

HSBC SYGDC Tankersley Ecological Impact Assessment (EclA)

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Executive Summary

Ecus Limited (Ecus) was commissioned by AXIS Architecture to undertake an Ecological Impact Assessment (EclA) of HSBC South Yorkshire Ground Data Centre (SYGDC) in Tankersley, Barnsley central Ordnance Survey (OS) National Grid Reference (NGR) SK 33784 99235, hereafter referred to as 'the Site' (Figure 1). The area proposed for development is illustrated in Figure 1 by the 'Red Line Boundary' and pink boundary of the 'Enhancement Areas', and the blue line boundary represents the wider 'Land Ownership Boundary'.

Proposals for the Site comprise the partial development of the ornamental pond to construct a Louvre penthouse (Appendix 1). This structure is intended to intake external air and exhaust heated air, with the capability of mixing these air volumes throughout the year to minimise energy consumption on Site.

The purpose of the EclA was to carry out an ecological desk study and an Extended UK Habitat Classification (UKHab) survey to inform an assessment of the ecological value of the Site and its potential to support notable or protected habitats and species.

The EclA identified a number of ecological constraints to the proposed works requiring the following recommendations:

Ecological Constraints	Potential Impact	Mitigation, Compensation and Enhancement Measures
Non-Statutory Designated sites	Presence of two Local Wildlife Sites (LWS), an area of Ancient Woodland, and areas of Deciduous Woodland Habitat of Principal Importance (HPI) within 250 m of the Site. Slight negative impact in the event of an accidental pollution event.	The implementation of the Construction Environmental Management Plan (CEMP) will ensure works are undertaken in accordance with good practice and appropriate anti-pollution measures.
Habitats	Habitats are considered to have conservation value at the Site level. Slight negative impact from the permanent direct habitat loss.	The implementation of the CEMP will ensure works are undertaken in accordance with good practice and appropriate anti-pollution measures. The whole Site will be subject to a landscaping plan which includes a variety of planting. The planting includes other neutral grassland,

Ecological Constraints	Potential Impact	Mitigation, Compensation and Enhancement Measures
		modified grassland and ground level planter. The habitat enhancement and creation proposals include: • Retain all existing habitats where possible. • Enhance section of modified grassland to other neutral grassland within the Site boundary and Enhancement Areas. The production of a Biodiversity Gain Plan (BGP) and a Habitat Management and Monitoring Management (HMMP) will be required as part of discharging the planning conditions in relation to BNG.
Amphibians (including Great Crested Newt (GCN))	The grassland and shrub habitats on Site are suitable for foraging and commuting amphibians. The pond on Site will be directly impacted by the works and is suitable for breeding amphibians if filled up. A LWS designated for GCN populations is located within 250 m of the Site. Three ponds (including the one on Site) are located within 250 m of the Site. The Site is also located within an Amber GCN District Level Licensing (DLL) Risk Zone. Moderate negative impact from construction works and associated habitat loss. Moderate impact of direct mortality, injury or disturbance through vegetation clearance.	An initial enquiry for acceptance into the DLL scheme within South Yorkshire will be submitted to Natural England which can be used to support the planning application. Once planning has been granted for the development a DLL Application Form including a Reasoned Statement will be submitted to Natural England for approval. Once granted the DLL will cover all potential disturbing works relating to GCN at the Site. All works will be undertaken in accordance with amphibian Best Practice Measures (BPM), to protect any amphibians and in particular GCN.
Bats	Habitats and surrounding habitats suitable for	A sensitive lighting plan should be developed in accordance with current guidelines from the Bat

Ecological Constraints	Potential Impact	Mitigation, Compensation and Enhancement Measures
	foraging and commuting bats.	Conservation Trust (BCT)/Institute of Lighting Professionals.
Birds	The Site is likely to be used by common breeding bird species, both for nesting and foraging, with the individual tree and introduced shrub habitats being of greatest value in this respect. Slight negative impact on breeding birds if vegetation clearance is undertaken during the bird breeding season (March to August inclusive, species and weather dependent).	If vegetation clearance and/or works are required within the bird nesting season (March to August) nesting bird checks will need to be carried out by a suitably qualified ecological clerk of works. This must be done immediately prior to the start of works.
Other key or notable species	The Site contains some suitable terrestrial habitat for hedgehog. There is a slight negative impact of direct mortality, injury or disturbance to hedgehog due to the reduction in the extent of suitable habitat for hedgehog on Site. Potential indirect slight negative impact from noise and light pollution during construction.	BPMs for hedgehog and other mammals should be implemented to protect these species should they stray onto the Site, as detailed in Section 4.7.
Invasive non-native species	Rhododendron and cotoneaster is present within the shrub habitats recorded on Site.	An CEMP including reasonable avoidance measures for rhododendron and cotoneaster should be prepared prior to works and implemented during any Site activities. Consideration should be given to the use of a specialist contractor to eradicate rhododendron from the Site. It is recommended that good working practices in relation to rhododendron and cotoneaster are implemented to prevent the further spread of these species on Site detailed in section 4.7.

Biodiversity Net Gain

The total area of the Site has been calculated at 1000.11 m². Baseline area habitats are calculated to have a biodiversity value of **0.4530 Habitat Units (HU)**.

Based on the current proposals, the construction of the proposed developed will result in a net unit change of **+0.0464 HU** and deliver a **+10.23% net gain in HU**.

The production of a Biodiversity Gain Plan (BGP) and a Habitat Management and Monitoring Management (HMMP) will be required as part of discharging the planning conditions in relation to BNG. This will ensure the Site habitats deliver the habitat scores listed within this BNGA (or further iterations of this), to be agreed with the LPA, which will also serve to support protected and notable species. This includes management of post-development habitats to the condition required to deliver the BNG score specified in accordance with the condition assessment methodology.

1. Introduction

1.1 Background

- 1.1.1 Ecus Limited (Ecus) was commissioned by AXIS Architecture to undertake an Ecological Impact Assessment (EcIA) of HSBC South Yorkshire Group Data Centre (SYGDC) in Tankersley, Barnsley, central Ordnance Survey (OS) National Grid Reference (NGR) SK 33784 99235, hereafter referred to as 'the Site' (Figure 1).
- 1.1.2 The area proposed for development is illustrated in Figure 1 by the 'Red Line Boundary' and the pink line boundary shows the 'Enhancement Areas'. The blue line boundary shows the 'Land Ownership Boundary'. The proposed development is shown in Appendix 1.

1.2 Site Location

- 1.2.1 The Site is approximately 0.1 ha (the red line boundary is 0.084 ha and the proposed Enhancement Areas is 0.016 ha) in extent and lies within the administrative boundary of Barnsley Council. The Site is located within Tankersley, near Barnsley. The Site is currently being used as the HSBC SYGDC building and grounds which consist of an ornamental pond, grassland, shrubs, brick pathways and a tree.
- 1.2.2 The surrounding area is predominantly commercial and industrial developments with woodland, open greenspace and agricultural land to the South of the Site. One pond is located within the Site, with an additional three located within a 500 m buffer. Four ditches are located within a 500 m buffer.

1.3 Details of the Proposed Development

- 1.3.1 Proposals for the Site comprise the partial development of the ornamental pond to construct a Louvre penthouse (Appendix 1). This structure is intended to intake external air and exhaust heated air, with the capability of mixing these air volumes throughout the year to minimise energy consumption on Site. The planned development involves building the Louvre penthouse on a portion of the pond's perimeter. The development is designed to enhance the property's energy efficiency while maintaining most of the pond's aesthetic and ecological benefits.
- 1.3.2 The installation of a surface water attenuation tank will be positioned below the proposed landscaping works. This tank will manage and control the surface water runoff, thereby preventing potential flooding and maintaining the water levels within the pond. The attenuation tank will be designed to capture and temporarily store rainwater, releasing it gradually to mitigate the risk of overwhelming the pond and surrounding areas during heavy rainfall.

1.4 Purpose of this Report

- 1.4.1 The purpose of the EclA was to carry out an ecological desk study and an Extended UK Habitat Classification (UKHab) survey to inform an assessment of the ecological value of the Site and its potential to support notable or protected habitats and species. Inclusive of species protected under the Wildlife & Countryside Act 1981 (WCA) (as amended), the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 and the Natural Environment and Rural Communities (NERC) Act 2006. Full details of legislation relating to those habitats and species discussed within this report (Appendix 5) can be found at: <http://www.legislation.gov.uk>.
- 1.4.2 This report details the findings of an ecological desk study and the extended UKHab survey carried out in November 2024. The methodologies employed during the survey and all survey findings are described along with an evaluation and assessment of the ecological value of the Site. It also sets out any mitigation, compensation and/or enhancement measures required to ensure compliance with nature conservation legislation and/ or to address any potentially significant ecological effects, where relevant.

1.5 Biodiversity Net Gain Assessment (BNGA)

- 1.5.1 Under the Environment Act 2021, developments are required to achieve 10% Biodiversity Net Gain (BNG) to ensure that biodiversity post-development is greater than present pre-development. BNG calculations are conducted through assessing the condition of habitats on a site and then comparing the anticipated changes in biodiversity value based on the development proposals. A BNGA follows the mitigation hierarchy, which sets out that everything possible must be done firstly to avoid, secondly minimise and thirdly restore/rehabilitate losses of biodiversity on site. Only as a last resort are residual losses compensated for through biodiversity offsetting, whereby the loss of biodiversity is compensated for via new habitat creation off-site or by paying a financial sum to an offset provider. BNGA reports should adhere to the BNG good practice principles (Appendix 6).
- 1.5.2 BNGAs account for biodiversity losses, which prior to its introduction could not be fully assessed nor mitigated for, via legal and planning systems. Whilst some species are extensively protected, most habitat types are not; with the consequence that development could previously be 'legally compliant' but still result in biodiversity loss. BNGA guards against this, enabling development to contribute towards the national and global target of halting biodiversity loss (DEFRA, 2011) and towards local and national strategies (listed below with full details provided in Appendix 7) for conserving and enhancing wildlife. BNGAs allow stakeholders to demonstrate adherence to national legislation and local policy concerning biodiversity.

2. Methodology

2.1 Overview

- 2.1.1 The scope of this EclA, i.e., the collection of baseline data, evaluation of ecological resources and description and assessment of the significance of impacts, follows guidelines set out by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2024) and references therein.
- 2.1.2 The baseline ecological data was collated by a combination of desk-based study and field survey consistent with all current standard methodologies and published good practice guidelines.

2.2 Baseline Data Collation

Desktop Study

- 2.2.1 A desktop study was undertaken by Ecus Ltd in November 2024 via data purchased from Sheffield Biological Records Centre (SBRC). The desktop study was undertaken to obtain ecological records held for protected and notable species of flora and fauna and local non-statutory designated sites within 2 km of the Site. All records received have been reviewed, but records dating from the last ten years are considered to have greater relevance.
- 2.2.2 Multi-Agency Geographical Information for the Countryside (MAGIC) and Natural England's Open Data Geoportal were also consulted in November 2024 to obtain the following information:
- European Statutory Designated Sites (i.e., Special Areas of Conservation (SAC) and Special Protection Area (SPA)) and Ramsar Wetland Sites of International Importance located within 10 km.
 - Statutory Designated Sites of national (i.e., Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR)) and local importance (i.e., Local Nature Reserve (LNR)) located within 2 km.
 - European Protected Species (EPS) mitigation licences for great crested newts (GCN) *Triturus cristatus* and bats within 2 km of the Site.
 - Any other relevant environmental datasets on protected or priority habitats and species, for example Ancient Woodland Inventory, GCN Class Survey Licence Returns, and GCN eDNA Pond Surveys for District Level Licensing (DLL).
- 2.2.3 Natural England's GCN Risk Zone dataset was consulted to give an understanding of the potential presence of GCN in the local area and therefore the likelihood of the species being present on the Site. This dataset identifies areas where the distribution of GCN has been

categorized into distinct zones relating to GCN occurrence and the level of impact development is likely to have on this species. These zones are split into Red, Amber, Green and White and are described as follows:

- Red zone – contains key populations of GCN, which are important on a regional, national or international scale and include designated Sites of Special Scientific Interest for GCN.
- Amber zone – contains main population centres for GCN and comprise important connecting habitat that aids natural dispersal.
- Green zone – contains sparsely distributed GCN and are less likely to contain important pathways of connecting habitat for this species.
- White zone – contains no GCN. However, as most of England forms the natural range of GCN, white zones are rare and will only be used when it is certain that there are no GCN.

2.2.4 Information obtained from SBRC, MAGIC and Natural England's GCN Risk Zone dataset is included within the report where appropriate.

2.3 Field Surveys

Extended UK Habitat Classification Survey

2.3.1 The Site was surveyed on the 11th of November 2024 by Ecus Assistant Ecologist Emma McCartney BSc, MSc. The survey was completed following the Extended UKHab Classification methodology (UKHab, 2023). This survey method aims to characterise habitats and communities present and is not intended to provide a complete list of all plants occurring across the Site.

