# WESTHIDE SOLAR

## Addendum Ecology Report

for

Ersun (Westhide SPV) Ltd

June 2022

THE Landmark PRACTICE

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**D denotes a Draft version*

*The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.*

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## 1.0 INTRODUCTION

1.1 This Addendum report should be read in conjunction with the Westhide Solar, Ecological Appraisal (TLP, December 2021).

1.2 The Ecology and Green Infrastructure Specialist, appointed by Herefordshire County Council (HCC) provided ecology comments on behalf of HCC, on the planning application for the proposed development on 27 April 2022. Further to this, an e-meeting was held with representatives from The Landmark Practice (TLP), the HCC Ecology and Green Infrastructure Specialist and the appointed Planning Case Officer on 11 May 2022.

1.3 This Addendum report provides supplementary information as requested and agreed during the e-meeting on 11 May 2022.

**Comments from Herefordshire County Council**

1.4 The full comments received from HCC are provided below, taken from the email dated 27/04/2022.

> ***'Bats*** *- The Ecological Assessment identifies 6 ash trees which need to be removed for a mixture of reasons including enabling development and safety. These trees have been assessed as providing negligible (2 tree), moderate (1 tree) and high (3 trees) bat roosting potential. No bat emergence surveys or climbing inspections have been provided and the assessment seems to suggest that the further assessment of these trees can be undertaken prior to the commencement of works. The Council needs to understand the presence, or otherwise, of roosting bats on the site in order to consider all material considerations in making a planning decision and bat surveys cannot, therefore, be left to condition. These surveys need to be provided in advance of the application being determined.*
>
> ***Water vole*** *- I note that the ponds and ditches on the site have been assessed as being potentially suitable for water vole but that the need for further surveys has been scoped out based on the fact that the features are being retained and buffered. Water voles are particularly sensitive to vibration including piling techniques which will be used during the installation of the solar panels. A clearer assessment of the presence, or otherwise, of this species and the potential for disturbance impacts upon them and their burrows is required in order to allow a planning decision to be made.*
>
> ***Site Design -*** *I note the comments from Herefordshire Council's Landscape Specialist specifically around amending the layout of panels to provide a greater buffer distance around some ecological features and retained trees on the site. I support the suggestion that the substation should be repositioned to allow greater buffer distances around the important black poplar trees in this part of the site, I also support the removal of some short runs of panels in close proximity to retained ponds and trees to increase the buffer distances here. I note the recommendation in the Ecological Assessment that a 'significant' east to west connectivity corridor should be provided on the site particularly relating to great crested newts. Looking at the proposed masterplan I feel that this feature could be increased in width throughout to enhance its functionality.*
>
> ***Landscape Management*** *- I note the presence of breeding skylark on the site and I would welcome the provision of areas suitably managed for skylark breeding (sometimes called skylark plots) within the landscape proposals for the site. I note*

*that the landscaping is likely to continue to provide feeding and displaying opportunities for this species and I feel that the inclusion of potential breeding habitat is an important part of the mitigation for this species.*

*I note the retention of 3 present ponds on site with one dry pond also being present. I would welcome the reinstatement of the dry pond as part of the landscape enhancements and I also think that consideration to ongoing management of the ponds needs to be considered but does not seem to be recognised in the BNG assessment or the LEMP. Ponds, especially those surrounded by trees, tend to fill with vegetation and leaf litter which shallows and dries the features and degrades their ecological interest and the long term sustainability of great crested newt populations. The ponds should be subject to regular habitat suitability assessments – every 5 years or so – with the option for intervention in the form of tree removal or management, vegetation management or partial redredging as required. This is essential in order to ensure that these features are at the required condition at the end of the 30 year period set out in the BNG assessment but is not recognised in the LEMP.*

*I note the reference in the LEMP to fertiliser use being kept to a minimum – my view is that there should be no fertiliser use on the site during the 30 year BNG period. Likewise references to herbicides and insecticides should be amended to state no use of these chemicals on site (potentially with the exception of the need to treat any invasive species which cannot be managed in any other way).'*

1.5 Responses to all comments, including further information where required, are set out under each respective heading below.

## 2.0 BATS

2.1 Ground level bat tree roost assessments of trees within the field boundaries were undertaken concurrently with the Phase 1 habitat survey on 30 October 2020 (TLP, February 2021). A total of six trees were subsequently identified to be removed and these were surveyed again in November 2021 (TLP December 2021). The roosting potential of the trees that are identified for removal, as categorised by the ground tree roost assessment (undertaken in November 2021 is summarised in **Table 1** below (**Figure 6 of the Ecological Appraisal** (TLP, December 2021) refers).

