

# Poynton Pool Reservoir Flood Resilience Improvement Scheme

## Preliminary Ecological Appraisal

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October 2022

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## Poynton Pool Reservoir Flood Resilience Improvement Scheme - Preliminary Ecological Appraisal

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## Contents

### Executive Summary

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Background to the Proposed Scheme	1
1.2	Survey Objectives	1
1.3	Legislation	1
<b>2</b>	<b>Methodology</b>	<b>3</b>
2.1	Desk Study	3
2.2	Field Study	3
2.3	Limitations	5
<b>3</b>	<b>Results</b>	<b>6</b>
3.1	Desk Study Results	6
3.2	Field Survey Results	9
<b>4</b>	<b>Conclusions and Recommendations</b>	<b>14</b>
4.1	Conclusions	14
4.2	Recommendations	16
<b>5</b>	<b>References</b>	<b>19</b>

### Figures

**Appendix A Relevant Legislation**

**Appendix B Target Notes**

**Appendix C Poynton Park Lake LWS Citation**

**Appendix D Protected and Notable Species Records from RECORD**

**Appendix E Pond Photographs and Full HSI Results**

## Executive Summary

Jacobs UK Ltd were commissioned by Cheshire East Council in early 2022 to undertake a Preliminary Ecological Appraisal (PEA) to support a planning application in relation to the proposed Poynton Pool Reservoir Flood Resilience Improvement Scheme, Cheshire (hereafter referred to as “the proposed Scheme”). The proposed Scheme will reinforce the retaining wall at Poynton Pool to prevent catastrophic flooding of homes and the strategic road network. The proposed Scheme will likely involve the removal of a strip of woodland located between Poynton Pool and the busy A523 road.

The PEA consisted of a desk study and a walkover. The desk study included obtaining records from the local record centre (RECORD), checking online resources and referring to a report RSK Biocensus detailing the results of bat activity surveys carried out on Poynton Pool boathouse during 2022. The walkover was carried out by Jacobs’ ecologists in May 2022. This focused on the protected species and habitats most likely to be present based on information collated during the desk study, and the suitability of the site to support them.

Habitats within the survey area included woodland, line of trees, unvegetated surfaces and standing water. No protected species records were returned from the local record centre (RECORD) from within the survey area, however, there were records from the wider area which included badger, bats, birds and terrestrial invertebrates. A survey undertaken by RSK Biocensus found a soprano pipistrelle bat roost in Poynton Pool Boathouse.

Great crested newt surveys, undertaken alongside the PEA, found that three waterbodies identified within 250m were of poor or below average suitability for the species. An eDNA test carried out on the pond behind the houses on Towers Road (Pond 2) was negative.

There were no records of invasive species returned by RECORD but, during the field PEA survey, one single rhododendron plant was noted to be present within woodland to the south of the scheme.

Following this survey, a number of recommendations were made in relation to Ecology which included: liaison with the Principal Nature Conservation Officer at Cheshire East Council in relation to works taking place within the LWS; further survey for bats; completion of an assessment for Biodiversity Net Gain; implementation of precautionary working methodologies in respect to breeding birds, mammals and other notable and/or invasive species.

## Introduction

### 1.1 Background to the Proposed Scheme

Jacobs UK Ltd were commissioned by Cheshire East Council in early 2022 to undertake a Preliminary Ecological Appraisal (PEA) to support a planning application in relation to the proposed Poynton Pool Reservoir Resilience Scheme, Cheshire (hereafter referred to as “the proposed Scheme”). The proposed Scheme is located within a public park, Poynton Park, adjacent to London Road North (A523) (Ordnance Survey (OS) grid reference SJ 922 846). It is anticipated that the planning application will be submitted in December 2022 with work planned to commence in Autumn 2023.

The proposed Scheme will reinforce the retaining wall at Poynton Pool (also known as Poynton Park Lake) to prevent catastrophic flooding of homes and the strategic road network. The proposed Scheme will likely involve the removal of a strip of woodland located between Poynton Pool and the busy A523 road.

This report presents the results of the initial preliminary ecological appraisal (PEA) and the great crested newt (GCN) surveys undertaken by Jacobs’ ecologists in May 2022.

### 1.2 Survey Objectives

The key objectives of this survey were to:

- Identify all statutory and non-statutory designated sites for nature conservation within the desk study area and its surroundings up to 1 km;
- Record, categorise and map habitat types within the survey area in accordance with UK Habs methodology (including the identification of Habitats of Principal Importance (HoPI) and Local Biodiversity Action Plan (LBAP) habitats) and their condition;
- Identify the potential for and presence of protected species or other species of conservation importance within the survey area (including Species of Principal importance (Natural Environment and Rural Communities (NERC) Act, 2006), British Red Data Book Species; birds on the red and amber list of Birds of Conservation Concern 5 (Stanbury *et al.*, 2021) and LBAP species); and,
- Provide sufficient ecological baseline information to assess the proposed Scheme impacts on designated sites, habitats and protected and notable species.

### 1.3 Legislation

Many UK wildlife species and their habitats are protected by law. The key legislation of potential relevance to the works include:

- Conservation of Habitats and Species Regulations 2017 (as amended) (Habs Regs 2017) for protected species and designated sites;

- Wildlife and Countryside Act 1981 (as amended) (WCA, 1981) for protected species and designated sites;
- Natural Environment and Rural Communities (NERC) Act, 2006 for Habitats of Principal Importance (HoPI) and Species of Principal Importance (SoPI).
- Protection of Badgers Act 1992;
- The Hedgerows Regulations 1997;
- Environment Act 2021; and
- Wild Mammals Protection Act (1996).

Appendix A provides further details on this legislation.



## Methodology

### 2.1 Desk Study

A desk study was undertaken in May 2022 to obtain ecological information relevant to the site and surrounding area. This included a review of the following:

- Multi-agency Geographic Information for the Countryside (MAGIC) (<https://magic.defra.gov.uk/magicmap.aspx>) was consulted to identify records of European Protected Species Mitigation (EPSM) licences issued, HoPI and statutory designated sites within 1km of the proposed Scheme, and waterbodies within 250m;
- Records of protected and notable species and non-statutory designated sites for nature conservation were obtained from the Local Records Centre (LRC) RECORD in May 2022. A small proportion of the 1km study area was located within outside of the geographical area covered by RECORD. However, this area was very small and some distance from the proposed Scheme, so a separate request was not submitted for this area. Only species data from within the last 10 years is given in this report, apart from those returned for bat roosts or badger setts as these can be consistently occupied for over 10 years.
- A bat survey report (RSK Biocensus, July 2022). Bat surveys had been undertaken at the Poynton Lake Boathouse at Poynton Park by RSK Biocensus ((TN1) see Appendix B for TN photographs). These were carried out in May, June and July 2022. The boathouse is on the opposite bank of the lake to the proposed Scheme (see Figure 1).

### 2.2 Field Study

The survey was undertaken in consideration of the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and consisted of a walkover carried out by Jacobs' ecologists in May 2022. This focused on the protected species and habitats most likely to be present based on information collated during the desk study, and the suitability of the site to support them. The weather during the survey was rainy.

#### 2.2.1 Survey Area

The survey area comprised the proposed Scheme footprint and all land up to 50m (as shown in Figure 1). However, the habitats to the west of the A523 were excluded from the survey area because it was considered that this busy road formed a significant barrier between them and the works footprint. From hereon, this will be referred to as the 'survey area'. Additionally, the survey area was extended to 250m for GCN surveys.

#### 2.2.2 Survey Types

##### a) Habitat Survey

All habitats within the survey area were assessed and coded according to the UK Habs methodology ([ukhab.org](http://ukhab.org)). Features of particular ecological interest, or those too small to map, were marked with a target note (TN) to provide supplementary

information. Dominant and noteworthy plant species were recorded, where possible. Plant abundance was expressed using the DAFOR scale: Dominant (d), Abundant (a), Frequent (f), Occasional (o) and Rare (r). Botanical taxonomic nomenclature follows that of Stace (2019).

### 2.2.3 Great Crested Newt

#### (i) Habitat Suitability Index

All ponds within 250m of the proposed Scheme were subject to a Habitat Suitability Index (HSI) assessment. Due to the presence of busy roads and no connections to the wider area (i.e., significant barriers to dispersal), this distance was considered to be sufficient to assess the likelihood of GCN being present within the proposed Scheme boundary. The HSI assessment evaluates the habitat suitability of a water body to support Great Crested Newt (*Triturus cristatus*) using ten weighted suitability indices (SI) to generate an overall HSI score (Oldham, *et al.*, 2000). The factors assessed are listed below:

- SI<sub>1</sub> Geographic location
- SI<sub>2</sub> Pond area
- SI<sub>3</sub> Pond drying
- SI<sub>4</sub> Water quality
- SI<sub>5</sub> Shade
- SI<sub>6</sub> Presence of waterfowl
- SI<sub>7</sub> Presence of fish
- SI<sub>8</sub> Pond density in area
- SI<sub>9</sub> Terrestrial habitat quality
- SI<sub>10</sub> Macrophyte cover in pond

The parameters used to work out a value for each weighted factor are detailed in Oldham *et al.*, (2000). Once the suitability indices for each factor were obtained, the calculation below was used to determine an overall HSI score of between 0 and 1:

$$(SI_1 \times SI_2 \times SI_3 \times SI_4 \times SI_5 \times SI_6 \times SI_7 \times SI_8 \times SI_9 \times SI_{10})^{1/10}$$

The score was then used, in conjunction with the scale, published by ARG UK (ARG UK Advice Note 5, May 2010), to categorise the HSI scores as poor, below average, average, good, or excellent. These categories are given in Table 2.1 below.