2.3.2 The habitats and vegetation types present within the Site were recorded onto a field map and notable, rare, or scarce plant species, along with any other features of ecological interest, are presented on Figure 4. Target Notes are presented in Appendix 2.

2.3.3 Evidence of protected species or species of nature conservation importance were recorded where present at the time of surveys. Habitats present that are listed under Section 41 of the NERC Act 2006 (i.e. Habitats of Principal Importance (HPI)) or the Local Biodiversity Action Plan (LBAP) for Barnsley were also noted.

Protected and Key Species

2.3.4 Any evidence of protected species or groups encountered during the survey was recorded, including any observations of field signs and an assessment of the suitability of the habitats present to support protected species. For full details of legislation relating to all habitats and species discussed within this report visit <http://www.legislation.gov.uk>.

Amphibians

- 2.3.5 To assess the potential presence of GCN and other common amphibian species, a desk-based assessment was undertaken using a 1:10,000 scale OS mapping to identify all waterbodies within 500 m of the Site that are not separated by a significant barrier to amphibian dispersal (such as a major road and/or fast flowing watercourse). As garden ponds within residential properties are often absent from OS map sources, aerial photography was also used to search for additional ponds.
- 2.3.6 Of the identified waterbodies within 500 m of the Site, those that were within 250 m were then studied in more detail in accordance with the Great Crested Newt Conservation Handbook “at most sites, the majority of adults probably stay within around 250 m of the breeding pond, so the density of individuals gradually decreases away from the pond” (Froglife, 2001).
- 2.3.7 The terrestrial habitats present within the Site were assessed for their suitability to support amphibians during their terrestrial stage and with consideration to their connectivity to other suitable habitat within the surrounding area.

Bats

Roosting Bats

- 2.3.8 In accordance with the Bat Conservation Trust’s (BCT) Good Practice Guidelines (Collins, 2023), the potential suitability of features within the Site (i.e. trees and buildings) to support roosting bats was categorised based on the number and type of roosting features and surrounding landscape character.
- 2.3.9 All trees and buildings within the Site were subject to an external visual assessment, undertaken from ground-level. This approach permitted a search for the presence of suitable features that have potential to be used by roosting bats.
- 2.3.10 An individual tree may have several features of potential interest to roosting bats associated with it. It is not always possible to confirm usage of a feature by bats as often their occupation may be sporadic. Consequently, trees were also surveyed and categorised as either:
- NONE – Either no PRFs in the tree or highly unlikely to be any.
 - FAR – Further Assessment Required to establish if PRFs are present in the tree.
 - PRF – A tree with at least one PRF present, being PRF - I or PRF – M
- 2.3.11 The potential suitability of structures within the Site to support roosting bats were categorised as either Negligible, Low, Moderate, High, or Confirmed, based on the number and type of roosting features and surrounding landscape character, in accordance with BCT Good Practice

Guidelines (Collins, 2023).

Foraging and Commuting Bats

2.3.12 Habitats within the Site were also assessed for their potential to support foraging and commuting bats. The commuting and foraging assessment methodology is based on information contained within the BCT Good Practice Guidelines (Collins, 2023), which categorises the habitat as either Negligible, Low, Moderate, or High suitability for commuting and foraging bats

Birds

2.3.13 In 2021 a re-assessment of Birds of Conservation Concern (BoCC) was published by Stanbury et al. (2021). The BoCC defines rare and threatened bird species on two lists (Red and Amber) describing the level of threat to each species of concern. Species on the Green list are unthreatened. This information was used to assist in assessing the Site value in relation to birds during the desk study stage.

2.3.14 “Red” is the highest conservation priority, with species needing urgent action due to either a historical decline in breeding population, severe (>50%) decline in breeding or non-breeding population, or severe decline in breeding range over 50 years or more. “Amber” is the next most critical group, with species qualifying for this status as a result of either recovery from red list criterion, being classed as rare breeders in the UK, moderate (>25%) decline in breeding or non-breeding population or moderate decline in breeding range over 25 years or more. These categories are followed by “Green”, indicating that the species are relatively unthreatened.

2.3.15 Desk study data was filtered for WCA 1981 Schedule 1 bird species, and those species protected under Annex 1 of the EU Directive on the Conservation of Wild Birds, also known as the Birds Directive (2009/147/EC). Priority species (EWA 2016; Local BAP) were likewise highlighted and the UK Red List for birds, also known as the BoCC5 as described above, was also referred to.

Badger

2.3.16 Field signs for badger *Meles meles* were searched for within the Site and up to 30 m from the Site boundary, where accessible. The survey followed standard methodology detailed in “Surveying Badgers” (Harris et al., 1989). This included surveying for badger setts, latrine/dung pits, foraging marks, feeding signs and pathways, specifically along linear features, and boundaries within the Site.

Reptiles

2.3.17 The habitats present within the Site were assessed for their suitability to support reptiles, and with consideration to their connectivity to other suitable habitat within the surrounding area. Habitat requirements were assessed with reference to the Reptile Habitat Management Handbook

(Edgar, Foster & Baker, 2010). Any incidental reptile encounters made during the survey would be recorded.

Riparian Mammals

2.3.18 A desk-based search was undertaken using 1:25,000 scale OS mapping to identify all watercourses and ponds within 250 m of the Site that could offer potential to support otter *Lutra lutra*, and water vole *Arvicola amphibius*. It should be noted that no detailed surveys were undertaken as part of the PEA.

2.3.19 The habitats within the Site were assessed for their suitability to support riparian mammals and a search of evidence was undertaken in accordance with the guidance for otter (Chanin, 2003), and water vole (Dean et al. 2016).

Other Key and Notable Species

2.3.20 Habitats were assessed for their potential to support other protected species, nationally or locally scarce or notable species, or any further species protected under nature conservation law which have not been highlighted above.

Invasive Species

2.3.21 During the extended UKHab survey any evidence of invasive species, as listed on Schedule 9 of the Wildlife and Countryside Act (WCA) 1981 (as amended), was recorded and subsequently mapped where seen.

2.4 Evaluation and Assessment

2.4.1 The ecological evaluation and impact assessment approach used here is based on Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland ("CIEEM guidelines") (CIEEM, 2024).

Important Ecological Features

2.4.2 Ecological features can be important for a variety of reasons and the rationale used to identify them is explained here. Importance may relate, for example, to the quality or extent of the Site or habitats therein; habitat and/ or species rarity; the extent to which such habitats and/ or species are threatened throughout their range, or to their rate of decline. Importance should be considered within a defined geographical context. The following frame of reference has been used in this case, relying on known/ published accounts of distribution and rarity where available, and professional experience:

- International;

- National (i.e. UK/ England etc.);
- Regional (i.e. North East);
- County (i.e. South Yorkshire); and
- Local (i.e. within 2 km).

2.4.3 The importance of the various habitats has been measured against published selection criteria where available and relevant. Examples of relevant criteria includes descriptions of habitats listed on Annex 1 of the Habitats Directive; Local Wildlife Site Selection Criteria; and Habitat Action Plans (HAPs) contained within Local Biodiversity Action Plans.

2.4.4 In assigning a level of importance to a species, it is necessary to consider their distribution and status, including a consideration of trends where relevant. Reference has therefore been made to published lists and criteria where appropriate. Examples of relevant lists and criteria include species of European conservation importance (as listed on Annexes II, IV and V of the Habitats Directive or Annex 1 of the Birds Directive) and Birds of Conservation Concern (BoCC).

2.4.5 For the purposes of this report ecological features of local importance or greater and/ or subject to legal protection have been subject to detailed assessment. Effects on other ecological features are considered unlikely to be significant in legal or policy terms and have therefore been omitted from the assessment process.

Impact Assessment

2.4.6 The impact assessment process involves the following steps:

- Identifying and characterising potential impacts;
- Incorporating measures to avoid and mitigate these impacts;
- Assessing the significance of any residual effects after mitigation;
- Identifying appropriate compensation measures to offset significant residual effects (if required); and
- Identifying opportunities for ecological enhancement.

2.4.7 The impact assessment process considers both direct and indirect impacts: direct ecological impacts are changes that are directly attributable to a defined action, e.g., the physical loss of habitat occupied by a species during the construction process. Indirect ecological impacts are attributable to an action, but which affect ecological resources through effects on an intermediary ecosystem, process, or feature, e.g., the creation of roads which cause hydrological changes, which, in the absence of mitigation, could lead to the drying out of wet grassland.

Significant Effects

2.4.8 The significance of effects has been determined by the conservation status of features and impacts on the structure and function of ecological features. There is no threshold at which effects have been determined as significant, rather each impact has been assessed based on its context in a particular geographical area/scale and will consider the extent, magnitude, duration, frequency/timing and/or reversibility of the impact. Generally, residual effects upon features of importance at up to the Local level are Minor, those at the Regional/County level are Moderate, and those at National to International are Major, unless mitigation is appropriate to reduce or negate the residual effect.

Cumulative Effects

2.4.9 Cumulative effects can result from individually insignificant but collectively significant actions taking place over a period or concentrated in a location. Cumulative effects can occur where a proposed development results in individually insignificant impacts that, when considered in combination with impacts of other proposed or permitted plans and projects, can result in significant effects.

2.4.10 The potential for the proposed development to act in combination with other proposals has been assessed through a review of the Barnsley Planning Portal website (Barnsley, 2024) to ascertain whether any additional development proposals exist within 1 km of the application Site such that a cumulative effect may arise. Cumulative effects are presented in more detail in paragraph 4.9 in Section 4 of this report.

2.5 Biodiversity Net Gain

2.5.1 A Biodiversity Metric Calculation has been completed using the metric tool, the 'Small Sites Statutory Biodiversity Metric Calculation Tool' distributed by the Department for Environment, Food and Rural Affairs (DEFRA), 2024. Habitat and linear feature measurements have been taken using digital mapping software (QGIS Geographic Information System version 3.28).

2.5.2 Using the Small Sites Metric (SSM), the baseline and post-development habitat values are calculated based on whether they occur commonly or whether they are rare, their area (ha) or length (km) for linear features such as hedgerows, condition, connectivity to other habitats, and importance within the local area (usually identified from local relevant planning policies or documents). This gives a pre-development and post-development value in Habitat Units (HU) for area-based habitats, Hedgerow Units (HeU) for linear terrestrial habitats and River Units (RU) for aquatic-based linear habitats, if present.

2.5.3 HPI, irreplaceable habitats (e.g., ancient woodland), on or adjacent to the Site were searched for

in accordance with the BNG best practice principles (Appendix 6), along with statutory designated sites for nature conservation.

2.5.4 Biodiversity Metric Calculations are displayed within the Small Sites Metric (Appendix 4) and are mapped in Figure 4 and 5.

2.6 Limitations

2.6.1 The Extended UKHab Survey was undertaken in November 2024 which is considered a sub-optimal period for botanical growth (optimal survey period March – September, inclusive). However, sufficient data was obtained to enable botanical identification from dead stems and leaf growth, such that habitats could be categorised during the walkover survey.

2.6.2 Surveyors were unable to access the woodland located to the west of the Site as it was enclosed by a fence. However, this is not considered to be a significant limitation as the trees could be assessed from the Site boundary using binoculars and there is limited access to the Site from the woodland for animals such as badger due to the height of the fence.

2.6.3 An Extended UKHab survey is intended to provide a rapid assessment of habitats present within a Site and is not intended to replace detailed vegetation or targeted protected species surveys, where deemed necessary. The surveys may be limited by a variety of factors which affect the presence of flora and fauna (e.g., climatic variation, season, and species behaviour). A lack of evidence of a protected species during a survey does not mean that the species is absent; hence the survey also records and assesses the ability of habitats to support such species. The time frame in which the survey is implemented provides a snapshot of activity within the survey area and cannot necessarily detect all evidence of use by a species.

2.6.4 This report will remain valid for a maximum period of 18 months from the date of the survey. In the case of certain exceptions, data may only be valid for 12 months, examples include:

- Where a site may offer existing or new features which could be utilised by a mobile species within a short timeframe.
- Where a mobile species is present on site or in the wider area and can create new features of relevance to the assessment.
- Where country-specific or species-specific guidance dictates otherwise.

2.6.5 Further surveys may be required to update the site information if planning is not obtained, or works do not commence within this time period.

2.6.6 The SSM does not have an Off-Site section, therefore the Enhancement Areas has been

included within the Site boundary due to the close proximity to the development.

2.6.7 For strategic significance, all area-based habitats on the Site have been considered 'Area/compensation not in local strategy/no local strategy' as they do not qualify as priority habitats and are not identified on any strategic plans.

3. Results

3.1 Statutory Designated Sites

- 3.1.1 No designated sites of international and European importance are situated within 10 km of the Site.
- 3.1.2 One statutory designated site relating to nature conservation of national importance was located within 2 km of the Site, as detailed in Table 1 below and illustrated in Figure 3.

Table 1. Statutory designated sites of national importance within 2 km of the Site

Site Name	Distance from Site	Reasons for Designation
Potter Holes Local Nature Reserve (LNR)	420 m northeast of Site	Semi-ancient woodland developed in and around old bell-pits, plus newer, planted woodland adjacent on a reclaimed colliery site.

