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Appendix 9.3 GCN Report

Client

Hallam Land

Project

**Hawkwell Village,
North-West Bicester**

Date

October 2025

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Rev	Issue Status	Prepared/Date	Approved/Date
	Draft	HC / 09.2021	JD / 06.10.2021
A	Final		JD / 23.12.2021
B	Final	JSM/TC / 24.09.2025	JDH / 03.10.2025
C	Final	SFW / 24.10.2025	JDH / 24.10.2025

1.0 NON-TECHNICAL SUMMARY

Report Scope and Methodology
<p>FPCR were commissioned by Hallam Land to undertake great crested newt <i>Triturus cristatus</i> (GCN) surveys for a Site at North West Bicester (Central OS Grid Ref: SP 570 251) to provide an ecological baseline for the application Site and determine presence or likely absence of GCN.</p> <p>GCN surveys were undertaken in accordance with Natural England guidance. These included traditional pond surveys in 2021 (using torching, bottle-trapping, netting, and egg searches) and environmental DNA (eDNA) sampling in 2025, following approved protocols.</p>
Survey Results
<p>Multiple records of GCN are held within the area but none within the Site boundary.</p> <p>The Site is situated north-west of Bicester and is dominated by arable farmland with small areas of improved grassland, hedgerows, scattered scrub, and a small block of woodland. Two ponds are present within the Site (P10 and P17), with several further ponds within 250m–500m in the surrounding farmland.</p> <p>In 2021, a small GCN population (peak count of 10 individuals) was recorded in onsite pond P10. Multiple offsite ponds within 500m also supported GCN, with a medium population size recorded in and around Bucknell.</p> <p>In 2025, GCN were detected by eDNA in seven of nine ponds tested, including onsite pond P17 and six offsite ponds (P5, P7, P11, P12, P13, and P16). The results confirm that GCN remain present both within the Site and the wider landscape.</p>
Assessment of Impacts
<p>Onsite habitats are generally of low quality for GCN, being dominated by intensively managed arable land. However, hedgerows, field margins, and small scrub/woodland areas provide some limited terrestrial habitat and connectivity to nearby ponds.</p> <p>In the absence of mitigation, there is potential for adverse impacts on GCN during development which may lead to a breach in the legislation protecting GCN and their habitats. Impacts could include incidental harm of GCN, degradation of the ponds and surrounding habitats through pollution, encroachment or habitat fragmentation and loss of habitat.</p>
Recommended Mitigation, Compensation and Enhancement
<p>A mitigation licence from Natural England or application to a local District Level Licence scheme (DLL) will be required to allow the development to proceed. This may include precautionary working methods.</p> <p>Proposals for the Site include the provision of suitable habitats within the green infrastructure (GI) providing shelter, foraging opportunities, and commuting routes throughout the Site and to the wider area. The addition of log piles and hibernacula will also aim to provide shelter availability.</p> <p>Habitats created and maintained on Site will be managed in the long-term to ensure they remain in favourable condition. Details will be outlined in the licence application and a separate Site management plan.</p>

2.0 INTRODUCTION

- 2.1 FPCR Environment and Design Ltd. were commissioned by Hallam Land to undertake great crested newt *Triturus cristatus* (GCN) surveys in association with an area of land off Bicester Road, Bicester.
- 2.2 A series of surveys were undertaken in order to establish the extent that this protected species may be affected by the proposed development and inform any GCN mitigation strategy and the subsequent European Protected Species (EPS) licence or District Level Licence that would be required to enable lawful development. This report provides the details of these surveys and provides an outline mitigation strategy for the maintenance of the favourable conservation status of GCN on site.
- 2.3 This report accompanies an Environmental Statement for the Site (Planning application reference number 21/04275/OUT). This report updates and supersedes the previous version dated September 2021, which was based on an earlier Development Framework Plan iteration and surveys which have since been updated.

Site Context

- 2.4 The land for the proposed development (hereafter referred to as the Site) is situated northwest of Bicester town.
- 2.5 The site is dominated by arable cropland with species poor semi-improved and improved grassland for grazing livestock, scattered scrub, hedgerows, and a small woodland block. Three small watercourses bisect the site, one close to the site's northern boundary, a second towards the southern end of the site and the third running north-south from the existing development to join the River Bure at Lords Lane. Along these watercourse corridors there is a mix of dense and scattered scrub and standard trees. One pond (P10) is present on site. There is also a pooling of water where three ditches converge (P17).
- 2.6 The site is bound by existing residential development to the north-east, the railway approaching Bicester North station to the south. The remaining perimeter of the site is bound by existing agricultural boundaries.

