Union Park Block 4, Union Park, Land at Bulls Bridge Industrial Estate, Hayes, UB3 4QQ

Ecological Assessment

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PROTECTED SPECIES

This report contains sensitive information relating to protected species. The information contained herein should not be disseminated without the prior consent of Ecology Solutions.

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1. Introduction

1.1. Site Background and Proposals

1.1.1. Ecology Solutions was commissioned by Ark UP4 Limited in October 2024 to undertake an Ecological Assessment of the site at Union Park, land at Bulls Bridge Industrial Estate, Hayes, UB3 4QQ.

1.1.2. Ecology Solutions has conducted ecological survey work of the wider Union Park site in 2018 and 2020. This work was previously commissioned by Bruceshaw on behalf of Ark Estates 2 Limited and related to the redevelopment of Union Park and the construction of three data centre blocks, entitled UP1, UP2 and UP3. These blocks are currently under construction.

1.1.3. A further data centre block (Union Park Block 4; UP4) is now proposed to the west of the wider Union Park site. This block will adjoin to the permitted UP3 block and will include an accompanying energy centre with associated landscaping and infrastructure.

1.2. Site Characteristics

1.2.1. The site is approximately 1.26ha in size and situated within the London Borough of Hillingdon. There is an existing building on site, which has a total area of circa 3,500sqm of floorspace and was formerly occupied by Addison Lee for the repair, maintenance, and replacement of private hire vehicles. This building and the associated hardstanding dominate the site. The building is expected to be demolished during consideration of the planning application. Small parcels of ephemeral habitat are located in the north and south of the site and a treeline is located in the southeast. Individual trees and ornamental shrub species are also present. Broadleaved woodland occupies a small area within the west of the site and extends southwards to the Grand Union Canal.

1.2.2. The Great Western Main Line railway borders the north of the site and the wider Union Park construction site the east. The wider landscape is predominantly industrial with residential land situated farther afield to the southwest.

1.3. Ecological Assessment

1.3.1. This document assesses the ecological interest of the site. The importance of the habitats within the site is evaluated with due consideration given to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)[1] .

1.3.2. Where necessary, mitigation measures are recommended so as to safeguard any significant existing ecological interest within the site and, where appropriate,

[1] CIEEM (2022). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.2 – Updated April 2022. Chartered Institute of Ecology and Environmental Management, Winchester.

potential enhancement measures are put forward and reference made to both national and local biodiversity priorities.

2. Survey Methodology

2.1. The methodology utilised for the survey work can be split into three areas, namely desk study, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desk Study

2.2.1. In order to compile background information on the site and the surrounding area, Ecology Solutions contacted the Greenspace Information for Greater London (GiGL) records centre for protected species records and recognised statutory and non-statutory designated sites.

2.2.2. Further information on designated sites from a wider search area was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)[2] database, which uses information held by Natural England and other organisations.

2.2.3. This information is reproduced at Appendix 1, and where appropriate on Plan ECO1.

2.3. Habitat Survey

2.3.1. The site was surveyed in October 2024 based on UK Habitat Classification (UKHab)[3] methodology as recommended by Natural England.

2.3.2. UKHab is a comprehensive system for mapping and recording habitats, designed to provide a simple and robust approach to survey and monitoring, and replaces the Phase 1 survey methods. UKHab comprises of a principal hierarchy ranging from level 1 (ecosystems) to level 5 (defined habitats including Annex 1 habitats) when classifying habitats. For this survey, all primary habitats were recorded to level 4 minimum. Secondary habitats are also used to provide further information on a main primary habitat where appropriate.

2.3.3. Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.

2.3.4. The relative abundance of plant species was assessed according to the DAFOR scale (D=Dominant, A=Abundant, F=Frequent, O=Occasional and R=Rare). The Braun-Blaque scale expresses an abundance score of presence (D=76-100%, A=51-75%, F=26-50%, O=6-25% and R=>1-5%).

2.3.5. It is important to note that all the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent at different seasons.