- 3.1.3 The Site also falls within an Impact Risk Zone (IRZ) for Dearne Valley Wetlands Site of Special Scientific Interest (SSSI) and Eastern Peak District SSSI. If the proposals fall into any of the corresponding development categories (e.g. combustion, waste or compost), the Local Planning Authority (LPA) should consult Natural England to assess the likely risks. However, the proposed development does not fall within the development categories previously described as a potential risk and therefore does not require the LPA to consult Natural England.

3.2 Non-Statutory Designated Sites

- 3.2.1 Six non-statutory designated sites were returned by the SBRC from within 2 km of the Site, pertaining to six Local Wildlife Sites (LWS), as detailed in Table 2 below and illustrated in Figure 3.

Table 2. Non-statutory designated sites within 2 km of the Site

Site Name	Distance from Site	Reasons for Designation
Sowell Pond and Westwood Lane Meadow (LWS)	150 m north of Site	The LWS consists of two parcels of land which are separated by a narrow strip of broadleaved plantation. It is designated for its neutral grassland, broadleaved trees, areas of dense scrub and ponds

		which support a population of GCN.
Westwood Country Park (LWS)	200 m southeast of Site	No citation provided.
West Wood (LWS)	400 m southwest of Site	Habitats within this LWS comprise of ancient woodland, lowland mixed deciduous woodland, and river.
Potter Holes (LWS)	420 m northeast of Site	Habitats within this LWS comprise of lowland mixed deciduous woodland.
Thornccliffe Wood (LWS)	720 m southeast of Site	No citation provided.
Rockley Woods (LWS)	1.8 km north of Site	Habitats within this LWS comprise of ancient woodland, lowland mixed deciduous woodland, wet woodland, rivers, and ponds.

Habitat of Principal Importance (HPI) and Ancient Woodland

- 3.2.2 Data from the Natural England's Priority Habitat Inventory dataset returned two Habitat of Principal Importance (HPIs under Section 41 of NERC Act, 2006) from within 500 m of the Site, namely deciduous woodland and traditional orchard (Figure 2). The closest area of HPI is deciduous woodland situated 30 m west of the Site.
- 3.2.3 Four areas of ancient woodland were returned by MAGIC within 500 m of the Site, all pertaining to West Wood LWS, located 230 m south of the Site (at the nearest point) (Figure 2).
- 3.2.4 Impacts to ancient woodland and the deciduous woodland HPI are unlikely to occur as a result of the proposed works and are scoped out of further assessment.

3.3 Habitats

- 3.3.1 Habitats recorded within the Site, along with their distribution and composition are discussed below. Habitat locations are presented on Figure 4. The Site photographs are included in Appendix 3.

g4 – Modified grassland

- 3.3.2 Modified grassland surrounds the ornamental pond and shrubs within the Site. The Enhancement Areas are also entirely made up of this habitat. The grassland is generally species-poor with a

species mix suggesting artificial seeding and regular management. Species present include perennial rye-grass *Lolium perenne*, dandelion *Taraxacum officinale* agg., creeping buttercup *Ranunculus repens*, and common sorrel *Rumex acetosa*.

- 3.3.3 Modified grassland is a common and widespread habitat but as it provides connectivity to suitable surrounding habitat, it is therefore considered likely to be of importance at a Site level.

u1 – built-up areas and gardens; 847 – Introduced shrub; 524 – Invasive non-native species

- 3.3.4 Five patches of introduced shrubs are present within the Site. Shrub species within the habitat regularly include rhododendron *Rhododendron ponticum*, cotoneaster species *Cotoneaster* sp., Leyland cypress *Cupressus x leylandii*, fuchsia *Fuchsia* sp., Chinese privet *Ligustrum sinense*, hydrangea *Hydrangea* sp., hedge veronica *Hebe elliptica x H. speciosa*, holly *Ilex aquifolium*, Siberian dogwood *Cornus alba*, and reed canary grass *Phalaris arundinacea*.

- 3.3.5 Introduced shrubs are a non-native habitat, however the shrubs offer some structural diversity and provided limited nesting opportunities for common bird species and foraging opportunities for amphibians, it is therefore considered likely to be of importance at a Site level.

r1g Other standing water; 46 – Ornamental lakes or ponds; 500 – Dry

- 3.3.6 A brick-lined artificially created ornamental pond was present in the middle of the Site. This has been recently drained.
- 3.3.7 The ornamental pond is filled with water will provide opportunities for amphibians, it is therefore considered likely to be of importance at a Site level.

u1b6 – Built-up areas and gardens - Developed land; sealed surface – Other developed land

- 3.3.8 This habitat is present around the ornamental pond and along the HSBC building. It is of minimal ecological value therefore is considered to not be of conservation value.

u1b5 – Built-up areas and gardens – Developed land; sealed surface - Buildings

- 3.3.9 This habitat is present in the form of the HSBC SYGDC building in the northern and eastern corners of the Site. It is of minimal ecological value therefore is considered to not be of conservation value.

Secondary Code – 32 - Scattered tree

- 3.3.10 One tree pertaining to Scots pine *Pinus sylvestris* is present within a patch of introduced shrub.

3.3.11 The scattered tree on Site is considered likely to be of importance at Site level due to providing nesting habitat for common bird species.

3.4 Protected Species

Amphibians

3.4.1 SBRC returned 49 records of GCN from within 2 km of the Site, with the closest record located 200 m north of the Site, dated 2017. A total of 16 out of the 49 records of GCN are located within the Sowell Pond and Westwood Lane Meadow LWS.

3.4.2 SBRC returned 48 records of common amphibians from within 2 km of the Site. Of these, 30 pertained to smooth newt *Lissotriton vulgaris*, 14 to common frog *Rana temporaria*, and four to common toad *Bufo bufo*. The closest record is of a smooth newt located approximately 200 m north of the Site, dated 2017.

3.4.3 A search of DEFRA's online mapping platform MAGIC revealed two European Protected Species (EPS) Licences in relation to GCN have been granted within 2 km of the Site, with the closest one situated 360 m north. Both licences allowed for the destruction of GCN resting places, and the most recent licence was dated 2019 - 2021.

3.4.4 No GCN Class Survey Licence Returns or eDNA and Habitat Suitability Index (HSI) survey results for ponds surveyed for District Level Licensing (DLL) were identified within 2 km of the Site.

3.4.5 The Site has been identified to fall within the Amber GCN DLL Risk Zone (which has known GCN populations, habitats and dispersal routes).

3.4.6 A search of Ordnance Survey (OS) and Google Earth aerial imagery revealed two ponds (presented on Figure 2) within 250 m of the Site namely:

- P1 is an ornamental pond situated within the Site boundary and was dry at the time of the survey.
- P2 is situated approximately 150 m northwest and is within the Sowell Pond and Westwood Lane Meadow LWS.

3.4.7 No sightings of GCN or common amphibians were recorded during the walkover survey. The Site contains some suitable terrestrial habitat for GCN sheltering and foraging in the form of introduced shrubs and a pile of rubble (TN1, Figure 4). The immediate surrounding habitat of modified grassland is likely to provide sub-optimal habitat for GCN sheltering or hibernation but may offer some, albeit limited, opportunities for GCN commuting and foraging. P1 was dry at the

time of the survey, however, would offer habitat for GCN breeding if it is filled with water.

3.4.8 Common amphibians including common toad and common frog do not require specific habitat conditions for breeding and are known to travel large distances in their terrestrial phase; therefore the presence of these species on Site cannot be ruled out.

3.4.9 Given the amount of species records, EPS licences, presence of suitable terrestrial habitat and dispersal opportunities in the wider landscape, and the Site being within an Amber GCN DLL Risk Zone, amphibians including GCN are scoped into the assessment. Taking the above into account, the Site is considered likely to be of importance to amphibians up to the Local level.

Badger

3.4.10 SBRC returned five badger records from within 2 km of the Site. Due to the sensitive nature of this species, records of badger are considered confidential and full details cannot be disclosed.

3.4.11 No field signs of badgers were identified during the survey of the Site. Areas of modified grassland and introduced shrub on Site provide limited foraging and commuting habitat for badgers. No habitats on Site were deemed suitable for sett creation.

3.4.12 Habitats surrounding the Site such as the deciduous woodland to the west are suitable for use by badger, including for foraging and sett creation, however, the presence of foraging and commuting badgers is unlikely due to the high fence separating the Site from areas of suitable habitat (Photograph 19; Appendix 3).

3.4.13 Based on the above, the Site is not considered likely to be of conservation importance for badger badgers are scoped out of further assessment.

Bats

3.4.14 SBRC returned two recent bat roost record from within 2km of the Site. Of these, one pertains to common pipistrelle *Pipistrellus pipistrellus* and one to brown-long eared *Plecotus auritus*. Both records are located approximately 1.2 km northeast of the Site, dated 2019.

3.4.15 A total of nine species of bat are listed as priority species on the SBL: Brandt's bat *Myotis brandtii*, brown long-eared bat, Daubenton's bat *Myotis daubentonii*, whiskered bat *Myotis mystacinus*, Natterer's bat *Myotis nattereri*, noctule *Nyctalus noctula*, Nathusius's pipistrelle *Pipistrellus nathusii*, common pipistrelle, and soprano pipistrelle *Pipistrellus pygmaeus*. Additionally, the soprano pipistrelle, brown long-eared bat and noctule bat are listed as priority species in the LBAP (Barnsley Biodiversity, 2024).

3.4.16 The search of SBRC returned 48 bat field records of foraging or bat casualties within 2 km of the

Site. Of these records a total of 16 common pipistrelle, 11 soprano pipistrelle, eight *Myotis* sp., seven noctule, three brown-long eared bat, and three whiskered bats. The closest records pertained to three species including brown-long eared, *Myotis* sp., and noctule located 900 m northwest of the Site, dated 2017.

Roosting Bats

- 3.4.17 There are no buildings or trees present within the Site that have the potential to support roosting bats. The Site is considered to be of negligible importance for roosting bats and has been scoped out of further assessment.

Foraging and Commuting Bats

- 3.4.18 In accordance with current guidelines (Collins, 2023), the habitats within the Site have been assessed as providing low value for foraging and commuting bats. However, the woodland available to the west of the Site could provide suitable foraging habitat and bats could use the Site as a transitional habitat. Foraging and commuting bats have been scoped into further assessment.

Birds

- 3.4.19 SBRC returned 152 recent bird records from within 2 km, pertaining to 41 species. Of these, eight species are red listed Birds of Conservation Concern (BoCC), ten are amber listed BoCC, and 23 are green listed BoCC. Six of the bird species are also included as species of principal importance on Section 41 of the NERC Act (2006). No bird species records were returned within the Site boundary.
- 3.4.20 Site habitats including introduced shrub and the individual tree were considered to offer some, albeit limited foraging and nesting opportunity to common bird species. Additionally, the deciduous woodland to the west of the Site offers an abundance of higher quality habitat in the wider landscape. The Site is therefore considered to be likely to be of conservation importance to birds at a Site level and have been scope into further assessment.

Reptiles

- 3.4.21 SBRC returned no recent records of reptiles from within 2 km of the Site.
- 3.4.22 No field signs of reptiles were observed during the Site visit. The grassland habitats on Site are very small in extent and most of the Site is unsuitable for reptiles. The Site is therefore scoped out of further assessment with regards to reptiles.

Riparian Mammals and White-Clawed Crayfish

Otter

3.4.23 SBRC returned no recent records of otter *Lutra lutra* from within 2 km of the Site.

3.4.24 No major watercourses are present within 500 m of the Site; however, four ditches (Figure 2) are located within 500 m of the Site namely:

- D1 located 190 m south of the Site;
- D2 located 400 m south of the Site;
- D3 located 390 m north of the Site; and
- D4 located 490 m north of the Site

3.4.25 No field signs of otter were observed during the Site visit. Due to the lack of records and poor habitat connectivity, otters are deemed unlikely to be a constraint to the works. The Site is therefore scoped out of further assessment with regards to otter.

Water vole

3.4.26 SBRC returned no recent records of water vole *Arvicola amphibius* from within 2 km of the Site.

3.4.27 No major watercourses are present within 500 m of the Site; however, four ditches are located within 500 m of the Site as described previously. None of the ditches are hydrologically connected to the Site.

3.4.28 No field signs of water vole were observed during the Site visit. Due to the absence of suitable habitat within the surrounding area, and the lack of records pertaining to the presence of water vole, it is considered unlikely that water vole would utilise the Site and water vole are not considered to be a constraint to the works. The Site is therefore scoped out of further assessment with regards to water vole.

White-Clawed Crayfish

3.4.29 SBRC returned no recent records of White-Clawed Crayfish (WCC) *Austropotamobius pallipes* from within 2 km of the Site.

3.4.30 Due to the Site not being hydrologically connected to any watercourses and the lack of records pertaining to WCC, they are not considered to be a constraint to the works. The Site is therefore scoped out of further assessment with regards to WCC.

Other Notable and Key Species

Hedgehog

3.4.31 SBRC returned 14 records of hedgehog *Erinaceus europaeus* from within 2 km of the Site, the

closest of which is situated 300 m west of the Site.