Proposals

- 2.7 The site is proposed as a mixed use development, with an extensive network of green infrastructure and public open space including which provides opportunities for habitat mitigation and enhancements.

3.0 LEGISLATION

- 3.1 GCN and the places they use for refuge and breeding are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats & Species Regulations 2017 (as amended).
- 3.2 They are a European Protected Species (EPS) and protected under Annexes II and IV of the EU Habitats and Species Directive and Appendix II of the Bern Convention.
- 3.3 In summary, it is an offence to:
- deliberately or recklessly take, injure or kill a great crested newt;
 - intentionally or recklessly damage, destroy or obstruct access to any structure or place used for breeding, shelter or protection by the species;
 - intentionally or recklessly disturb while it is occupying a structure or place which it uses for such purpose;
 - intentionally take or destroy the eggs of a great crested newt.
- 3.4 This legislation equally protects all life stages, including eggs, efts and adults.
- 3.5 Proposals which could lead to any of the above would require a derogation licence from Natural England alongside appropriate avoidance, mitigation and compensation measures, or application to a District Level Licensing Scheme (DLL).
- 3.6 Where GCN are present, and impacts upon them arising from activities such as development cannot be avoided, a EPS Licence from Natural England is required in order to allow proposals to derogate from the legislation (licences cannot be obtained to provide protection against offences under the Wildlife & Countryside Act 1981 (as amended)).
- 3.7 European Protected Species are a material consideration within the planning process to ensure impacts on these species are minimised and mitigated for as necessary. The National Planning Policy Framework (NPPF)⁴ sets out principles which ensure that development will not result in significant harm to biodiversity and geological conservation interests and wherever possible, alternatives are sought. Where proposals cannot reasonably be located elsewhere, the NPPF considers that adequate mitigation measures should be put in place, and where mitigation is not sufficiently adequate to prevent significant harm, compensation measures should be sought. Networks of habitats are viewed by the NPPF as a valuable resource, linking sites of importance and providing routes or stepping stones for migration, dispersal and genetic exchange of species in the wider context. Such networks should be protected from development and where possible, strengthened or integrated within it.

⁴ Ministry of Housing, Communities and Local Government. (2024). *National Planning Policy Framework*. [Online]. London: Ministry of Housing, Communities and Local Government. Available from: [National Planning Policy Framework \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/123456/National_Planning_Policy_Framework.pdf) [Accessed 21/10/2025]

4.0 METHODOLOGY

Desk Study

4.1 In order to compile existing baseline information, relevant ecological information was requested from both statutory and non-statutory nature conservation organisations including:

- Thames Valley Environmental Records Centre (TVERC)
- Multi Agency Geographic Information for the Countryside (MAGIC) website⁵

4.2 Further inspection, using colour 1:25,000 Ordnance Survey (OS) maps and aerial photographs from Bing (<http://www.bing.com/maps>) was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider landscape.

Field Study

4.3 The habitats within the Site were assessed in 2021 for their potential to support GCNs during both their breeding and terrestrial phases, including an assessment of waterbodies. In addition, access was sought to assess waterbodies within a 500m radius of the Site which had suitable connective habitat to the site.

4.4 During 2025 an update survey was conducted which focused on waterbodies within a 250m of the Site. Two additional ponds (P5 and P13) just beyond this limit were included in the survey to provide additional context and strength for comparison to 2021 data.

Habitat Suitability Assessment (HSI)

4.5 All accessible waterbodies were assessed using a Habitat Suitability Index (HSI)⁶. The HSI incorporates ten suitability indices, all of which are factors known to affect this species:

- Geographic location
- Pond area
- Pond drying
- Water quality
- Shade
- Presence of waterfowl
- Presence of fish
- Number of linked ponds
- Terrestrial habitat
- Macrophytic coverage

4.6 A score is assigned for each attribute and a total score is calculated between 0 and 1. Pond suitability is then determined according to the scale in Table 1.

Table 1: HSI Scale

HSI Score	Pond Suitability
<0.5	Poor
0.5-0.59	Below average
0.6-0.69	Average
0.7-0.79	Good
>0.8	Excellent

⁵ www.magic.gov.uk

⁶ Oldham, R.S., Keeble, K., Swan, M.J.S. & Jeffcote, M. (2000) Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal*, 10(4), 143-155.