[2] https://www.magic.gov.uk
[3] UKHab Ltd (2023) *UK Habitat Classification Version 2.0* (at https://ukhab.org)

2.3.6. Despite the habitat survey being undertaken in October, outside the optimal survey period, given the expanse of developed land contained within the site and the limited vegetation present, it is considered that an accurate and robust assessment has been made of the site's botanical interest.

River Condition Assessment

2.3.7. The Grand Union canal flows parallel to the southern site boundary. It is located off-site and outside of the applicant's ownership.

2.3.8. The riparian zone (a 10-metre area extending from the bank top of the watercourse) does not cross into the red line boundary of the site. Nonetheless, for completeness, the section of the Grand Union Canal flowing adjacent to the site was subject to a RCA by an accredited Modular River Physical Survey (MoRPh) surveyor in October 2024.

2.3.9. The MoRPh survey was developed for Citizen Scientists to support the Catchment Based Approach and river stewardship for Catchment Partnerships and is now being more widely adopted for river assessment and monitoring. Data collected during the survey was inputted into the online Cartographer platform to generate a baseline condition for the watercourse.

2.3.10. Five 50m module surveys along the canal flowing adjacent to the site were conducted.

2.4. Faunal Survey

2.4.1. Obvious faunal activity recorded during the site survey, such as birds or mammals observed visually or by call, was recorded. Specific attention was paid to any potential use of the site by protected species, priority species or other notable species.

2.4.2. In addition to general observations of faunal activity, specific surveys were undertaken to assess habitat suitability bats and Badgers *Meles meles*.

Bats

2.4.3. A field survey was undertaken with regard to best practice guidelines issued by CIEEM (2023[4]), the Joint Nature Conservation Committee (2012[5]) and the Bat Conservation Trust (2023[6]).

2.4.4. The buildings within the site boundary were appraised for their potential to support roosting bats.

[4] Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management (CIEEM).
[5] Mitchell-Jones, A.J. & McLeish, A.P. (Eds.) (2012). *Bat Workers' Manual*. 4th edition. Joint Nature Conservation Committee, Peterborough.
[6] Collins, J. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. 4th Edition. The Bat Conservation Trust, London.

2.4.5. The probability of a building being used by bats as a summer roost site increases if it:

- is largely undisturbed;
- dates from pre-20th Century;
- has a large roof void with unobstructed flying spaces;
- has access points for bats (though not too draughty);
- has wooden cladding or hanging tiles; and / or
- is in a rural setting and close to woodland or water.

2.4.6. Conversely, the probability decreases if a building is of a modern or pre-fabricated design / construction, is in an urban setting, has small or cluttered roof voids, has few gaps at the eaves or is a heavily disturbed premises.

2.4.7. The main requirements for a winter / hibernation roost site are that it maintains a stable (cool) temperature and humidity. Sites commonly utilised by bats as winter roosts include cavities/holes in trees, underground sites and parts of buildings. Whilst different species may show a preference for one of these types of roost site, none are solely dependent on a single type.

2.4.8. External and internal building inspections involved a detailed search of all accessible architectural features for signs of bats such as:

- Bat droppings;
- Urine staining;
- Scratch marks;
- Staining around suitable crevices; and
- Feeding remains.

2.4.9. Windowpanes and other external surfaces were checked for droppings or other secondary evidence. External features, such as soffit boxes, roof tiles, hanging tiles, ridge areas and window casements were also observed. Any features that could potentially provide access into internal areas such as roof voids and cavity walls were noted.

2.4.10. Trees within and adjacent to the site were also assessed for their potential to support roosting bats. Features typically favoured by bats or evidence of past use by bats were searched for including:

- Obvious holes, e.g. rot holes and old woodpecker holes:
- Dark staining on the tree, below a hole;
- Tiny scratch marks around a hole from bat claws;
- Cavities, splits and/or loose bark from broken or fallen branches, lightning strikes etc; and
- Very dense covering of mature Ivy *Hedera helix* over the trunk.

2.4.11. The potential opportunities for both foraging and commuting bats were also considered in terms of the habitats present within and immediately adjacent to the site.

