

BARN OWL SURVEY REPORT AND PRECAUTIONARY MITIGATION PLAN

LAND EAST OF STOKE ROAD AND NORTH OF NORMANDY WAY (A47), HINCKLEY,
LEICESTERSHIRE, NR LE10 1YA

ON BEHALF OF

MR & MRS ADCOCK C/O RICHBOROUGH ESTATES

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Previous Survey Work & Rationale

Following the initial survey work completed at the land east of Stoke Road and north of Normandy Way, further survey work was advised to determine the status of a potential nesting site for barn owl.

During the breeding bird survey effort undertaken in May 2022, barn owl *Tyto alba* was observed once, leaving a potential nesting site. Juvenile barn owl begging calls were then heard (by the same surveyor who conducted the BBS) during a bat transect survey undertaken by Zebra Ecology on the 27 July 2022 (Zebra Ecology, 2022). A reasonably fresh barn owl pellet (indicated by dark colouration) covered in downy feathers was also discovered during a separate bat transect survey undertaken by Zebra Ecology on 20 September 2022. Given that the individual(s) were not visible upon closer inspection, it is assumed that barn owls are present in a potential nesting site and therefore are a 'probable breeder' on-site. A nest verification survey by a suitably licensed tree climbing ecologist was recommended to determine the status of this potential nest-site, as per the guidance found in the Leicester, Leicestershire, and Rutland Barn Owl Survey Protocol (2021). Barn owls are a scarce breeder within the locality, as well as being identified within the local BAP. Therefore, just one breeding pair is considered sufficient to be a significant population of this species found within the Leicestershire & Rutland Red Data Book (LCC, 2011).

Update and Further Survey Findings

On 5 October 2022, a licensed barn owl surveyor (NE licence ref: CL29-00338) undertook a nest verification survey assessment of the tree which included ground-based inspection and a climb of the lower limbs. The findings of this survey were as follows:

- The tree had evidence of barn owl, comprising whitewash splashing in the below vegetation.
- Ground-level visual inspection identified a minimum of three potential nest site entrances within the tree cavity.

- The tree was subject to ash dieback and therefore only safe lines were gained to the lower limbs to enable access to the c.2m from ground central section of the tree. Beyond this point, the branches were considered unsafe to climb due to the weak structural integrity of the tree.
- When stationed within the tree the climbing surveyor noticed an ammonia-rich smell highly indicative of a nest site (Barn Owl Trust, 2021).
- At approximately 30 minutes into the survey, a single barn owl was flushed from a cavity within the tree and flew north-east.

Conclusions

Given the findings of this survey, and the evidence gathered during previous survey efforts, the tree has been confirmed as an active barn owl roost site, **and it is extremely likely that an active barn owl nest site was present at the time of survey.** The evidence in support of this includes:

- Two observations of adult barn owl flying out of the tree, once on 4 July 2022 during visit 5 of the breeding bird survey effort and a second on 5 October 2022 during the further survey work.
- The juvenile barn owl begging calls heard coming from the tree on a bat transect survey on 27 July 2022.
- The reasonably fresh down-covered barn owl pellet discovered at the base of the tree on a bat transect survey completed on 20 September 2022.
- The whitewash splashing on the vegetation beneath the canopy of the tree noted on 5 October 2022.
- The ammonia-rich smell noted by the climbing surveyor on 5 October, indicating the presence of nesting owls as the nest material soaks up the faeces produced by owlets after they have hatched and before they have fledged (Barn Owl Trust, 2021).

Legal Compliance, Evaluation and Recommendations

Barn owls are included in Schedule 1 of the Wildlife & Countryside Act 1981 which affords them protection against disturbance whilst nesting in addition to the basic level of protection of barn owls afforded to most wild birds.

Specifically, under Part 1, Section 1 (5) it is an offence punishable with imprisonment for a period of up to 6 months to intentionally or recklessly:

- Disturb a Barn Owl while it is building a nest or is in, on or near (c.30m from) a nest containing eggs or young.
- Disturb dependent young of a barn owl.

Based on the conclusions made above, the tree should be treated as an in-use barn owl roosting and **nesting site**. Barn owls are highly faithful to their nesting sites (Barn Owl Trust, 2021) and any loss of a roost/nest site can lead to knock on effects, including abandonment of their current home-range. Any unexpected, prolonged and/or noisy work within the building/tree or close by may be extremely disturbing to the birds and pose a major threat to breeding success (Barn Owl Trust, 2021).