3.4.32 There were no incidental sightings were observed during the Site visit. Areas of introduced shrub on Site provide suitable foraging and sheltering habitat for hedgehogs. Given the presence of suitable habitat within the Site, and the presence of suitable habitat within the wider area, the Site is considered likely to be of importance to hedgehogs at a Site level and hedgehogs are scoped into further assessment.

Brown Hare

3.4.33 SBRC returned one record of brown hare *Lepus europaeus* from within 2 km of the Site, situated approximately 1.8 km north of the Site, dated 2018.

3.4.34 No evidence of brown hares were observed during the Site visit. Brown hares are most common in open farmland, grassland areas and woodland edges, all of which are not provided by the Site or surrounding areas. The Site is therefore considered unlikely to be of importance to brown hare and brown hare are scoped out of further assessment.

3.5 Invasive Non-Native Plant Species (INNPS)

3.5.1 SBRC returned ten records of Invasive Non-Native Plant Species (INNPS) from within 2 km of the Site. Of these, nine pertain to Japanese knotweed *Reynoutria japonica*, and one pertain to Himalayan balsam *Impatiens glandulifera*. The closest record is a stand of Japanese knotweed located 930 m northeast of the Site, dated 2017.

3.5.2 Multiple stands of rhododendron (Photographs 6, 10, 11; Appendix 3) and cotoneaster species *Cotoneaster* sp. were recorded within the Site during the surveys. Certain species of cotoneaster are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), this makes it illegal to plant or otherwise cause the species to grow in the wild. Identifying cotoneaster to species level is difficult, therefore as a precaution, it is advised that the species recorded on site is treated as being listed on Schedule 9.

3.5.3 Due to the presence of rhododendron and cotoneaster within the Site, INNPS are scoped into further assessment.

3.6 Biodiversity Net Gain

3.6.1 A biodiversity metric calculation has been completed for the planning application for the proposed refurbishment works at HSBC SYGDC, using the red line boundary and the Enhancement Areas, displayed in Figure 1.

Baseline

3.6.2 Baseline UKHab habitat types featured within the red line boundary comprises of scattered tree (Secondary Code 33), Grassland – g4 Modified grassland, 33 Scattered trees, Rivers and lakes - r1g Other standing water, Urban – u1 Built up areas and gardens, Urban – u1b6 Developed land; sealed surface – other developed land, and Urban – u1b5 Developed land; sealed surface – buildings. Baseline UKHab habitat types featured within the Enhancement Areas comprises of Grassland – g4 Modified grassland. Baseline habitats are illustrated in Figure 4. For conversion of UKHab to the SBM habitats see Table 3.

Table 3. UKHab to Statutory Metric habitat conversions.

UKHab Habitat Type	Statutory Metric Tool Habitat Type
g4 - Modified Grassland	Grassland – Modified Grassland
g3c – Other neutral grassland	Grassland – Other Neutral Grassland
r1g – Other standing water [46 – <i>Ornamental lakes or ponds</i>]	Lakes – Ornamental Lake or Pond
u1 - Built up areas and gardens [847 – Introduced shrub]	Urban – Introduced Shrub
u1b6 - developed land; sealed surface – other developed land	Urban – Developed Land; Sealed Surface
u1b5 – developed land; sealed surface – buildings	Urban – Developed Land; Sealed Surface
[Secondary Code 33 - Scattered tree]	Individual trees – Urban/Rural tree

3.6.3 The area has been calculated at 1000.11 m². The habitat type, condition, area and HU are provided within Table 4. Baseline area-based habitats have a biodiversity value of 0.4530 HU.

Table 4. Baseline Area-based Habitats, Condition and Habitat Units

Ref.	Habitat Type	Area (m ²)	Strategic Significance	Habitat Units (HU)
B1	Lakes - Ornamental lake or pond <i>Ornamental pond which will be partial lost for the development.</i>	198.03	Area/compensation not in local strategy/ no local strategy	0.08
B2	Urban - Introduced shrub <i>Scattered areas of introduced shrub.</i>	79.87	Area/compensation not in local strategy/ no local strategy	0.02
B3	Urban - Developed land; sealed surface <i>Buildings.</i>	34.13	Area/compensation not in local strategy/ no local strategy	0.00
B4	Urban - Developed land; sealed surface <i>Footpaths and other developed land.</i>	167.95	Area/compensation not in local strategy/ no local strategy	0.00
B5	Grassland – Modified grassland <i>Areas of modified grassland around pond.</i>	360.90	Area/compensation not in local strategy/ no local strategy	0.14
B6	Grassland – Modified grassland <i>Area of Modified Grassland in Enhancement Area A.</i>	129.23	Area/compensation not in local strategy/ no local strategy	0.05
B7	Grassland – Modified grassland <i>Area of Modified Grassland in Enhancement Area B.</i>	30.00	Area/compensation not in local strategy/ no local strategy	0.01

Ref.	Habitat Type	Area (m ²)	Strategic Significance	Habitat Units (HU)
Trees	Individual trees – Urban/rural trees <i>One individual tree to be retained.</i>	162.78	Formally identified in local strategy	0.1498
Total Habitat Units				0.4530

Post-Development

3.6.4 Proposed post-development habitat types include Individual tree - Urban tree, Grassland – Modified grassland, Grassland – Other neutral grassland, Lakes – Ornamental Lake or Pond, Urban – Introduced Shrub, and Urban – Developed land; sealed surface. Proposed post-development UKHab habitat types featured within the Enhancement Areas comprises of Grassland – Other neutral grassland. Post-development habitats are illustrated in Figure 5.

3.6.5 The habitat type, condition, area and HU of the post-development habitats are provided within Table 5. Based on the current post-development proposals, the area-based habitats produced a calculated biodiversity value of **0.4993 HU** and delivers a net unit change of **+0.0464 HU** which equates to a **+10.23% net gain in HU**. The SSM is provided in Appendix 4.

Table 5. Post-Development Area-based Habitats, Condition and Habitat Units

Ref.	Habitat Type	Area (ha)	Condition	Strategic Significance	Habitat Units
<i>Retained</i>					
B1	Lakes - Ornamental lake or pond <i>Retention of part of the ornamental pond.</i>	79.12	Moderate	Area/compensation not in local strategy/ no local strategy	0.0316
B2	Urban - Introduced shrub <i>Retention of two areas of introduced shrubs.</i>	51.32	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	0.0103
B3	Urban - Developed land; sealed	14.24	N/A - Other	Area/compensation	0.0000

Ref.	Habitat Type	Area (ha)	Condition	Strategic Significance	Habitat Units
	surface <i>Retention of buildings (i.e. gas bottle store).</i>			not in local strategy/ no local strategy	
B4	Urban - Developed land; sealed surface <i>Retention of some areas of footpaths and other developed land (i.e. around pond).</i>	29.81	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.0000
B5	Grassland – Modified grassland <i>Retention of areas of modified grassland towards the south of the Site.</i>	151.04	Moderate	Area/compensation not in local strategy/ no local strategy	0.0604
Trees	Individual trees – Urban/rural trees <i>Retention of the one tree on Site.</i>	162.78	Moderate	Formally identified in local strategy	0.1498
Created					
C1	Urban - Developed land; sealed surface <i>Creation of proposed Louvre penthouse.</i>	155.94	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.0000
C2	Urban - Developed land; sealed surface <i>Creation of footpath and other developed land.</i>	206.34	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.0000
C3	Urban – Ground level planters	17.93	Condition Assessment	Area/compensation not in local strategy/	0.0035

Ref.	Habitat Type	Area (ha)	Condition	Strategic Significance	Habitat Units
	<i>Creation of flower bed in area of pond lost for the development.</i>		N/A	no local strategy	
C4	Grassland – Modified grassland <i>Creation of modified grassland from the loss of introduced shrubs.</i>	50.08	Good	Area/compensation not in local strategy/ no local strategy	0.0335
C5	Grassland – Other neutral grassland <i>Creation of other neutral grassland from the loss of introduced shrubs.</i>	3.77	Good	Area/compensation not in local strategy/ no local strategy	0.0013
Enhanced					
E5	Grassland – Modified grassland enhanced to Grassland – Other neutral grassland <i>Enhancement of modified grassland towards the west of the Site.</i>	81.29	Good	Area/compensation not in local strategy/ no local strategy	0.0706
E6	Grassland – Modified grassland enhanced to Grassland – Other neutral grassland <i>Enhancement of modified grassland in the Enhancement Area A.</i>	129.23	Good	Area/compensation not in local strategy/ no local strategy	0.1123
E7	Grassland – Modified grassland enhanced to Grassland – Other neutral grassland <i>Enhancement of modified grassland in the Enhancement</i>	30.00	Good	Area/compensation not in local strategy/ no local strategy	0.0261

Ref.	Habitat Type	Area (ha)	Condition	Strategic Significance	Habitat Units
	<i>Area B.</i>				
Total Habitat Units					0.4993

4. Ecological Assessment and Mitigation Measures

4.1 Summary of Development Proposals

- 4.1.1 Proposals for the Site comprise the partial development of the ornamental pond to construct a Louvre penthouse (Appendix 1). This structure is intended to intake external air and exhaust heated air, with the capability of mixing these air volumes throughout the year to minimise energy consumption on site. The planned development involves building the Louvre penthouse on a portion of the pond's perimeter. The development is designed to enhance the property's energy efficiency while maintaining most of the pond's aesthetic and ecological benefits.
- 4.1.2 The installation of a surface water attenuation tank will be positioned below the proposed landscaping works. This tank will manage and control the surface water runoff, thereby preventing potential flooding and maintaining the water levels within the pond. The attenuation tank will be designed to capture and temporarily store rainwater, releasing it gradually to mitigate the risk of overwhelming the pond and surrounding areas during heavy rainfall.

4.2 Potential Impacts

- 4.2.1 Potential impacts from the construction of the proposed development are outlined below:
- Potential habitat loss and fragmentation;
 - Disturbance during construction; and
 - Potential contamination of surface water.

4.3 Construction Environmental Management Plan (CEMP)

- 4.3.1 In addition to species-specific mitigation discussed below, a Construction Environmental Management Plan (CEMP) will be prepared to detail how the habitats and species within and surrounding the Site should be protected during the construction phase. The CEMP will include details of appropriate fencing to restrict access into key ecological areas; information on any timing restrictions; and measures to prevent damage to sensitive ecological habitats and protected species. Typically, the preparation of a CEMP will be a conditional requirement of the planning permission.

4.4 General Ecological Enhancements

- 4.4.1 The following ecological enhancement measures could be considered for the Site and would be detailed within the CEMP and the landscape scheme:

- The whole Site will be subject to a landscaping plan which will include a variety of planting. The planting includes species-rich grassland (i.e. wildflower meadow) and introduced shrub planting.
- Any Site planting/seeding should include native species, locally sourced where possible, to provide additional resources for wildlife in the area. This would also encourage increased invertebrate interest indirectly benefitting bat and bird species.
- Log/brush piles and/or hibernacula are created using logs or other woody material. These enhancements provide valuable foraging and sheltering opportunities for a range of species, including amphibians, small mammals, reptiles, and invertebrates. The provision of deadwood habitat (e.g. log piles, reclaimed felled trees) to provide suitable habitat for saproxylic invertebrates.

4.5 Designated Sites - Specific Measures

Statutory Designated Sites

- 4.5.1 One statutory designated site of national importance is located within 2 km of the Site.
- 4.5.2 The Site also falls within an IRZ for Dearne Valley Wetlands SSSI, and Eastern Peak District SSSI. However, the proposed development does not fall within development categories described in paragraph 3.1.3 as a potential risk and therefore does not require the Local Planning Authority (LPA) to consult Natural England. Due to the distance between the Site and the designated sites of national importance (SSSI), it is considered unlikely that the proposals will directly impact upon these designations.

Residual Effects

- 4.5.3 There will be no adverse residual impacts on the above statutory sites resulting from the development proposal.

Non-Statutory Designated Sites, Ancient Woodland and HPI

- 4.5.4 Six non-statutory designated sites are located within 2 km of the Site, with Sowell Pond and Westwood Lane Meadow (LWS) located 150 m northwest of the Site.
- 4.5.5 West Wood Ancient Woodland and deciduous woodland HPI are located within 250 m of the Site.
- 4.5.6 Due to the small-scale nature of the works and the construction area being restricted to within the Site boundary, it is not anticipated that the proposed development will impact the LWS, Ancient Woodland or HPI. Additionally, the deciduous woodland HPI is separated from the Site by a tall fence forming a boundary feature.

Mitigation, Compensation and Enhancement Measures

- 4.5.7 Measures to minimise indirect disturbance (such as pollution) to non-statutory designated sites, Ancient Woodland and HPI will be covered within the CEMP (as mentioned above), which will ensure works are undertaken in accordance with good practice and appropriate anti-pollution measures.

Residual Effects

- 4.5.8 It is anticipated that with the implementation of protection measures within the CEMP there will be no adverse residual impacts on non-statutory designated sites, Ancient Woodland and HPI within the zone of influence of the Site.