Badgers

2.4.12. The site and immediate vicinity were subject to specific surveys for Badgers in October 2024.

2.4.13. The surveys comprised two main elements: firstly, searching thoroughly for evidence of Badger setts. If any setts were encountered each sett entrance was noted and plotted, even if the entrance appeared disused. The following information was recorded where present:

i) The number and location of well used or very active entrances if present; these are clear of any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently.

ii) The number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance.

iii) The number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be, together with the remains of the spoil heap.

2.4.14. Secondly, any evidence of Badger activity such as well-worn paths, run-throughs, snagged hair, footprints, latrines and foraging signs was sought and if present recorded so as to build up a picture of the use of the site by Badgers.

3. Ecological Features

3.1. A UKHab survey was undertaken within the site and an RCA of the off-site Grand Union Canal by Ecology Solutions in October 2024. The following habitats were recorded:

- Developed Land; Sealed Surface;
- Industrial Building;
- Broadleaved Woodland;
- Ruderal or Ephemeral;
- Introduced Shrub;
- Tree;
- Line of Trees; and
- Canal (off-site).

3.2. The location of the above habitats is illustrated on Plan ECO2.

3.3. Developed Land; Sealed Surface (UKHab code u1b)

3.3.1. The site primarily includes hardstanding associated with the buildings, including an access road and carparking areas. Areas of car parking were being utilised for open storage space at the time of survey. Building materials and machinery were being stored here within the west of the site. Lighting is present throughout the area and Ragwort *Senecio jacobaea* was the only species recorded within.

3.4. Industrial Building (UKHab code 817)

3.4.1. Two buildings are present within the site. Building B1 is split into two sections: Buildings B1a and B1b. Building B1a (see Photograph 1) is a two-storey structure constructed from brick. It has a shallow pitched roof, formed of corrugated metal sheeting. The building is in good condition overall, with no damage to brickwork observed during the survey. Internally, the building is in regular use as offices.

3.4.2. Building B1b (see Photograph 2) is a three-storey industrial warehouse with two metal roller doors on the southern, western and northern aspects. The building has a shallow pitched roof of corrugated metal sheeting with skylights. Externally, the building is cladded in metal panelling with a corrugated metal skin along the bottom. The building is in good condition overall with no slipped or missing metal panels noted. Internally, the warehouse is operational, in regular use and well lit.

3.4.3. Building B1 is expected to be demolished during consideration of the planning application.

3.4.4. Building B2 (see Photograph 3) is located in the east of the site and is a prefabricated three-storey unit constructed from metal. The structure has a flat roof, in use as development offices.

3.5. Broadleaved Woodland (UKHab code w1g)

3.5.1. A small area of broadleaved woodland is present in the west of the site (see Photograph 4), extending southwards (and off-site) towards the Grand Union

Canal. The canopy is dominated by Sycamore *Acer pseudoplatanus*, with scattered Ash *Fraxinus excelsior*. The woodland understorey comprises primarily of Traveller's Joy *Clematis vitalba*, Hawthorn *Crataegus monogyna* and Dog Rose *Rosa canina*, with occasional occurrences of Yew *Taxus baccata* and Elder *Sambucus nigra.* Ground flora is scarce with large quantities of leaf litter with occasional Ivy and Ash saplings.

3.6. Ruderal or Ephemeral (UKHab code 81)

3.6.1. Three areas of ruderal / ephemeral habitat are present within the site (see Photograph 5). These areas appear to have previously constituted modified grassland but have since become disturbed and dilapidated. Now, the areas consist largely of bare ground used for the storage of materials.

3.6.2. Ephemeral EP1 is located to the south of the site and is dominated by Knotgrass *Polygonum aviculare*, with occasionally occurring Perennial Rye Grass *Lolium perenne,* Greater Plantain *Plantago major*, Dandelion *Taraxacum officinale* and Spiny Sowthistle *Sonchus asper.* Rarely occurring species include Canadian Fleabane *Conyza canadensis*, Willowherb *Epilobium* sp., Annual Meadow-grass *Poa annua,* Perforate St John's Wort *Hypericum perforatum* and Buddleia *Buddleja davidii* (categorised as an invasive species in London by the London Invasive Species Initiative (LISI)).