Aquatic Surveys (2021)

- 4.7 A total of 10 waterbodies were surveyed in 2021 following the methods recommended by Natural England as detailed in the Great Crested Newt Mitigation Guidelines (English Nature, 2001). No access was permitted for P5 and P6. P3, P4, and P9 were dry and therefore not surveyed in this period. To determine the presence or absence of great crested newts, four individual survey visits were performed with two of these within the 'peak' GCN aquatic survey season (mid-April to mid-May). In the event the presence of GCN was confirmed a further two surveys would be undertaken (with half of the surveys within the 'peak' survey period). These additional surveys allow population size-class assessments to be undertaken. Appropriately licensed ecologists from FPCR completed all of these surveys during suitable conditions i.e. when the ambient air temperature exceeded 5°C, with little/no wind or rain. Survey conditions for each occasion are detailed in Table 2.

Table 2: Survey Conditions (2021)

Survey Date	Survey Conditions					
	Wind	Rain	Evening temp (°C)		Morning temp (°C)	
			Air pm	Water pm	Air am	Water am
04/05/2021	2	0	7	10	8	10
06/05/2021	0	0	9	9	9	9
11/05/2021	1	1	11	11	9	9
18/05/2021	0	1	13	11	9	8
01/06/2021	0	0	22	12	12	12
08/06/2021	0	0	21	16	11	16

- 4.8 On each survey occasion three of a possible four different techniques (egg search, sweep net, bottle-trap and torch) were used where possible, unless GCN were confirmed, in which case only two methods (bottle trapping and torching) are required to determine population size class. A summary of each is provided below:

Bottle Trapping

- 4.9 Bottle traps were set within the waterbody in the evening at densities of one trap per two metres of shoreline (where feasible) and left overnight for inspection in the morning. Traps were partially submerged in the water leaving an air bubble in the bottle and secured by a cane marked with a high visibility tape to ensure relocation the following day. Care was taken to ensure that trapping did not occur during excessively warm weather, when the temperature inside the trap could rise considerably, reducing oxygen levels and potentially suffocating the newts.

Sweep Netting

- 4.10 Long handled sweep-nets were used to sample the margins of the pond for GCNs, with approximately 15 minutes of netting per 50m of shoreline.

Torch Light Survey

- 4.11 Torching involved searching the waterbody after dusk using high-powered torches to scan the margins and potential display areas for newts. The perimeter of the pond was walked slowly to record any newts observed. Torch surveys are unsuitable within heavily vegetated and/or turbid ponds or after periods of heavy rain as visibility is diminished.

Egg Searching

- 4.12 Newts lay single eggs on leaves of aquatic plants or other suitable pliable material, after which the material is folded over the egg to protect it. GCN eggs can be distinguished from those of the other newts by their size, shape and colour. Submerged vegetation was examined for newt eggs and folded leaves gently opened to check for eggs. If a GCN egg had been identified, no further leaves would have been examined thereby minimising any further potential disturbance.

Population Size-Class Assessment

- 4.13 Where a population of GCNs was confirmed, a population size-class assessment was completed in accordance with Natural England's standard guidance within the *Great-crested Newt Mitigation Guidelines*. This assessment is based on the highest maximum count of GCNs across connected ponds observed on a single survey occasion (Table 3).

Table 3: Determining Population Size-Class

Population size class	Highest number of observations for one night
Small	0-10 animals
Medium	11-100 animals
Large	>101 animals

eDNA Surveys (2025)

- 4.14 To assess any changes to GCN presence/ absence within and in close proximity to the Site, environmental DNA (eDNA) surveys were conducted in 2025. The purpose of these surveys was to support the previously submitted planning application 21/04275/OUT. Water sampling and analysis was undertaken on ponds within 250m of the Site as shown in Figure 1. This included ponds P10 and P17, which are within the site boundary. Ponds P5 and P13 which both lie just beyond 250m were also included.
- 4.15 Survey and subsequent analysis conformed to guidance set out in the Analytical and Methodological Development for Improved Surveillance of Great Crested Newt; WC1067; Appendix 5; Technical advice note for field and laboratory sampling of great crested newt environmental DNA. This methodology has been approved by Natural England for the determination of GCN presence/absence.
- 4.16 Sampling was undertaken on 30th April 2025, during the recommended survey season (15th April – 30th June inclusive) by appropriately licenced ecologists who collected a sample of water from the pond. Sampling was undertaken using kits obtained from ADAS Biotechnology. This comprised taking samples of agitated water from 20 locations around each pond and mixing thoroughly. Fifteen millilitres of this water was then placed into each of the 6 sterile sample

tubes containing preservative, precipitates and a DNA sequence that was used for degradation control. All samples were stored in accordance with the protocols provided by the laboratory. Following analysis, results provided by the laboratory could have one of three outcomes which are described in Table 4 below.