2.2 Due to the late confirmation of the need to fell these trees to enable construction of the proposed development, no further survey works were undertaken prior to the submission of the planning application.

**Table 1**: Preliminary Ground Tree Roost Assessment Results.

| Tree No. | Species | Roost potential |
|---|---|---|
| T1 (T60*) | Ash | Moderate |
| T7 (T30*) | Ash | High |
| T19 (T9*) | Ash | Negligible |
| T20 (T18*) | Ash | Moderate |
| T21 (T16*) | Ash | Negligible |
| T22 (T32*) | Ash | High |

** Tree number as per arb report (Hillside Trees, 2021) – in order for cross referencing*

2.3 Further surveys have been and are being undertaken in 2022 to confirm the presence, or otherwise, of roosting bats within the trees that are to be removed to enable the proposed development.

**Methods**

Ground-Level Roost Inspections

2.4 An updated ground level roost assessment was carried out on 31 May 2022 concurrently with an aerial inspection by a licensed bat worker from TLP, in compliance with the *Bat Conservation Trust's Good Practice Guidelines* (Collins, 2016).

2.5 The inspections were undertaken during daylight hours from ground level. Binoculars and a high-powered torch were used to identify potential roost features (PRFs). These include, but are not limited to:

- Woodpecker holes;
- Rot hollows;
- Cracks and splits;
- Loose and flaking bark;
- Thick-stemmed ivy;
- Hollows and cavities; and
- Bird and bat boxes.

2.6 Following the ground-level inspections, each tree supporting PRFs was categorised according to good practice survey guidelines (Collins, 2016). Criteria for each category are set out in Table 2 below.

**Table 2:** Criteria for the Categorisation of Bat Roosting Suitability of Trees (based on Collins J, 2016).

| Category | Description |
|---|---|
| Confirmed | Trees with bats observed or evidence of bats present such as bat droppings. |
| High | Trees with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. |
| Moderate | Trees with bat potential, supporting fewer suitable features than 'high category' trees. Trees 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 single roosting bats. |
| Low | Trees of sufficient size and age to contain potential roost features but with none seen from the ground level, or features seen with only very limited roosting potential. |
| Negligible | Trees with negligible features likely to be used by roosting bats. |

*N.B. The above colour coding system has been used throughout this report.*

Aerial Roost Inspections

2.7 To date, two aerial tree roost assessments have been carried out, on 31 May 2022 and 20 of June 2022 respectively, by two bat licensed and CS38 certified climbers, in compliance with the *Bat Conservation Trust's Good Practice Guidelines* (Collins, 2016). Additional tree climbing surveys are being undertaken of trees where all features can be fully inspected.

2.8 Trees assessed as offering moderate and high suitability for roosting bats during the ground-level inspections were climbed (where safe to do so) and previously identified PRFs were examined more closely with use of an endoscope, mirror, and torch. Any direct or indirect evidence of bats, additional information about previously identified PRFs and/or information on newly discovered PRFs was recorded and used to inform and update each trees existing roosting suitability categorisation as per **Table 3**.

2.9 Trees that retained or attained high to moderate bat roost potential status after an initial climb were/will be climbed on two further occasions; trees that retained or attained a moderate bat roost potential after the initial climb were climbed on one further occasion. These additional climbs are to determine how usage of trees by bats varies over time and to increase the overall robustness of the assessment.

2.10 A summary of the survey dates and attendant weather conditions of each aerial survey is set out in **Table 3** below.

**Table 3**: Aerial Roost Inspection Survey Dates and Weather Conditions.

| Climbing Phase | Date | Temp (C) | General Weather conditions |
|---|---|---|---|
| Initial Climb | 31/05/2022 | 17 | Warm, sunny, 80 % cloud cover, light breeze (1-2 beaufort) |
| 2nd Climb | 20/06/2022 | 21 | Warm, muggy, overcast |
| 3rd Climb | **11/07/2022** | **TBC** | **TBC** |

**Results**

Ground-Level Roost Inspections

2.11 The results of the updated ground tree assessment, undertaken in May 2022, are presented in **Table 4** below.

**Table 4**: Preliminary Ground Tree Roost Assessment Results.

| Tree No. | Species | Roost potential (November 2021) | Roost potential (31/05/2022) |
|---|---|---|---|
| T1 (T60*) | Ash | Moderate | Moderate |
| T7 (T30*) | Ash | High | High |
| T19 (T9*) | Ash | Negligible | Negligible |
| T20 (T18*) | Ash | Moderate | Moderate |
| T21 (T16*) | Ash | Negligible | Negligible |
| T22 (T32*) | Ash | High | No longer present |

** Tree numbers as per arb report for cross referencing*

2.12 Tree number T22 (T32*), had fallen down since the survey in November 2021 and was no longer present. The 'negligible' potential trees (T21 (T9*) and T19 (T16*)) were still assessed as having negligible potential and therefore no further survey works are required. The identified potential of all of the other trees that are to be removed remained the same.

