

PRESCOT TO CRANTON CYCLEWAY

Ecological Planning Report – Section 8a

Knowsley Metropolitan Borough Council

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Quality information

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Executive Summary

Site Details	Prescot to Cronton Cycleway – Phase 8a Located to the west of Cronton Village adjacent to Penny Lane and directly east of Fox's Bank Lane. Central Grid Reference: SJ48038905
Scheme Details	The Scheme aims to provide a package of walking and cycling infrastructure improvements which ties into works being undertaken by Knowsley Metropolitan Borough Council (KMBC, where the cycleway will continue to Widnes and the Trans Pennine Trail. The Proposed Scheme will connect existing walking and cycling links to create a continuous network between residential areas, employment areas and green spaces. The Scheme has been divided into a series of Phases. AECOM was originally commissioned by KMBC to carry out a PEA assessment of Phases 2, 3, 5, 6, 8 and 9 only. This highlighted the need for further surveys within Phase 8a of the Scheme, and this report provides the results for these surveys in order to assist with the planning permission required for Section 8a.
Ecological Features that may be affected by the Scheme	The scheme lies within a small corner of the Local Wildlife Site (LWS), Land east of Fox's Bank Brook. Native bluebell are present in the vicinity. Fox's Bank Brook provides some suitability for water voles and footprints of water vole were found during the field survey, but no burrows or further evidence were found along the section adjacent to the works. Two oak trees adjacent to the Scheme have moderate to low suitability for roosting bats. Indian balsam was found within two locations of the Survey Area. These are along Fox's Bank Brook and adjacent to Pond 3.
Recommendations for further survey and assessment	It is understood that not all trees will be affected and that KMBC would be dealing with trees in house. If the two trees identified as having bat roost potential are going to be impacted by the Scheme they will require a detailed inspection by an experienced bat ecologist to determine their suitability for roosting bats. If it is confirmed that they are suitable then further surveys will be required to determine the presence/absence of roosting bats within the trees. This would include dusk emergence and /or pre-dawn re-entry surveys. In accordance with guidance: • Three surveys for high roost potential; • Two surveys for moderate potential; and, • Soft felling for trees with only low roost potential A preconstruction update survey may be required for badger and water vole as these are mobile species, depending upon the timescales for work commencing. Should works not commence prior to spring 2022 then it is recommended that a pre-construction survey for badger is undertaken. A pre-construction survey for water voles should be undertaken in sections of the Site within 5 m of the banks of the watercourse in autumn 2021 or spring 2022 if works have not commenced by then.

Recommendations for Mitigation	Subject to a pre-construction survey, no further mitigation is required for water vole and badger besides ensuring that as much of a buffer as possible is given between the location of works and Fox's Bank Brook (greater than 5 m from the top of the bank is preferred), and care is taken to look out for signs of water vole and badger during the works. If signs are found works should stop and an experienced ecologist should be contacted to provide advice before works can continue as mitigation requirements may change. Consideration should be made to relocating native bluebells present within the Site, by retaining the bulbs within the soil where possible. Options could include relocation of the turfs where the works encroach out of the arable field habitat and into the tall ruderal and woodland edge habitat. The turfs could be relocated further into the woodland area or along the hedgerows (old, or new if planted in advance). An ECoW could be utilised to check sections for bulbs in order to replant just the bulbs. Care would need to be taken to not relocate species such as Indian balsam which is known to be present within the woodland habitat along the watercourse banks The stands of Indian balsam found within the Survey Area appear to be located beyond the potential impacts of the works to pose a risk of potential spread, and therefore mitigation is not considered necessary at this stage unless this species is noted to be located within the works once set out on Site. It is recommended that toolbox talks are given on this species, and that nearby areas are fenced off using demarcation fencing and signs installed to avoid accidental interference. Bamboo is noted to be present close to Fox's Bank Lane just south of the residential area and should be avoided.. No further mitigation is required for great crested newts.
Opportunities for Biodiversity Enhancements	Planting native species-rich hedgerows and native trees. Sowing wildflower seeds in adjacent habitats to the cycleway where possible. Where tree removal is required, it is recommended that some of the felled material is reused to create log pile refuges within the woodlands adjacent to the proposed route, this will create habitat for hedgehogs, terrestrial invertebrates, such as butterflies and moths and also amphibians and reptiles. Consideration should also be made for the installation of bird and bat boxes to replace any nesting and roosting features lost as a result of tree removal. Removal or management of the Indian balsam present would count as enhancement where it does not lie within the working area.

1. Introduction

Background

- 1.1 This planning report has been prepared by AECOM on behalf of Knowsley Metropolitan Borough Council (KMBC), to assess the ecological constraints in connection with the proposed Prescot to Cronton cycleway Section 8a (hereafter referred to as the Scheme), in particular to present the results of detailed surveys to determine the potential of the habitats present within and adjacent to the Scheme boundary to support badger (*Meles meles*), water vole (*Arvicola amphibius*), and great crested newt (*Triturus cristatus*). The entire Scheme aims to provide a package of walking and cycling infrastructure improvements to provide new facilities between Carr Lane, Prescot (SJ 457 924) and Sandy Lane, Cronton (SJ 498 881) via Stadt Moers Park and the proposed Halsnead Garden Village development. The Proposed Scheme has been divided into a series of Phases. AECOM was commissioned by KMBC to assess only Phases 2, 3, 5, 6, 8 and 9 and this report solely discusses the further detailed surveys which have been carried out at Phase 8a of the Scheme in order to inform the planning application required for Phase 8a only.
- 1.2 The assessment of ecological constraints has been undertaken with reference to current good practice¹ and forms part of the technical information commissioned by KMBC, in connection with the Scheme. The planning report addresses relevant wildlife legislation and planning policy as summarised in [Appendix B](#) and is consistent with the requirements of *British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development*.

The Site

- 1.3 The area surveyed is located to the west of Cronton Village adjacent to Penny Lane and directly east of Fox's Bank Lane. This section of the Scheme is known as Phase 8a. The Site is shown by the red line boundary on Figure 2 in Appendix A, which shows all of Phase 8, and the section of Phase 8a is illustrated by the extents of the purple line. All land situated within this red line boundary, but limited to the section of the purple line, is hereafter referred to as the Site. Surveys were conducted to a distance of 50 m either side of the Site boundary, which is known as the Survey Area, with the exception of that for great crested newts for which ponds within 250 m of the Site were assessed.
- 1.4 The Site in the main comprises arable land, scattered trees, tall ruderals on a small bank, and woodland edges. The Site is bounded by Fox's Bank Lane and Penny Lane, a brook (Fox's Bank Brook), and the wider area consists mainly of arable land, ponds and residential housing. Seven ponds lie within the great crested newt survey area for Phase 8a.

The Scheme

- 1.5 The Scheme aims to provide a package of walking and cycling infrastructure improvements to provide new facilities between Carr Lane, Prescot (SJ 457 924) and Sandy Lane, Cronton (SJ 498 881) via Stadt Moers Park and the proposed Halsnead Garden Village development. The Scheme will tie into works being undertaken by Halton Borough Council, where the cycleway will continue to Widnes and the Trans Pennine Trail. The Proposed Scheme will connect existing walking and cycling links to create a continuous network between residential areas, employment areas and green spaces.
- 1.6 The Scheme has been divided into a series of Phases. AECOM was originally commissioned by KMBC to carry out a PEA to assess Phases 2, 3, 5, 6, 8 and 9 only. This highlighted the

¹ CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

need for further surveys and hence this report discusses the further surveys that have only been carried out at Phase 8a of the Scheme in order to inform the planning application for this Phase. These include additional surveys for water vole, badger, great crested newt and bats.

- 1.7 The Scheme within Phase 8a will create a new section of cycleway at the north end of the arable field, between Fox's Bank Lane to the west and moving onto Penny Lane to the east. The new cycleway will include planted hedgerows with trees, plus a post and rail fence with mesh, between the cycleway and the arable field.

Purpose of the Preliminary Ecological Appraisal

- 1.8 This planning report presents ecological information obtained during the following:
- A desk-study undertaken in June 2020 to obtain records of designated sites, notable habitats² and protected and notable species³ within 1 km of the Site (the area covered by the desk study is hereafter referred to as the Study Area);
 - A walkover of accessible land within and adjacent to the Site (the area covered by the survey is hereafter referred to as the Survey Area) in April 2021; and,
 - Habitat Suitability Index (HSI) assessments conducted on the seven ponds present within 250 m of the site in April 2021, and subsequent environmental DNA (eDNA) surveys carried out on the three ponds determined to be potentially suitable for great crested newts (GCN) within 250 m of the Site in June 2021.
- 1.9 The purpose of the planning report is to provide an ecological appraisal of the Site, specifically to:
- Present the original survey data for this Phase of the route,
 - Undertake further detailed surveys for badger, water vole, and great crested newt to determine the suitability of the Site to support them;
 - To identify potential ecological constraints to the Site and make initial recommendations to avoid impacts on Important Ecological Features⁴ (IEFs), where possible;
 - To identify requirements for mitigation, where possible, including mitigation measures that will be required and those that may be required, and;
 -
 - To identify any opportunities offered by the Scheme to deliver biodiversity enhancements.
- 1.10 The methodology followed for undertaking the desk study and field surveys is detailed in [Appendix C](#), including any limitations to the assessment.