**Table 2.1: HSI scores and their GCN suitability categories**

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

## (ii) Environmental DNA (eDNA) Assessment

Environmental DNA (eDNA) is nuclear or mitochondrial DNA that is released from an organism into the environment. Sources of eDNA include secreted faeces, mucous, and gametes; shed skin and hair; and carcasses. In aquatic environments, eDNA is diluted and distributed in the water where it persists for 7–21 days. Recent research has shown that the DNA from a range of aquatic organisms can be detected in water samples at very low concentrations using qPCR (quantitative Polymerase Chain Reaction) methods (Biggs *et al.*, 2014).

Natural England now accepts eDNA test results as evidence of presence or likely absence of GCN within a breeding pond, providing that the standardised methodology is followed as set out in a technical advice note by the Freshwater Habitats Trust (Biggs *et al.*, 2014). This technique only requires one visit to a pond to determine presence/likely absence.

The eDNA surveys were undertaken on suitable waterbodies with access available. This involved the collection of 20 water samples which, where access allowed, were taken at regular intervals around the perimeter of each pond on 26<sup>th</sup> May (i.e., within the specified timeframe for this technique between April 15<sup>th</sup> to June 30<sup>th</sup>). The 20 samples were then combined into a single container and mixed well. Six subsamples were removed and placed into tubes with a DNA preservative (ethanol). The preserved samples were then couriered to a laboratory for analysis.

## 2.3 Limitations

Access permission to undertake an eDNA survey to confirm presence or likely absence of GCN was only gained from three out of 12 separate landowners of Pond 2. No access was gained to Pond 1. The desk study records, habitat suitability assessments carried out on both ponds and the eDNA on Pond 2 are considered to provide sufficient combined information to support the conclusions made within this report.

The findings of this report represent the professional opinion of qualified and experienced ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited in this document. Should more than 24 months pass from completion of this survey and the commencement of works, it is considered prudent that the survey findings be reviewed and updated to ensure that the assessment of ecological impacts is undertaken against an accurate baseline.

## Results

### 3.1 Desk Study Results

#### 3.1.1 Natural England Licences

A review of MAGIC for EPSM licences within 1km of the proposed Scheme, identified 17 mitigation licences that were issued for GCN and four for bats. None were within the proposed Scheme boundary; the closest was a licence for GCN from approximately 660m west.

#### 3.1.2 Statutory Designated Sites

No statutory designated sites were identified within 1km of the proposed Scheme.

#### 3.1.3 Non-Statutory Designated Sites

One non-statutory (locally) designated site was identified within 1km of the proposed Scheme:

- **Poynton Park Lake Local Wildlife Site (LWS).** This LWS (previously called a Site of Biological Importance) covers the whole extent of the proposed Scheme, Poynton Pool and its banks consisting of 9.79 hectares of broad-leaved semi-natural woodland, marginal/inundation vegetation and open water (standing, eutrophic, large lakes) (see Appendix C). The citation states: *'The lake is bordered by a narrow strip of broad-leaved woodland at the western edge, adjacent to the main road and parkland is present to the south. The marginal and emergent vegetation is scattered around the lake but concentrated in the south where it is moderately diverse with a number of species including sweet flag (Acorus calamus), nodding bur-marigold (Bidens cernua), greater spearwort (Ranunculus lingua) and lesser water parsnip (Berula erecta). The site is of ornithological interest, species noted included breeding mute swan (Cygnus olor), great crested grebe (Podiceps cristatus) and coot (Fulica atra) and has diverse bryophytes.'*

#### 3.1.4 Habitats of Principal Importance

Section 41 of the NERC Act 2006 requires the Secretary of State to publish a list of the habitats considered to be of principal importance for the purpose of conserving biodiversity (HoPIs). There are two HoPIs within the study area (see Section 1.3 above and Appendix A):

- Poynton Pool: Eutrophic Standing Water; and
- Poynton Park: Wood Pasture and Parkland.

#### 3.1.5 Protected and Notable Species

Table 3.1 provides a summary of the records returned by RECORD for protected, notable and invasive species within 1 km. None of these records are from within the boundary of the proposed Scheme. The majority of records are over 500m away; the closest being a record for signal crayfish (*Pacifastacus leniusculus*) from Poynton Park and Hairy-legged horsefly (*Hybomitra bimaculata*) 40m south. Full desk study

records are presented in Appendix D and in Figures 2.1-2.3. A summary of the wildlife legislation relevant to the species listed can be found in Appendix A.

**Table 3.1: Summary of Records obtained from RECORD.**

Species		Number of records	Nearest record (Location/Date)	Date of most recent record	Protection or Designation
Badger ( <i>Meles meles</i> )		6 (Including 2 setts)	224m west	2015	Protection of Badgers Act, 1992
Bats	<i>Chiroptera</i>	2 tree roosts	500m north-west	2014	Habitat Regs, 2017
	Brandt's ( <i>Myotis brandtii</i> )	1	400m west	2015	WCA, 1981 - Sch5
	Common pipistrelle ( <i>Pipistrellus pipistrellus</i> )	5	570m south-east	2015	Section 41 NERC Act, 2006 (some species)
	Daubenton's ( <i>Myotis daubentonii</i> )	1	400m west	2015	Cheshire LBAP
	Natterer's ( <i>Myotis nattereri</i> )	1	400m west	2015	
	Noctule ( <i>Nyctalus noctula</i> )	1	400m west	2015	
	Soprano pipistrelle ( <i>Pipistrellus pygmaeus</i> )	3 (including 1 tree roost)	570m south-east	2015	
	Whiskered ( <i>Myotis mystacinus</i> )	1	400m west	2015	
Terrestrial Invertebrates	Figure of Eight Moth ( <i>Diloba caeruleocephala</i> )	3	800m South-west	2014	Section 41 NERC Act, 2006
	Small Phoenix Moth ( <i>Ecliptopera silaceata</i> )	2	800m South-west	2014	Section 41 NERC Act, 2006



Species		Number of records	Nearest record (Location/Date)	Date of most recent record	Protection or Designation
	Hairy-legged horsefly	1	40m South	2016	Nationally scarce
Invasive Species	Himalayan balsam ( <i>Impatiens glandulifera</i> )	4	570m south-east	2015	N/A
	Japanese knotweed ( <i>Reynoutria japonica</i> )	1	570m south-east	2015	
	Signal crayfish	1	Adjacent to the eastern boundary with Poynton Park	2015	

**Key to Abbreviations**

- Habitats Regs (2017): The Conservation of Habitats and Species Regulations, 2017 (as amended)  
WCA (1981) Sch5: Schedule 5 of the Wildlife and Countryside Act, 1981 (as amended)  
NERC (2006): Section 41 of the NERC Act (2006)

**b) Birds**

Records for 27 bird species were returned for the desk study area, none are from within the 50m survey area. These records included five species afforded protection under Schedule 1 of the WCA, 1981 (as amended); notable species, comprising 12 amber and 16 red listed species, and 6 species listed in Section 41 of the NERC Act, 2006 (of which five are featured in the Cheshire LBAP). Of those species listed under Schedule 1 of the WCA, 1981 (as amended), the majority were winter passage migrants unlikely to be present during the breeding season; however, records of two species may relate to breeding birds: greylag goose (*Anser anser*) and whimbrel (*Numenius phaeopus*). Two of these 27 species (osprey (*Pandion haliaetus*) and tawny owl (*Strix aluco*) are shown on Figure 2; the other 25 were from a small residential property 1km south of the proposed Scheme and have not been included on a figure.

Other species included: brambling (*Fringilla montifringilla*), fieldfare (*Turdus pilaris*); redwing (*Turdus iliacus*); swift (*Apus apus*); ringed plover (*Charadrius hiaticula*); lapwing (*Vanellus vanellus*); skylark (*Alauda arvensis*); house martin (*Delichon urbicum*); curlew (*Numenius arquata*); starling (*Sturnus vulgaris*); herring gull (*Larus argentatus*); mistle thrush (*Turdus viscivorus*); tree sparrow (*Passer montanus*); linnets (*Linaria cannabina*); yellow wagtail (*Motacilla flava*); greenfinch (*Chloris chloris*); mallard (*Anas platyrhynchos*); moorhen (*Gallinula chloropus*); snipe (*Gallinago gallinago*); black-headed gull (*Chroicocephalus ridibundus*); tawny owl; kestrel (*Falco tinnunculus*); rook (*Corvus frugilegus*); song thrush (*Turdus philomelos*); bullfinch (*Pyrrhula pyrrhula*) and reed bunting (*Emberiza schoeniclus*).

### a) Bat Survey Report (RSK Biocensus)

Surveys undertaken by RSK Biocensus in May, June and July 2022 recorded a soprano pipistrelle (*Pipistrellus pygmaeus*) day roost present in Poynton Pool Boathouse (TN1) on the bank of Poynton Lake, approximately 120m east of the proposed Scheme. A total of eight bats emerged on the first survey (May), one during the second (June) and none during the last (July).

General bat activity recorded around the boathouse included a noctule commuting over Poynton Pool; with soprano pipistrelles, common pipistrelles and at least one *Myotis* species commuting and foraging along the shoreline, under a shelter of trees south-east of the boathouse and some foraging over the lake.

## 3.2 Field Survey Results

### 3.2.1 Habitats

The proposed Scheme is sandwiched between Poynton Pool (in Poynton Park) and the busy A523 road (partial dual carriageway) with residential housing estates to the north along Anglesey Drive. Poynton Park is bordered by South Park Drive in the south. The following habitats were noted to be present at the time of survey.

