Low	Low	Crack/splits on south face, widespread damage from a tear out.	Retained
T24	Oak	SJ35945165	Low	Mod	Oak with some ivy cover, potentially obscure potential roost features. Rot hole cavity on eastern limb facing south. Small hole in twisted limb on the west, facing south.	Retained
T27	Sycamore	SJ36195148	Low	Mod	Crack/splits on east face, some major damage with possible cavities extending up in the central trunk.	Retained
T28	Oak	SJ36205149	Mod	Mod	Crack/split on east face (no features seen) and base is also cracked. Split on limb on southern side, facing east. Small crack on trunk on the east side.	Retained
T29	Sycamore	SJ36215151	Mod	Mod	Knot holes and crack around the base of broken off limb on the north. Could not identify the broken limb on the western face from 2018.	Retained
T31	Oak	SJ36215160	Mod	Mod	Crack/split on east face on side branch. Also split around dead limb and trunk on the northwest side approx. 5m high.	Retained
T33	Sycamore	SJ36035166	Low	Low	Light ivy cover, potentially obscure potential roost features, but none directly seen.	Retained
T35	Oak	SJ36285165	Low	Mod	Crack/splits on west face are open, as in 2018 but look to extend further up and be more enclosed (approx. 2.5m from ground level).	Possibly lost



					Large hole at base but can see back of it.	
G3	Hybrid black poplars	SJ36245127	Low	Low	Peppered with ivy, potentially obscure potential roost features	Retained
G4	Sycamore	SJ36205127	Low	Low	Peppered with ivy, potentially obscure potential roost features.	Retained
G7	Poplar	SJ35995164	Low	Low	Majority are peppered with ivy, potentially obscure potential roost features, but none directly seen.	Lost
G10	Ash	SJ36025164	Neg	Low	Ash on the western end of the group has ivy cover that potentially obscures potential roost features. The rest of the trees in G10 have neg potential.	Lost

Table 7: Trees lost within the development footprint with negligible potential to support roosting bats.

Tree Ref.	Species	Grid Ref.
T13	Elm	SJ35975129
T17	Sycamore	SJ35845139
G3	Copper beech	SJ36245127
G5	Sycamore	SJ35855123
G14	Holly	SJ36085145



Section 3: Conclusion and Recommendations

Habitats

- 3.1. The habitats recorded across the site in 2021 were different than recorded in 2018 in the sense that arable land has replaced fields of poor semi-improved grassland.
- 3.2. The results of the update walkover have not recorded any other new habitats, or any of significant ecological importance, which would require additional mitigation beyond that already proposed in 2018. No further actions or recommendations to habitats are made to this regard.

Badgers

- 3.3. The update badger survey conducted in 2021 confirmed that the badger setts previously recorded in 2018 have expanded in range along the northeast boundary of the site. The development parameters sought in the northeast corner of the site are unchanged since 2018 and it is considered that all setts along the eastern boundary would be retained and sufficiently buffered from development (i.e. by at least 30m) to avoid any adverse impacts and the need for any permanent or temporary sett closure of setts S1, S2, S3, S4 and S5.
- 3.4. A footpath is proposed in proximity to these setts (c. 10-30m distant), but it is considered that the installation of this footpath could be accomplished via sensitive working methods to avoid the need for any sett closure or trigger any other adverse impacts.
- 3.5. Whilst setts 6, 7 and 8 are located within a retained area of the site, a 'strategic shared use footpath/cycleway link' passes through this area and directly over the setts, and the installation of this footpath may necessitate either permanent or temporary closure of these active outlier setts. For outlier sett closure, no replacement sett provision is required but the closure of the setts must be done under licence from NRW, which will comprise only closing the setts between July and November inclusive. One-way gates will be installed at each entrance and monitored for a period of 21 days. After this period, the setts can be excavated under supervision by a suitably qualified ecologist and works can proceed in the area. Should it be apparent through the monitoring that badgers have managed to re-excavate the closed setts, the 21-day closure period will need to re-commence until a clear run of 21 days of no badger activity has been recorded.
- 3.6. Sett 9, a partially used outlier, would also be lost under current proposals as this location is where the strategic link road enters the site from the north. This sett would also need to be closed under the methodology discussed above.
- 3.7. It should be noted, however, that badgers can excavate (or abandon) new setts in a short period of time so as part of any future reserved matters or detailed application, update surveys for badger would need to be completed to re-assess their status and distribution within the site. The mitigation strategy discussed above would then need to be re-visited in line with the results of the update surveys.
- 3.8. Regardless of the results of any update surveys, badgers are known to disperse and forage throughout the site. To this end, sensitive working practices must be employed during site clearance works and construction activities to protect badgers as far as is reasonably practicable.