² Notable habitats are taken as principal habitats for the conservation of biodiversity listed under Section 41 of the *Natural Environment and Rural Communities Act 2006*; habitats listed under the North Merseyside Biodiversity Action Plan (ERYBAP); hedgerows identified as being 'important' under the wildlife criteria of the *Hedgerow Regulations 1997*, ancient woodlands and veteran trees

³ Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the *Natural Environment and Rural Communities Act 2006*; any species listed in an IUCN Red Data Book; and any other species listed under the North Merseyside BAP.

⁴ Important Ecological Features are habitats, species, ecosystems and their functions and processes that are of conservation importance and could potentially be affected by the Scheme.

2. Ecological Baseline, Constraints and Recommendations

- 2.1 The following sections detail the results of the desk and field-based studies undertaken to inform this planning report. Where necessary, recommendations for mitigation measures to protect known IEFs, or further surveys to determine the presence or absence of likely IEFs, are provided.
- 2.2 With regard to background data, 'recent' records are considered to be those no older than 10 years from the date of the desk study. Records outside of this period are historical and have only been reported where more recent records for a feature do not exist. Exceptions to this are detailed in the appropriate sections below.

Designated Sites

Desk Study

- 2.3 Table 1 summarises the designated sites situated within the Study Area (1 km). These are shown on Figure 1 in [Appendix A](#).

Table 1. Designated Sites within Study Area

Designated Site	Reason for Designation	Location of Designated Site ⁵
Land east of Fox's Bank Brook LWS	A stream valley with broadleaf woodland on the east bank, possibly of ancient origin.	Just within Phase 8a
Rough Head Wood LWS	A semi-natural broadleaf woodland with ponds and a stream. Dead wood has been left and provides good habitat.	366 m north east of Phase 8a
George Wood and adjacent land LWS	Predominantly a mature broadleaf woodland with a large area of neutral grassland. Other habitats include scrub and wetland.	593 m south-east of Phase 8a
Mine Waste, Cronton LWS	A predominantly wooded site with two ponds on its north-western side. A mix of dry and wet acid grasslands is present around the ponds and to the south.	576 m west of Phase 8a
Blundells Hill Golf Club LWS	A golf course containing a range of habitats including, woodland, scrub, wetlands and hedgerows. These habitats support a high diversity of species and include a number of nationally, regionally and locally rare species.	662 m north of Phase 8a
The Old Wood, South LWS and Ancient Woodland (AW)	A predominantly broadleaf woodland with ditch and marsh habitats. Bracken dominated areas can also be found.	898 m west of Phase 8a.

Constraints and Recommendations

- 2.4 There are no Statutory Designated Sites within 2 km of the Site, nor does the Site fall within any Site of Special Scientific Interest (SSSI) Impact Risk Zones (IRZ) for which the Scheme type could have the potential to impact upon. No Special Areas of Conservation (SACs) designated for bat species lie within 10km of the Site.
- 2.5 There are six LWSs within 1 km of the Site, all but one lies over 350 m away and therefore would not be affected by the Scheme. One LWS (Land east of Fox's Bank Brook LWS), lies just within the Scheme, but mainly north of the proposed new cycleway. Almost all of the LWS lies outside of the Scheme. Only the southern point of the LWS appears to be affected where the outline of the LWS falls just within the corner of the arable field, and outside of the habitat types for which

the LWS is designated. No trees within the hedgerow along the edge of the track at this point would be affected either. The cycleway runs south of the woodland and watercourse along this arable field, however the LWS does not cover all of the woodland here, only the eastern side of the woodland. The southern point of the LWS extends south from the woodland, over the existing tracks and just into the corner of the arable field where the cycleway remains within the arable field. The scale and Scheme type would not likely have an adverse effect on the LWS as long as the rest of LWS is marked out on site to avoid encroaching into the land (including for storage of materials) and that standard pollution prevention guidelines are adhered to during the construction. No permanent lighting is proposed, and the use of the cycleway would not have any effects on the LWS during Operation. It is not considered that the Scheme would affect the integrity or function of the LWS. The proposed landscape planting of hedgerows and trees along the cycleway will actually increase the number of trees within this area, replacing arable field with these habitats.

Habitats

Desk Study

- 2.6 Table 2 summarises the records of notable habitats and protected or notable flora⁶ (including veteran trees⁷) within the Study Area. Locations of these are shown in Appendix A, Figure 1.

Table 2. Notable Habitats and Flora within Study Area

Habitat/ Flora Feature	Reason for Conservation Interest	Distance from Site
Deciduous woodland	Habitats of Principal Importance (NERC)	More than 15 areas lie within 1 km of the Site, the closest being the woodland along which the cycleway will be built to the south of
No main habitats but additional habitats present	Habitats of Principal Importance (NERC)	Two areas lie within 1 km, the closest being 600 north of the site. Both sites are for woodland.
Traditional Orchard	Habitats of Principal Importance (NERC)	One area lie at approximately 1 km from the Site.
Open mosaic habitat	Habitats of Principal Importance (NERC)	One area lies approximately 620 m to the west of the Site within an old quarry
Ancient woodland		One area lies at approximately 1 km from the Site, to the north west within the Old Wood, South LWS
Bluebell (<i>Hyacinthoides non-scripta</i>)	WCA8	Multiple records are present within the wider area, all greater than 500 m away. The citation for the Land, east of Fox's Bank Brook LWS does however include it to be present in the citation. None were seen during the survey in 2021 in the woodland to which this LWS lies adjacent to, but still could be present in the wider area and were noted in 2020. The Scheme does go through this LWS but only where it extends into the arable field corner. Bluebell (unconfirmed) were present adjacent to Pond 2.

⁶ For this assessment 'flora' includes: vascular and non-vascular plants, fungi and lichens.

⁷ For this assessment the definition of a veteran tree is taken from Annex 2 of the National Planning Policy Framework (glossary): "A tree which, because of its great age, size or condition is of exceptional value for wildlife, in the landscape, or culturally."

Field Survey

- 2.7 Arable fields are present both north and south of the Scheme as shown on Appendix A, Figure 2. These fields were ploughed at the time of the survey. The Scheme runs through the north of these arable fields.
- 2.8 Broadleaved semi-natural woodland (Priority Habitat) is present surrounding Fox Bank Brook, which was flowing at the time of the survey, and lies immediately north of the Scheme. Broadleaved semi-natural woodland is also present south of Penny Lane, adjacent to the end of the residential housing as shown on Appendix A, Figure 2. The canopy includes species such as pedunculate oak (*Quercus robur*), sycamore (*Acer pseudoplatanus*) and ash (*Fraxinus excelsior*) with occasional elder (*Sambucus nigra*). Species observed within the ground flora include ground elder (*Aegopodium podagraria*), cleavers (*Galium aparine*), common nettle (*Urtica dioica*), bracken (*Pteridium aquilinum*), ivy (*Hedera helix*) and bramble.
- 2.9 A strip of tall ruderal is present along the edge of the arable field along Fox Bank Lane and south of the woodland. Species composition includes cow parsley (*Anthriscus sylvestris*), nettle, cleavers, bramble, willowherb (*Epilobium spp.*), greater stitchwort (*Rabiera holostea*), bracken (*Pteridium spp.*), ivy, English bluebell (*Hyacinthoides non-scripta*), hogweed (*Heracleum spp.*), creeping thistle (*Cirsium arvense*), red campion (*Silene dioica*) and meadow sweet (*Filipendula ulmaria*). It is also present within the small area of broadleaved semi-natural woodland to the south of Penny Lane.
- 2.10 There is a small area of scrub which surrounds the pond on Penny Lane, Species present here include blackthorn (*Prunus spinosa*) and bramble (*Rubus fruticosus*).
- 2.11 There is an area of residential housing and gardens located just off Fox Bank Lane. There is also several farm buildings and residential housing present on Penny Lane.
- 2.12 A dry ditch is present in the Survey Area. This is a small steep-sided ditch located on Penny Lane nearby to Penny Lane Farm.
- 2.13 Improved and amenity grassland is present north of the residential housing on Fox Bank Lane, outside of the Site boundary.
- 2.14 Various ponds are present throughout the Survey Area and adjacent to the Site. No ponds would be lost as part of the Scheme.