3.6.3. Ephemeral EP2 is situated in the north of the site, a large metal container was being stored in and adjacent to the area at the time of the survey. Species present include Scarlet Pimpernel *Anagallis arvensis*, Wood Dock *Rumex sanguineus*, Common Nettle *Urtica dioica*, Creeping Cinquefoil *Potentilla reptans*, Field Speedwell *Veronica persica*, Knot Grass, Fennel *Foeniculum vulgare*, Spurge *Euphorbia* sp., Prickly Sow-thistle *Sonchus asper*, Bristly Oxtongue *Picris echioides,* Ragwort, Hoary Plantain *Plantago media*, Canadian Fleabane, Traveller's Joy and Buddleia.

3.6.4. The northern boundary of the site comprises Ephemeral EP3. This area is a continuation of EP2 but exhibits a greater amount of bare ground, with grass and herb species occurring in lesser densities throughout the area.

3.7. Introduced Shrub (UKHab code 847)

3.7.1. Four small areas of ornamental shrub planting are present to the south of Building B1 (see Photograph 6). Species present include Box-leaved Honeysuckle *Lonicera pileata,* Portuguese Laurel *Prunus lusitanica,* Field Rose *Rosa arvensis*, Thistle *Cirsium sp.,* in addition to encroaching species including Canadian Fleabane, Spiny Sowthistle, Ivy and Buddleia.

3.8. Tree (UKHab code 200)

3.8.1. Two small Alder *Alnus glutinosa* trees are present to the southwest of Building B1, within the carparking area.

3.9. Line of Trees (UKHab code 33)

3.9.1. One line of trees is present to the southeast of Building B1 and west of Building B2 (see Photograph 7). The treeline separates the car parking area from a

pedestrian area around Building B2. The feature includes large Portuguese Laurel *Prunus lusitanica* specimens and Hornbeam *Carpinus betulus* with less frequent Alder. Trees are approximately 8m in height, and the feature overall, 2m wide. The understorey includes Box-leaved Honeysuckle, Bramble and Portuguese Laurel, with a sparse covering of Ivy.

3.10. Canal (UKHab code r1e) / off-site

3.10.1. The Grand Union Canal flows parallel to the southern site boundary (see Photograph 8) and is separated from the site via the broadleaved woodland detailed above, in addition to a metal fence. The off-site woodland is consistent with that contained on-site, but additional species are present including Elder, Hawthorn, Bramble, and Guelder Rose *Viburnum opulus*. The canal and surrounding environs are not under the applicant's control. The canal is additionally designated a Site of Importance for Nature Conservation (SINC), as is the adjacent off-site woodland located within the riparian zone.

3.10.2. The canal and its riparian zone are located off-site. Along the canal is a towpath, lined by thin strips of grassland, comprising a small portion of the riparian zone. Species present include Creeping Cinquefoil, Yarrow *Achillea millefolium*, Ivy, White Clover *Trifolium repens*, Cow Parsley *Anthriscus sylvestris* and Buddleia. Oak (*Quercus* sp.) trees are present along the tow path of the canal.

3.10.3. The main channel is located approximately 14m from the site boundary along almost its entire length. Boats were moored along the banks and travelling along the watercourse during the RCA. No aquatic or marginal vegetation is present due to the concrete sidings of the watercourse.

3.10.4. The River Condition Assessment yielded a preliminary condition score of -1.14, which falls within the Poor condition range.

3.11. Background Records

3.11.1. The data search returned a total of 637 records of plant species. Of these records, four pertain to Cornflower *Centaurea cyanus*, listed under Section 41 of the Natural Environment and Rural Communities Act (NERC) (2006) and within the UK Biodiversity Action Plan (UKBAP). The closest record of this species is located approximately 0.9km northeast of the site, observed in 2004. The most recent record dates from 2022 and is situated approximately 2km northwest of the site.