Aerial Roost Inspections

2.13 The results of the aerial tree climbing surveys undertaken on 31 May 2022 and 20 June 2022 are summarised in **Table 5** below. Only trees with moderate or high potential were included.

**Table 5:** Preliminary Ground Tree Roost Assessment Results.

| Tree No. | Species | Ground Roost Potential (31/05/2022) | Aerial Roost potential (31/05/2022) | Aerial Roost potential (20/06/2022) |
|---|---|---|---|---|
| T1 (T60*) | Ash | Moderate | High | Negligible |
| T7 (T30*) | Ash | High | Moderate | Moderate |
| T20 (T18*) | Ash | Moderate | High | High |

** Tree number as per arb report – in order for cross referencing*

2.14 The tree T1 (T60*) was upgraded from 'moderate' to 'high' following the first aerial tree climbing inspection on 31 May 2022. The tree contained several suitable features with one knot hole having high potential and the remaining features being of low potential. During the second survey a bees nest was present within this feature which currently makes the tree unsuitable for roosting bats. All features could be fully inspected during the aerial tree climbing survey.

2.15 The tree T7 (T30*) remained at 'moderate' suitability. The tree contained one woodpecker hole that had moderate suitability and five wood pecker holes with low suitability (mainly test holes and feeding holes rather than old nest holes). In addition one knot hole was present which had low suitability. All features could be fully inspected during the aerial tree climbing survey.

2.16 The tree T20 (T18*) was upgraded to 'high' following the first aerial tree climbing inspection. A knot hole was present on a branch at 6 m which had high potential on the same branch was another knot hole assessed as offering moderate potential. All other features were low or negligible. All features could be fully inspected during the aerial tree climbing survey.

**Discussion and Recommendations**

2.17 None of the trees to be removed have been found to contain bat roosts following the surveys to date. All three trees will be climbed one final time (Health and Safety permitting, with regard to the bees nest within T1) with a proposed survey date of 11 July 2022.

2.18 Bats generally use a large number of tree roosts for their day roosts, the survey data does not indicate the presence of any maternity roosts as these would be used regularly by bats and evidence would have already been found.

2.19 HCC needs to be able to understand how bat roosts will be mitigated for in order to be able to make a decision on a planning application. Identifying tree roosts is notoriously difficult due to their transient nature. If a day roost is found during the final survey this can, however, be easily mitigated for by a tree mounted bat box. Therefore, the evidence gathered to-date will allow determination of the planning application without the data from the final survey. It is therefore proposed that, should a roost be found during the last survey, an appropriate licence will be applied for from Natural England and be mitigated for by an appropriate tree mounted bat box.

2.20 As already discussed in the Ecological Appraisal (TLP, December 2021) the impacts on bats from the proposed development are minimal due absence of lighting and the ecological enhancements of habitats associated with the landscaping plans for the site.

## 3.0 WATER VOLES

3.1 Water vole surveys were originally scoped out the suite of Phase 2 ecology surveys as all waterbodies were being retained (as agreed with the HCC Ecologist, 30/04/2021). Nonetheless, as it was possible during the great crested newt eDNA surveys, a water vole survey was carried out in conjunction.

### Methods

3.2 A water vole survey of P1, P2, P3, P4, P15, D1 and D2 (**Figure 5 in the Ecological Appraisal** (TLP, December 2021)) which are within the site/ or directly adjacent was undertaken on 20 April 2021. In addition, during every great crested newt survey (traditional population class assessment) water bodies were checked for water vole evidence. Evidence of water vole activity, including burrows, runs, latrines and feeding remains was searched for along the banks of the ponds and ditches with reference to *Water Vole Conservation Handbook* (3rd) Edition (2011) and *The Water Vole Mitigation Handbook* (2016)[1]. The surveys were undertaken by suitably qualified ecologists.

### Results

3.3 No evidence of water voles was recorded during the water vole survey. In addition, following subsequent great crested newt surveys no evidence of water voles was observed.