Constraints and Recommendations

- 2.15 The habitats being lost within Phase 8a comprises mostly arable land with low ecological value. With small areas of tall ruderal habitat immediately south of the woodland. The Scheme would not encroach into the woodland habitat, and the majority of the trees along the existing tracks would also remain, with minor losses of trees for health and safety reasons. The rest of the Scheme design in this area falls along an already existing hardstanding track/road with little to no ecological value.
- 2.16 The woodland habitat includes priority woodland and native bluebells and therefore should be avoided where at all possible, keeping the works within the arable field as far as possible, and also minimising effects on the tall ruderal habitat.
- 2.17 No ponds will be lost as part of the works. The cycleway does join the existing road adjacent to pond 2 and then passes pond 1 within the existing road.
- 2.18 Standard pollution prevent guidelines should be followed in order to prevent indirect effects on these and other habitats, including the woodland, and demarcation fencing should be used to ensure that there is no encroachment into retained habitats
- 2.19 Native bluebell has the potential to be present within the woodland and marginal habitats to the north of the cycleway, although none were noted along the edge in spring 2021, they were noted in spring 2020 and around pond 2 in 2021. Prior to the works, if at the appropriate time of the year (spring), a further check for this species should be made in case it falls within the exact

footprint of the works. Should this occur then an ecologist should be consulted on appropriate translocation of the species into an appropriate part of the habitat. Should the works commence prior to spring 2022, then consideration should be made to retaining the bulbs within the soil where possible. Options could include relocation of the turfs where the works encroach out of the arable field habitat and into the tall ruderal and woodland edge habitat. The turfs could be relocated further into the woodland area or along the hedgerows (old or new if planted in advance). An ECoW could be utilised to check sections for bulbs in order to replant just the bulbs. Care would need to be taken to not relocate species such as Indian balsam which is known to be present within the woodland habitat along the watercourse banks.

Badger

Desk Study

- 2.20 The desk study returned no recent records within 2 km of Phase 8a.

Field Survey

- 2.21 No evidence of badger was identified within the Site during the field survey.

Constraints and Recommendations

- 2.22 Due to the distance of the badger records from the Scheme and no evidence of badger activity being returned during the field survey; the works are not considered likely to have an impact on badger.
- 2.23 Further mitigation is therefore not considered necessary beyond care being taken to look for signs in case potential badger setts are discovered during works (in which case works should stop immediately and an experienced ecologist should be consulted to 1) confirm it is badger, and 2) advise on the most appropriate way to deal this.
- 2.24 Due to the mobility of badgers and the potential for colonisation of the Site, a pre-construction survey is also recommended if no works have commenced by spring 2022. Should badger be noted to be present at this time, then consideration would be required to remove the proposed use of mesh on the new fencing to avoid fragmentation.
- 2.25 Evidence of badgers on site may include;
- Sett entrances - holes characteristically at field edges, in hedgerows or on earth embankments marking the entrance to a sett; frequently accompanied by other field signs and mounds of earth (spoil);
 - Footprints – easily recognisable for being broader than they are long and often seen in recently dug earth or soft mud;
 - Badger trails through vegetation - badgers use the same routes within their territory, so the paths are usually well worn and obvious, being at least 20 cm in width and often linking feeding grounds with sett entrances;
 - Dung pits/latrines - found along territory boundaries and near to inhabited setts; pits are on average 15 cm across and 15 cm deep, and where dung pits are grouped together, they are termed latrines;
 - Excavations – badgers often create shallow depressions to pass under fencing or push the fencing up to open up commuting routes;
 - Badger hair – coarse, black and white and hairs may be snagged when the badger slides under fencing or through vegetation with thorns;
 - Scratch marks – scratching poles can be found close to the sett entrance, with shredded or scored bark to a height between approximately 0.6 – 0.9 m; sometimes scratch

marks can be seen on rocks in the spoil heap close to a sett entrance where they have been loosened by badgers;

- Snuffle holes – excavated depressions in areas of bare earth where the badger has been searching for worms or insects;
- Piles of old bedding (bracken, dead leaves and dry grass) in or near the entrance to a sett is a good sign that the sett is active or has been very recently; badgers can gather such bedding from up to 100 m away from the sett and trails of bedding can sometimes be seen along well-used badger trails; and,
- Other signs – for example, sightings of live badgers or the remains of dead badgers close to setts or as road casualties.

Otter and Water Vole

Desk Study

- 2.26 There are two recent records of water vole in the wider area of the Study Area both from February 2016 and located approximately 1.8 km south west of Phase 8a. There is one recent record of otter (*Lutra lutra*) located approximately 1.5km south west of Phase 8a, along Chapel Brook. The watercourse adjacent to the site was not considered to be suitable for otter beyond potential for commuting.

Field Survey

- 2.27 Table 3 summarises both the evidence of water vole found to be present within the Survey Area, and the potential for features and habitats within the Survey Area to support water vole.
- 2.28 Features and habitats in Table 3 are shown on Figure 2 in [Appendix A](#). Photographs are provided in [Appendix D](#).

Table 3. Summary of Water Vole presence/ potential presence within the Survey Area

Feature	Description	Location ⁸	Relevant Target Notes
Fox's Bank Brook	Slow flowing brook with gentle sloping banks located within an area of broadleaved woodland. At least one set of water vole footprints were recorded along the bank of the brook.	Flows to the north of Phase 8a, adjacent to the proposed cycleway	Appendix D, Photograph 2, 3
Water vole footprints	Water vole footprints within the bank of Fox's Bank Brook.	Located on the bank of Fox's Bank Brook, approximately 50 m north of the Scheme.	Appendix A, Figure 2, TN3; Appendix D, Photograph 1
Potential Water vole footprints	Potential water vole footprints within the bank of Fox's Bank Brook.	Located on the bank of Fox's Bank Brook, approximately 15 m north of the Scheme.	Appendix A, Figure 2, TN4

Constraints and Recommendations

- 2.29 Two water vole footprints were identified along Fox's Bank Brook as shown in Appendix A, Figure 2 TN3, in the section of the brook that lies outside of the Site itself. No other signs of water vole were identified such as latrines, feeding signs/remains or burrows, and no evidence was noted within the section of the brook which adjacent to the Site, with the exception of

⁸Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the feature from the Site

further potential (unconfirmed) water vole prints, suggesting that the section of the brook is not occupied by water vole and is only used by commuting water vole. It is therefore considered that, at present, the works would not affect water vole burrows. Due to the nature of water voles and potential expansion of territories, this could change in the future should works not have commenced by Spring 2022. Works should be avoided where possible within 5 m of the banks for the brook adjacent to the Site. Where this is not possible, access along the brook must be maintained at all times for commuting water voles, to prevent temporary fragmentation of habitat, and the works should be minimised to only that essential to the works in order to limit the temporary affect to the habitat. Lighting during construction should be avoided along the brook, and it is understood that no operational lighting would be installed.

- 2.30 Due to the mobility of water voles and the potential for colonisation of the Site as territories expand, a preconstruction survey for newly created burrows within areas of the brook within 5m of the Site should be undertaken in autumn 2021 or spring 2022 to ensure that none would be affected.
- 2.31 If signs of water vole are identified in a section of bank within 5m of the works during construction or the preconstruction survey, the works will have to stop immediately and a Natural England licence and appropriate mitigation is likely to be required.
- 2.32 Standard pollution prevention guidance must be adhered to prevent indirect effects.

Great Crested Newt

Desk Study

- 2.33 The desk study returned three recent records of great crested newts within 2 km of Phase 8a, however all are located almost at the 2 km mark and on the far side of barriers of major roads. However, there is also anecdotal evidence of them being present in the wider area (exact location unknown).
- 2.34 Seven ponds are present within an unobstructed 250 m of the proposed route. These ponds and surrounding terrestrial habitat may be suitable for use by great crested newts.

Field Survey

- 2.35 Table 4 summarises the features that have the potential to support great crested newts. Where access to aquatic features was possible, habitat suitability index (HSI)⁹ assessments have been completed.
- 2.36 Features in Table 4 are shown on Figure 3 in [Appendix A](#). TN descriptions and photographs are provided in [Appendix D](#).

Table 4. Summary of features with potential to support Great Crested Newt

Feature	Description of Feature and Location ¹⁰	Relevant Target Notes	HSI Score
Pond 1	Tree lined pond between an arable field and lane. The immediate surroundings of the pond include dense scrub and amenity grassland.	Appendix A, Figure 3, P1 Appendix D, Photograph 4 and 5	0.62 (Average)
Pond 2	Small shallow pond within wooded area, between arable field and track.	Appendix A, Figure 3, P2 Appendix D, Photograph 6	0.43 (Poor)
Pond 3	Pond within wooded area adjacent to arable fields.	Appendix A, Figure 3, P3 Appendix D, Photograph 7	0.62 (Average)
Pond (P4)	Tree lined pond in the middle of an arable field.	Appendix A, Figure 3, P4 Appendix D, Photograph 8	0.21 (Poor)

⁹ Habitat Suitability Index score is an assessment of the potential for a waterbody to support great crested newts. See [Appendix C](#) for more details.

¹⁰Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the feature from the Site

Feature	Description of Feature and Location ¹⁰	Relevant Target Notes	HSI Score
Pond (P5)	Tree lined pond in the middle of an arable field.	Appendix A, Figure 3, P5 Appendix D, Photograph 9	0.55 (Below average)
Pond (P6)	Tree lined pond adjacent to arable fields	Appendix A, Figure 3, P6 Appendix D, Photograph 10	0.41 (Poor)
Pond (P7)	Small, shallow pond on edge of arable field next to road, likely to dry up during a warm spell.	Appendix A, Figure 3, P7 Appendix D, Photograph 11 and 12	0.24 (Poor)

- 2.37 The eDNA surveys were undertaken in June 2021 on Pond 1, Pond 3 and Pond 5 which all returned a negative result for great crested newt presence. Pond 2 was not considered a high enough score on the HSI for eDNA to be undertaken, and was also too shallow to be sampled.