Table 4: Possible results of eDNA Analysis

Result	Description
Positive	A positive result means GCN eDNA was detected and they have been present within the water in the 20 days preceding sampling. A score is provided indicating the number of positive replicates from a series of twelve.
Negative	GCN eDNA was not detected. Where samples are negative, further testing for PCR inhibitors and degradation of the sample is undertaken.
Inconclusive	Controls indicate degradation or inhibition of the sample. Therefore, the lack of detection of GCN eDNA is not conclusive evidence for determining the absence of this species using the sample provided.

Survey Limitations

2021 Surveys

- 4.17 P5 and P6 were not surveyed as access was not permitted. P5 was located approximately 500m west from the site, with partial barriers between, it lies within 500m of a pond (P7) closer to the site which was surveyed. Publicly available records indicate this pond has supported GCN in 2010. P6 was located around 300m south and lies over 500m from the nearest pond. As a result, the lack of survey data for these ponds are not considered a significant constraint.
- 4.18 P10 was surveyed on only five occasions, with the first survey not completed. The peak count recorded at P10 was 10 GCN. While it may be possible that a medium population size-class could have been recorded on the initial survey date, none of the other ponds surveys presented peak counts on this first survey occasion, and so this scenario is considered unlikely.

2025 Surveys

- 4.19 A reduced survey area of 250m was used in 2025 relative to 500m in 2021. This was considered proportionate as an update effort, with the following documents lending support.
- 4.20 According to research published by Natural England⁸, GCN are unlikely to travel in excess of 200-250m from a breeding pond and if the habitats adjacent to the pond are of good quality, the distance travelled from the pond is likely to be reduced. The report states:

“By far the most captures were recorded within 50 m of ponds and few animals were captured at distances greater than 100 m”

“Captures on fences (and by other methods) at distances between 100 m and 200 – 250 m from breeding ponds tended to be so low as to raise serious doubts about the efficacy of this as an approach, although a small number of projects did report captures on significant linear features at distances approximately 150 – 200 m from ponds.”

⁸ Cresswell and Whitworth, 2004. English Nature Research Report Number 576

- 4.21 Jehle⁹ determined a terrestrial zone of 63m, within which 95% of summer refuges were located. In addition, following the breeding season, Jehle and Arntzen¹⁰ recorded 64% of newts within 20m of the pond edge".
- 4.22 For the purpose of mitigation licences Natural England classify core terrestrial habitats as those within 50m of a breeding pond, habitats between 50m and 250m are classified as intermediate, and beyond this habitats are classified as distant.

⁹ Jehle, R. 2000. The terrestrial summer habitat of radio tracked great crested newts (*Triturus cristatus*) and marbled newts (*Triturus marmoratus*). The Herpetological Journal, Volume 10, pp137-142.

¹⁰ Jehle, R., Arntzen, J. W. 2000. Post-breeding migrations of newts (*Triturus cristatus* and *T. marmoratus*) with contrasting ecological requirements. Journal of Zoology, 251, pp297-306.

5.0 RESULTS


Desk Study




- 5.1 Full details of the desk study are provided in the separate ecological appraisal (FPCR 2025). In summary two records of GCN were located within 1km of the site boundary with the closest record being located approximately 300m east of the Site at Bure Park LNR and over 500m west of the Site within Ardley Cutting and Quarry SSSI.
- 5.2 Records within the public domain associated with the NW Bicester Strategic Masterplan development indicate the presence of great crested newts within two ponds to the south of the Site at Himley Farm between 950m and 1.2km from the Site where a medium population was recorded in 2010/2011. Small populations were recorded at this time in ponds P2, P5 and P9 all located in and around Bucknell over 250m to the west and partially separated from the Site. A further small population was recorded in P7, approximately 240m to the west, with direct connections to the Site.