### b) Woodland and Scrub

#### (i) Other Broad-leaved Woodland (UK Habs code: w1g7)

This habitat covered the majority of the proposed Scheme footprint. It was also present around the car park immediately to the north of the scheme and along Anglesey Drive. The woodland was well established and dominated by mature and over-mature trees with patches of understorey growth present also. It was likely planted as part of the landscaping around Poynton Pool, screening it from the A523. It was approximately 7m wide, with a footpath along the edge of the lake and a hedgerow along the boundary with the A523. It was heavily disturbed by walkers and dogs, with ground flora common of disturbed ground. Self-seeded tree and shrub species were present throughout. There was frequent evidence of management including pruned tree branches left in habitat piles and sectioned, felled trees.

The canopy consisted of sycamore (*Acer pseudoplatanus*) (f), beech (*Fagus sylvatica*) (f), horse chestnut (*Aesculus hippocastanum*) (f), common lime (*Tilia x europaea*) (f) common oak (*Quercus robur*) (o), ornamental oak (*Quercus* sp.) (o), yew (*Taxus baccata*) (o), wych elm (*Ulmus glabra*) (o) sessile oak (*Quercus petraea*) (r), silver birch (*Betula pendula*) (r), sweet chestnut (*Castanea sativa*) (r), copper beech (*Fagus sylvatica* f. *purpurea*) (r) and ash (*Fraxinus excelsior*) (r) trees. Ivy (*Hedera helix*) growth is present on some of the mature trees.

The understorey consisted of holly (*Ilex aquifolium*) (a), hawthorn (*Crataegus monogyna*) (a) and immature wych elm (o), beech (o), cherry (*Prunus* sp.) (o), sweet chestnut (o), Norway maple (*Acer platanoides*) (o) and ash (o).

The ground species included ivy (a), false oat-grass (*Arrhenatherum elatius*) (a); cock's-foot (*Dactylis glomerata*) (a), meadow foxtail (*Alopecurus pratensis*) (o), cow parsley (*Anthriscus sylvestris*) (o), common hogweed (*Heracleum sphondylium*) (o) and hybrid bluebells (*Hyacinthoides x massartiana*) (r)

There were a number of log piles present, within the woodland along the west of Poynton Pool (TN2).

**(ii) Line of trees (UK Habs code: w1g6)**

A line of mature willow (*Salix* sp.) (o) trees and saplings were also present along the water's edge and their canopy extended over the lake.

**c) Urban**

**(i) Artificial unvegetated unsealed surface (UK Habs code: u1c)**

This habitat covered the car park located off Anglesey Drive to the north of the proposed Scheme and also included the public footpath through the woodland.

**d) Standing Water**

**(i) Eutrophic standing water (UK Habs code: r1a)**

Poynton Pool, a large fishing lake within Poynton Park (OS grid reference SJ 923 846), bordered the edge of the working area for the proposed Scheme (see Table 3.3, Section 3.2.2 below). Reed beds were present in the north-west and south-east edges of the lake, with common reed (*Phragmites australis*) (d); emergent vegetation such as water mint (*Mentha aquatica*) (o), water iris (*Iris pseudacorus*) (o) and yellow waterlily (*Nuphar lutea*) (o) were also present.

Two ponds were present within 250m of the proposed Scheme. The first (Pond 1, off Anglesey Drive, OS grid reference SJ 924 847) was man-made with both a pavement walkway and semi-mature trees around its edge; this was connected to Poynton Pool by a short, open channel. The second (Pond 2, at the rear of houses on Towers Road, OS grid reference SJ 925 847) was surrounded by residential gardens, woodland and scrub. Both of these ponds are described in more detail within Table 3.3, Section 3.2.2, below. Photographs of Poynton Pool and the ponds are presented in Appendix E.

**3.2.2 Protected and Notable Species**

**a) Badgers**

The woodland habitats present on site offered suitable habitat for badgers (*Meles meles*). However, no field signs such as setts, latrines or snuffle holes were recorded within the survey area.

**b) Bats**

The woodland habitat present, along with the adjacent standing water and parkland provided suitable habitat for foraging, roosting and commuting bats. The proposed Scheme is well connected to other suitable habitats for bat within the wider environment.

**c) Birds**

During the surveys mallard (*Anas platyrhynchos*), Canada geese (*Branta canadensis*) and mute swans (*Cygnus olor*) were noted to be present on Poynton Pool. The rainy weather present throughout the survey many have precluded noting other species that may have been present within the woodland on the west of the pool.



**d) Great Crested Newt**

**(i) Habitat Suitability Index Assessment and eDNA**

Poynton Pool and the two other waterbodies within 250m of the proposed Scheme were assessed for their suitability to support GCN using the HSI assessment. They were found to be of either poor or below average suitability to support GCN. A description of the ponds and the results of those surveys are summarised in Table 3.2 below. Full HSI results are presented in Appendix E.

The HSI score confirmed that Poynton Pool was considered unsuitable for GCN due to its size, the presence of fish and wildfowl; consequently, no eDNA testing was carried out.

Access could not be obtained to undertake eDNA testing at Pond 1.

Pond 2 was eDNA tested for GCN and the results confirmed absence.

**Table 3.2: GCN HSI and eDNA Results**

Pond ID	Description	Access permitted	HSI Score	eDNA result
Poynton Pool	<p>Large fishing lake directly adjacent to the east of the proposed Scheme.</p> <p>Pool is unsuitable to support GCN due to the presence of fish. Waterfowl (Canada geese, mute swans, Mallard and red-eared terrapins (<i>Trachemys scripta elegans</i>) were also noted to be present.</p>	<p>Partial- access granted to the park area which covers 90% of the pond edge. No access to the gardens of residential properties bordering the north of the pond.</p>	Poor (0.30)	Not surveyed as pond unsuitable to support GCN.

Pond ID	Description	Access permitted	HSI Score	eDNA result
Pond 1	<p>Pond with man-made banks and a pavement walkway around the edge on the opposite side of Anglesey Drive, approximately 80m north-east of the proposed Scheme.</p> <p>Semi-mature trees are present along the edge of the pond and the embankment leading up to Anglesey Drive.</p> <p>Common reeds and yellow waterlilies present in the pond but little submerged vegetation suitable for GCN egg laying.</p> <p>Mallards present.</p> <p>This pond runs into Poynton Pool via a culvert running under Anglesey Drive and an open channel.</p>	No- pond viewed from the public road, Anglesey Drive to undertake HSI.	Below Average (0.51)	Not surveyed due to no access.
Pond 2	<p>Pond surrounded by residential gardens and some areas of woodland and scrub on the opposite side of Anglesey Drive, approximately 200m north-east of the proposed Scheme.</p> <p>Limited patches of submerged vegetation within the pond.</p> <p>Fish are likely to be present due to the size and permanence of the pond.</p>	Partial- access was gain to three out of the 12 landowners surrounding the pond. Thus 15% of the pond edge could be accessed.	Poor (0.46)	Negative

There was suitable terrestrial GCN habitat present within the survey area, including woodland areas and log piles. There was also suitable habitat within the adjacent parkland at Poynton Park, where tussocky and marshy grassland were present.

#### e) Otter

Poynton Pool was suitable for foraging otter due to the presence of fish but there was limited connectivity to other suitable habitats due to the proposed Scheme being

surrounded by roads including the busy A523. No field signs such as spraints or potential resting sites were recorded within the survey area.

#### **f) Reptiles**

No reptiles were noted during the survey; however, Poynton Pool, woodland and urban gardens within the survey area and the adjacent parkland all provide suitable habitats to support reptiles such as grass snake and slow worm. Although Anglesey Drive would act as a barrier to dispersal from the urban gardens to the north, the stream that connects Pond 1 to Poynton Pool does offer a potential dispersal corridor. However, the habitats within the boundary of the proposed Scheme are heavily disturbed by walkers and their dogs.

#### **g) Terrestrial invertebrates**

The woodland habitat and log piles within the survey area and the adjacent standing water offer suitable habitats for some notable species of terrestrial invertebrates. For example, the hairy-legged horsefly larvae recorded close to the proposed Scheme develop in wet soil, wood detritus and waterbird nests, and the habitat of the figure of eight moth is woodland, where its larvae feed on hawthorn amongst other small trees.

#### **h) Protected or Notable Plant Species**

No protected or notable plant species were recorded within the survey area.

#### **i) Invasive Non-Native Species**

Rhododendron (*Rhododendron ponticum*) is an invasive non-native species (INNS) listed on Schedule 9 on the WCA 1981 (as amended). A single plant was noted to be present at OS grid reference SJ 922 844 (TN2) (See Figure 1).

Red-eared terrapins (*Trachemys scripta*) were noted to be present in Poynton Pool during the habitat survey. Although not listed as an INNS on Schedule 9 of the WCA 1981 (as amended), they are listed within Government guidance on INNS (<https://www.gov.uk/guidance/invasive-non-native-alien-animal-species-rules-in-england-and-wales#non-native>) as a widely spread species.

## Conclusions and Recommendations

### 4.1 Conclusions

#### 4.1.1 Statutory Designated Sites

No statutory designated sites are located within 1km of the proposed Scheme.

#### 4.1.2 Non-Statutory Designated Sites

The proposed Scheme is located within the boundary of the Poynton Park Lake LWS. This site covers the whole extent of the proposed Scheme, Poynton Pool and a small section of woodland within Poynton Park. The LWS is designated primarily for its aquatic habitat, birds and diverse bryophytes. The boundary consisted of broad-leaved semi-natural woodland, marginal/inundation vegetation and open water (standing, eutrophic, large lakes).

#### 4.1.3 Habitats

##### a) Other broad-leaved woodland (w1g7)

This woodland covered the majority of the proposed Scheme footprint. It consisted of a wide variety of broad-leaved tree species both as standard trees and as a scrub layer. The ground flora includes common species of disturbed ground. There was frequent evidence of management.