3.11.2. Fifty records relating to Dittander *Lepidium latifolium* were returned by the data search. This species is listed as a London Species of Conservation Concern. The closest record is located approximately 0.8km northeast of the site in 2004 and the most recent is situated approximately 1km northwest of the site, recorded in 2020.

3.11.3. A total of 446 records pertaining to invasive / non-native plant species were returned by the data search. Species include Tree-of-heaven *Ailanthus altissima*, Buddleia, Cotoneaster *Cotoneaster* sp., Japanese Knotweed *Fallopia japonica*, Shaggy Soldier *Galinsoga quadriradiata*, Giant Hogweed *Heracleum mantegazzianum*, Spanish Bluebell *Hyacinthoides hispanica*, Foxglove-tree *Paulownia tomentosa*, Green Alkanet *Pentaglottis sempervirens*, Cherry Laurel

Prunus laurocerasus, Turkey Oak *Quercus cerris*, Evergreen Oak *Quercus ilex*, False Acacia *Robinia pseudoacacia*, Franchet's Cotoneaster *Cotoneaster franchetii,* Montbretia *Crocosmia pottsii x aurea = C. x crocosmiiflora,* Goat's-rue *Galega officinalis*, Bluebell *Hyacinthoides non-scripta x hispanica = H. x massartiana,* Floating Pennywort *Hydrocotyle ranunculoides* and Snowberry *Symphoricarpos albus*.

3.11.4. The most recent records date from 2020 and refer to Tree-of-heaven, Cotoneaster, Foxglove-tree, Cherry Laurel, Turkey Oak, Evergreen Oak and False-acacia. The closest of these records is the False-acacia, recorded approximately 0.4km south of the site in 2020.

4. Wildlife use of the Site

4.1. General observations were made during the surveys of any faunal use of the site, with specific attention paid to the potential presence of protected, priority, or otherwise notable species. Specific surveys have been completed in regard to bats.

4.2. Bats

4.2.1. The buildings within the site are not suitable for roosting bats, on account of their structure and lack of Potential Roosting Features (PRFs). They are in good condition and regular use. The on-site trees additionally have no PRFs.

4.2.2. The Grand Union Canal and Great Western Railway are flanked by trees and the off-site woodland, providing a suitable commuting corridor for bats. Opportunities for bats on-site, however, are very limited, with these focused on the small area of woodland in the northwest of the site. No trees with PRFs were observed within the off-site section of woodland bordering the site during the survey.

Background Records

4.2.3. The data search returned 38 bat records. Species include Daubenton's Bat *Myotis daubentonii,* Leisler's Bat *Nyctalus leisleri,* Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus,* Noctule *Nyctalus noctula*, Pipistrelle Bat *Pipistrellus* sp. and Brown Long-eared Bat *Plecotus auritus*. The closest records pertain to Common Pipistrelle and Soprano Pipistrelle located 0.8km northeast of the site, in 2011. The most recent record is of coarse resolution and relates to a Pipistrelle species located within a 1km to 10km grid square in 2022, which may encompass the site. The most recent record with a precise location is of Common Pipistrelle and Soprano Pipistrelle located 3km south of the site in 2019.

4.3. Badgers

4.3.1. The site offers limited opportunities for Badgers. These are restricted to the on and off-site woodland which offers very limited foraging and sett-building opportunities. Dispersal of this species would be greatly impacted via the presence of the Grand Union Canal, Great Western Railway, and expanse of industrial land in the site's vicinity. No evidence of Badgers was recorded during the survey. It is considered that this species is absent from the site.

Background Records

4.3.2. Four records pertaining to Badger were returned by the data search. These records date from 1980 to 2015. The records are confidential, and as such their location is not provided.

4.4. Hedgehogs

4.4.1. The habitats on-site offer limited opportunities for Hedgehog *Erinaceus europaeus*. Foraging and hibernation opportunities are present within the on-site and off-site woodland. As per Badgers, the canal and surrounding industrial land

use may present a dispersal barrier to this species. No evidence of this species was noted during the survey. Nevertheless, its presence within the site cannot be discounted.