Constraints and Recommendations

- 2.38 Due to the negative eDNA results returned from the surveys and the poor suitability of the other ponds within the Survey Area to support great crested newt, it is considered that this species will not be a constraint to the Scheme in Phase 8a.

Bats

Desk Study

- 2.39 The desk study identified 15 records of several species of bat the last 10 years within 2km of Phase 8

Table 5. Bat species records within 2 km of Phase 8a

Common name	Scientific name	Designations*
Brown long-eared bat	<i>Plecotus auritus</i>	HabRegs2, WCA5/9.4b, WCA 5/9.5a, WCA 5/9.4c; LBAP
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	
Noctule bat	<i>Nyctalus noctula</i>	
Pipistrelle Bat species	<i>Pipistrellus</i>	
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	
Unidentified Bat	<i>Myotis</i>	

* HabRegs2 - The Conservation (Natural Habitats, &c.) Regulations 2017 (Schedule 2); WCA5/9.4b - Wildlife and Countryside Act 1981 (Schedule 5 Section 9.4b); WCA 5/9.5a - Wildlife and Countryside Act 1981 (Schedule 5 Section 9.5a); WCA 5/9.4c - Wildlife and Countryside Act 1981 (Schedule 5); LBAP - North Merseyside BAP

Field Survey

- 2.40 A bat survey was not undertaken by AECOM as it was not within the works commissioned, however notes made on site are presented below. Table 6 summarises both the evidence of bats being present within the Survey Area, and the potential for features and habitats within the Survey Area to support bats. This is not an exhaustive list, just that noted during other surveys.
- 2.41 Features and habitats in Table 6 are shown on Figure 2 in [Appendix A](#). Photographs are provided in [Appendix D](#).

Table 6. Summary of Bat presence/ potential presence within the Survey Area

Feature	Description	Location ¹¹	Relevant Target Notes
Oak Tree (T1)	Mature oak tree with moderate potential to support roosting bats. Split down the main trunk due to lightning strike, looks like it is hollow further up the trunk.	Adjacent to the proposed cycle path along Phase 8.	Appendix A, Figure 2, TN1 Appendix D, Photograph 13
Oak Tree (T2)	Mature oak tree with possible crevice from south west branch. Possible low bat roost potential.	Adjacent to the proposed cycle path along Phase 8.	Appendix A, Figure 2, TN2 Appendix D, Photograph 14
Mosaic of hedgerows, ponds, brook and woodland habitat.	High suitability commuting and foraging habitat for bats.	Within and adjacent to the Site.	N/A

Constraints and Recommendations

- 2.42 It is understood that almost all trees on site will be retained. If the trees outlined above (T1 and T2) are going to be impacted by the Scheme (even for health and safety purposes) they will require a detailed inspection by an experienced bat ecologist to determine their suitability for roosting bats. If it is confirmed that they are suitable then further surveys will be required to determine the presence/absence of roosting bats within the trees. It is understood that the council have this in hand.
- 2.43 This would include dusk emergence and /or pre-dawn re-entry surveys. In accordance with guidance:
- Three surveys for high roost potential;
 - Two surveys for moderate potential; and,
 - Soft felling of trees with low potential
- 2.44 The works would not adversely affect bat habitats during operation as additional habitats such as trees and hedgerows will be added as part of the landscape planting, and no permanent lighting will be installed. It is understood that trees would be retained, including the woodland edge and therefore loss of potential roosts would not occur. Construction lighting, if required, should be avoided if possible, and where not, should be task specific and directional in order to prevent lighting of woodland edges, tree lines and hedgerows.

Common Species of Reptile

- 2.45 Common species of reptile refers to common lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix helvetica*).

Desk Study

- 2.46 There are no recent records of reptiles within the Study Area, however there are 4 historic records of slow worm within 2 km.

¹¹Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the feature from the Site

Field Survey

- 2.47 No specific reptile surveys were undertaken beyond assessing for habitat suitability. Table 7 summarises the features that have the potential to support common species of reptile.
- 2.48 Features in Table 7 are shown on Figure 2 in [Appendix A](#).

Table 7. Summary of features with potential to support Reptiles

Feature	Description	Location ¹²	Relevant Target Notes
Small bank along top of arable field with tall ruderals.	Small bank along field margin, with some potential to support foraging and basking reptiles, south facing however mostly under canopy of woodland behind.	North of arable field to the west end of the Site.	N/A

Constraints and Recommendations

- 2.49 Due to the lack of evidence and limited records and suitability for reptiles being present within the Site no further surveys are recommended at this stage. However, any works should ensure to maintain as much of the bank habitat that is suitable for reptiles as possible. As a precaution, vegetation clearance in tall ruderal or grassland habitats could comprise of staged strimming to encourage any reptiles to move out of the area.
- 2.50 Artificial refugia, such as log piles, could also be incorporated into designs to improve the habitats for reptile species.

Birds

Desk Study

- 2.51 There are four recent records of notable¹³ bird species within the Study Area. All four records are of a colony of tree sparrows (*Passer montanus*) associated with land adjacent to Alder Lane, approximately 0.69 km south of the Site (at the closest point), and are from 2010 – 2013. Tree sparrow is a Species of Principal Importance (SPI) and is also on the Birds of Conservation Concern 4 (BoCC4) Red list.

Field Survey

- 2.52 Table 8 summarises the features that have the potential to support birds within the Survey Area, either individually notable species or assemblages of birds.
- 2.53 Features in Table 8 are shown on Figure 2 in Appendix A. TN descriptions and photographs are provided in [Appendix D](#).

¹²Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the feature from the Site

¹³ Notable bird species are taken as those listed: on Annex I of the EC Birds Directive (2009/147/EC); on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); as Species of Principal Importance (SPI) for the Conservation of Biodiversity in England listed in Section 41 of the Natural Environment and Rural Communities Act 2006; as Red or Amber in the Birds of Conservation Concern (BoCC) 4 (Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015). Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* 108, 708-746); bird species or groups listed under the North Merseyside BAP.

Table 8. Summary of features with potential to support Birds

Feature	Description	Location ¹⁴	Relevant Target Notes
Trees with holes / cavities potentially suitable for nesting birds, including tree sparrow (<i>Passer montanus</i>)	Suitable to support breeding bird species	Within the Survey Area	N/A
Arable, tall ruderal and riparian vegetation	Suitable to support foraging bird species	Within the Survey Area	N/A

Constraints and Recommendations

- 2.54 Wintering birds are not considered to represent a constraint to the Scheme. However, the general measures provided below, where also suitable to non-breeding birds, should be followed.
- 2.55 Breeding birds are likely to be present within the Survey Area, therefore vegetation that may support breeding birds (e.g. woodland or scrub) which requires clearance, should be removed outside the nesting season (typically considered to be March to August, inclusive). If this is not possible, removal should be carried out under a watching brief of a suitably experienced ecologist. All bird nests are protected by the Wildlife and Countryside Act, 1981 (as amended). Should an occupied nest be found during construction, works must immediately cease, and a suitably experienced ecologist should be contacted. A buffer zone, the distance of which will need to be determined by the ecologist, will need to be incorporated to reduce the risk of the nest being abandoned by the birds until the nest is no longer in use / dependent offspring have fledged.
- 2.56 Works at night should be avoided and any artificial lighting used, such as during low light levels in the daytime, should be minimised and only directed towards (i.e. downward pointing) the required area to reduce potential impacts to breeding, sheltering and roosting birds..

Terrestrial Invertebrates

Desk Study

- 2.57 There are recent records of notable¹⁵ terrestrial invertebrates within in the wider area. These include records of tormentil mining bee (*Andrena tarsata*), a Schedule 41 species. Further records include species such as common blue damselfly (*Enallagma cyathigerum*), brown hawker (*Aeshna grandis*), azure damselfly (*Coenagrion puella*), Broad-bodied Chaser (*Libellula depressa*), Common Darter (*Sympetrum striolatum*), and Emperor Dragonfly (*Anax imperator*). All records are greater than 1 km from the Site boundary, the tormentil mining bee lies 1.8 km east of the Site.

Field Survey

- 2.58 No specific surveys were undertaken beyond assessing for habitat suitability. Table 9 summarises both the evidence of notable terrestrial invertebrate species being present within the Survey Area, and the potential for features and habitats within the Survey Area to support notable terrestrial invertebrate species.
- 2.59 Features and habitats in Table 9 are shown on Figure 2 in [Appendix A](#).

¹⁴Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the feature from the Site

¹⁵ Notable terrestrial invertebrates are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any invertebrate listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); any invertebrate listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); any invertebrate listed in the IUCN Invertebrate Red Data Book (1991); and any invertebrate listed under a North Merseyside BAP.

Table 9. Summary of Notable Terrestrial Invertebrates Species presence/ potential presence within the Survey Area

Feature	Description	Location ¹⁶	Relevant Target Notes
Mosaic of grasslands, arable, woodland and tall ruderal	Suitable to support terrestrial invertebrates	Within the Survey Area	N/A

Constraints and Recommendations

- 2.60 It is recommended that existing habitats with suitability for terrestrial invertebrates are avoided where possible.
- 2.61 Management of any adjacent areas to the cycleway (should this be possible) by seeding wildflower mixes will increase the diversity of herbs in the sward and provide foraging habitat for terrestrial invertebrates.