##### b) Line of trees (w1g6)

There was a line of mature willow trees along the water's edge with canopies that extended over the pool.

##### c) Artificial unvegetated unsealed surface (u1c)

This habitat was present at the north of the proposed scheme within the car park and the footpath through the woodland.

##### d) Standing water (r1a)

There were three waterbodies that fall into this category: Poynton Pool, and two smaller ponds. There was an area of common reed, water mint and water iris in the north-west of Poynton Pool that will be adjacent to the works.

#### 4.1.4 Protected and Notable Species

##### a) Badger

Six records of badger were returned by RECORD during the desk study; however, the closest of these was 224m west of the proposed Scheme. No badgers or signs of badgers were recorded during the walkover survey.



## b) Bats

The desk study confirmed that there were seven species of bats present within 1km: Brandt's bat; common pipistrelle; Daubenton's bat; Natterer's bat; noctule; soprano pipistrelle; and whiskered bats. None of these records were identified within the survey area or in close proximity to the proposed Scheme.

An activity survey by RSK Biocensus found a soprano pipistrelle day roost in Poynton Pool Boathouse (TN1) on the bank of Poynton Lake, approximately 120m east of the proposed Scheme. General bat activity recorded around the boathouse included a noctule, soprano pipistrelles, common pipistrelles and at least one *Myotis* species.

The field survey identified a number of trees with features that had potential to support roosting bats.

## c) Birds

No desk study records of birds were identified within the proposed Scheme footprint. Mallard, mute swans and Canada geese were present on Poynton Pool during the field survey. Habitats within the survey area, including the woodland, the line of trees, Poynton Pool and the ponds have potential to support nesting common garden, woodland and water birds. All species of birds and their nests are afforded protection under the Wildlife and Countryside Act 1981 (as amended) while they are breeding.

## d) Great Crested Newts

No records of GCN were returned by RECORD from within the 1km study area. The ponds within 250m of the proposed Scheme were of either below average or poor suitability for GCN. Poynton Pool was considered unsuitable habitat to support a breeding population of GCN due to the presence of fish. There was no access to Pond 1 for eDNA testing; however, Pond 2 returned a negative eDNA result. In addition, it is considered unlikely that this species is present on within the proposed scheme boundary due to the presence of significant barriers to dispersal.

### 4.1.5 Otter

Although Poynton Pool offers foraging opportunities for otter, no field signs were recorded during the walkover survey and no desk study records were returned from RECORD. The nearest suitable habitat is to the west at Norbury Brook; however, the busy A523 road will act as a barrier to commuting animals. The woodland within the survey area is heavily disturbed and unsuitable for resting or laying-up and it is considered unlikely that otter will be present on site.

### 4.1.6 Reptiles

There were no records for reptiles returned from RECORD. Habitats within the survey area including the woodland and urban areas have the potential to support reptiles such as grass snakes and slow worms. The log and brash piles within the woodland offer hibernation opportunities for reptiles. There are, however, significant barriers to the north and west of the proposed Scheme (busy roads and Poynton Pool) which will reduce movement from suitable nearby habitats into the survey area.

#### 4.1.7 Notable Plant Species

No notable plant species were recorded during the walkover survey and no records were returned from RECORD. It is therefore considered unlikely that there are any notable plant species within the survey area at the current time. Consequently, no further consideration is required in respect to notable plants.

#### 4.1.8 Other Notable Species

Although there is habitat suitable for notable terrestrial invertebrates, very few records for these species were returned by RECORD. These included two moth species from over 800m south-west and a single species of horsefly from 40m south. The horsefly larvae develop within wet soil, wood detritus and waterbird nests, all habitats present within the survey area.

The woodland, brash piles and habitat piles and the line of trees on the site also offer suitable habitat for other notable species such as hedgehogs, which are a SoPI.

#### 4.1.9 Non-Native Invasive Plant Species

Records for Himalayan balsam and Japanese knotweed were returned from RECORD; however, these were from 570m south-east of the proposed Scheme. One single rhododendron plant was noted within the proposed Scheme footprint during the field survey.

### 4.2 Recommendations

#### 4.2.1 Designated Sites

The proposed Scheme is located within the boundary of the Poynton Park Lake LWS. It is recommended that liaison is undertaken with the Principal Nature Conservation Officer at Cheshire East Council to agree works taking place within the LSW boundary and any specific requirements for mitigation as a result.

#### 4.2.2 Habitats

It is recommended that consideration is given to the retention (and protection as appropriate) of individual trees within the broad-leaved woodland wherever possible.

In addition, it is recommended that the adjacent area of common reed and emergent vegetation within Poynton Pool is protected during construction works.

A Biodiversity Net Gain assessment will be required to support a planning application for the proposed Scheme. This will allow the project to demonstrate it can provide a 'measured net gain' in accordance with the National Planning Policy Framework (NPPF) and the Environment Act (2021) (see Appendix A). Where insufficient 'on-site' habitat is available to mitigate for any habitat losses as a result of the proposed Scheme, there may be a requirement to identify locations for off-site habitat creation measures.

#### 4.2.3 Birds

All vegetation clearance should be undertaken outside of the nesting bird season from March to August inclusive. Where this will not be possible and in the areas along Poynton Pool margins where vegetation will be retained, this should be checked by a



suitably trained ecologist for nesting birds a maximum of 24 hours prior to vegetation clearance commencing. Should an active nest be found, the ecologist will impose a suitable buffer where works must cease until all the young have fledged. This can result in considerable delays to the construction process. It should be noted that certain species, such as the feral pigeon (*Columba livia*) can nest and rear young all year round.

#### 4.2.4 Otter

Although no signs of otter were identified during the survey, otter may forage in Poynton Pool. It is recommended that precautionary working measures are therefore implemented during construction e.g., to prevent otters getting trapped in any excavations, these will either be covered overnight, or a means of escape provided.

#### 4.2.5 Badger

A pre-construction check for badgers is recommended to ensure that no new badger setts have been constructed within or up to 30m from the proposed Scheme footprint.

Should a new sett be found, which will be destroyed or disturbed by the proposed Scheme, a mitigation licence for badgers may be required from Natural England prior to works commencing. A licence will take approximately 12 weeks to be granted.

#### 4.2.6 Bats

To determine the likely impacts of the proposed Scheme on bats further bat surveys are recommended. This includes ground level tree assessments and subsequently tree climbing or activity surveys on all trees with moderate or high bat roost potential. These surveys would be carried out in accordance with good practice guidelines (Collins, 2016) and will consist of climbing of the trees and endoscopic of suitable features.

If bats are found to be present, and if the works are anticipated to breach current legislation, an EPSL licence detailing each tree to be impacted by the proposed Scheme will be required from Natural England prior to works commencing. The licence application will include a detailed method statement and appropriate mitigation measures. A licence will take approximately 12 weeks to be granted once planning permission has been received.

#### 4.2.7 Invasive Non-Native species

The single rhododendron plant noted during the field surveys should be removed and destroyed prior to commencement of works. This species must not be allowed to spread off-site and should therefore be disposed of in a controlled manner.

It is recommended that a further pre-construction check for non-native invasive species be carried out prior to the start of construction.

#### 4.2.8 Precautionary Methods of Working

Although it is unlikely that GCN or reptiles are present within the boundary of the proposed Scheme, the log piles within the woodland area offer suitable terrestrial habitat for these species, that may use them as hibernacula. As a precaution, these will be dismantled during the active GCN and reptile season (April to October) and when temperatures are higher than 5°C. Dismantling should be undertaken gently

using hand tools only. The piles will be moved to a suitable area outside of the proposed Scheme boundary and used to create new hibernacula. In the unlikely event that GCN are identified during the works, consideration will be given to an appropriate mechanism for licensing (e.g., Natural England Low Impact Class Licence (LICL)).

The removal of woodland, scrub and log piles on site will also reduce the availability of suitable habitat for other notable species such as hedgehogs and terrestrial invertebrates. It is recommended that vegetation clearance is undertaken under a Precautionary Working Method Statement (PWMS) which details wildlife friendly measures to prevent harm to any of these species. This work should be supervised by a suitably qualified ecologist.

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## Figures



**FIGURE 1**

**Legend**

-  Scheme boundary
  -  50m Survey area
  -  250m Survey area
  -  Excluded from survey
  -  Log Pile
  -  Rhododendron
  - TN Target Note
- Primary**
-  r1a - eutrophic standing water
  -  u1c - artificial unvegetated, unsealed surface
  -  w1g7 - other broad-leaved woodland
  -  w1g6 - line of trees



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Rev.	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