Due to the large nature of the proposed residential scheme, it is likely that the general environment surrounding the nest site will be made less suitable for use by barn owls, and subsequently they may be less inclined to use the site for breeding. However, guidance provided by the Leicester, Leicestershire, and Rutland Barn Owl Survey Protocol (2021) and Barn Owl Trust (2022) states:

- *“Barn owls can learn to tolerate noise and activity as long as they have something to hide in – such as a nest box.*
- *“Provided that the birds can remain out of sight, they seem perfectly content in sites with lots of human/agricultural activity. Some farmhouses have had barn owls nesting in the attic for many years.”*

Avoidance measures have been implemented at the design stage by retaining the tree (and subsequent nesting cavity) and a green infrastructure buffer zone has been planted in the habitat immediately surrounding the tree. However, as a precautionary approach, and with consideration being given to the local importance of breeding barn owl sites at the local level, a mitigation plan should be produced to indicate how specific enhancements for barn owls will be achieved at the local level as part of a conditioned LEMP.

The prolonged retention and suitability of the tree for nesting is advised. The development proposals include the retention of the tree, and as such, no direct effects on the nest site are proposed as a result of the development. If the tree is to undergo any surgery/limb removal, this should only be done once nesting barn owl absence has been confirmed by a suitably licensed ecologist.

Due to the nature and scale of the proposals (c.475 residential dwellings), there will be significant adverse indirect effects on the viability of the nest site during construction. Initial and unpredictable disturbance may be caused by the heavy machinery, large work-force numbers and vehicles traversing the site during the development period. It is therefore recommended that works, particularly loud machinery works are restricted to the off-season for breeding barn owl (November-February inclusive). Should works be proposed to commence during the breeding season (March-October inclusive), a pre-commencement survey of the tree by a suitably licenced ecologist will be required to confirm that barn owls are not currently breeding within its cavities. If breeding barn owl activity is noted as a result of this survey, a 100m buffer zone will need to be implemented around the tree, and on-site works restricted to beyond this area until the chicks have fledged. This delay would usually not exceed four months, to allow for a full breeding cycle to have occurred. Suspected completion of the cycle should be followed by a nest inspection by a suitably licensed ecologist, prior to works continuing.

In the unlikely event where a barn owl begins nesting in the tree (or anywhere else on site) once works have commenced, a 100m buffer zone should be established around the nest site, and young must be allowed to fledge naturally and fully before works can commence within the buffer once more. Suspected completion of the cycle should be followed by a nest inspection by a suitably licenced ecologist, prior to works continuing.

Details to be included in the LEMP

As barn owl is a Local Biodiversity Action Plan species for Leicestershire, an appropriate level of mitigation, compensation and enhancement for barn owls should be created within the surrounding land/as part of the development, in order to promote this species in the immediate environment. This should be agreed and included as part of a conditioned LEMP prior to development commencement. Details of this should include:

- An alternative nest site in the form of a suitable barn owl nest box should be placed within 200m of the tree, (and preferably 100m from the edge of the proposed development to reduce future disturbance from anthropogenic activities). This should be placed in a tree (if a suitable tree can be found, N.B. avoid

ash trees due to likely structural weakness); if a suitable tree is absent, then a barn owl pole box erected on a pole would suffice. Installation height should be at least 3m above ground, with clear flight access in and out of the entrance to the box. Further details for siting nest boxes can be found in the Leicester, Leicestershire, and Rutland Barn Owl Survey Protocol (2021).

- The alternative nest site should be in situ at least 30 days prior to development commencement. Ideally, a full season of alternative nesting provision would be preferable, if achievable, to give ample time for discovery and utilisation by local barn owls.
- The nest box should also be within a clear line of site from the tree, and in a more favourable environment than the tree (i.e., surrounded by long, unmanaged grassland, where prey abundance will be higher).

As the development site is short, cattle-grazed grassland and the majority of the hedgerows are being retained (particularly to the north of the site surrounding the tree), it is not predicted that the development proposals would cause significant reductions in prey abundance for barn owl at the site level. Barn owls require 14-47ha of rough grassland within 2km of their roosting/nesting sites (Barn Owl Trust, 2021). At present, the provision of c.2ha of rough grassland and scrub has been proposed to the west of the site as part of the development's commitment to biodiversity net gain. If this was appropriately managed, a considerable parcel of this area could provide enhancements within the local context for foraging barn owl. It should be noted that this would fall on the very edge of optimal foraging habitat as the southern boundary of this area immediately abuts the well-lit A47 and adjoining infrastructure of Hinckley town. Increased risk of road death is not likely to be significantly increased here as appropriate foraging territory is not present on the other side of the A47.