Other Notable Species

Desk Study

- 2.62 There are recent records of common frog (*Rana temporaria*), common toad (*Bufo bufo*), smooth newt (*Lissotriton vulgaris*) hedgehog (*Erinaceus europaeus*), brown hare (*Lepus europaeus*) within the area.

Field Survey

- 2.63 No specific surveys were undertaken beyond assessing for habitat suitability. Table 10 summarises both the evidence of other notable species being present within the Survey Area, and the potential for features and habitats within the Survey Area to support other notable species.

Table 10. Summary of Other Notable Species presence/ potential presence within the Survey Area

Feature	Description	Location ¹⁷	Relevant Target Notes
Arable fields, grassland, hedgerow and woodland habitats	Suitability to support brown hare and hedgehogs	Within and outside of the Survey Area	N/A
Ponds and areas of grassland, scrub and woodland	Suitability to support common amphibians	Within and outside of the Survey Area	N/A

Constraints and Recommendations

- 2.64 The proposed works have the potential to impact on habitat used by other notable species. Given the scale of the works, and the availability of habitats in the wider landscape, it is unlikely that the Proposed Scheme will negatively impact on these species. However, consideration should be made to avoid using mesh on the proposed fencing either in all sections, or parts of it, or potentially to the ground level in order to prevent habitat fragmentation for species such as brown hare and hedgehogs, and to prevent directing them onto the road.
- 2.65 Ecological enhancement can be achieved by the provision of artificial refugia for species such as hedgehogs, and amphibians (to use in their terrestrial phase).

¹⁶Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the feature from the Site

¹⁷Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the feature from the Site

Invasive Non-Native Species

Desk Study

- 2.66 The desk study returned 56 recent records of invasive non-native species within 2km of Phase 8a. These include records of Indian (Himalayan) Balsam (*Impatiens glandulifera*), rhododendron (*Rhododendron*) and Japanese knotweed (*Reynoutria japonica*).

Field Survey

- 2.67 During the field survey Indian Balsam was identified to be present along the extent of Fox's Bank Brook that was surveyed (Appendix A, Figure 2, TN64; Appendix D, Photograph 15). Indian Balsam was also present adjacent to Pond 3 (Appendix A, Figure 2, TN 5; Appendix D, Photograph 16), within a small area of woodland. During the Phase 1 habitat survey, bamboo and buddleia were noted to be present south of the watercourse.

Constraints and Recommendations

- 2.68 It is anticipated that the stands of Indian balsam found within the Survey Area are beyond potential impacts of the works and therefore mitigation is not considered necessary as the works will not be within the area considered to impose a risk of potential spread of Indian balsam.
- 2.69 Due to the time of year the survey was undertaken estimates cannot be made of the full extent of Indian balsam and therefore it is possible that it may reach closer to the Scheme than what has been recorded within this report.
- 2.70 If the Indian balsam found within the Survey Area falls within the potential impacts of the works then advice must be sought from a suitably experienced ecologist. A management plan may be required to prevent any spread of the species. It is recommended that toolbox talks are given on these species, and that nearby areas are fenced off using demarcation fencing and signs installed to avoid accidental interference. A preconstruction survey may be beneficial once the area of works has been marked out to ensure that no stands fall within the working area.

3. Opportunities for Enhancements

- 3.1 This section highlights opportunities for providing ecological enhancements, based on the current Scheme details. These are high level opportunities and would need to be developed in greater detail.
- 3.2 The Proposed Scheme offers opportunities for ecological enhancement around Phase 8 as a whole. The following enhancement measures are anticipated:
- Planting of native species-rich hedgerows and native trees, including those of fruit and nut bearing species to provide potential food sources for a variety of species.
 - Where tree removal is required, it is recommended that some of the felled material is reused to create log pile refuges within the woodlands adjacent to the proposed route, this will create habitat for hedgehogs, terrestrial invertebrates, such as butterflies and moths and also amphibians and reptiles.
 - Consideration should also be made for the installation of bird and bat boxes to replace any nesting and roosting features lost as a result of tree removal.
 - Removal or management of the Indian balsam, and bamboo present within the survey area would also count as enhancement where it does not lie within the working area.

4. Conclusion

- 4.1 This planning report is based on a desk study, previous surveys undertaken for most Phases of the wider Scheme, and specific ecological surveys undertaken in April and June 2021, to assess the suitability of the habitats within Phase 8a to support badger, water vole, and great crested newt and to identify any signs that these species are present within this area. This planning report also provides relevant species mitigation in respect to the findings of the ecological surveys and provides advice in respect of Scheme design, site layout and / or site investigation.
- 4.2 No statutory designated sites would be affected by the Scheme. Six LWS lie within 1 km of the Site and all but one lie greater than 350 m away and therefore would not be affected. One LWS (land, east of Fox's Bank Brook) lies just within the Site, as the outline of the LWS for woodland encroaches just within the arable field. With appropriate pollution prevention guidelines followed, and demarcation of the rest of the LWS to prevent encroachment further into the LWS, then it is not considered that the LWS would be adversely impacted by the Scheme due to the limited extents and nature of the works. The proposed landscape planting would increase the hedgerows and trees present in the area.
- 4.3 The main habitat lost for the Scheme comprises a small section of arable land before the cycleway moves onto existing road. Further small areas of tall ruderal habitat along the woodland edge/arable field would be lost. This has the potential to contain native bluebells and recommendations are given to potentially relocate the bulbs should they fall within the areas of works.
- 4.4 The badger survey returned no evidence of badger and therefore it is considered unlikely that badger will be impacted by the Scheme. However, if one or more badger setts are identified during construction, works will have to stop immediately, and a Natural England licence and appropriate mitigation is likely to be required. A preconstruction survey is recommended should works have not commenced by spring 2022.
- 4.5 The water vole survey returned evidence of water vole footprints within Fox's Bank Brook, within sections of the brook outside of the Site. No other evidence of water vole was recorded within the Survey Area. Due to the lack of burrows and substantial evidence that water vole are regularly using the brook, in particular the elements adjacent to the Site, and Fox's Bank Brook being unaffected directly by the current Scheme design, it is considered unlikely that water vole will be adversely impacted by the Proposed Scheme. Standard pollution prevention guidance must be adhered to prevent indirect effects. Works will potentially fall within 5 m of the brook in some places, but should be avoided where at all possible. Access along the brook must be maintained for species including water vole to continue to use it for commuting purposes, and lighting of the brook should be avoided. If signs of water vole, in particular burrows, are identified within 5 m of the works during construction, the works will have to stop immediately and a Natural England licence and appropriate mitigation is likely to be required. A preconstruction survey is recommended in autumn 2021 and again should works have not commenced by spring 2022.
- 4.6 The results of the HSI assessments determined that four of the seven ponds assessed are of 'poor' suitability, one is considered 'below average' suitability and two are considered of 'average' suitability for great crested newts. eDNA surveys carried out in June 2021 on the three below average, and average ponds, returned a negative result for great crested newt presence, suggesting that great crested newt are likely to be absent from the Scheme and therefore not a constraint.
- 4.7 Two mature oak trees were identified as having suitability for roosting bats. If these trees are going to be impacted by the works, they will require a detailed inspection by an experienced bat ecologist to determine suitability for roosting bats. If it is confirmed that they are suitable then further surveys will be required to determine the presence/absence of roosting bats within the trees in line with guidance. It is understood that the council have this in hand.

- 4.8 Indian balsam was recorded within proximity to Phase 8a along Fox's Bank Brook and adjacent to Pond 3. Due to the time of year the survey was undertaken estimates cannot be made on the full extent of Indian Balsam and therefore it is possible that it may reach closer to the Scheme than what has been recorded within this report. Bamboo was also noted to be present adjacent to Fox's Bank Lane. It is recommended that tool box talks are given on these species, and that nearby areas are fenced off using demarcation fencing and signs installed to avoid accidental interference. A preconstruction survey may be beneficial once the area of works has been marked out to ensure that no stands fall within the working area.