4.6 Habitats - Specific Measures

- 4.6.1 The Site contains modified grassland, tree and shrub habitats that offer suitable habitat for protected and notable species and are of value to biodiversity at the Site level.
- 4.6.2 The installation of the Louvre structure will require the loss of a small amount of modified grassland, and the loss of over half of the ornamental pond.
- 4.6.3 Sections of modified grassland and introduced shrub will be enhanced to other neutral grassland and a patch of introduced shrub will be planted where the ornamental pond is to be backfilled.

Mitigation, Compensation and Enhancement Measures

- 4.6.4 Habitat enhancement and creation is proposed, which will compensate for the habitat losses arising during construction. These measures also act as mitigation for potential operational effects to habitats and species by providing buffering and screening between the proposed development and off-Site habitats. The following measures would be implemented to help mitigate these potential adverse effects:
- To retain as many existing habitats as possible.
 - Where possible, create wildflower grassland and scrub to connect the existing habitats across site (i.e. shrub habitat).
 - To use the proposed Enhancement Areas to create ecologically valuable habitats.
- 4.6.5 The production of a Habitat Management and Monitoring Management (HMMP) is recommended to ensure the On-Site habitats deliver the habitat scores listed within the final SSM, to be agreed with the LPA, which will also serve to support protected and notable species. This includes management of post-development habitats to the condition required to deliver the BNG score specified in accordance with the condition assessment methodology.

- 4.6.6 A CEMP will be prepared to detail how the habitats within and surrounding the Site should be protected during the construction phase. This will include measures to protect the habitats within the Site.

Residual Effects

- 4.6.7 By implementing the above protection measures and favourable management, the retained shrubs and grassland can be maintained throughout the construction phase and there will be no residual negative effects. It is likely that with the planting of species-rich grassland, the proposed scheme will have a positive impact upon the site.

4.7 Protected and Notable Species - Specific Measures

Amphibians

- 4.7.1 There is a dry pond within the Site with the potential to be suitable for amphibians if refilled with water, and three ponds within 500 m of the Site boundary. Additionally, there are multiple records of GCN and common amphibians including some records within 250 of the Site, the Site is within an Orange GCN DLL Risk Zone, and the Site contains some suitable terrestrial habitat for GCN common amphibians. It is therefore possible that common amphibians and GCN will be encountered within the Site.
- 4.7.2 The works would reduce the extent of habitats available to amphibians resulting in a slight negative impact on amphibian populations given the low potential of the habitats present. Further direct impacts on amphibians may be encountered during the construction phase if they are present within the Site, particularly if works are undertaken during the active season and excavations are left open overnight or amphibian shelter in stored material as these could result in trapped or injured animals.

Mitigation, Compensation and Enhancement Measures

- 4.7.3 An initial enquiry for acceptance into the DLL scheme within South Yorkshire will be submitted to Natural England which can be used to support the planning application.
- 4.7.4 Once planning has been granted for the development a DLL Application Form including a Reasoned Statement will be submitted to Natural England for approval. Once granted the DLL will cover all potential disturbing works relating to GCN at the site.
- 4.7.5 All works should be undertaken in accordance with amphibian Best Practice Measures (BPM):
- All Site personnel should be aware of amphibians (including GCN) when they are working on the site. This is particularly important when trenches are backfilled as amphibians are more likely to shelter within these areas.

- Where possible, all vehicles will be parked on areas of hardstanding, bare ground, or short vegetation.
- Vegetation clearance should proceed carefully and with consideration for the possible presence of amphibians. It should proceed in one direction, with frequent rest intervals, allowing any amphibians to easily escape into adjacent areas of habitat.
- The working and storage areas should be kept clear of debris/rubble/cut vegetation. Stored materials should be kept off the ground in stillages or on pallets so as to prevent amphibians from seeking shelter or protection beneath/within them.
- Where materials need to be delivered to the site for immediate use and/or temporary storage directly on the ground, care should be taken not to cause unnecessary or inadvertent damage or disturbance to neighbouring terrestrial habitat.
- All trenches or open excavations should be back filled and covered at the end of the working day to prevent amphibians from falling into the trench and taking refuge overnight. Open excavations should have soil 'ramps' or egress boards to allow a means of escape, should any animals fall in.

Residual Effects

- 4.7.6 Providing the measures set out above are adhered to, and GCN are protected during construction though the implementation of a DLL, it is not expected to be any negative residual effects on GCN, with the new planting enhancements even providing a slight positive residual effect through the increase in suitable terrestrial habitat.

Bats

- 4.7.7 Bats have the potential to utilise the Site for foraging and commuting purposes due to the Site having some direct connectivity to other suitable habitat in the wider landscape, such as woodland.

Mitigation, Compensation and Enhancement Measures

- 4.7.8 To maintain the current low lighting levels at night-time, if any lighting is to be used at the Site, either during the construction or operational phase a sensitive lighting scheme should be designed by a lighting engineer in close consultation with an ecologist and implemented within the new development. Any light spill should be directed away from the boundaries of the Site so that suitable habitats for bats are not impacted. In accordance with the 'Bats and artificial lighting in the UK; Bats and the built environment series, Guidance Note 08/23' by the Bat Conservation Trust and Institution of Lighting Professionals (2023), the 'Dark Buffer' i.e., 5 m buffer around the perimeters of the Site, should have light levels of 0 lux.

Residual effects

- 4.7.9 There is potential for a small negative residual impact on foraging and commuting bat, although this impact is not anticipated to be significant due to the abundance of more suitable habitat in the wider landscape.
- 4.7.10 With habitat creation and enhancement measures set out in Section 4.4 and provided the CEMP and HMMP are adhered to, it is anticipated that residual effects for foraging and commuting bats can be reduced to non-significant levels, with the abundance of new planting likely to result in a slight positive residual impact for bat species which use such habitats.

Birds

Breeding birds

- 4.7.11 The Site is likely to be used by common breeding bird species, both for nesting and foraging, with the introduced shrubs and grassland habitats being of greatest value.
- 4.7.12 The scheme has potential to give rise to minor disturbance during the construction phase although such activity would be temporary in nature and would be able to continue during the Sites operation without adverse impact. The enhancement of grassland will be a long-term benefit to foraging birds.

Mitigation, Compensation and Enhancement Measures

- 4.7.13 If vegetation clearance is needed it should be done outside of the nesting bird season (March to the August, inclusive). However, if this is not possible, the areas requiring vegetation removal should be checked for active nests by an ecologist. This should be done a maximum of 24 hours before vegetation removal work begins. If an active nest is discovered during the works, an exclusion zone around the nest will need to be established and maintained until a suitably qualified person has confirmed the birds have fledged or that the nesting attempt has concluded.
- 4.7.14 As previously mentioned, biodiversity protection buffers will be demarcated prior to the construction phase commencing in order to protect the retained shrubs from damage throughout construction and to minimise disruption to bird nesting on Site. All biodiversity protection buffer fencing will need erecting prior to any ground works. This will be outlined further within the CEMP.

Residual Effects

- 4.7.15 There is potential for a small negative residual impact on nesting birds, if they breed within the Site, although this impact is not anticipated to be significant due to the sub-optimal habitat.
- 4.7.16 With habitat creation and enhancement measures set out in Section 4.4, and provided the CEMP

is adhered to, it is anticipated that residual effects for breeding birds can be reduced to non-significant levels, with the abundance of new planting likely to result in a slight positive residual impact for foraging and nesting bird species which use such habitats.

Other Key and Notable Species

Hedgehog

4.7.17 Hedgehogs are a highly mobile and inquisitive species that have the potential to move on to the Site at any time. The Site was also deemed to offer suitable sheltering, commuting and foraging opportunities for hedgehog and other small mammals.

Mitigation, Compensation and Enhancement Measures

4.7.18 It is recommended that a scheme of BPMs for hedgehog and other small mammals be implemented to protect these species should they stray onto the Site. This should include the following:

- All excavations should be filled or covered overnight. If this is not possible, a large scaffold plank should be positioned at no more than a 45 degree angle, or one side of the excavation graded or partially graded to provide an escape ramp for any small mammal that may fall in. All excavations should be checked for animals prior to works resuming the following day.
- Existing log/ brush piles should be kept where possible. If they have to be moved this must be done by hand, so that animals can be found beforehand.
- It is recommended that any work undertaken at night follows a sensitive lighting plan to minimise unnecessary disturbance to any mammals that may be utilising the rail corridor during the works. This involves keeping light to a minimum throughout the works and ensuring that only the task area is lit and light spill onto vegetated and surrounding habitats is avoided where possible.
- Footfall and the storage of materials within the trackside habitat should be kept to a minimum, so as not to impact sheltering animals.
- If a hedgehog is discovered during the works at any time during active period (April to October inclusive), they should be allowed to move away on their own volition. In the event that hedgehogs are in immediate danger they can be moved carefully with clean gloved hands to a sheltered area (e.g., dense scrub).

Residual Effects

4.7.19 Providing the measures set out above are adhered to, there should not be any negative residual effects on hedgehogs. The new landscaping even provides a slight positive residual effect as it increases the range of foraging and sheltering habitat.

4.8 Cumulative Effects

- 4.8.1 Barnsley Council's Planning Portal was searched for other planning applications submitted during 2023 and 2024 within a 1 km radius of the Site.
- 4.8.2 The search identified that all planning applications are for small/ localised private developments, such as alterations to existing residential properties, including house extensions, and amendments of previous planning applications. Due to the small-scale nature of these planning applications, it is concluded that the planning applications are not relevant to this EclA or likely to result in cumulative effects. As such, no significant cumulative effects are predicted.

4.9 Summary of Biodiversity Net Gain Delivery

- 4.9.1 Based on the current post-development soft landscaping plan, the construction of the proposed developed will result in a net unit change of **0.0464 HU** and deliver a **+10.23% net gain in HU**.
- 4.9.2 The net gain is mainly due to the enhancement of low distinctiveness modified grassland to medium distinctiveness other neutral grassland. The results are detailed in Table 6.

Table 6. Summary of Biodiversity Net Gain Calculations

Habitat Type	Baseline Units	Post-development Units	Change in Units	% Change in Units
Habitat Units (HU)	0.4530	0.4993	+0.0464	+10.23%

- 4.9.3 If any further changes are made which may impact the current SSM calculation, then further works would be required to determine whether or not the adjusted proposals are still sufficient to achieve a net gain in relation to the proposed development.

Habitat Management and Monitoring Management (HMMP)

- 4.9.4 The production of a Biodiversity Gain Plan (BGP) and a Habitat Management and Monitoring Management (HMMP) will be required as part of discharging the planning conditions in relation to BNG. This will ensure the Site habitats deliver the habitat scores listed within this BNGA (or further iterations of this), to be agreed with the LPA, which will also serve to support protected and notable species. This includes management of post-development habitats to the condition required to deliver the BNG score specified in accordance with the condition assessment methodology.

BNG Principles

- 4.9.5 Appendix 6 details the BNG good practice principles (CIEEM, CIRIA, IEMA, 2019) which should be adhered to when undertaking BNG assessments in association with proposed developments. The actions within Appendix 6 should be taken into account throughout the design stage of the development.

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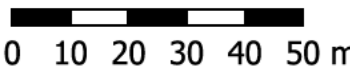
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Figure 1: Site Location Map

Key

-  Site Boundary
-  Ownership boundary
-  Enhancement Areas



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Figure 1
Site Location Plan

A	28.11.2024	EM	EB	XXX
Rev	Date	Drawn by	Checked by	Revision Comments
Site centred on:		SK 33783 99233		

Figure 2: HPI, Watercourses/Waterbodies and Ancient Woodland within 500 m Map



Key

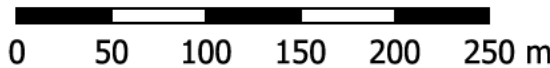
-  Site Boundary
-  250 m buffer
-  500 m buffer
-  Ancient Woodland

Water

-  Waterbodies
-  Watercourses

Habitats of Principle Importance (HPI)