Pond Descriptions




- 5.3 Descriptions of the ponds surveyed during 2021 and updated in 2025 are provided in Table 5.




Table 5: Pond Descriptions


Pond Ref.	Location	Description	
P1	SP565258	P1 was located approximately 200m north-west of the site, within a small number of trees adjacent to a field. It measured approximately 40m by 10m. The pond was shaded on one side by the adjacent trees. There was some limited emergent and marginal vegetation.	

Pond Ref.	Location	Description	
P2	SP563258	<p>P2 is located approximately 375m north west of the site within a garden. It was a large pond measuring approximately 80m by 30m. It was surrounded by scrub and trees including willow which provided shade. There was some emergent and marginal vegetation including yellow iris <i>Iris pseudacorus</i>, water mint <i>Mentha aquatica</i>, and marsh marigold <i>Caltha palustris</i>.</p>	
P3	SP563257	<p>P3 was a depression in a field approximately 300m north of site. It was dry for the duration of the survey period.</p>	
P4	SP563256	<p>P4 was a depression in a field approximately 290m north of site. It was dry for the duration of the survey period.</p>	

Pond Ref.	Location	Description	
P5	SP559253	P5 is located adjacent to Bicester Road. It supports a diverse range of aquatic plants and is heavily shaded around the banks by surrounding trees and scrub.	
P7	SP562251	P7 was located in a depression in a field along a woodland edge, approximately 175m west of site. It was approximately 20m by 15m. The majority of the pond was covered in common grass species and was absent of aquatic and marginal vegetation.	
P8	SP563258	P8 was a garden pond located approximately 400m north-west of the site. It measured approximately 5m by 5m, located within a garden adjacent to a field. The majority of the pond surface was covered with emergent vegetation including water violet <i>Hottonia palustris</i> . Blanket weed was also present. Scrub and trees on the bank provided some shade.	

Pond Ref.	Location	Description	
P9	SP563258	P9 was an ornamental garden pond approximately 400m north-west of the site. It was dry for the duration of the survey period.	
P10	SP568247	P10 was located on site at the edge of a field within an area of scrub including willow. It was approximately 15m by 10m. The majority of the pond was shaded by the surrounding scrub. There was very limited aquatic and marginal vegetation.	
P11	SP566256	P11 was located at the edge of a field approximately 150m north-west of the site. It was approximately 20m by 10m. It had scrub on the banks which provided moderate shade. There was limited aquatic vegetation.	

Pond Ref.	Location	Description	
P12	SP568255	<p>P12 was a large garden pond located approximately 30m north-west of the site. It was approximately 100m by 50m, surrounded by amenity grassland and trees. Adjacent trees and scrub provided a little shade. There was some limited emergent and marginal vegetation as well as algae.</p>	
P13	SP564257	<p>P13 was a depression at the edge of a field approximately 300m north-west of the site. It was approximately 20m by 10m. It had limited vegetation, mostly common grass species, and little to no aquatic vegetation. The adjacent trees provided shade.</p>	
P16	SP571258	<p>P16 was located approximately 35m north of the site at the edge of a field within an area of scrub. It was approximately 30m by 10m. The surrounding scrub provided shade over the pond. There was considerable coverage of emergent vegetation.</p>	

Pond Ref.	Location	Description	
P17	SP570243	P17 is located towards the south of the site at the point where three wet ditches converge, creating a pooling of water. There is a steady flow of water through the pond. It measured approximately 20m by 2m. The majority of the pond is shaded by the surrounding woodland. There was little to no aquatic vegetation.	
P19	SP578248	P19 is located approximately 50m east of site. It is an attenuation basin associated with the adjacent housing scheme. It was dominated by terrestrial vegetation and dry at time of survey.	No picture available.

Habitat Suitability Index (HSI) Assessment

5.4 Table 6 provides a summary of the 2021 HSI assessment for each of the ponds. Table 7 provides an updated summary of the 2025 HSI assessment for each of the ponds..