Re-Survey of Site

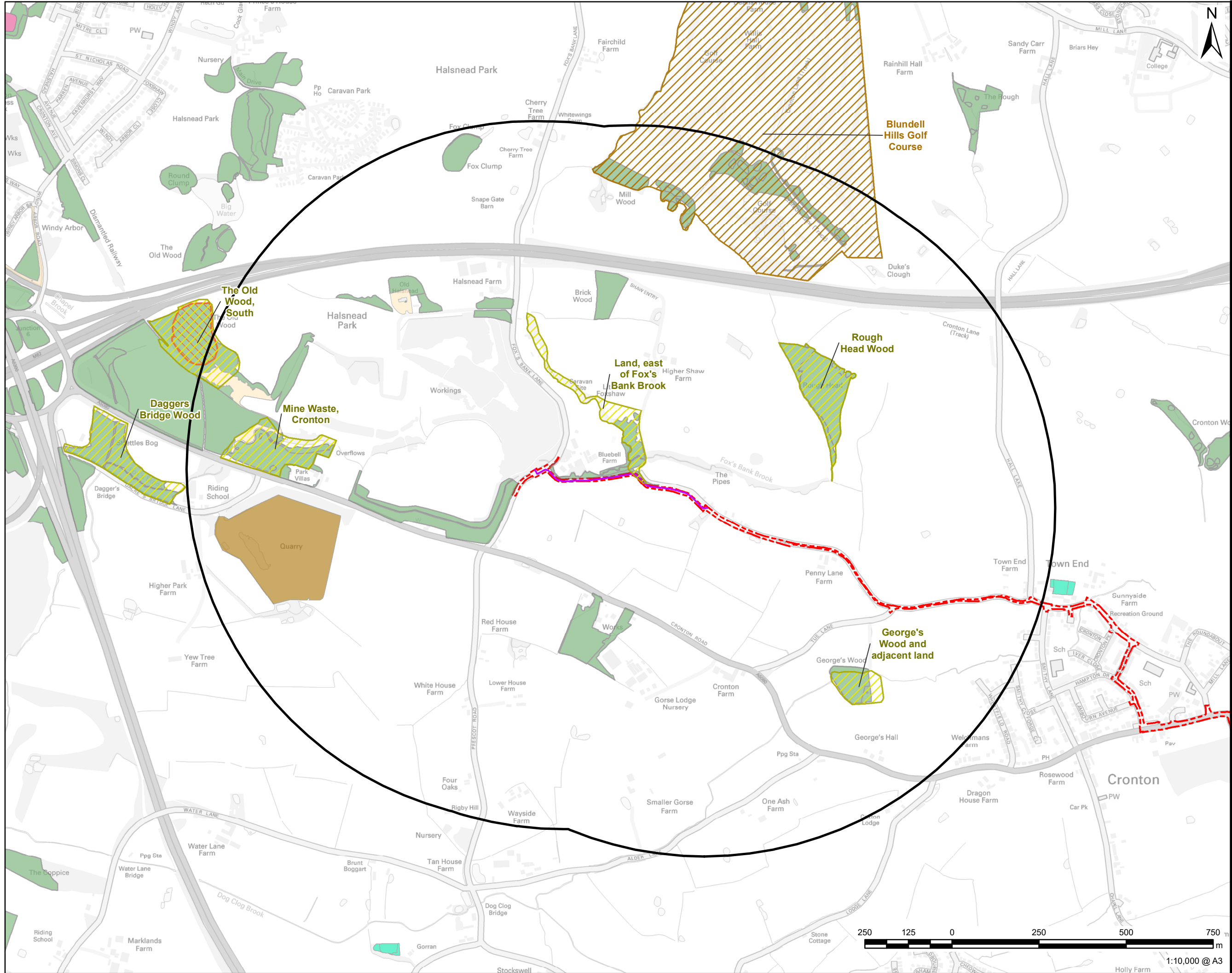
- 4.9 Due to the mobility of animals and the potential for colonisation of the Site, it is recommended that an updated ecological survey be undertaken prior to construction should this not occur within 12 months of the date of the field survey, therefore if works have not commenced by spring 2022. Preconstruction checks are recommended for water vole in autumn 2021, badger in spring 2022, and for invasive species once working areas have been marked out if during an appropriate time of the year.

Appendix A Drawings

Figure 1 – Designated Sites

Figure 2 – Phase 1 Habitat Survey

Figure 3 – Habitat Suitability Index



PROJECT

Prescot to Cronton Cycleway

CLIENT



CONSULTANT

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LEGEND

Prescot to Cronton Cycleway - Proposed Route Centreline

-
- Phase 8a
- Phase 8a - 1km Buffer
- Scheme Limit
- Designated Sites
- Ancient Woodland
- Locally Designated Sites¹
- Knowsley Local Wildlife Site
- St Helens Local Wildlife Site
- Priority Habitat Inventory
- Deciduous woodland
- Lowland fens
- No main habitat but additional habitats present
- Traditional orchard
- Open Mosaic Habitat

NOTES

1: Environmental information search data provided by Merseyside BioBank.