-  Deciduous woodland
-  Traditional orchard



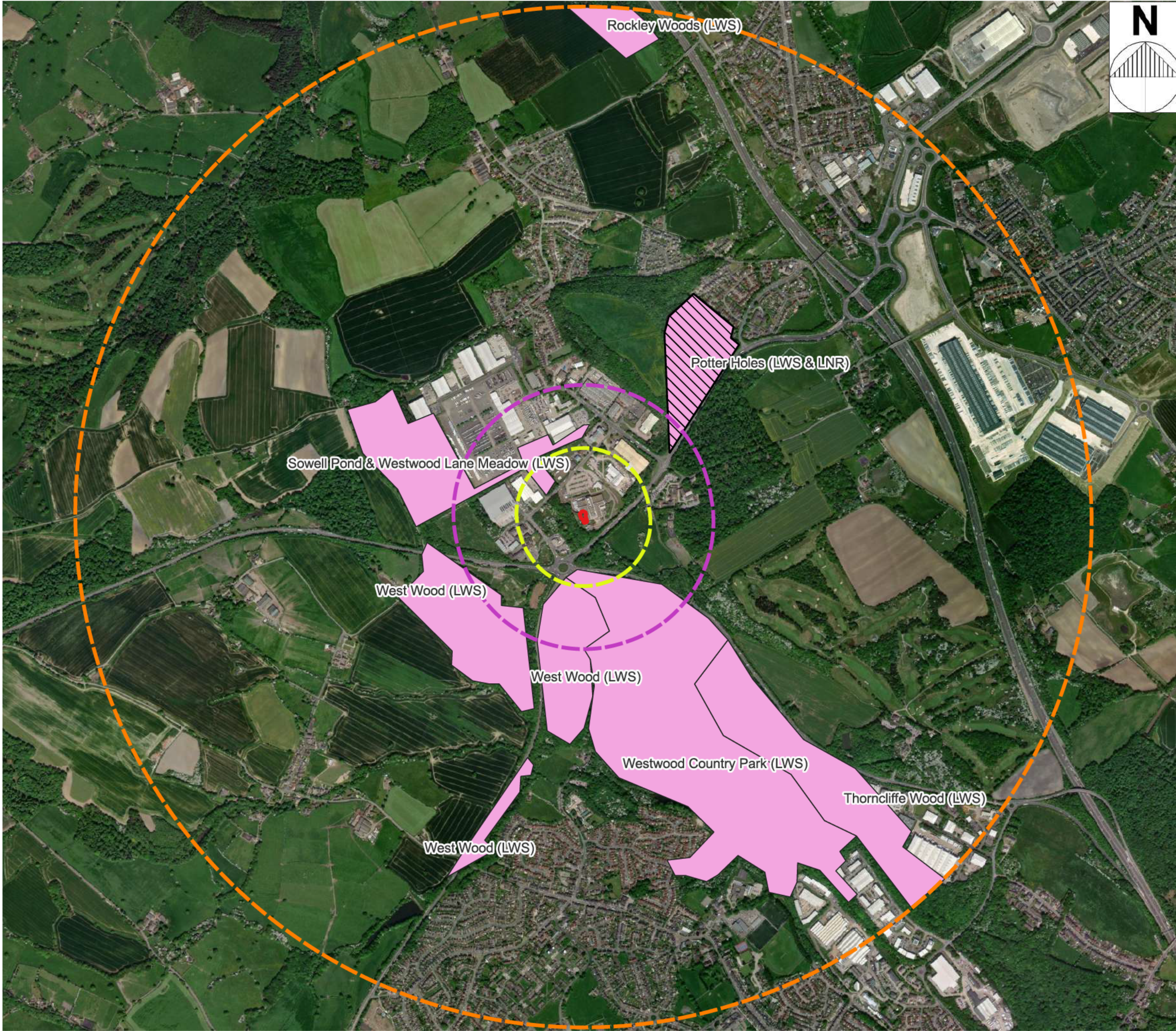
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Figure 2
HPI, Water & Ancient Woodland

A	06.11.2024	EM	EB
Rev	Date	Drawn by	Checked by
Site centred on:		SK 33783 99233	

Figure 3: Statutory and Non-Statutory Designated Sites Map



Key

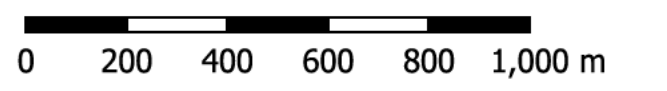
-  Site Boundary
-  2 km Bufferr
-  250 m Buffer
-  500 m Buffer

Statutory Designated Sites

-  Local Nature Reserve (LNR)

Non-Statutory Designated Sites

-  Local Wildlife Site (LWS)



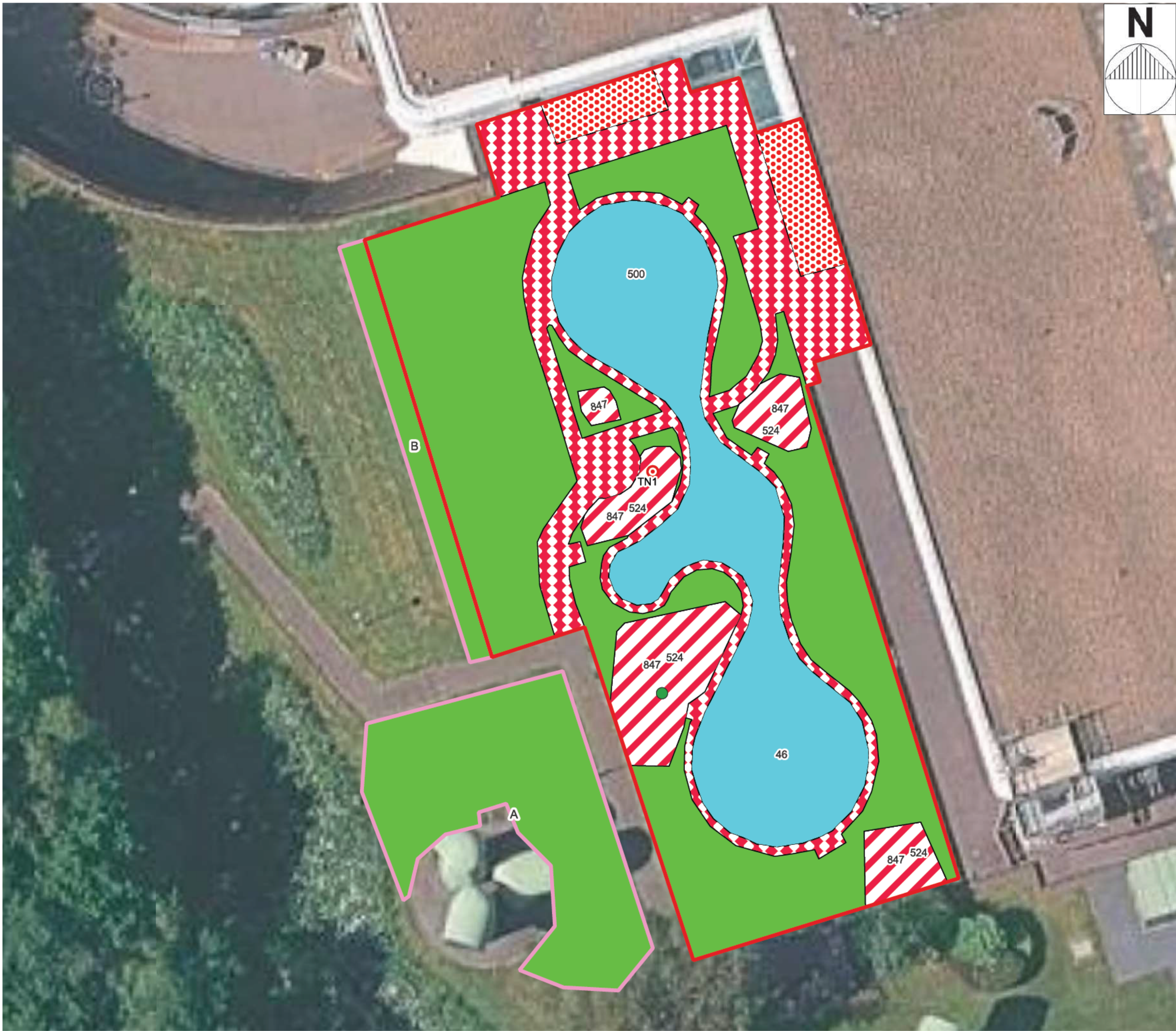
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Figure 3
Statutory and Non-Statutory Designated Sites

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Site centred on:		SK 33783 99233		

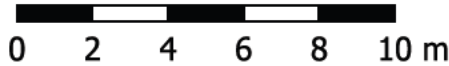
Figure 4: Baseline Habitat Map



Key

- Site Boundary
- Enhancement Areas
- Target Note
- Baseline Habitats
 - g4 - modified grassland
 - u1 - built-up areas and gardens
 - u1b5 - buildings
 - u1b6 - other developed land
 - r1g - other standing water
 - 33 - scattered tree

Secondary codes :
46 - Ornamental pond
847 - Introduced shrub



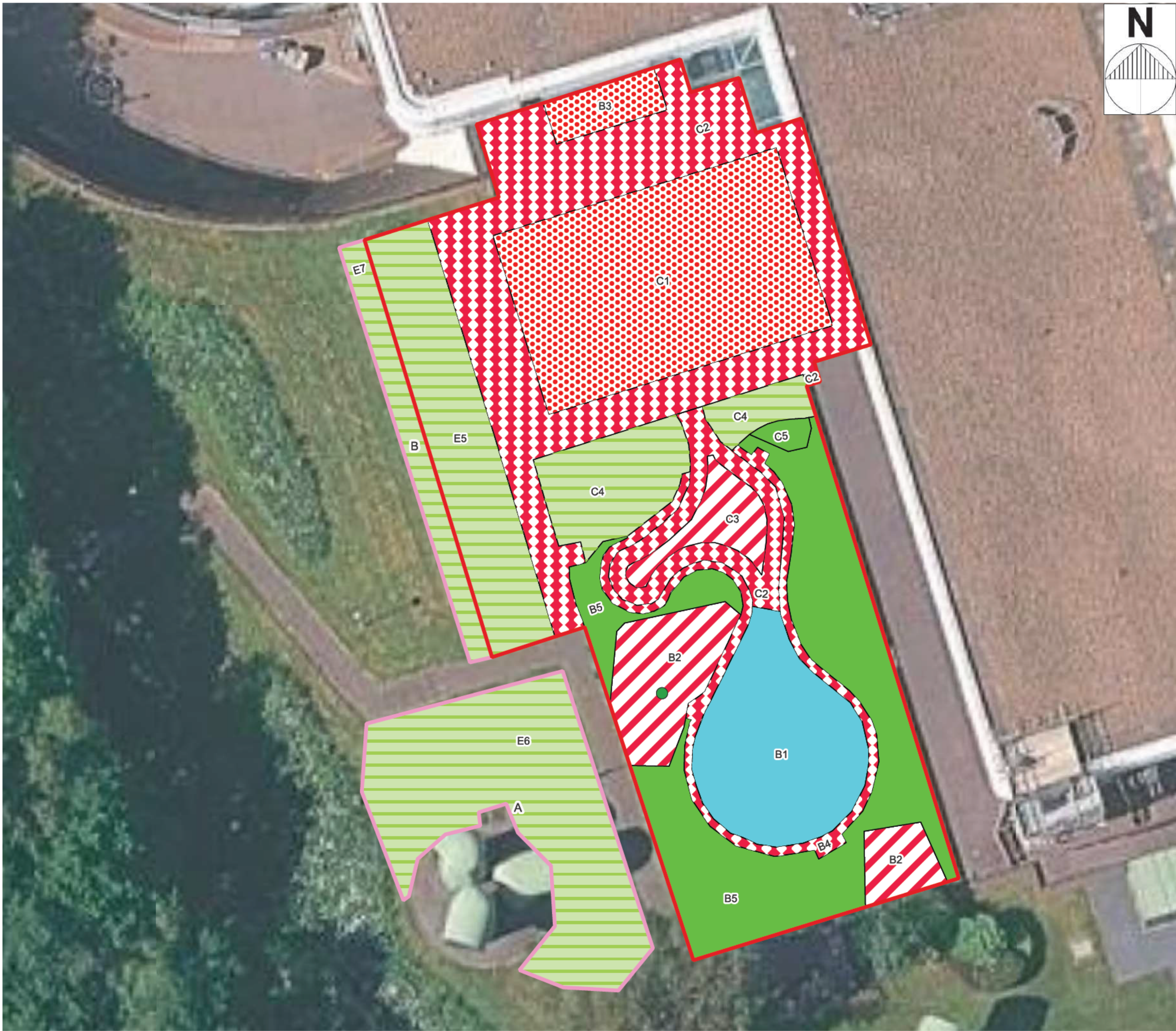
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Figure 4
Baseline Habitat Map

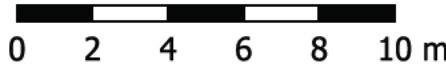
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Rev	Date	Drawn by	Checked by	Revision Comments
Site centred on:		SK 33783 99233		

Figure 5: Post-Development Habitat Map



Key

-  Site Boundary
-  Enhancement Areas
- Post-development habitats
 -  g3c - other neutral grassland
 -  g4 - modified grassland
 -  u1 - built-up areas and gardens
 -  u1b5 - buildings
 -  u1b6 - other developed land
 -  r1g - other standing water
 -  33 - scattered tree