Background Records

4.4.2. Eighty-four records of Hedgehog were returned by the data search over the past 10 years. The closest record relates to a location approximately 0.6km northeast of site in 2016. The most recent record relates to a location 2.5km northeast of site in December 2020. Three of the records provided are coarse, located within either 1km or 10km grid squares within the search area, dating from 1987 to 2022.

4.5. Otter

4.5.1. No evidence of Otters was recorded along the Grand Union Canal during the surveys undertaken. Given the site's close proximity to the canal, the potential future presence of Otter along the southern site boundary cannot be ruled out. Metal fencing north of the woodland does provide a barrier to dispersal and as such, Otters are not expected to actively use (or be able to gain access to) the site.

Background Records

4.5.2. Three records of Otter were obtained during the data search. The closest record was recorded 2.9km south of the site in 2010. Two of the records obtained are coarse, located within a 20km grid square within the search area, in 2022.

4.6. Water Vole

4.6.1. No evidence of Water Voles was recorded along the Grand Union Canal during the surveys undertaken. Given the lack of suitable emergent vegetation and cover, along with disturbance from walkers and boats and the modified banks, the presence of Water Vole within this stretch of watercourse is considered unlikely.

Background Records

4.6.2. No records pertaining to Water Vole within the last 10 years were returned by the data search.

4.7. Other Mammals

4.7.1. Evidence of Fox *Vulpes vulpes* was noted in the off-site woodland, in the form of feathers from a predated Pigeon.

4.7.2. Due to the habitats present, it is considered that small common mammal species could be present within the site such as Brown Rat *Rattus norvegicus*. It is considered unlikely that any notable species would be present.

Background Records

4.7.3. Eight records pertaining to Chinese Muntjac were returned by the data search. The closest record is situated 1.1km south of the site boundary and dates from 2018. The most recent record is located 2.2km northeast of the site and dates from 2020.

4.8. Birds

4.8.1. During the site visit in October 2024, Feral Pigeon *Columba livia* were observed within Building B1b, potentially roosting / nesting within. Carrion Crow *Corvus corone*, Long-tailed Tit *Aegithalos caudatus* and Magpie *Pica pica* were observed off-site within the woodland and Common Moorhen *Gallinula chloropus* and Coot *Fulica atra* were recorded on the Grand Union Canal. Egyptian Goose *Alopochen aegyptiaca* and Black-headed Gull *Chroicocephalus ridibundus* were additionally recorded flying along the canal.

4.8.2. The woodland, treeline and individual trees provide the greatest value for birds utilising the site, but given their limited availability, the off-site woodland presents the greatest opportunities. It is considered that birds would not be reliant on the site for any reason.

Background Records

4.8.3. The data search returned a total of 2,965 records of birds. Of these, 572 records pertained to species protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). Records are attributed to Cetti's Warbler *Cettia cetti*, Peregrine *Falco peregrinus*, Red Kite *Milvus milvus*, Firecrest *Regulus ignicapillus*, Kingfisher *Alcedo atthis*, Merlin *Falco columbarius*, Wryneck *Jynx torquilla*, Black Redstart *Phoenicurus ochruros*, Green Sandpiper *Tringa ochropus*, Redwing *Turdus iliacus* and Fieldfare *Turdus pilaris*. The closest record pertains to Kingfisher located 0.3km south of the site, observed in 2009. The most recent record is of Red Kite in 2022. This record is confidential and as such, no location information is provided. The most recent record with a precise location is also of Red Kite, dating from 2021, located 2.5km south of the site.

4.8.4. Of the records returned, 118 relate to species listed under Annex 1 of the Birds Directive. These records refer to Little Egret *Egretta garzetta*, Short-eared Owl *Asio flammeus*, Barnacle Goose *Branta leucopsis* and Common Tern *Sterna Hirundo*. The closest of these records relates to Little Egret, located approximately 1.1km northeast of the site in 2019. The most recent record is also of Little Egret at a location 2.7km south of the site in 2021.