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ISSUE PURPOSE

DRAFT

PROJECT NUMBER

60629784

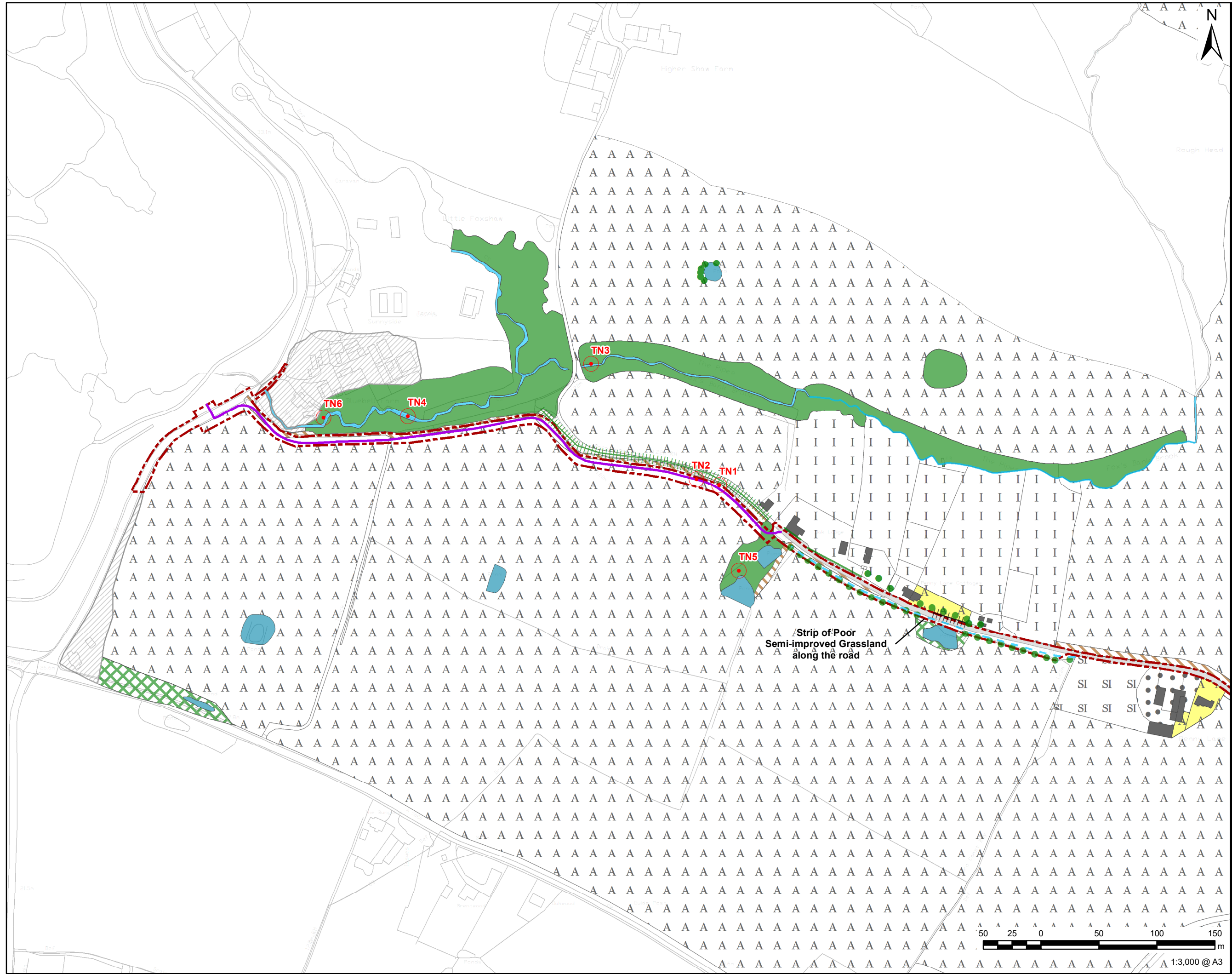
SHEET TITLE

Phase 8a

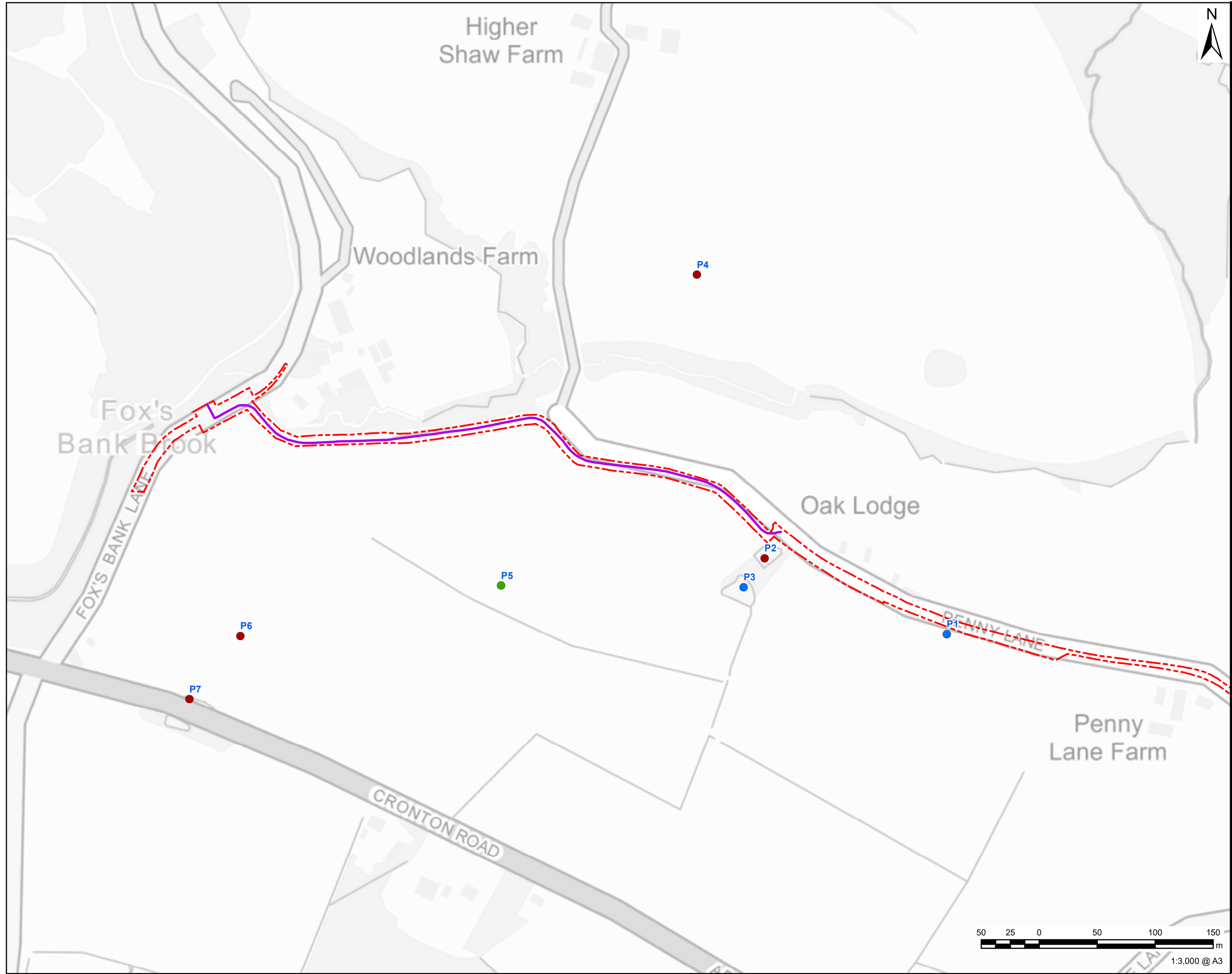
Designated Sites

SHEET NUMBER

Figure 1



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LEGEND

Prescot to Cronton Cycleway
- Proposed Route Centreline

Phase 8a

 Scheme Limit

Ponds - Habitat Suitability Rating

- Average

● Below Average

● Poor

NOTES

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SHEET TITLE

Phase 8a
Habitat Suitability Index

SHEET NUMBER

Figure 3

Appendix B Relevant Legislation and Planning Policy

Legislation

The UK is no longer a member of the European Union (EU). EU legislation as it applied to the UK on 31 December 2020 is now a part of UK domestic legislation. EU legislation which applied directly or indirectly to the UK before 11.00 p.m. on 31 December 2020 has been retained in UK law as a form of domestic legislation known as 'retained EU legislation'.

The Secretary of State for the Environment, Food and Rural Affairs and Welsh Ministers have made changes to parts of the *Conservation of Habitats and Species Regulations 2017* (referred to as the 2017 Regulations) so that they operate effectively. Most of these changes involve transferring functions from the European Commission to the appropriate authorities in England. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

Designated Sites

Special Protection Areas (SPA) / Special Areas of Conservation (SAC)

These sites in the UK no longer form part of the EU's Natura 2000 ecological network. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (referred to as the 2019 Regulations) have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes:

- existing SACs and SPAs
- new SACs and SPAs designated under these Regulations

Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network.

Formal Appropriate Assessment is required to be undertaken by the competent authority before undertaking, or giving consent, permission or other authorisation for any work which are likely to have a significant effect on such a site.

Wetland of International Importance (Ramsar site)

Designated under the Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (the Ramsar Convention), in the UK, these sites are treated as having the same level of protection as SPA's and SAC's.

Sites of Special Scientific Interest

Under the Wildlife and Countryside Act 1981 (as amended), it is an offence to carry out or permit to be carried out any operations likely to damage the Site of Special Scientific Interest (SSSI). These operations are listed in the SSSI notification.

Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 of the Wildlife and Countryside Act 1981 (as amended), before undertaking operations likely to damage a SSSI.

Local Nature Reserve

A Local Nature Reserve (LNR) is a statutory designation made under National Parks and Access to the Countryside Act 1949, by principal local authorities (district, borough or unitary councils).

The local authority must control the LNR land - either through ownership, a lease or an agreement with the owner.

LNRs are given protection through policies in a local development plan.

Locally Designated Sites

Local Wildlife Sites are sites with 'substantive nature conservation value'. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species within a region.

They are usually selected by the relevant Wildlife Trust, along with representatives of the local authority and other local wildlife conservation groups.

The LWS selection panel, select all sites that meet the assigned criteria, unlike SSSIs, which for some habitats are a representative sample of sites that meet the national standard. Consequently, many sites of SSSI quality are not designated and instead are selected as LWSs. Consequently, LWSs can be amongst the best sites for biodiversity.

Protected Species

Bats and Great Crested Newt

These species, known as European Protected Species, are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill an animal; deliberately disturb an animal; or damage or destroy a breeding site or resting place used by an animal.

Deliberate capture or killing is taken to include "accepting the possibility" of such capture or killing. Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.

Where development works are at risk of causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal.

These species are also protected under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb an animal in such a place.

Lower levels of disturbance not covered by the *Conservation of Habitats and Species Regulations 2017* remain an offence under the *Wildlife and Countryside Act 1981* although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

Water Vole

Water voles are protected under the *Wildlife and Countryside Act 1981* (as amended). There are no licensing purposes that explicitly cover development or other construction activities which could have an impact on water voles.

When development work is proposed in or near an area which is either known to or likely to contain water voles, then the developer will need to implement suitable mitigation to prevent impacts to water voles. The preferred mitigation option is to leave water voles *in situ*, with the development works adopting avoidance measures through redesign of the proposals.

Where impacts cannot be avoided, operations aimed at displacing water voles from a development site are now no longer covered by the "incidental result of an otherwise lawful action" defence in the *Wildlife and Countryside Act 1981* (as amended). Displacement of water voles now needs to be undertaken under a licence.

In England, small scale (limited to continuous lengths of bank not exceeding 50 m) displacement of water voles can be carried out at certain times of the year (February to April) for the purposes of conservation under a Class Licence by a registered person. For larger scale displacements or displacements outside of this period, displacement can be undertaken under a site-specific conservation licence.

Where it is considered that the best outcome for water voles is capture and translocation to a different location then this action is considered by Natural England to be outside the scope of the defence as the intentional capture of water voles is unlikely to be considered 'incidental'. In these circumstances there may be genuine grounds for issuing a conservation licence for the purpose of translocating the water vole population to suitable alternative habitat.

Badger

Badgers and their setts are protected under the Protection of Badgers Act 1992 (as amended). This makes it an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.

It is not illegal to carry out disturbance activities near setts that are not occupied, i.e. those that do not show signs of current use.

Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England. Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process.

When assessing the requirement for a licence in respect of development, Natural England¹⁸ state that badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.

Licences are normally not granted from December to June inclusive (the badger breeding season) because dependent cubs may be present within setts.

Species and Habitats of Principal Importance for the Conservation of Biodiversity

Section 40 of the Natural Environment & Rural Communities Act (NERC) 2006 sets out the duty for public authorities to conserve biodiversity in England.

Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act for England. The list, known as the 'England Biodiversity List', of habitats and species can be found on the Natural England web site.

The 'England Biodiversity List' is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 to have regard to the conservation of biodiversity in England when carrying out their normal functions.

Hedgerows

Under the Hedgerows Regulations 1997, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. In general, permission will be required before removing hedges that are at least 20 metres in length, over 30 years old and contain certain species of plant. The local planning authority will assess the importance of the hedgerow using criteria set out in the regulations.

Non-native Invasive Plant Species

Under the Wildlife and Countryside Act 1981 (as amended), it is an offence to plant or otherwise cause these species to grow in the wild.

¹⁸ Interpretation of 'Disturbance' in relation to badgers occupying a sett, Natural England (2009)

Any contaminated soil or plant material is classified as controlled waste and should be disposed of in a suitably licensed landfill site, accompanied by appropriate Waste Transfer documentation, and must comply with section 34 of the *Environmental Protection Act 1990*.

Planning Policy

National Planning Policy Framework, 2021

The National Planning Policy Framework (NPPF) sets out the Governments planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF). Chapter 15 of the NPPF '*Conserving and enhancing the natural environment*' sets out the requirements to consider biodiversity in planning decisions.