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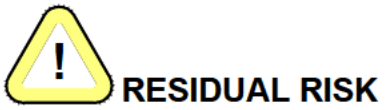
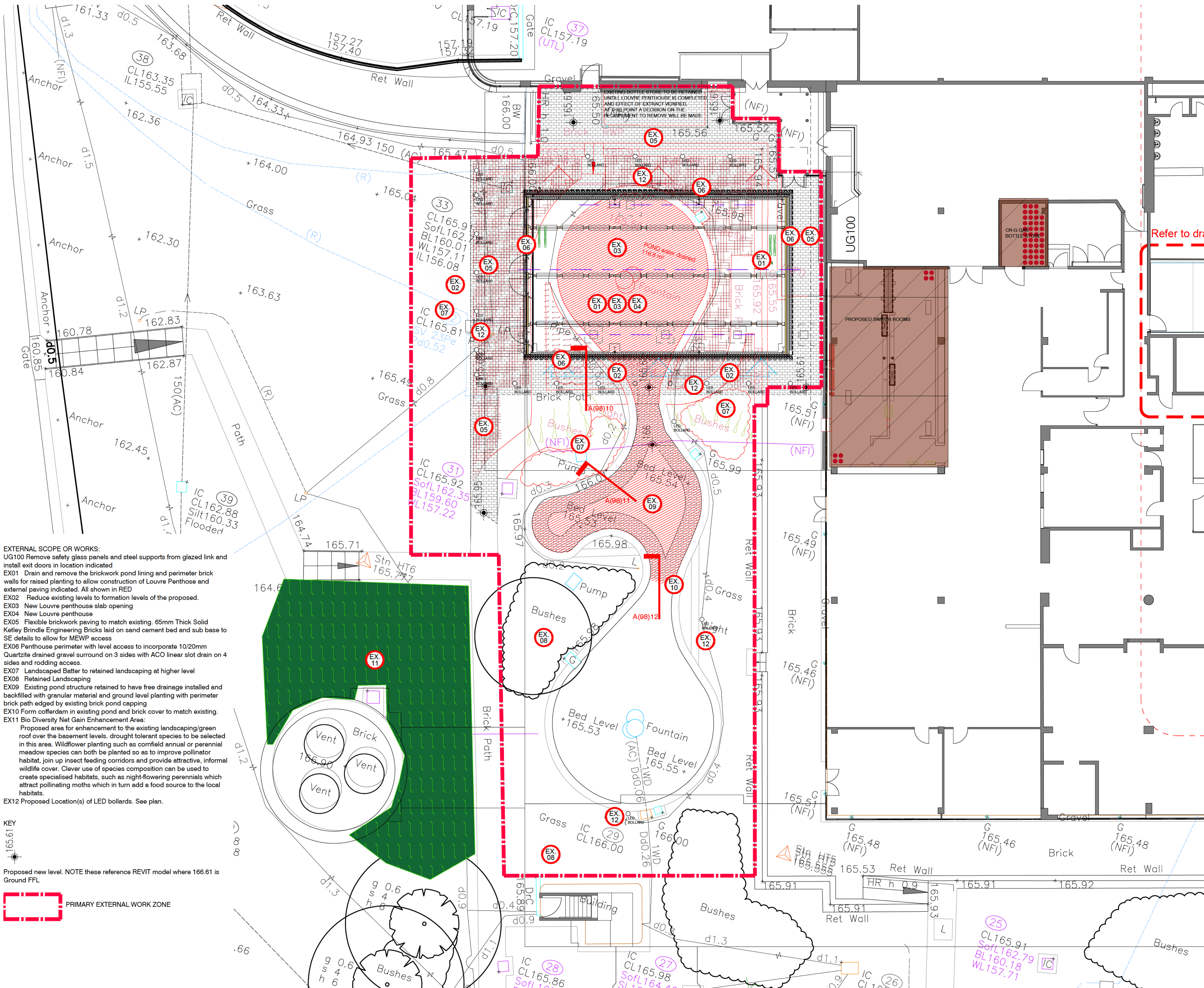
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Figure 5
Post-Development Habitat Map

A	02.12.2024	EM	EB	XXX
Rev	Date	Drawn by	Checked by	Revision Comments

Site centred on: SK 33783 99233

Appendix 1: Proposed Landscape Plan



RESIDUAL RISK

Wherever possible unnecessary risk is designed out of these proposals. Where residual risk remains this is assessed and identified on the relevant drawings with this symbol. Refer to the note and the relevant measures in the Health + Safety documentation

GES NOTES:
These are not exhaustive, refer to current Global Engineering Standards.
Generally:

Noise shall not exceed the local office GES maximum permissible NR requirements. Where noise from LEC equipment is likely to cause nuisance, consider using proprietary acoustic LECs with acoustic baffles and ventilation fans).

The acoustic performance of the air delivery systems and related components has become an increasingly key factor with regards to comfort in office space.

The designer shall ensure that the maximum permissible noise criteria as stated within the table below are adhered to when designing air conditioning systems.

The designer shall obtain sufficient information to assess room absorption characteristics when calculating room noise levels.

The designer shall give due consideration to maximum permissible noise levels externally when selecting external plant and be aware of any statutory approvals required regarding compliance with acoustic criteria.

Table D30000050-1 - Room Maximum NR Ratings	
Description	NR Rating
Cellular Office 35	35
Open Plan Office 38	38
Meeting Room 35	35
Conference Room 35	35
Training Room 35	35
Video Conferencing Room 30	30
Break Out Areas 38	38
Dining Space / Canteen 40	40
Trading Room 38	38
IT Equipment Rooms (Note 1) 45	45
Entrance Hall 40 - 45	40 - 45
Reception 40 - 45	40 - 45
Toilet Areas 40	40

Within IT Equipment rooms the target NR level is NR45. Where this NR level is not achievable and significantly higher noise levels are permitted within IT environments appropriate Health and Safety compliance measures shall be implemented including the high noise level warnings and appropriate protection measures in place.

The cooling plant design maximum cooling rate shall be achieved at the maximum ambient conditions to suit the location. Each unit shall be capable of running continuously at the lowest step of cooling capacity without any adverse effect.

Dependent on location of the facility, the opportunity of free cooling shall be maximised.

The design, construction, materials and finishes of all equipment shall be suitable for the location, climatic conditions and operating conditions to which the installation will be exposed. The designer shall undertake a risk assessment of the local environmental conditions and apply appropriate protective upgrades to plant and equipment. For example, buildings with external plant exposed to sea air conditions shall be enhanced to a marine specification.

Rotating and reciprocating components shall be dynamically balanced. Unless otherwise indicated each unit shall be provided as a fully packaged, factory assembled and tested unit, constructed on a robust frame and casing. Where necessary include for the dismantling and rebuilding of the equipment by the manufacturer in position on site.

The frame supports and casing of the units shall be constructed of material which is either corrosion resistant or made proof against corrosion after manufacture.

The chiller installation shall comply with the manufacturer's recommendations regarding installation (including clearances), operation, and maintenance.

Major components shall be readily accessible for safe maintenance and arranged to facilitate removal without disturbing other system components. Plant shall be arranged to ensure tube removal or maintenance is unobstructed. Units shall be fully accessible for thorough cleaning.

The location of air cooled units relative to the building shall not impede air flow through the unit. Where possible unit coils shall be protected from direct sunlight.

Airflow through the unit(s) shall not be restricted by associated water distribution pipework or other services and plant. Airflow through the unit(s) shall be in accordance with manufacturer's recommendations.

Unit(s) shall perform within the acoustic requirements as indicated. The acoustic performance shall be achieved by either selection of equipment to ensure that it conforms at a noise level below that specified, or by the provision of an acoustic protection package to ensure that the acoustic requirements are achieved.

The unit(s) shall be capable of meeting the required duty without exceeding the specified noise level requirements as stated.

Pipework and equipment carrying refrigerant shall be insulated. Insulation shall be manufactured without the use of CFCs, HCFCs or HFCs, be formaldehyde free and be resistant to mould and mildew.

All insulation installed outdoors shall wherever practical be mechanically protected or where this is not practical, apply two coats of weather resistant coatings.

Metal parts of coolers shall be bonded to earth.

Lighting protection shall be provided for external unit(s).

T2 UPDATED SCOPE OF WORKS, PROPOSED BOLLARD LOCATIONS AND BNG SPECIFICATION FOR THE PROPOSED PLANTING. 04.11.2024

T1 ISSUED FOR CLIENT APPROVAL. 28.08.2024

P2 ACOUSTIC NOTES ADDED. REVISION TO LANDSCAPE FOLLOWING CLIENT INPUTS. SCOPING NOTES ADDED. 05.06.2024

P1 PRELIMINARY DRAWING ISSUE 1 by CJC 23.04.2024

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Revision

AXIS architecture

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SYGDC

TANKERSLEY

Louvre Penthouse B
Proposed External Works Layout

A1 Scale A3 Scale Date Drawn By RIBA 1:100 1:200 26.08.2024 MJW

Project Number Drawing Number Revision 27708 A(98)03 T2

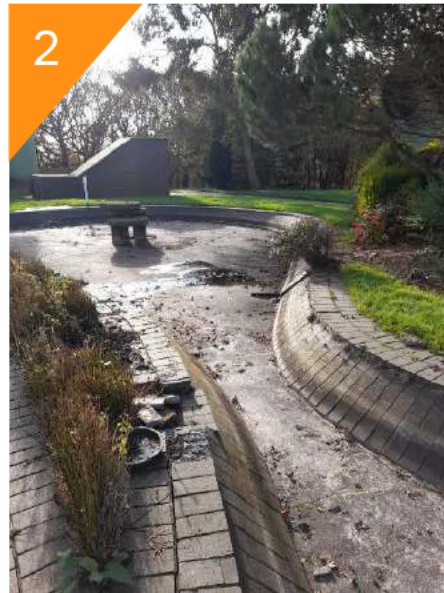
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DO NOT SCALE for manufacture. Verify all dimensions prior to construction

Appendix 2. Target Notes

A2.1 1, Target Notes

Target Note	Grid Reference	Description	Photograph reference
TN1	SK 33779 99238	Pile of rubble.	Photograph 18: Appendix 3

Appendix 3. Site Photographs



Photograph 1-3: Ornamental pond

Photograph 4-5: Modified grassland

Photograph 6: Rhododendron within the sections of introduced shrub

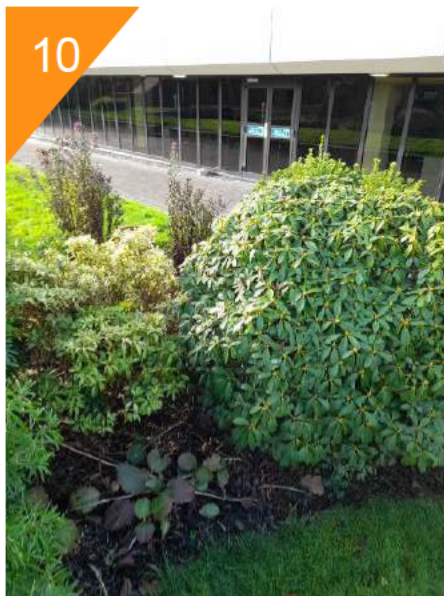


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Site Photographs

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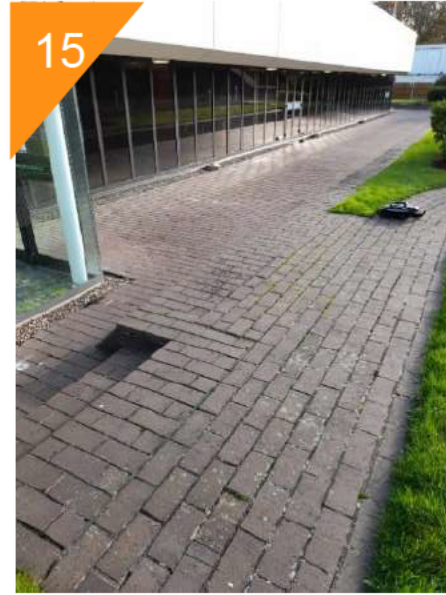
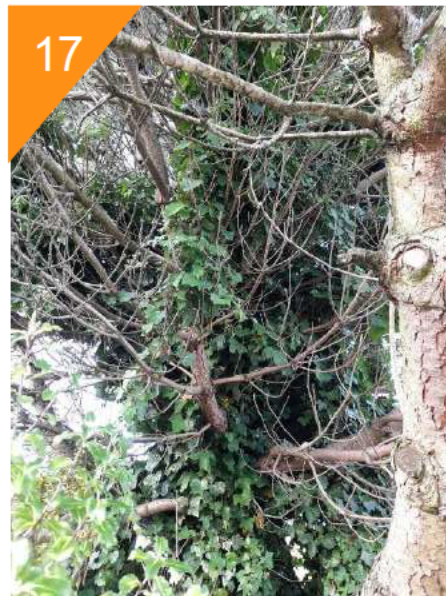


Photograph 7-11: Introduced shrub patches

Photograph 12: HSBC building

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Site Photographs



Photograph 13-14: Glass walkway – HSBC building

Photograph 15: Brick pathway

Photograph 16-17 : Scots Pine tree within a patch of introduced shrub

Photograph 18 : Pile of rubble TN1

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Site Photographs

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Photograph 19: Deciduous Woodland HPI
and fence separating it from the Site

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Site Photographs

Ecus Ltd.

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Appendix 4. BNG Small Sites Metric

This document will be provided separately as an Excel Spreadsheet

Appendix 5: Relevant Legislation

A.1.1 This section briefly summarises the relevant legislation pertaining to the relevant designated sites, habitats and species. The full legislation is detailed below. Please note that the following text does not constitute legal advice.