**Jacobs**

Client  


Project  
 POYNTON POOL RESERVOIR FLOOD RESILIENCE IMPROVEMENT SCHEME

Drawing Title  
 RESULTS OF THE PRELIMINARY ECOLOGICAL APPRAISAL

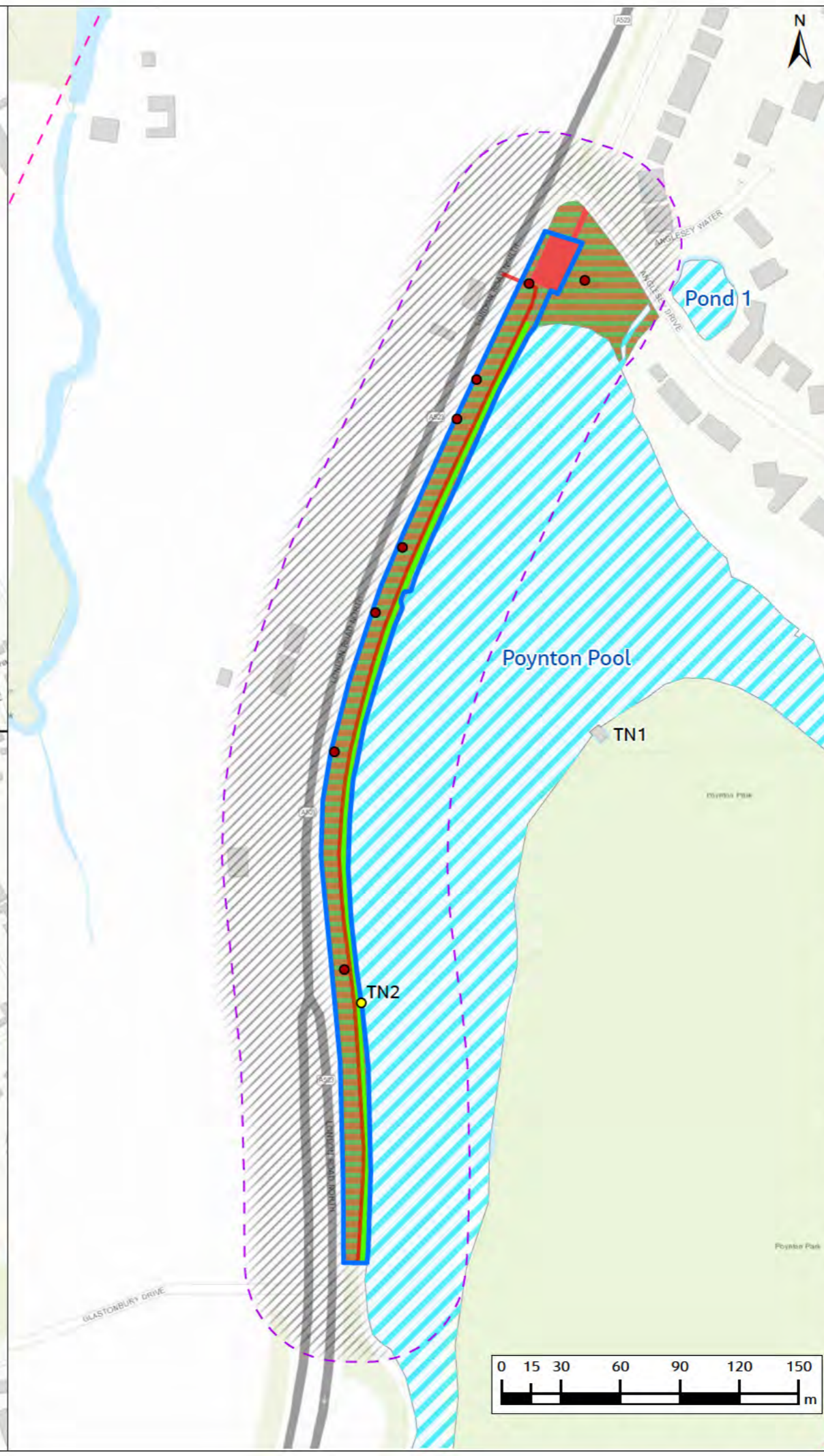
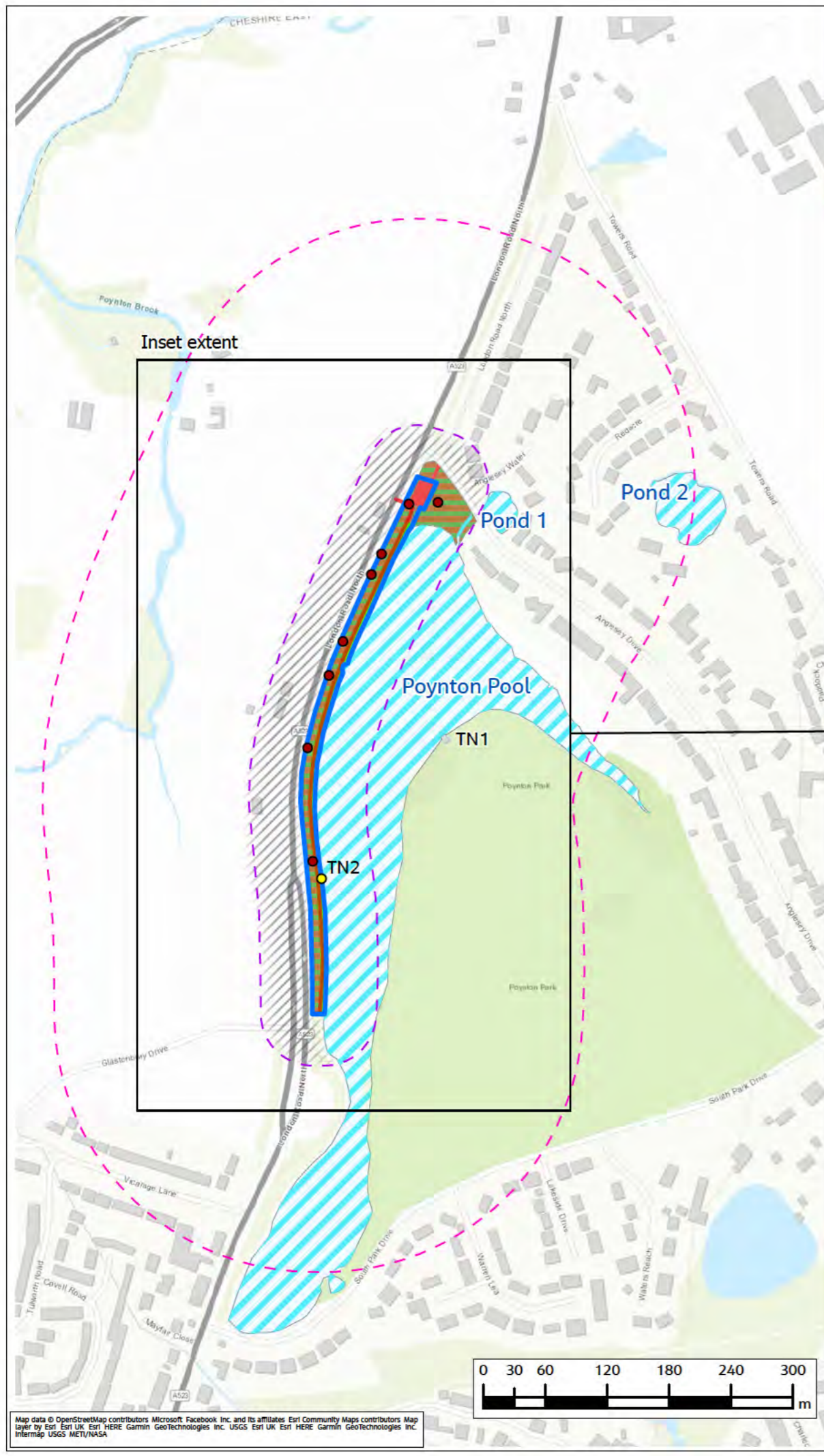
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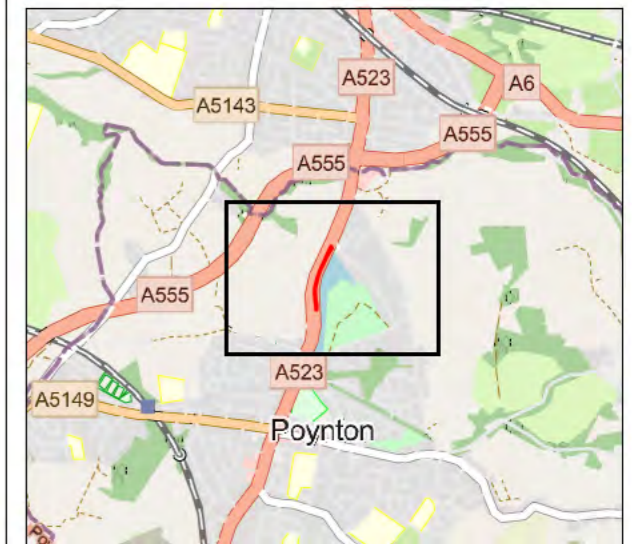
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**FIGURE 2**

**Legend**

- Scheme Boundary
- 1km desk study area
- Terrestrial Invertebrates species**
- Figure of eight moth
- Hairy-legged horsefly
- Invasive Species**
- Himalayan balsam
- Japanese knotweed
- Signal crayfish
- Bat species**
- Bat
- Brandt's
- Brown long-eared
- Common pipistrelle
- Daubenton's
- Natterer's
- Noctule
- Soprano pipistrelle
- Whiskered bat
- Bird species**
- Osprey
- Tawny owl



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Rev.	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