### Discussion

3.4 Therefore, water voles are deemed absent from the site and no further consideration is required.

## 4.0 SITE DESIGN

4.1 As per comments from the HCC Landscape Officer as well as the Tree Officer and the Ecology and Green Infrastructure Specialist, the site layout has been amended. The layout of the panels has been altered to provide a greater buffer distance from ecological features. The substation has been moved to increase the distance from ancient veteran trees (Black Poplars) and this has increased the buffer by 15 m (refer to Master Plan version I). Incidentally, since the identification of these valued trees and following feedback from the Tree Officer and The Woodland Trust, the landowner intends on taking

[1] Strachan et al 2016. Water Vole Conservation Handbook. 3rd Edition. Wildlife Conservation Research Unit.

cuttings and propagating these Black Poplar trees around the wider Estate to ensure their legacy.

4.2 In summary, the following amendments to the site layout have been made:

- Larger buffers around the veteran trees in and around Fields C, D and E (15 x diameter of tree trunk). Shown with blue dash line around trees. Panels, roads and fence lines have been moved to accommodate;
- Substation moved further to the west to give space to veteran trees;
- Some amendment to panels and access tracks to avoid RPAs of other trees;
- Additional hedgerow and tree planting along the western edge of Fields C and F (453 m);
- Additional hedgerow and tree planting along the southern edge of Fields D and E (231 m);
- Areas of panels in Fields F, G and H removed to create rewilding areas. This will still be proposed as species rich grassland, as before, but left to re-naturalise; and
- Wild Bird Seed Mix moved from western edge of D and F, to northern edge of F and H, to avoid overshadowing. No change in total area.

4.3 Great crested newt corridors or buffers along hedgerows and canal have not been changed.

4.4 In relation to the comment regarding the east – west corridor and the need to provide '*increased … width throughout to enhance its functionality'.* The GCN buffer is actually 20-25 m from panels (the Master Plan, Rev I, has been amended to show this more clearly). Furthermore, the overall site will be permeable to GCN and the change from arable to grassland will greatly enhance the site habitats for newts. All ponds are buffered by a minimum of 25 m from panels. In addition the great crested newt buffer zone is 25 m from all panels.

## 5.0 LANDSCAPE MANAGEMENT

**Skylark**

5.1 In relation to breeding skylark on site, the breeding bird survey recorded three skylark territories within fields adjacent to the site (these will not be impacted by the proposed development) and a single territory within the site, although the latter was abandoned prematurely as a result of the ploughing of Field H in order to plant a potato crop. Therefore no skylark territories will be lost as part of the proposed development. In the May 2022 e-meeting with the Ecology and Green Infrastructure Specialist and HCC Planning Case Officer, this fact was raised and acknowledged. The Specialist noted that they would, regardless, like to see a skylark plot included within the layout if possible.

5.2 Following comments and the May 2022 e-meeting with the Ecology and Green Infrastructure Specialist and HCC Planning Case Officer, careful consideration was undertaken as to whether a skylark plot could be incorporated into the design. However due to the nature of the site, no suitable areas for skylark plots are present as skylark plots need to be situated away from hedgerows and trees by 24 m and also panels as they act in the same way as hedgerows (providing cover for predators). It is therefore not feasible to include a skylark plot as enhancement for this species within the site without significant loss of solar panels. As skylark have not been recorded breeding within the site, we would

suggest that such a loss would be overly onerous and not proportionate. The site does, however, contain enhancement for skylark in the form of wild bird seed mix.

**Ponds**

5.3 The three retained ponds on site will have ongoing management to maintain their suitability to hold water, as well as support the great crested newt population present. The Landscape and Ecology management Plan (LEMP) has been amended to include suitable management measures.

5.4 As discussed and agreed during the May 2022 e-meeting, the dry pond is not viable to be reinstated. However, long term monitoring of the ponds has been included within the LEMP (V3, June 2022) as requested (i.e. habitat suitability Index surveys every five years, and a single great crested newt traditional survey) to aid within understanding the current population of GCN on site.

5.5 No fertiliser will be used and sheep grazing management has been replaced with a hay cut instead to eliminate increase levels of nutrients (mainly nitrates) in the soil via their droppings and urine. This has been incorporated into the Landscape information within the Masterplan (Rev I) and the LEMP (V3, June 2022). In addition no insecticide or herbicides will be used.

5.6 In relation to the wild bird seed mix - the original recommended mix was - WM1 Wild Bird Seed Mix KWM1SYN - KingsCrops - which contains kale which is treated with Seed-Life™ and Synergy treatment which contain a wide range of nutrients including nitrogen and potassium. To avoid these additional chemical inputs we have recommended creation of a purpose made mix excluding kale. The seed mix would be amended to contain nitrogen fixers such as white or red clover, lucerne or common vetch. This change has been made to the Landscape information within the Masterplan (Rev I) and the LEMP (V3, June 2022).

## 6.0 SUMMARY

6.1 This Report provides a summary of the proposed development's responses to post-submission consultation comments received in 2022, with additional information supplied where appropriate.