Local Planning Policy

Planning permission is required for Section 8 of the Proposed Scheme and relevant local planning policies for KMBC are listed in Table B1. This provides a summary of relevant local planning policies. For the precise wording of the policies please refer back to the source document.

Table B1. Local Planning Policy for the Proposed Scheme

Document	Planning Policy	Purpose
Knowsley Local Plan: Core Strategy January 2016	Policy CS8 – Green Infrastructure	Maintenance and Enhancement of Knowsley's Existing Green Infrastructure 1) Knowsley's existing Green Infrastructure and its beneficial functions will be protected, managed and/or enhanced, primarily to: b) Sustain and promote biodiversity (including designated sites, priority habitats and protected and endangered species) in accordance with importance and contribution to ecological networks. 2) To achieve the above, planning powers and other interventions will be used to: a) Protect and enhance strategically important areas of greenspace; c) Promote effective movement of wildlife through a network of strategic green links, by protecting, maintaining and improving existing and new open spaces, water courses (including water quality) and biodiversity assets; d) Protect, enhance and/or introduce biodiversity into existing areas of Green Infrastructure, through integration into the design of new development and public realm projects; f) Protect and where possible improve green paths and cycleways linking residential areas, existing strategic areas of greenspace, employment locations, local community services and leisure facilities; g) Work in partnership with other districts and relevant bodies at a landscape scale to minimise the impact of development upon Knowsley's existing biodiversity and geological assets, and sustain the protection afforded to internationally important sites, including supporting habitat, for biodiversity outside of the borough. Approach to Green Infrastructure and New Development 6) New development must be served by Green Infrastructure to meet the needs of residents and the local environment, in a manner which will: c) Seek to protect, maintain and where possible enhance biodiversity within and around new developments according to their designation and significance to provide space for nature; and d) Provide adequate mitigation and/or, as a last resort, compensation for Green Infrastructure or biodiversity loss, in circumstances where harm resulting from the development is otherwise unavoidable.
	Policy CS21 – Greenspaces and Trees	Greenspace protection

Document	Planning Policy	Purpose
		3) Irrespective of whether criteria in 2) are met, unless the benefits of a proposal clearly outweigh the loss of urban greenspace, development will be resisted where it would significantly harm any existing or potential special qualities of greenspace in the area in terms of: c) Biodiversity and environmental benefits. Local Green Spaces 9) Any Local Green Spaces Designations which are formally designated will be identified in the Local Plan: Site Allocations and Development Policies or future Neighbourhood Plans (if applicable). This designation will only be used where the greenspace concerned is: b) Demonstrably special to a local community and holds a particular local significance, for example because of its beauty, historic significance, recreational value (including as a playing field), tranquillity or richness of its wildlife. Enhancement of Natural and Semi-Natural Greenspace and Tree Protection 10) The Council will encourage proposals for new development to incorporate: a) Retention of existing trees, woodland, vegetation and other habitat features which offer a positive contribution to the local environment in terms of visual amenity, recreation value or biodiversity/wildlife interest; b) Appropriate planting of trees, other soft landscaping and installation of habitat features for the benefit of biodiversity; and c) Adequate replacement provision where tree loss is unavoidable, comprising two additional trees for every tree lost and taking account of species and size.

Source: Knowsley Local Plan: Core Strategy January 2016

UK Biodiversity Framework

In July 2012 the UK Post -2010 Biodiversity Framework was published. This covers the period 2011 - 2020 and forms the UK Government's response to the UN convention on Biological Diversity held in Nagoya in 2010. This contained five strategic goals ("Aichi" Goals). The Framework recognised that the Biodiversity Action Plan should now be delivered through strategies for each of the four countries comprising United Kingdom and Northern Ireland. For England, this is Biodiversity 2020: A Strategy for England's wildlife and ecosystem services (Defra, 2011). Local Authorities have also prepared Local Biodiversity Action Plans (LBAP) for those species most in need of conservation consideration. The Site is located within a region that is covered by the North Merseyside Biodiversity Action Plan. This LBAP includes Action Plans for 28 species and 16 habitats.

Appendix C Methodology

Desk Study

Background Records Search

The initial preliminary ecological assessment of the wider Scheme carried out by AECOM in June 2020 included a desk study to obtain background records relevant to the Site and the Scheme. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage is not possible.

The Study Area is dependent upon the nature, timing and scale of the Scheme, as well as the location of the Site and the surrounding landscape. These variables all contribute to what is referred to as the Zone of Influence (Zoi) of the Scheme, which is the area over which ecological features may be affected by biophysical changes because of the works and associated activities.

In June 2020 Mersey BioBank was contacted to obtain the following ecological data:

- Records of non-statutory designated sites (Local Wildlife Sites (LWS)) within 1 km of the Site boundary;
- Records of legally protected and notable species (fauna and flora) within 1 km m of the Site boundary, including Species of Principal Importance for the Conservation of Biodiversity listed under Section 41 of the Natural Environment & Rural Communities Act 2006 in the England Biodiversity List¹⁹.

The Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk) was reviewed for the following information:

- Designated sites of nature conservation importance (statutory sites only) within 2 km of the Site. This was extended to 10 km for Special Areas of Conservation (SACs) for bats.
- Notable habitats within 500 m of the Site, these being areas of ancient woodland and ‘Habitats of Principal Importance for the Conservation of Biodiversity’ included in the England Biodiversity List²⁰.

Great Crested Newt Pond Search

Ordnance Survey maps and the *emapsite* website (<https://login.emapsite.com/>) have been used to identify the presence of water bodies within 500 m of the Site boundary, in order to help establish if the land within and immediately surrounding the Site could be used by great crested newts. This species can use suitable terrestrial habitat up to 500 m from a breeding pond²¹, though there is a notable decrease in great crested newt abundance beyond 250 m from a breeding pond²².

Field Survey

The Preliminary Ecological Assessment (AECOM, 2020), identified the need for the following surveys:

¹⁹ Section 40 of the Natural Environment & Rural Communities Act 2006 requires that The Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the [England Biodiversity List](#)

²⁰ Section 40 of the Natural Environment & Rural Communities (NERC) Act 2006 requires that eThe Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the [England Biodiversity List](#)

²¹ Great Crested Newt Mitigation Guidelines (English Nature, 2001).

²² Natural England. An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576) <http://publications.naturalengland.org.uk/publication/134002>.

- Habitat Suitability Index (HSI) assessments of seven ponds within 250m of the Scheme – this involves assessing the potential of habitats within the Survey Area to support great crested newt, following English Nature (2001)²³ and Froglife (2001)²⁴ guidance
- Habitat assessment for water vole – this involves assessing the potential of watercourses and water bodies within the Survey Area to support water vole, following The Mammal Society (2016)²⁵ guidance.
- Badger - the survey involves searching for signs of badger activity including setts, tracks, snuffle holes and latrines, following the methodology detailed in Scottish Badgers (2018)²⁶ and Harris et al (1989)²⁷;

During the surveys carried out in April 2021, two trees were also identified as having moderate and low bat roost suitability.

Limitations and Assumptions

There were several ponds within the 500m buffer of Phase 8a that were inaccessible during the time of the field survey, however it can be assumed that due to major barriers such as a busy A road that if they support great crested newts they will not be indirectly impacted by the Scheme.

The full extent of Indian balsam within Phase 8a cannot be certain due to the time of year that the survey took place, and also the extents could have increased prior to the start of works on site.

²⁵ Dean, M. Strachan, R. Gow, D. Andrews, R. (2016). *The Water Vole Mitigation Handbook (The Mammal Society Guidance Series)*. Eds Fiona Mathews and Paul Chanin. The Mammal Society. London.

²⁶ Scottish Badgers (2018). *Surveying for Badgers: Good Practice Guidelines*. Version 1.

²⁷ Harris, S. Cresswell, P. and Jefferies, D. (1989). *Surveying Badgers*.

Appendix D Photographs

Photograph	Description	Photograph(s)
Photograph 1	Water vole footprints in Fox's Bank Brook (TN3)	

Photograph Description Photograph(s)

Photograph 2, 3	Fox's Bank Brook	
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Photograph Description Photograph(s)

		
Photograph 4, 5	Pond 1	

Photograph Description Photograph(s)

		
Photograph 6	Pond 2	

Photograph Description Photograph(s)

Photograph 7	Pond 3	
Photograph 8	Pond 4	

Photograph Description Photograph(s)

Photograph 9	Pond 5	
Photograph 10	Pond 6	

Photograph Description Photograph(s)

Photograph 11, 12	Pond 7	
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Photograph Description Photograph(s)

		
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Photograph Description Photograph(s)

Photograph 13	Oak tree with moderate potential to support roosting bats (TN1)	
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Photograph Description Photograph(s)

Photograph 14	Oak tree with low potential to support roosting bats (TN2)	
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Photograph Description Photograph(s)

Photograph 15	Indian balsam located nearby to Pond 3 (TN5)	
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Photograph Description Photograph(s)

Photograph 16	Indian balsam located next to Fox's Bank Brook (TN6)	 A photograph showing a dense patch of Indian balsam plants with bright green, serrated leaves. The plants are growing on a dark, muddy bank next to a stream. The water in the stream is dark and turbulent, with some white foam visible. The background shows more of the stream and the surrounding environment.
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