Table 6: 2021 HSI Scores

Pond	HSI	
	Score	Category
P1	0.88	Excellent
P2	0.82	Excellent
P3	0.00	Dry
P4	0.00	Dry
P7	0.86	Excellent
P8	0.82	Excellent
P9	0.00	Dry
P10	0.73	Good
P11	0.87	Excellent
P12	0.79	Good

P13	0.79	Good
P16	0.94	Excellent
P17	0.63	Average

Table 7: 2025 HSI Scores

Pond	HSI	
	Score	Category
P1	0.88	Excellent
P5	0.86	Excellent
P7	0.86	Excellent
P10	0.73	Good
P11	0.87	Excellent
P12	0.79	Good
P13	0.79	Good
P16	0.94	Excellent
P17	0.63	Average
P19	0.00	Dry

Aquatic Surveys (2021)

- 5.1 Results identified a peak count of 10 in P10 on site and a peak count of 16 across the offsite ponds.
- 5.2 GCN were recorded during surveys 1-6 in ponds P2, P7, P8, P10 and P13. Eggs were recorded in P13 during the survey period. Table 8 summarises the results of aquatic surveys. GCN numbers are in bold, with peak counts underlined.
- 5.3 A small population of smooth newts *Lissotriton vulgaris* were recorded in association with P10 onsite (peak count of 2) and a small population in the offsite ponds P1, P2, P7, P8, and P13 (peak count of 10). In addition, small numbers of common toad and common frog were recorded within pond 11 and pond 12.

Table 8: Summary of aquatic survey results (2021)

	Survey 1	Survey 2	Survey 3	Survey 4	Survey 5	Survey 6
	04/05/2021	06/05/2021	11/05/2021	18/05/2021	01/06/2021	08/06/2021
Onsite ponds						
P10	Not surveyed	<u>10</u>	5	7	5	1
P17	0	0	0	0	0	0
Total Onsite	-	10	5	7	5	1
Offsite Ponds						
P1	0	0	0	0	0	0
P2	5	2	6	1	6	<u>9</u>

	Survey 1	Survey 2	Survey 3	Survey 4	Survey 5	Survey 6
P3	DRY					
P4	DRY					
P7	0	0	1	1	1	<u>3</u>
P8	0	1	0	<u>2</u>	1	1
P9	DRY					
P11	0	0	0	0	0	0
P12	0	0	0	0	0	0
P13	0	0	0	<u>6</u>	<u>6</u>	3
P16	0	0	0	0	0	-
Total Offsite	5	3	7	10	14	16

eDNA Survey results (2025)

- 5.4 7 out of the 9 ponds surveyed recorded positive eDNA results, indicating the presence of GCN within 20 days preceding the sampling of the ponds. Ponds P1 and P10 returned negative eDNA results, indicating GCN have not been present within 20 days preceding the sampling of the ponds. Pond P19 was dry at time of survey.
- 5.5 The results of the eDNA surveys are summarised in Table 9.

Table 9: Summary of eDNA survey results (2025)

Pond	eDNA Result
P1	Negative
P5	Positive
P7	Positive
P10	Negative
P11	Positive
P12	Positive
P13	Positive
P16	Positive
P17	Positive
P19	n/a – pond dry

6.0 DISCUSSION & RECOMMENDATIONS

- 6.1 On-site terrestrial habitats, comprised predominantly arable land with some improved grassland, and were considered to provide poor terrestrial habitat for GCN, although some suitable terrestrial habitat for GCN occurs in the in the form of small woodland/scrub areas, hedgerows, and field margins. The hedgerows provided connectivity with other suitable terrestrial habitat areas outside the site boundary.
- 6.2 Surveys carried out in both 2021 and 2025 confirmed the presence of GCN onsite and in the wider area.
- 6.3 The 2025 eDNA results show the presence of GCN in the onsite pond P17 as well as the offsite ponds P5, P7, P11, P12, P13, and P16.
- 6.4 2021 results found a small population of GCN (peak count 10) in onsite pond P10, but these were absent in 2025.
- 6.5 With a total peak count in 2021 of 16 GCN on one occasion across the off-site ponds surveyed, a medium population has been confirmed as present within ponds in and around Bucknell.
- 6.6 Ponds P2 and P8 were beyond the 250m search area used in 2025, however these were shown to support GCN during the 2021 surveys. Ponds P5 and P13 which are also beyond the 250m limit, but were surveyed for context, both returned positive results, confirming that the offsite GCN population around Bucknell is still present.
- 6.7 The onsite ponds P17 and P10 with records of GCN are over 500m away from the offsite ponds. There is very limited suitable terrestrial habitat other than hedgerow bases that connects them, with managed farmland of limited suitability for GCN between. As such it is considered probable that the on and offsite populations of GCN are largely separated, and form two different functional populations.
- 6.8 The presence of GCN on Site in 2021 (P10) and 2025 (P17) is a statutory constraint to the development. The presence of GCN within 250m of the Site in ponds P7, P11, P12, and P16 also present potential statutory constraints as GCN could be using suitable onsite terrestrial habitats (largely hedgerow bases).
- 6.9 GCN within beyond 250m are considered unlikely to utilise the Site's habitats, with access to more suitable habitat in closer proximity to their locations.
- 6.10 Potential impacts from the proposals include killing/injuring of GCN during earthworks/demolition, entrapment of GCN in excavations and loss of terrestrial habitat. Given the proximity of GCN ponds to the site and proposed development area there is risk of an offence occurring in the absence of mitigation. It is therefore considered that a licence will be required in order to comply with the relevant legislation. Licences can be obtained either as a site level from Natural England, or at a district level, from NatureSpace. It is generally considered likely that the use of a site level licence is likely to remain appropriate at this Site, given the retention of ponds, the limited extent of impacts to suitable terrestrial habitats, and the ability to provide mitigation on Site within the green infrastructure which will help connect the ponds to the west.
- 6.11 In order for a European Protected Species Licence to be approved by Natural England it must be demonstrated that the proposals will minimise any potential impacts upon the species in question (in this case GCN) and that the favourable conservation status of this species is

