

APPENDIX 11.10 AMPHIBIANS

1.1 Introduction

- 1.1.1 The amphibian survey results presented in this appendix reflect the survey information available at the time of writing. The eDNA survey result for the on-site watercourse remains outstanding and the findings should therefore be treated as interim. The appendix will be reviewed and updated, if necessary, following receipt of the eDNA result and completion of the wider ecological survey programme.

1.2 Methodology

- 1.2.1 Surveys for Great Crested Newt (GCN) (*Triturus cristatus*) were informed by the Great Crested Newt Conservation Handbook (Froglife, 2001).
- 1.2.2 The site was examined for suitable waterbodies and for breeding terrestrial habitat. Terrestrial habitats providing sufficiently structured vegetation in which amphibians may forage or hibernate over winter were also surveyed for.
- 1.2.3 In addition to the on-site assessment, Great Crested Newt Mitigation Guidelines (English Nature, 2001) recommend that a desktop analysis of ponds within 500m of the site be undertaken, to identify any potential breeding ponds which may require further survey. Ponds within 500m of the site were mapped on GIS with an OS OpenData base map at 1:10,000 resolution (Figure 1).

Data search

- 1.2.4 The data search returned two records of great crested newt (GCN) (*Triturus cristatus*). The 2017 record was located 0.72km south southwest from the site boundary by the public pond, and the 2023 record was located 2km north northwest of the site boundary along the road.
- 1.2.5 The background data search returned six records of Great Crested Newt EPS licences within 2km of the site boundary, as follows:
- (2019-42296-EPS-MIT-1) from 2020 to 2024 located 0.68km south southwest of the site boundary;
 - (EPSM2012-4865) from 2013 to 2016 located 1.55 north of the site boundary;
 - (EPSM2013-5838) from 2013 to 2017 located 1.75km north of the site boundary;
 - (EPSM2009-459) from 2012 to 2015 located 1.75km north of the site boundary;
 - (EPSM2011-2782) from 2011 to 2016 located 1.1km south of the site boundary;
 - (EPSM2009-509) from 2009 to 2010 located 0.87km southeast of the site boundary.

- 1.2.6 The desk-based assessment identified a network of four ponds within 500m of the site, two ponds on the east of the Bitham Brook on the other side of the railway line, one to the south of the site on the other side of the railway line and one within the West Wiltshire Trading Estate (Figure 1).
- 1.2.7 The ponds are not well connected, mostly ecologically severed or within industrial environments, all over 250m from the site; therefore, only the pond within the West Wiltshire Trading Estate and the watercourse on the eastern site boundary were subject to further survey.

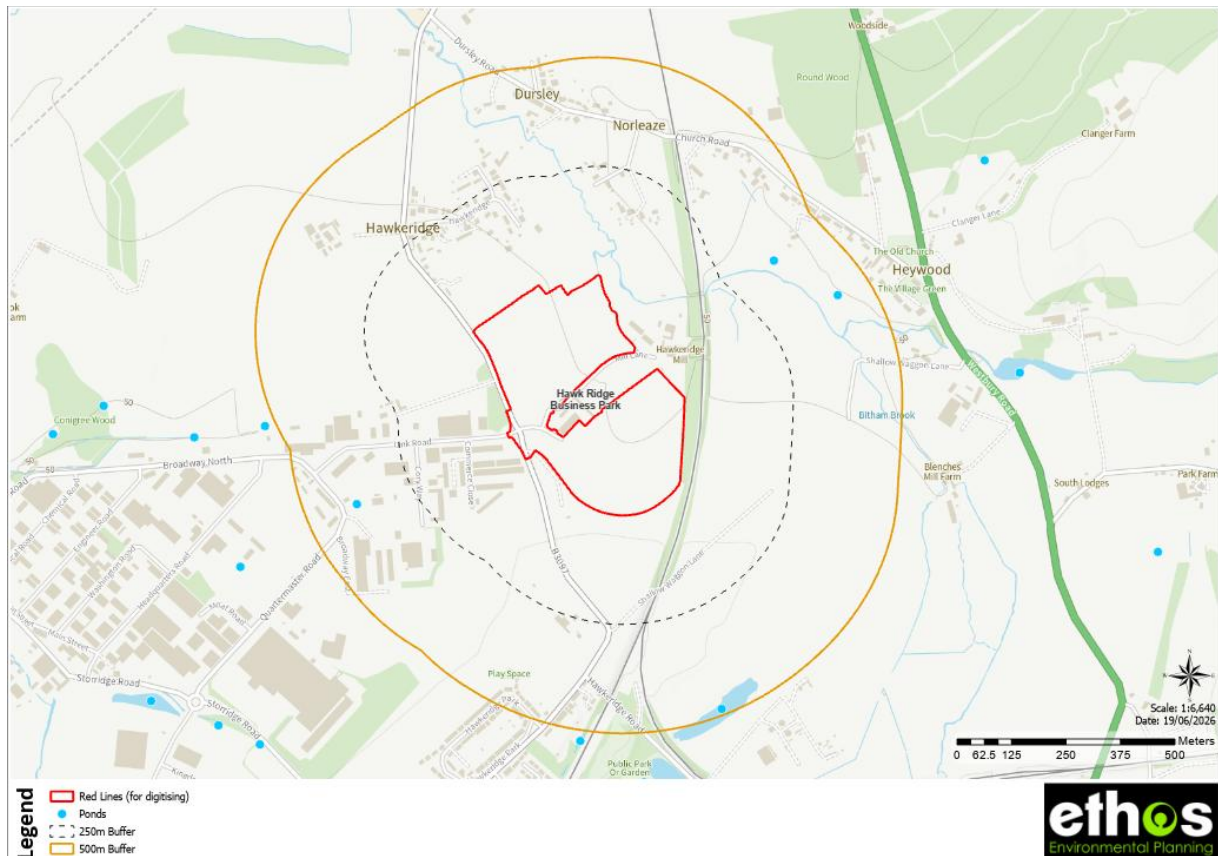


Figure 1 Location of ponds within 500m of site boundary.