**Jacobs**

Client

Project  
**POYNTON POOL RESERVOIR FLOOD RESILIENCE IMPROVEMENT SCHEME**

Drawing Title  
**DESK STUDY RECORDS**

Drawing Status  
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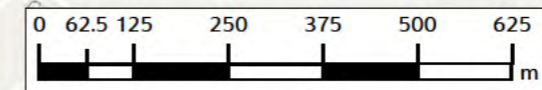
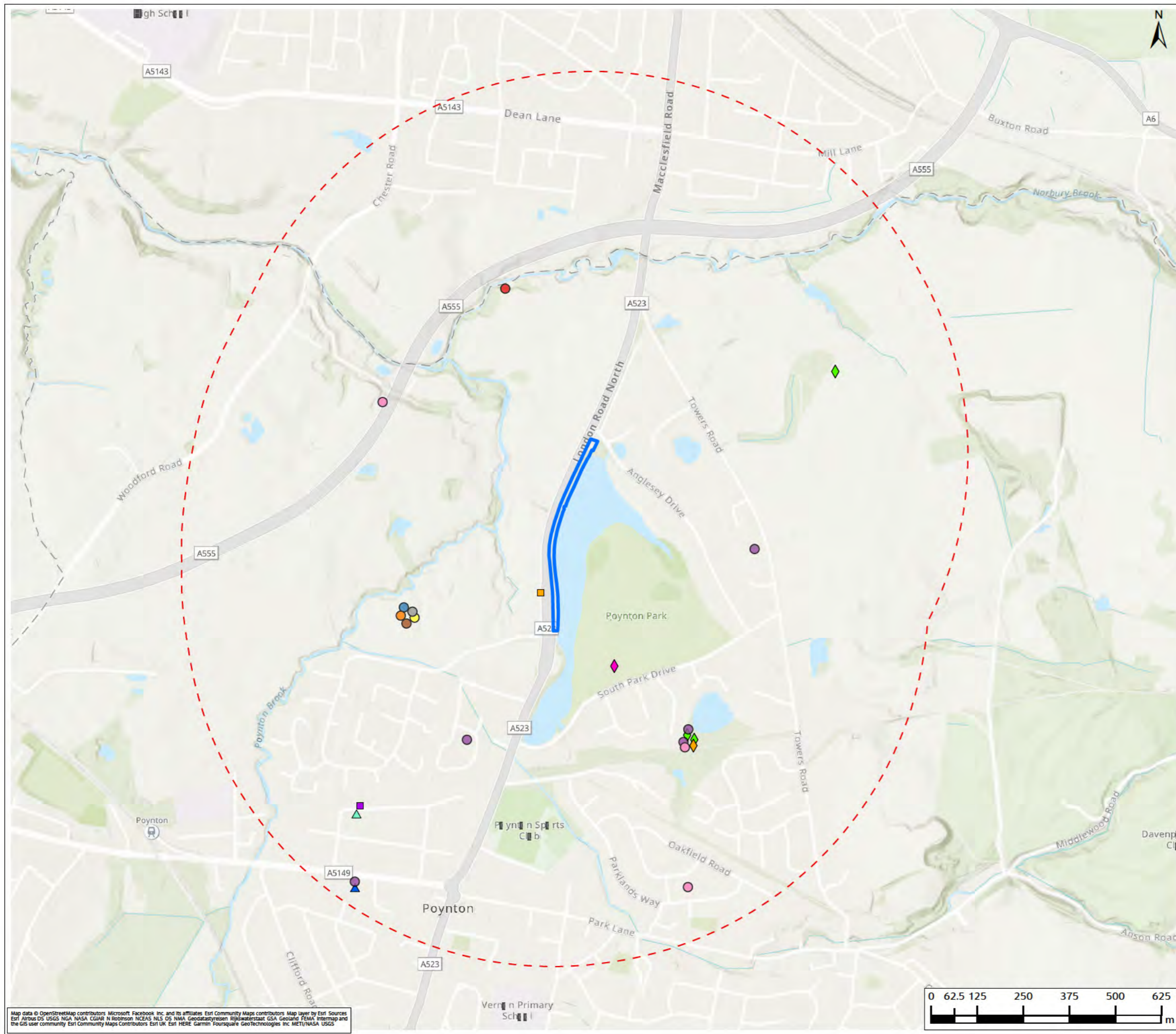
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## Appendix A Relevant Legislation

### ***Biodiversity Net Gain***

Under the Environment Act 2021, from 2023 (exact date yet to be confirmed but expected to be November) all planning applications will have to show that there will be at least a 10% biodiversity net gain (BNG) at completion. This will be measured using Defra's biodiversity metric and habitats will need to be secured for at least 30 years. The act has also strengthened the legal duty for public bodies to conserve and enhance biodiversity.

### ***Habitats and Species of Principal Importance***

Habitat conservation, enhancement, minimisation of loss and improvement of ecological connectivity and biodiversity form the focus of many environmental acts, most prominently the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act, 2006 places a duty on all public bodies to have regard to the conservation of biodiversity in England, when carrying out their normal functions (the biodiversity duty). Section 41 requires the Secretary of State to publish a list of the habitats and species considered to be of Principal Importance for the purpose of conserving biodiversity.

### ***Legislation relating to European Protected Species (e.g., bats, otter, great crested newt)***

European Protected Species and their resting places (e.g., bat roosts) are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended), the Countryside and Rights of Way (CROW) Act 2000, and the Conservation of Habitats and Species Regulations 2017 (as amended).

The Conservation of Habitats and Species Regulations 2017 (as amended) transpose the European Union's 'Habitats Directive' (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) into UK law. The Regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' (EPS), and the adaptation of planning and other controls for the protection of European Sites. EPS are listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended).

### Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to:

- Intentionally kill, injure or take certain animals listed in Schedule 5;
- Intentionally or recklessly damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Intentionally or recklessly disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any structure or place which any such animal uses for shelter or protection.

In addition, under this legislation there are offences relating to sale, possession and control of wild animals listed in Schedule 5.

### Under the Conservation of Habitats and Species Regulations 2017 (as amended) it is an offence to:

- Deliberately capture, injure or kill any wild animal listed as a European Protected Species;
- Deliberately disturb wild animals of any such species in such a way as to be likely:
  - 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 a hibernating or migratory species, to hibernate or migrate, or;
  - to significantly affect the local distribution or abundance of the species to which they belong.
- Deliberately take or destroy the eggs of such an animal, or;
- Damage or destroy a breeding site or resting place of such an animal.

In addition, under this legislation there are offences relating to possession, control sale and exchange of an EPS.

Great crested newt, otter and several species of bat are listed as SoPI under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

### **Bats**

All bat species and their roosts and resting places are protected under the WCA 1981 (as amended), and the Conservation of Habitats and Species Regulations 2017 (as amended). The relevant sections of this legislation make it an offence to:

- Intentionally kill, injure or capture or take a bat;
- Possess or control (live or dead animal, part or derivative);
- Deliberately (intentionally) or recklessly damage, destroy or obstruct access to a breeding site or any structure or place used for shelter or protection by a bat; and
- Deliberately (intentionally) or recklessly disturb a bat whilst it is occupying such a structure or place, and sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative).

Several bat species are listed on Section 41 of the NERC Act 2006 and are SoPIs which require due consideration by local planning authorities when assessing planning applications. The ten species of bat that occur in Cheshire are listed on the Cheshire Local Biodiversity Action plan.

### **Badger**

Badgers are protected under the Protection of Badgers Act 1992 which makes it an offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so;
- intentionally or recklessly damage, destroy or obstruct access to a badger sett; and
- disturb a badger when it is occupying a sett.

These provisions have implications for construction or preparation works undertaken in the vicinity of an active sett and may be confounded by distance from the sett entrance. Any works resulting in ground penetration, vibration or noise near an identified badger sett

entrance/s have the potential to disturb badgers and advice should be sought from a suitably experienced ecologist under such circumstances. If disturbance to an active sett is probable, then a licence may need to be obtained from Natural England before any works commence.

### **Otter**

Otter are afforded strict protection under the WCA (1981) (as amended) on Schedule 5 (sections 9(5)(a) (b) and 9 (4)(b)(c) and the Conservation of Habitats and Species Regulations 2017 (as amended).

Otter are listed as a SoPI under Section 41 of the NERC Act 2006.

### **Birds**

All birds, their nests and eggs are protected by the WCA 1981 (as amended) and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy the egg of any wild bird; and
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird.

Schedule 1 of the WCA 1981 provides further protection for selected species (including peregrine falcon (*Falco peregrinus*), barn owl (*Tyto alba*) and little ringed plover (*Charadrius dubius*) during the breeding season. If any person intentionally or recklessly disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird. That person shall be guilty of an offence.

A number of bird species are listed as SoPI under Section 41 of the NERC Act, 2006.

### Conservation Status - Birds of Conservation Concern (Stanbury *et al.*, 2021)

The UK's leading bird conservation organisations have worked together on the fourth quantitative review of the status of the birds that occur regularly in the UK, updating the last review in 2015. The status of birds within the UK has been regularly monitored through a series of surveys, including the national Breeding Bird Survey, Common Bird Census, sea bird monitoring programs and wetland monitoring programs. The result of this review and continued monitoring is Birds of Conservation Concern 5: The Population Status of Birds in the UK, Channel Islands and Isle of Man (Stanbury *et al.*, 2021).

Birds are assessed against criteria to place each species on one of three alert lists: red, amber or green. Red list species are considered to be of high conservation concern, being either globally threatened, having historical UK population declines, having a rapid population decline or breeding range contraction of 50% or more in the last 25 years.

Amber list species are considered to be of medium conservation concern as they meet one or more of the following criteria (but none of the red list criteria): Red listed for historical decline in a previous review but with substantial recent recovery (more than doubled in the last 25 years), a UK breeding range contraction of between 25% and 49%, a reduction of breeding or non-breeding population of 25-49% in the last 25 years, a 5-year mean of 1-300 breeding pairs in the UK, an unfavourable European conservation status, at least 50% of the UK breeding population found in 10 or fewer sites, or where the breeding population in the UK represents 20% or more of the European breeding populations.



Green list species are considered to be of low conservation concern. They include all regularly occurring species that do not qualify under any of the red or amber criteria. The green list also includes those species listed as recovering from Historical Decline in the last review that have continued to recover and do not qualify under any of the other criteria.

### **Reptiles**

All native reptile species have some degree of protection in the UK, through section 9(1) and (5) (specified in Schedule 5) of the WCA 1981 (as amended). There are two different levels of protection afforded to reptiles through this legislation according to species and this is described in more detail below.

#### Protection against killing, injuring and trade

This level of protection under section 9 (parts 1 and 5) applies to the four widespread species of reptile, namely the common lizard, slow-worm, grass snake and adder. Only part of sub-section 9(1) applies, which make it an offence to:

- Intentionally kill or injure, and
- Sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative).