maintained. The following section, based on guidelines within the Great Crested Newt Mitigation Guidelines¹¹, provides some details of the mitigation/compensation that is likely to be required.

Mitigation Measures

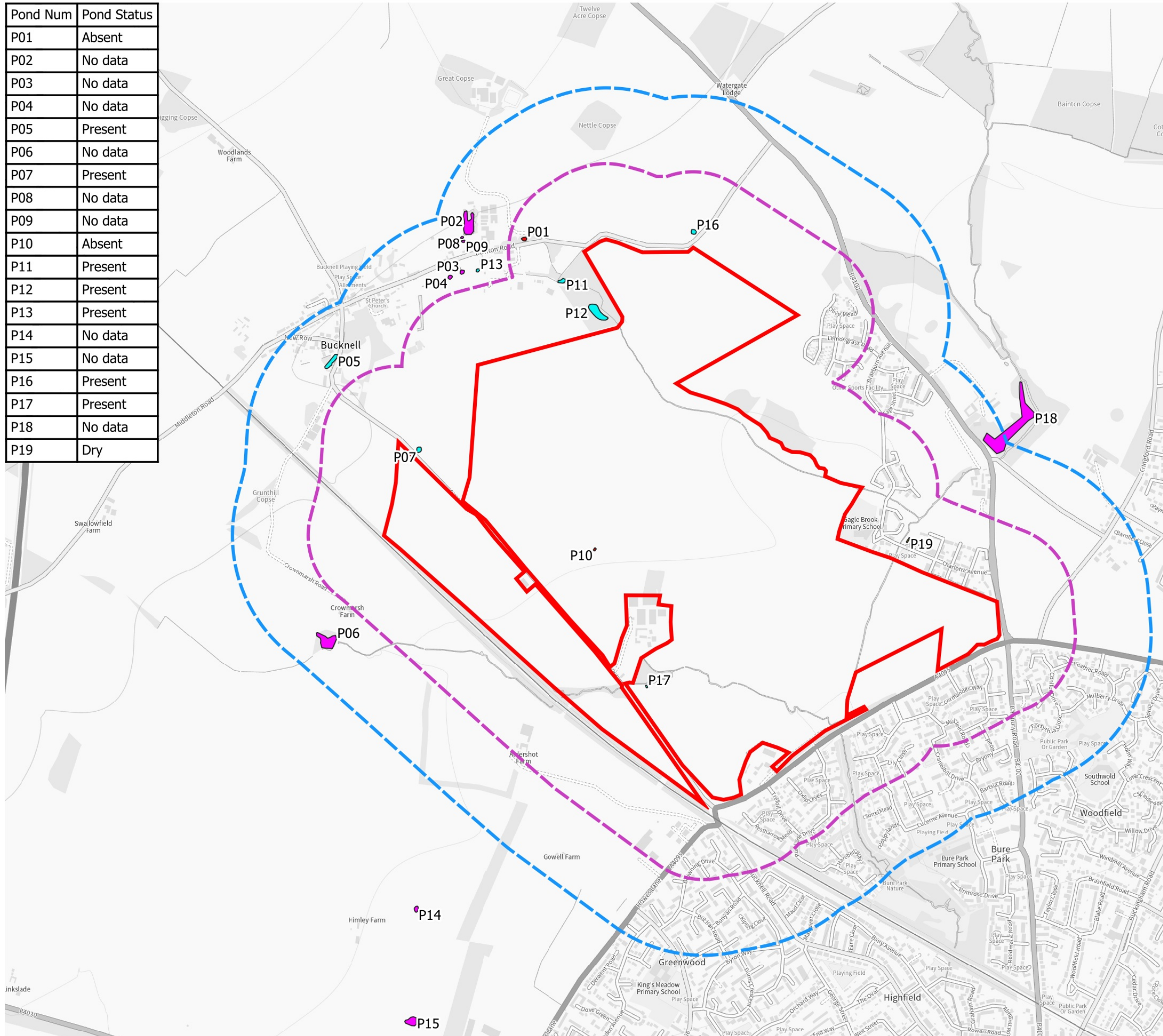
- 6.12 Where ponds (either GCN or non-GCN) can be retained within development proposals they should be incorporated into a scheme which provides habitat connectivity to the wider landscape. As such design proposals include the retention of P10 and P17 and immediately surrounding trees and scrub habitats within a green corridor which will link to a main area of green space proposed to be located on the western side of the site.
- 6.13 No aquatic habitat in which GCN has been recorded will be destroyed. Proposals will lead to only small losses of suitable terrestrial habitat within 500m of the ponds in the form of hedgerows and field margins, and some improved grassland which could also be used for movement. None of these impacts would lead to the fragmentation or isolation of the ponds.
- 6.14 A new swale will run down the proposed green corridor from P10 and attenuation ponds will be created nearby. The ponds should be designed sensitively to support GCN. In addition to these it is recommended that separate wildlife ponds are created in the open green space which should be designed primarily to provide suitable aquatic habitat for GCN, these will provide stepping-stone habitats to off-site ponds in the wider area to more effectively link the two populations. New GCN and amphibian friendly habitats will be created within the adjoining green spaces, including scrub and woodland edge habitat, tussocky grassland areas, wet grassland with hedgerows providing movement corridors. Enhancements should also be made to the onsite ponds to increase the suitability for GCN. These may include the thinning of over-shading vegetation and the removal of silt and leaf litter.