4.8.5. A total of 674 records pertain to species listed under Section 41 of the NERC Act (2006) and / or under the UKBAP. Species include Hawfinch *Coccothraustes coccothraustes*, Skylark *Alauda arvensis*, Ring Ouzel *Turdus torquatus*, Lesser Redpoll *Carduelis cabaret*, Tree Pipit *Anthus trivialis*, Cuckoo *Cuculus canorus*, Yellowhammer *Emberiza citrinella*, Reed Bunting *Emberiza schoeniclus*, Grasshopper Warbler *Locustrella naevia*, Spotted Flycatcher *Muscicapa striata*, Curlew *Numenius Arquata*, House Sparrow *Passer domesticus*, Wood Warbler *Phylloscopus sibilatrix* and Lapwing *Vanellus vanellus*. The closest of these records is attributed to House Sparrow, located 0.4km east of the site in 2005.

The most recent record also pertains to House Sparrow at a location 2.1km east of the site in 2022.

4.8.6. Of the records returned, 1262 relate to London Priority Species (LPS) or Local Species of Conservation Concern. These records pertain to Pochard *Aythya farina*, Dunnock *Prunella modularis*, Starling *Sturnus vulgaris*, Mistle Thrush *Turdus viscivorus*, Song Thrush *Turdus philomelos*, Tawny Owl *Strix aluco*, Woodcock *Scolopax rusticola*, Whinchat *Saxicola rubetra*, Yellow Wagtail *Motacilla flava*, Grey Wagtail *Motacilla cinerea*, Gadwall *Anas strepera*, Linnet *Carduelis cannabina*, Baltic Gull *Larus fuscus fuscus,* Lesser Black-backed Gull *Larus fuscus*, Lesser Whitethroat *Sylvia curruca* and Swift *Apus apus*. The closest record is attributed to Swift, located 0.7km southwest of the site in 2012. The most recent record relates to Starling in 2022 at a location 1.9km northwest of the site.

4.8.7. Records of two species listed on the Birds of Conservation Concern Red list were also returned. These records total 202 and relate to Greenfinch *Carduelis chloris* and Herring Gull *Larus argentatus*. The closest record relates to Greenfinch, located 1.1km south of the site in 2013, with the most recent record being attributed to Herring Gull in 2022, located 2.1km east of the site.

4.8.8. Finally, 265 records of the invasive /non-native Ring-necked Parakeet *Psittacula krameri* were returned by the data search. The closest record was observed 1.1km south of the site in 2013. The most recent record was noted 2.4km southwest of the site in 2019.

4.9. Reptiles

4.9.1. The habitats within the site are unsuitable for reptiles, and the area is isolated from any suitable off-site habitats. Reptiles are unlikely to be present within the site.

Background records

4.9.2. Sixty-nine records relating to reptiles were returned by the data search. The records pertain to Grass snake *Natrix helvectica*, Slow-worm *Angius fragilis* and Adder *Vipera berus*. The closest record relates to Grass snake located approximately 1km northeast of the site in 2005. The most recent record also relates to Grass snake, situated approximately 2.5km northwest of the site in 2020. Forty-three of the records provided are coarse, located within either 1km or 10km grid squares within the search area, dating from between April and June 2016.

4.10. Amphibians (Great Crested Newt)

4.10.1. The site is devoid of aquatic habitat and terrestrial habitat is very limited, with opportunities focused in the small woodland area to the northwest, which extends off-site. The canal offers sub-optimal habitat due to the presence of flowing water and is devoid of aquatic vegetation, making it unsuitable for breeding amphibians There are no ponds within 500m of the site boundary. The site is not suitable for Great Crested Newt *Triturus cristatus*. Amphibians are not expected to be present on or dispersing through the site.

Background Records

4.10.2. The data search returned 50 amphibian records, relating to Common frog *Rana temporaria* and Common toad *Bufo bufo.* The closest record pertains to Common frog *Rana temporaria* located approximately 0.8km southwest of the site in 1999. The most recent record is coarse and relates to Common frog *Rana temporaria.* This record is located within a 10km grid square within the search area and dates from 2021. The data search returned no records of Great Crested Newt.