### **Great Crested Newt**

Great crested newt (GCN) and their places of shelter are protected under the WCA 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). The relevant sections of this legislation make it an offence to:

- Intentionally kill, injure or capture or take a GCN;
- Possess or control (live or dead animal, part or derivative);
- Deliberately (intentionally) or recklessly damage, destroy or obstruct access to a breeding site or any
- Structure or place used for shelter or protection by a GCN;
- Deliberately (intentionally) or recklessly disturb a GCN whilst it is occupying such a structure or place; and
- Sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative).

The above legislation applies to all life stages of a GCN, including eggs, juveniles and adults.

Great crested newt is listed on Section 41 of the NERC Act (2006) (a species of principal importance) which require due consideration by local planning authorities when assessing planning applications. GCN are also listed in the Cheshire Local Biodiversity Action Plan.

### **Amphibians (except GCN)**

Under the WCA 1981 (as amended) the four widespread amphibian species, smooth newt (*Triturus vulgaris*), palmate newt (*Triturus helveticus*), common toad and common frog (*Rana temporaria*) receive limited protection through section 9(5) only which makes selling, offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative) an offence.

Common toad is listed as a SoPI under Section 41 of the NERC Act 2006.

### **Other Mammals**

**Hedgehogs** are protected in England under Schedule 6 of the WCA 1981 and are listed as a species of principal importance under Section 41 of the NERC Act 2006. Under this legislation hedgehogs are protected from killing or capture using certain methods.


### ***The Wild Mammals (Protection) Act 1996 (Rabbit and Foxes)***

*The Wild Mammals (Protection) Act 1996* makes it an offence for any person to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering. This includes animals such as rabbit and fox, and effectively requires for the humane killing of animals that may otherwise be crushed by large machinery including cranes and excavators.

### ***Invasive Plant Species***

Himalayan balsam, Japanese knotweed and Rhododendron are amongst the non-native plant species listed under Schedule 9 of the WCA, 1981 (as amended), which makes it an offence to '*...plant or otherwise cause them to grow in the wild*'. This includes spreading or transferring soil which may contain seeds or rhizomes from a Schedule 9 plant between sites. This may inadvertently be done through the use of excavation machinery on multiple sites and the entrapment of soil, seed or rhizomes in vehicle tracks or other equipment between sites, particularly during times of year where flowering plants are not visible.

## Appendix B Target Note Photograph

Target Note No.	Description	Photograph
1	Boathouse at Poynton Pool. This was confirmed as a bat roost by surveys carried out during 2022.	

## Appendix C Poynton Park Lake LWS Citation

### Cheshire Sites Of Biological Importance Full Report

---

**Site Code:** 459

**Name:** POYNTON PARK LAKE

#### Administrative Areas

**Civil Parish:** POYNTON-WITH-WORTH, MACCLESFIELD, CHESHIRE  
**District:** MACCLESFIELD, CHESHIRE

**Grid Reference:** Centroid SJ 9229 8440 (MBR: 446m by 709m)      **10km Square:** SJ98SW

**Status:** B Grade SBI      **Date Approved:** 1996      **Date Amended:** 2005

#### Habitat Information

Code	Habitat Type	Area (Ha)
A111	Woodland: broadleaved, semi-natural	
F2	Marginal/inundation	
G114	Open water: standing, eutrophic, large lakes >5ha	

**Total Area:** 9.79

#### Site Description

A long lake in Poynton Park bordered by a narrow strip of broadleaved woodland down the western edge, next to the main road, and parkland is present to the south. The marginal and emergent vegetation is scattered around the lake but concentrated in the south where it is moderately diverse with a number of species including sweet flag, nodding bur-marigold, greater spearwort and lesser water parsnip. The site is of ornithological interest, species noted included breeding mute swans, great crested grebe and coots and has diverse bryophytes.

#### Notes

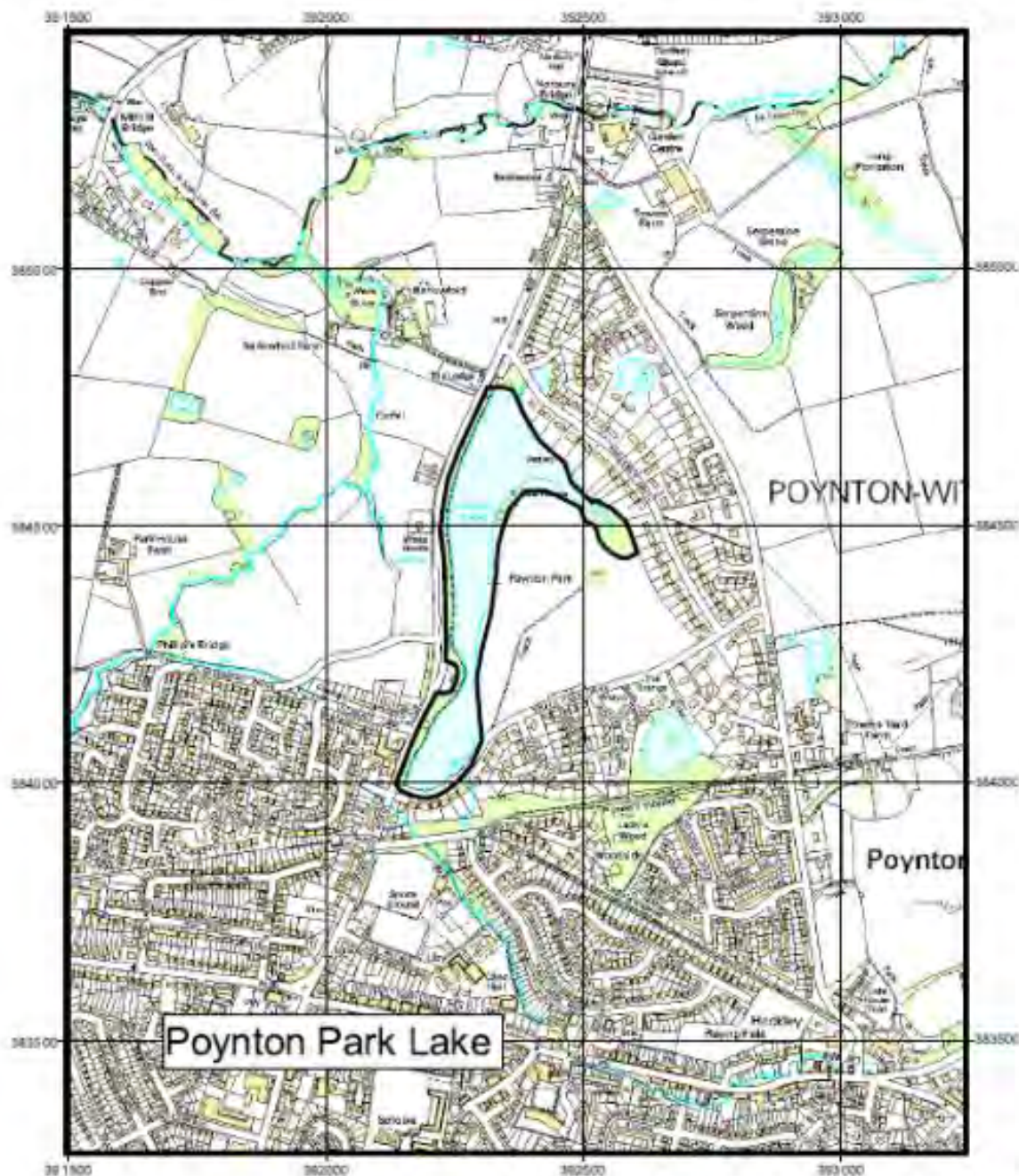
1993 revision: no change. The lake is managed mainly for the fishermen but they are aware of, and take care of the wildlife and vegetation. 2005 revision: boundary extension and deletion and upgrade C to B.

**Sources - None recorded**

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# Cheshire Sites of Biological Importance





## Appendix D Protected and Notable Species Records from RECORD

Common Name/ Scientific Name	Location	Grid Reference	Record Type	Date
<b>BATS</b>				
Bat <i>Chiroptera</i>	Hazel Grove	SJ9210485225	Tree Roost	12/08/2014
Brandt's <i>Myotis brandtii</i>	Glastonbury Drive, Poynton	SJ9183784336	Field Record	26/08/2015- 03/09/2015
Common pipistrelle <i>Pipistrellus pipistrellus</i>	Chester Road, Poynton	SJ9169683608	Field Record	10/06/2014
	Poynton-with-Worth	SJ920840	Bat Casualty - Released	05/09/2015
	South Park Drive, Poynton	SJ926840	Field Record	14/07/2015
	South Park Drive, Poynton	SJ926840	Field Record	16/07/2015
	Towers Road, Poynton	SJ9278184518	Field Record	22/08/2017
Daubenton's <i>Myotis daubentonii</i>	Glastonbury Drive, Poynton	SJ91837843366	Field Record	26/08/2015- 03/09/2015
Natterer's <i>Myotis nattereri</i>	Glastonbury Drive, Poynton	SJ91837843366	Field Record	26/08/2015- 03/09/2015
Noctule <i>Nyctalus noctula</i>	Glastonbury Drive, Poynton	SJ91837843366	Field Record	26/08/2015- 03/09/2015
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	South Park Drive, Poynton	SJ926840	Field Record	14/07/2015
	Hazel Grove	SJ9177184917	Tree Roost	15/07/2014
	South Park Drive, Poynton	SJ926836	Field Record	16/07/2015
Whiskered bat <i>Myotis mystacinus</i>	Glastonbury Drive, Poynton	SJ9183784336	Field Record	26/08/2015- 03/09/2015
<b>EURASIAN BADGER</b>				
Badger <i>Meles meles</i>	Glastonbury Drive, Poynton	SJ920845	Active Sett	09/09/2015
	South Park Drive, Poynton	SJ926842	Field Record	22/04/2013
	Towers Road, Poynton	SJ929840	Snuffle Hole	18/01/2017
	South Park Drive, Poynton	SJ926840	Badger Sett	14/03/2013
	South Park Drive, Poynton	SJ926840	Badger Sett	14/07/2015
	Towers Road, Poynton	SJ929840	Tracks/Trail	18/01/2017
<b>BIRDS</b>				
Black-headed Gull <i>Chroicocephalus ridibundus</i>	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
Bullfinch <i>Pyrrhula pyrrhula</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015