- 6.15 Prior to the commencement of works a Natural England European Protected Species Licence will be necessary, under which a trapping and translocation operation would be used to remove any GCN from areas of works.
- 6.16 A GCN Mitigation Strategy for the Site will be developed to provide the details of all above mitigation, including timings and methods for exclusion of GCN from sensitive working areas, and details of habitat creation and enhancement to ensure that appropriate mitigation measures are in place during works and that post-development the site provides suitable terrestrial and aquatic habitat for GCN. It is therefore considered that as a result of the mitigation and enhancement proposals the favourable conservation status of great crested newts will not only be maintained but enhanced within the local area.

Other Amphibians

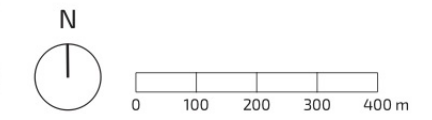
- 6.17 All common amphibian species are protected from sale by the Wildlife and Countryside Act 1981 (as amended).
- 6.18 Habitat creation will enhance the value of the Site for other amphibians generally in the local area, including recorded during surveys, including smooth newts, common frogs and common toads.

¹¹ English Nature (2001) Great Crested Newt Mitigation Guidelines, English Nature, Peterborough.

Pond Num	Pond Status
P01	Absent
P02	No data
P03	No data
P04	No data
P05	Present
P06	No data
P07	Present
P08	No data
P09	No data
P10	Absent
P11	Present
P12	Present
P13	Present
P14	No data
P15	No data
P16	Present
P17	Present
P18	No data
P19	Dry



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- KEY**
- Site Boundary
 - 250m buffer
 - 500m buffer
- Waterbodies**
- GCN Present
 - GCN Absent
 - Pond Dry
 - Not Surveyed

date: 03/10/25 drwn/chkd: JDH

client: **Hallam Land**
 project:

NW Bicester

title: **Waterbody Location Plan** scale: 1:12,500 @ A3

number: **FIGURE 1** rev: -

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