Ecological feature	Summary of relevant legislation
Statutory Designated sites	Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) were designated under the EU Birds Directive and Habitats Directive, respectively. Together, SPAs and SACs make up a series of sites collectively known as Natura 2000, or European, sites. Sites of Special Scientific Interest (SSSI) are notified under the Wildlife and Countryside Act (WCA) 1981 (as amended). Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way (CROW) Act 2000 (in England and Wales). See below for further legislative details and Appendix B for specific site information.
Non-statutory Designated sites	Local Wildlife Sites (LWS) do not receive any specific legal protection.
Habitats of Principal Importance	The list of Habitats of Principal Importance (HPIs) was prepared in response to the Natural Environment and Rural Communities (NERC) Act 2006. Under the NERC Act, the Secretary of State must take such steps as appear to be reasonably practicable to further the conservation these habitats or promote the taking by others (e.g. LPAs) of such steps.
Bats	Bats and their roosts are legally protected under the Habitats Regulations (Conservation of Habitats and Species Regulations, 2017 (as amended) making them a European Protected Species (EPS)) and the Wildlife and Countryside Act, 1981 (as amended). Some species of bat (e.g. the brown long-eared, noctule and soprano pipistrelle) are also Species of Principal Importance (SPI) included on a list that was prepared in response to the Natural Environment and Rural Communities (NERC) Act.
Great Crested Newt	Great crested newts and their habitat are legally protected under the Conservation of Habitats and Species Regulations (the 'Habitats Regulations') 2017 (as amended) and the Wildlife and Countryside Act, 1981 (as amended) (WCA). Great crested newts are classified as Species of Principal Importance (SPI) under the NERC Act.
Badger	Badgers and their places of shelter (setts) are protected under specific legislation known as the Protection of Badgers Act 1992. This prohibits (among other things) the killing or injury of badgers, the damage or destruction of setts and disturbance of badgers occupying setts.
Birds	All nesting birds are legally protected from killing and injury with their active nests and eggs being protected from damage and destruction under the WCA. A selection of bird species (including the dunnoek, song thrush and starling among others) are also SPI under the NERC Act. Some bird species are on the 'Red List and Amber List' of species of high and medium conservation concern respectively. This does not confer any additional legal protection or status but should be taken into consideration. Bird species listed on Schedule 1 of the WCA are subject to additional protection, which prohibits their disturbance whilst breeding, and would include activities near to a nest site. Wintering birds are not protected by legislation in this context (they are only protected during the breeding season from disturbance).

Ecological feature	Summary of relevant legislation
Reptiles	Reptiles are legally protected from intentional killing and injury under the under the WCA; reptiles are also classified as SPIs.
Non-native Invasive Plant Species	Cotoneaster was identified on the Site and is listed on Schedule 9 of the Wildlife and Countryside Act, 1981 (as amended). It is illegal to plant or other cause to grow in the wild any plant included on Schedule 9 of the WCA. Note that the Department for Environment Food and Rural Affairs (DEFRA) do not consider planting of Schedule 9 species in private gardens, estates and amenity planting as 'planting in the wild' so long as reasonable measures are taken to confine them to the cultivated area (i.e. to prevent spread into the wild).

Conservation of Habitats and Species Regulations 2017 (as amended)

- A.1.2 The conservation of Habitats and Species Regulations transpose the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora ("The Habitats Directive") into law.
- A.1.3 The 2017 Regulations consolidate the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The regulations provide for:
- designation and protection of European Sites (Special Protection Areas (SPA) and Special Areas of Conservation (SAC)) including the need for 'Appropriate Assessment' of plans and proposals;
 - protection of European protected species.
 - adaptation of planning and other controls for the protection of European Sites; and
 - make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2.
- A.1.4 Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) were designated under the EU Birds Directive and Habitats Directive, respectively. Together, SPAs and SACs make up a series of sites collectively known as Natura 2000, or European, sites. If plans or projects (not directly related to site management) are proposed that could have an effect on the interest features of a Natura 2000 site (even if the proposed works are outside the boundary of the designated area), the relevant competent authority (in consultation with Natural England) has a duty to consider whether the site could be affected. If effects could occur, an appropriate assessment is required to determine whether significant adverse effects on the qualifying interest of the site could occur, either alone or in combination with other plans or projects. This enables avoidance or mitigation to be developed to ensure potential adverse impacts are no longer significant. If negative impacts cannot be avoided, or if uncertainty remains, consent for works will only be granted if there are no alternative solutions, there are imperative reasons of over-riding public interest for the works and compensatory measures have been secured. As a matter of policy, Ramsar sites (wetland sites of international importance designated under the Ramsar Convention 1971) are protected as European sites in the same way.
- A.1.5 No steps that will impact upon a European protected species or its habitat can be undertaken unless authorised by a European Protected Species licence issued by Natural England. Such a licence is granted until after planning consent has been granted once Natural England are satisfied that adequate measures are to be put in place to mitigate for the impact of the development.

Wildlife and Countryside Act 1981 (as amended)

- A.1.6 The Act implements the Convention of European Wildlife and Natural Habitats (The Bern Convention) and the Directive 2009/147/EC 'The Birds Directive'.
- A.1.7 The 1981 Act has been amended by the Countryside and Rights of Way (CROW) Act 2000.
- A.1.8 Schedules 1 (birds) and 5 (animals) of the Act identify species of bird and other animal in relation to which the Act makes killing, injury, taking and disturbance an offence while Schedule 8 to the Act lists species of plant in relation to which the Act makes it an offence to intentionally pick, uproot or destroy.
- A.1.9 Section 14(2) of the Act makes it an offence to cause any species of animal or plant listed in Schedule 9 of the Act to grow in the wild.
- A.1.10 Sites of Special Scientific Interest (SSSI) are notified under the Wildlife and Countryside Act (WCA) 1981 (as amended). Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way (CROW) Act 2000 (in England and Wales). In essence, SSSIs are protected through the approach to land use and management. Certain activities are prohibited within a SSSI (generally those likely to damage the special interest) or require consent from the relevant statutory body (in this case Natural England). Each SSSI has a list of 'operations requiring consent'; if any of these activities are proposed, a landowner or site manager must first seek permission from Natural England in writing prior to undertaking the activity. Works can be excluded from the consenting process if they are required in an emergency (although Natural England must be notified as soon as possible) or if they have been approved through the planning application process, or by other statutory bodies, where Natural England have already been consulted.

The Natural Environmental and Rural Communities Act 2006 ('NERC')

- A.1.11 The NERC Act sets a duty on public bodies (including Local Authorities) to have due regard for habitats and Species of Principal Importance for biodiversity in England when carrying out their duties.
- A.1.12 Section 41 (S.41) the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list is used by decision-makers, such as Local Authorities, in implementing their protection duties under this Act when carrying out their functions.
- A.1.13 The S.41 list includes 56 habitats and almost 1000 Species of Principal Importance in England. Since the UN Convention on Biological Diversity (CBD) in 2010 the UK identify these habitats and species as conservation priorities under the UK Post-2010 Biodiversity Framework, (they were formerly identified as UK BAP habitats and species).

The Protection of Badgers Act, 1992

- A.1.14 Badgers are protected under the Protection of Badgers Act 1992. This makes it an offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. A licence can be granted by Natural England to permit works that would otherwise result in an offence (e.g. to allow sett closure where activities close by may otherwise result in disturbance or damage to the sett).

Wild Mammals (Protection) Act, 1996

- A.1.15 Under the Wild Mammals (Protection) Act 1996 it is an offence to cause unnecessary suffering to wild mammals, including crushing and asphyxiating. This Act is primarily concerned with animal welfare and aims to prevent cruelty. As a result, offences include those actions with the intent to inflict unnecessary

suffering. A wild mammal includes any mammal which is not domestic or captive. Red foxes, wild deer and other mammals such as rabbits are therefore covered by the Act.

Invasive Non-native Species

- A.1.16 Schedule 9, Section 14 of the Wildlife and Countryside Act (1981, as amended) prohibits the introduction into the wild of any species that is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state, or any species of the 69 plants listed on Schedule 9. Schedule 2 of The Invasive Alien Species (Enforcement and Permitting) Order 2019 aims to prevent and manage the introduction and spread of invasive alien species.

Appendix 6: BNG Best Practice Principles

Table A1.1 BNG Best Practice Principles

Principle	Description
1. Apply the mitigation hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
2. Avoid losing biodiversity that cannot be offset by gains elsewhere	Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain.
3. Be inclusive and equitable	Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.
4. Address risks	Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.
5. Make a measurable Net Gain contribution	Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.
6. Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when: • Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses; • Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation; • Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels; • Enhancing existing or creating new habitat; Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.
7. Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).
8. Create a Net Gain legacy	Ensure Net Gain generates long-term benefits by: • Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity; • Planning for adaptive management and securing dedicated funding for long-term management; • Designing Net Gain for biodiversity to be resilient to external factors, especially climate change; • Mitigating risks from other land uses; • Avoiding displacing harmful activities from one location to another; Supporting local-level management of Net Gain activities.
9. Optimise sustainability	Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.
10. Be transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

Appendix 7: BNG Legislation and Policy

A summary of BNG related legislation and policy is provided below. Full details are available at legislation.gov.uk.

National Legislation

UK Government's 25 Year Environment Plan

The UK Government's 25 Year Environment Plan (DEFRA, 2018) states a desire to '*embed a 'net environmental gain' principle for development to deliver environmental improvements locally and nationally*' and plans to consult on making Biodiversity Net Gain a mandatory requirement.

On 14th March 2019, Her Majesty's Treasury confirmed that following consultation, the government will use the forthcoming Environment Bill to mandate BNG for development in England, ensuring that the delivery of much-needed infrastructure and housing is not at the expense of vital biodiversity.

Biodiversity 2020: A strategy for England's wildlife and Ecosystem Services

Biodiversity 2020: A strategy for England's wildlife and ecosystem services (DEFRA, 2011) is the national strategy for biodiversity. This sets out an ambition to halt the loss of biodiversity and see an increase in the area of priority habitats by 200,000 ha by 2020. Biodiversity 2020 sets in policy the objectives to improve our wildlife sites, make them bigger, develop more of them and join them up (summarised as 'Bigger, Better, More and Joined').

National Planning Policy Framework

The revised National Planning Policy Framework (NPPF) (MHCLG, 2019) refers to conserving and enhancing the natural environment. This requires Local Authorities in England to take measures to:

Conserve and enhance biodiversity;

Protect the habitats of these species from further decline;

Protect the species from the adverse effect of development; and

Refuse planning permission for development, if significant harm resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for.

Although not currently a legal obligation, the revised NPPF refers to biodiversity and environmental net gains in the following paragraphs:

Transport Infrastructure

- Paragraph 102. "*Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*

*d) the environmental impacts of traffic and transport infrastructure can be identified assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for **net environmental gains**.*"

Planning decisions

- Paragraph 118. "*Planning decisions and planning policy should a) encourage multiple benefits from both urban and rural land ... and taking opportunities to **achieve net environmental gains** -*

such as developments that would enable new habitat creation.”

- Paragraph 170. *“Planning policies and decisions should contribute to and enhance the natural and local environment by: ... d) minimising impacts on and **providing net gains** for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.”*
- Paragraph 174. *“To protect and enhance biodiversity and geodiversity plans should b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing **measurable net gains for biodiversity**.”*
- Paragraph 175. *“When determining planning applications, local planning authorities should apply the following principles: a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts) adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; ... and d) ... opportunities to incorporate biodiversity improvements in and around developments, especially where this can secure **measurable net gains for biodiversity**.”*

Natural Environment and Rural Communities Act

The Natural Environment and Rural Countryside (NERC) Act (HMSO, 2006), requires public bodies, including local authorities, ‘to have regard to the conservation of biodiversity in England when carrying out their normal functions’.

Section 40 (Duty to conserve and enhance biodiversity) sets out that:

Paragraph 1. *“A public authority which has any functions exercisable in relation to England must from time to time consider what action the authority can properly take, consistently with the proper exercise of its functions, to further the general biodiversity objective.”*; and that

Paragraph 3. *“Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat”.*

Section 41 (Biodiversity Lists and Action (England)), sets out that:

Paragraph 1. *“The Secretary of State must... publish a list of the living organisms and types of habitat ... of principal importance for the purpose of conserving or enhancing biodiversity”* based on consultation with Natural England; and that

Paragraph 3a. Every planning authority must *“a) take such steps... to further the conservation of the living organisms and types of habitat included in any list published under this section, or (b) promote the taking by others of such steps”.*

Environment Act

Schedule 7a of the Environment Act (HMSO, 2021) makes provision for grants of planning permission in England to be subject to a condition to secure that the biodiversity gain objective is met.

Schedule 7a Part 1 sets out that:

(1) The biodiversity gain objective is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the onsite habitat by at least the relevant percentage.

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- (2) *The biodiversity value attributable to the development is the total of—*
- (a) the post-development biodiversity value of the onsite habitat,*
 - (b) the biodiversity value, in relation to the development, of any registered offsite biodiversity gain allocated to the development, and*
 - (c) the biodiversity value of any biodiversity credits purchased for the development.*
- (3) *The relevant percentage is 10%.*