- 1.2.8 The site is located predominantly within the Natural England GCN 'green' risk zone, with a small section of the north-east corner of the site located in the 'amber' zone, as shown below in Figure 2.

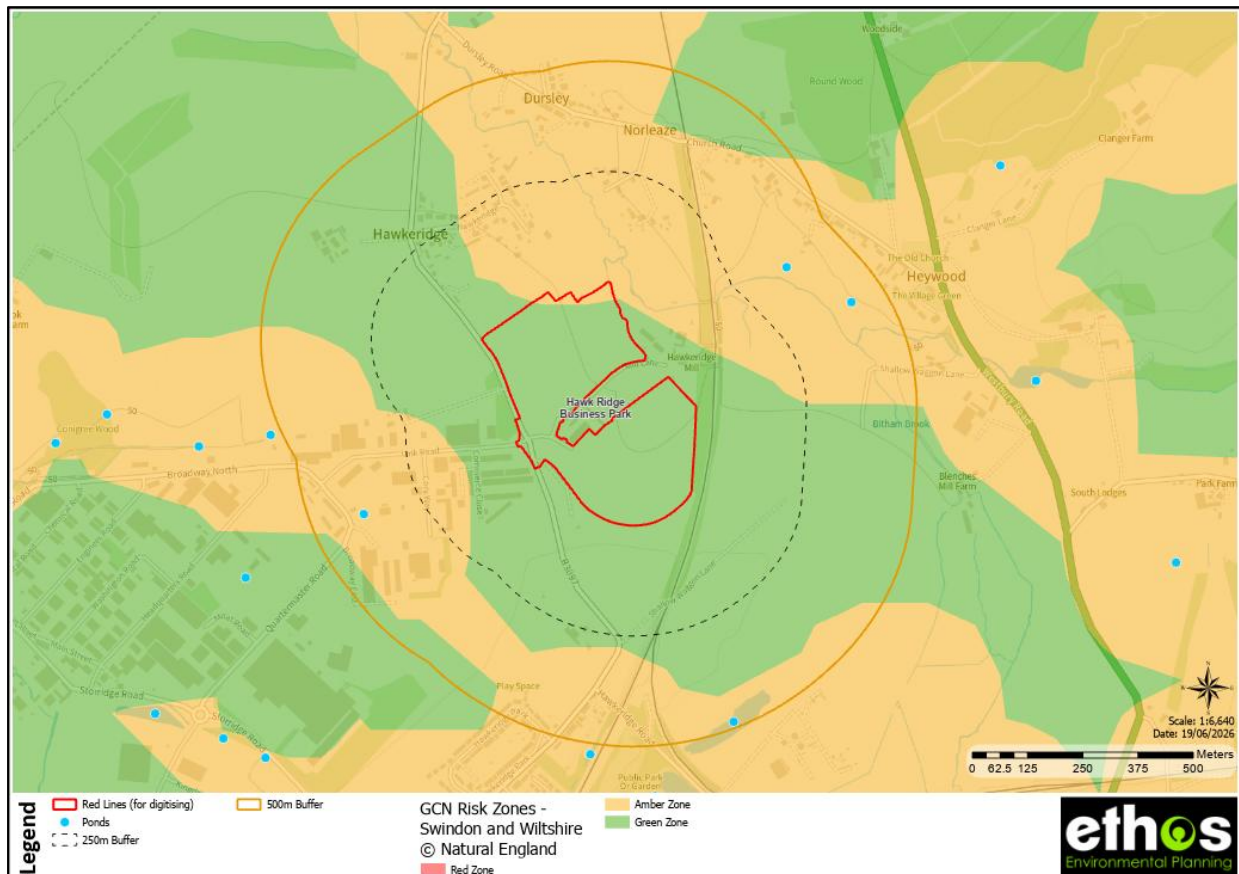


Figure 2 GCN Natural England Swindon and Wiltshire Risk Zones

Habitat assessment

- 1.2.9 The onsite terrestrial habitats were assessed as sub-optimal, due to the dominating cover of cereal cropland providing a lack of foraging and cover opportunities. The hedgerows, ruderal and scrub on site have some potential to provide foraging and commuting opportunities.
- 1.2.10 The tributary of Bitham Brook located on the eastern boundary of the site deemed to be sub-optimal for amphibians, notably GCN as it was choked of vegetation and dry during the initial summer months of survey effort. The watercourse held water during spring 2026 and therefore was subject to an eDNA survey; the results of this survey are still awaiting at the time of writing and will be provided in an addendum.

1.3 Assessment and Results

Habitat Suitability Assessment

- 1.3.1 The GCN Habitat Suitability Index (HSI) was calculated for ponds scoped into the initial pond survey effort. The West Wiltshire Trading Estate pond was assessed as having

average suitability for GCN. The on-site watercourse was assessed as having poor suitability for GCN.

eDNA Survey Results

- 1.3.2 These survey results are awaiting at the time of writing and will be provided in an addendum.

1.4 Assessment of Impacts and Mitigation Measures

- 1.4.1 As it is unknown whether GCN are present in the watercourse on the eastern site boundary or the West Wiltshire Trading Estate pond, no assessment or mitigation measures can be concluded at this time.
- 1.4.2 It is noted that the creation of the Sustainable Urban Drainage Systems (SuDS) on site and the enhancement of the terrestrial habitat adjacent to the watercourse for the SANG and public open space will enhance the sites suitability for GCN and other amphibians.