Common Name/ Scientific Name	Location	Grid Reference	Record Type	Date
Curlew <i>Numenius arquata</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Dunnock <i>Prunella modularis</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Fieldfare <i>Turdus pilaris</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
Greenfinch <i>Chloris chloris</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Greylag Goose <i>Anser anser</i>	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Herring Gull <i>Larus argentatus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
House Martin <i>Delichon urbicum</i>	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
House sparrow <i>Passer domesticus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Kestrel <i>Falco tinnunculus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Lapwing <i>Vanellus vanellus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Lesser black-backed gull <i>Larus fuscus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Linnet <i>Linaria cannabina</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Mallard <i>Anas platyrhynchos</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015






Common Name/ Scientific Name	Location	Grid Reference	Record Type	Date
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Meadow pipit <i>Anthus pratensis</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
Mistle thrush <i>Turdus viscivorus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Moorhen <i>Gallinula chloropus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Osprey <i>Pandion haliaetus</i>	Milton Drive, Poynton	SJ917838	Field Record	04/06/2013
Oystercatcher <i>Haematopus ostralegus</i>	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Redstart <i>Phoenicurus phoenicurus</i>	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
Redwing <i>Turdus iliacus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
Reed bunting <i>Emberiza schoeniclus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Ringed plover <i>Charadrius hiaticula</i>	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Rook <i>Corvus frugilegus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
Skylark <i>Alauda arvensis</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Snipe <i>Gallinago gallinago</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
Song thrush <i>Turdus philomelos</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Starling <i>Stumus vulgaris</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015



Common Name/ Scientific Name	Location	Grid Reference	Record Type	Date
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Stock dove <i>Columba oenas</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Swift <i>Apus apus</i>	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Tawny owl <i>Strix aluco</i>	Chester Road, Poynton	SJ9169683608	Field Record	10/06/2014
Teal <i>Anas crecca</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
Tree sparrow <i>Passer montanus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Wheatear <i>Oenanthe oenanthe</i>	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
Whimbrel <i>Numenius phaeopus</i>	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
Whitethroat <i>Sylvia communis</i>	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
Willow warbler <i>Phylloscopus trochilus</i>	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Woodpigeon <i>Columba palumbus</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Wren <i>Troglodytes troglodytes</i>	Poynton-with-worth -CP	SJ925835	Field Record	03/2015
	Poynton-with-worth -CP	SJ925835	Field Record	04/2015
	Poynton-with-worth -CP	SJ925835	Field Record	05/2015
	Poynton-with-worth -CP	SJ925835	Field Record	06/2015
Yellow wagtail <i>Motacilla flava</i>	Poynton-with-worth - CP	SJ925835	Field Record	04/2015
<b>TERRESTRIAL INVERTEBRATES</b>				
Figure of Eight Moth <i>Diloba caeruleocephala</i>	Milton Drive, Poynton	SJ91718382	Field Record	24/10/2014
	Milton Drive, Poynton	SJ917838	Field Record	1/11/2014
Hairy-legged horsefly <i>Hybomitra bimaculata</i>	Poynton Pool	SJ922844	Field Record	26/06/2016

## Appendix E Pond Photographs and Full HSI Results

Pond No	Description	Photograph
Poynton Pool	A large fishing lake with waterfowl present. Carp ( <i>Cyprinidae</i> sp.) seen to be present.	
1	Concrete pond adjacent to Anglesey Drive, with paths around the pond. Large fish seen.	
2	Pond behind residential properties on Towers Road and Redacre. With a mixture of managed and more natural banks.	



**Great Crested Newt Pond HSI  
Survey**

**1. Pond Details**

<b>Project</b>	<b>Poynton Pool Reservoir Resilience Scheme</b>
Project number/reference	BRJ10627
Site	Poynton Pool Reservoir Resilience Scheme

Pond number/reference	Poynton Pool
OS Grid reference	SJ 92277 84671
Location details	
Access instructions	Access to 90% of the pond/lake is possible through the public park. The remaining 10% is accessible through residential gardens and we did not have access to this area during the HSI.

Landowner name	Poynton Park- Cheshire East Council
Address/email	

**Habitat Suitability Index**

			SI value
SI1. Map location	<b>A/B/C</b>	A	1.00
SI2. Surface area	<b>rectangle/ellipse/irregular</b>	rectangle	
	length (m)	590	
	width (m)	100	
	OR estimate (m <sup>2</sup> ) if irregular		
	area (m <sup>2</sup> )		
	=	59000	
SI3. Desiccation rate	<b>never/rarely/sometimes/frequently</b>	never	0.90
SI4. Water quality		moderate	0.67
SI5. Shade	% of margin shaded 1m from bank	40	1.00
SI6. Waterfowl	<b>absent/minor/major</b>	major	0.01
SI7. Fish population	<b>absent/possible/minor/major</b>	major	0.01
SI8. Pond density	number of ponds within 1km	12	0.99
SI9. Terrestrial habitat	<b>good/moderate/poor/isolated</b>	good	1.00
SI10. Macrophyte cover	%	2	0.33

*Note: Guidance in undertaking the HSI is available at [www.narrs.org.uk](http://www.narrs.org.uk).*

*HSI calculation formulae adapted from Rob Oldham*

**HSI score = 0.30**

**Pond suitability = poor**

**General  
description/notes/comments**

Large lake with large carp present within the lake. This waterbody is linked to Pond 1. Pond 1 runs into Poynton Pool.

Pond number/reference	Pond 1- Anglesey Drive
OS Grid reference	SJ 92412 84793
Location details	Located on Anglesey Water.
Access instructions	No access agreed, pond viewed from Anglesey Drive over the wall.

Landowner name	
Address/email	

**Habitat Suitability Index**

			SI value
SI1. Map location	<b>A/B/C</b>	A	1.00
SI2. Surface area	<b>rectangle/ellipse/irregular</b>	ellipse	
	length (m)	30	
	width (m)	30	
	OR estimate (m <sup>2</sup> ) if irregular		
	area (m <sup>2</sup> ) =	706.8583471	1.00
SI3. Desiccation rate	<b>never/rarely/sometimes/frequently</b>	never	0.90
SI4. Water quality		moderate	0.67
SI5. Shade	% of margin shaded 1m from bank	80	0.60
SI6. Waterfowl	<b>absent/minor/major</b>	minor	0.67
SI7. Fish population	<b>absent/possible/minor/major</b>	major	0.01
SI8. Pond density	number of ponds within 1km	12	0.99
SI9. Terrestrial habitat	<b>good/moderate/poor/isolated</b>	moderate	0.67
SI10. Macrophyte cover	%	50	0.81

*Note: Guidance in undertaking the HSI is available at [www.narrs.org.uk](http://www.narrs.org.uk).*

*HSI calculation formulae adapted from Rob Oldham*

**HSI score = 0.51**

**Pond suitability = below average**

**General description/notes/comments**

Pond 1 flows into Poynton Pool through a culvert and stream. There is a walkway and pavement around the perimeter of the pond. Trees are present along the edge of the pond bank which backs onto Anglesey Drive (willow, holly, beech). Mallards present in the pond. There are lily pads and reeds present in the water but not many submerged plants.



**Great Crested Newt Pond HSI Survey**

**1. Pond Details**

<b>Project</b>	<b>Poynton Pool Reservoir Resilience Scheme</b>
Project number/reference	BRJ10627
Site	Poynton Pool Reservoir Resilience Scheme

Pond number/reference	Pond 2
OS Grid reference	SJ 92613 84829
Location details	Pond surrounded by residential gardens. Access through each garden.
Access instructions	

Landowner name	
Address/email	

**Habitat Suitability Index**

			SI value
SI1. Map location	<b>A/B/C</b>	A	1.00
SI2. Surface area	<b>rectangle/ellipse/irregular</b>	ellipse	
	length (m)	80	
	width (m)	70	
	OR estimate (m <sup>2</sup> ) if irregular		
	area (m <sup>2</sup> ) =	4417.864669	
SI3. Desiccation rate	<b>never/rarely/sometimes/frequently</b>	never	0.90
SI4. Water quality		Moderate	0.67
SI5. Shade	% of margin shaded 1m from bank	60	1.00
SI6. Waterfowl	<b>absent/minor/major</b>	major	0.01
SI7. Fish population	<b>absent/possible/minor/major</b>	possible	0.67
SI8. Pond density	number of ponds within 1km	12	0.99
SI9. Terrestrial habitat	<b>good/moderate/poor/isolated</b>	moderate	0.67
SI10. Macrophyte cover	%	5	0.36

*Note: Guidance in undertaking the HSI is available at [www.narrs.org.uk](http://www.narrs.org.uk).*

*HSI calculation formulae adapted from Rob Oldham*

**HSI score = 0.46**

**Pond suitability = poor**

**General description/notes/comments**

Surrounded by residential gardens. Submerged vegetation within the pond limited to certain patches. Fish were not seen but are likely to be present given the size of the pond and the permanence.