3.9. This detail should be included within a Construction and Environmental Management Plan (CEMP) and include, but not be restricted to:

- Sealing or ramping any excavations left overnight, or providing mammal ramps at regular intervals;
- Capping any pipework left open overnight;
- Storage of construction materials/site arisings off the ground or in skips;
- Compressing any stockpiles to reduce the likelihood of badgers excavating setts within

Bats

3.10. The update preliminary roost assessment surveys largely confirmed the results of the previous assessments conducted in 2020. The majority of trees assessed would be retained under current proposals, but the following trees and recommendations for further consideration/work are noted:

- T35 assessed as providing 'moderate' bat roost potential – noted as a Category 'U' tree and recommended for removal in the former Tyler Grange Arboricultural Impact Assessment Report (10581_R03b_BS5837 Preliminary Arboricultural Impact Assessment_JJ_JW_19.12.18). It would not be directly impacted by development works and is in poor health, but such trees are often highly valuable for many fauna, so any detailed design should seek to retain as much of this tree as possible whilst still maintaining public safety. Should detailed designs confirm the need for removal of this tree for health and safety/public interest reasons then it will need to be subject to detailed surveys for roosting bats. In accordance with best-practice, this would comprise two dedicated surveys in optimal season (May – August), which would entail nocturnal emergence/re-entry roost surveys or climbed inspections. The latter is likely to be an unviable option due to the poor structural integrity of the tree, making climbing unsafe.
- All trees to be lost assessed as providing 'low' bat roost potential would not require any further surveys in relation to bats, but it would be best-practice for their removal to be done in a sensitive manner in an appropriate season (early spring or late autumn), including but not limited to;
 - Section felling and careful lowering of limbs to the ground;
 - Endoscope inspection of grounded limbs by a licensed ecologist;
 - Limbs left on the ground for a period of 24 hours prior to removal/chipping;
- In the unlikely event a roosting bat is encountered, works should stop, and further advice sought from the licensed ecologist.

3.11. Regardless of the status of any roosting bats in T35, however, the parameters of the proposals put forward allow provision for any mitigation requirements for the loss of a roost. This could be achieved by replacement bat boxes on retained nearby trees or integrated roost features in new properties.



GCN

- 3.12. Update eDNA surveys of the on-site ponds are recommended to confirm that GCN have not colonised the site since previous surveys, which may then have implications on the mitigation strategy previously put forward. Should these surveys confirm the presence of GCN on-site, the mitigation strategy would need to be revisited to account for this.

General

- 3.13. Overall, the habitats within the site, and their value/importance to protected/notable species are unchanged since previous assessment in 2018. No changes are recommended or considered necessary in relation to the previous mitigation/enhancement strategies put forward.



References

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Harris, S., Cresswell, P. and Jefferies, D. (1989) Surveying Badgers. The Mammal Society Publication No. 9. The Mammal Society, Southampton.

Wilson, G., Harris, S. and McLaren, G. (1997) Changes in the British badger population, 1988 to 1997. People's Trust for Endangered Species (PTES), London



Appendix 1: Site Proposals





- KEY:**
- Site boundary
 - Open space
 - Residential development
 - Primary access point (as per CBO Site Access Plan re CBO-0322-017)
 - Further primary access point (illustrative location only)
 - Potential secondary link
 - Strategic link road (illustrative route only)
 - Primary roads (illustrative only)
 - Potential links to adjacent land
 - Footpaths
 - Strategic shared use footpath/cycleway link
 - Existing pedestrian and cycle routes
 - Existing vegetation to be retained
 - Existing pond to be retained
 - Proposed woodland and tree planting
 - Proposed equipped play area (400m²)
 - Indicative SuDS attenuation areas (if required)

**BARRATT
HOMES**
built around you

BLOOR HOMES

*The Trustees of The
Wrexham (Parochial)
Education Foundation*

Land South of Holt Road Wrexham

Parameter Plan

Drwg No: 661B 05 D
Drawn by: SB
Rev by: EM
QM Status: Checked
Scale: 1:2500 @ A3

Date: 16-12-20
Checker: DL
Rev checker: SB
Product Status: Issue

Plans:

Habitat Features 2021: 10581/P01b February 2021 HC / JD

Ground based tree assessment results 2021: 10581/P07a February 2021 HC / JD





- Site Boundary
- A Arable
- Broad-leaved Woodland (Plantation)
- Broad-leaved Woodland (Semi-natural)
- Defunct hedge
- Drain (dry)
- SI Grassland (Semi-improved)
- Pond
- Scattered Trees
- Scrub
- Tall Ruderal



Project	Land South of Holt Road, Wrexham
Drawing Title	Habitat Features 2021
Scale	As Shown (Approximate)
Drawing No.	10581/P01b
Date	February 2021
Checked	HC/JD



3 Jordan Street, Deansgate, Manchester, M15 4PY
 T: 0161 236 8367 E: info@tylergrange.co.uk W: www.tylergrange.co.uk



Site Boundary

PRA Tree Category

Moderate

Low

Negligible

Not assessed



Project	Land South of Holt Road, Wrexham
Drawing Title	Ground based tree assessment results 2021
Scale	As Shown (Approximate)
Drawing No.	10581/P07a
Date	February 2021
Checked	HC/JD



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An abstract collage on a dark blue background. A large yellow hexagon is the central focus. Surrounding it are various geometric shapes: a light blue pentagon, a purple arrow pointing down, a purple asterisk, a black hand icon, a black leaf, a black triangle, a black circle with white segments, and a black triangle with a yellow dot pattern. The text "Step into our world" is written in a large, black, sans-serif font across the yellow hexagon.

Step into our world

www.tylergrange.co.uk



**Tyler
Grange**

Landscape | Ecology | Arboriculture