4.11. Invertebrates

4.11.1. Given the habitats present, it is likely that a common assemblage of invertebrate species would be present within the site. There is no reason to believe that any notable invertebrate species are present.

Background records

4.11.2. One invertebrate record returned by the data search is listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This record relates to White-clawed crayfish *Austropotamobius pallipes,* located approximately 2.8km south of the site in 2010.

4.11.3. The data search returned 1053 records of invertebrates listed under Section 41 of the NERC Act (2006). These records comprise of 76 species including *Agonum scitulum*, Agnes & Sable *Rheumaptera hastata*, August Thorn *Ennomos quercinaria*, Autumnal Rustic *Eustroma reticulatum*, Beaded Chestnut *Agrochola lychnidis*, Blood-vein *Timandra comae*, Brindled Beauty *Lycia hirtaria*, Broom Moth *Spilosoma lutea*, Brown Hairstreak *Thecla betulae*, Brown-spot Pinion *Agrochola macilenta*, Buff Ermine *Spilosoma lubricipeda*, Centre-barred Sallow *Atethmia centrago*, Cinnabar *Tyria jacobaeae*, Common Fan-foot *Herminia tarsipennalis*, Crescent *Lobophora halterata*, Dark Brocade *Selidosema brunnealis*, Dark Spinach *Hypena obsitalis*, Dark-barred Twin-spot Carpet *Xanthorhoe birivata*, Deep-brown Dart *Euxoa obelisca*, Dot Moth *Melanchra persicariae*, Double Dart *Graphiphora augur*, Dusky Brocade *Selidosema brunnealis*, Dusky Thorn *Ennomos fuscantaria*, Dusky-lemon Sallow *Xanthia aurago*, Ear Moth *Amphipoea oculea*, Feathered Gothic *Tholera cespitis*, Figure of Eight *Tethea ocularis*, Flounced Chestnut *Agrochola helvola*, Forester *Adscita statices*, Four-spotted *Ecliptopera silaceata*, Garden Dart *Agrotis exclamationis*, Garden Tiger *Arctia caja*, Ghost Moth *Hepialus humuli*, Goat Moth *Cossus cossus*, Green-brindled Crescent *Allophyes oxyacanthae*, Grey Dagger *Acronicta psi*, Hedge Rustic *Tholera decimalis*, Knot Grass *Acronicta rumicis*, Lackey *Malacosoma neustria*, Large Nutmeg *Apamea anceps*, Large Wainscot *Rhizedra lutosa*, Latticed Heath *Chiasmia clathrata*, Minor Shoulder-knot *Brachylomia viminalis*, Mottled Rustic *Caradrina morpheus*, Mouse Moth *Amphipoea ravida*, Mullein Wave *Scopula marginepunctata*, Narrow-bordered Bee Hawk-moth *Hemaris tityus*, Necklace Ground Beetle *Carabus nemoralis*, Neglected Rustic *Xestia neglecta*, Oak Hook-tip *Watsonalla binaria*, Oak Lutestring *Clostera curtula*, Pale Shining Brown *Hypena lividalis*, Powdered Quaker *Orthosia gracilis*, Pretty Chalk Carpet *Euphyia unangulata*, Rosy Minor *Polymixis ramosa*, Rosy Rustic *Hydraecia micacea*, Rustic *Hoplodrina octogenaria*, Sallow *Xanthia icteritia*, Scarce Brown Streak *Brachionycha nubeculosa*, Scarce Four-dot Pin-

palp *Xylocampa areola*, September Thorn *Ennomos erosaria*, Shaded Broad-bar *Scopula limboundata*, Shoulder-striped Wainscot *Mythimna comma*, Small Emerald *Geometra papilionaria*, Small Heath *Coenonympha pamphilus*, Small Phoenix *Ecliptopera silaceata*, Small Square-spot *Diarsia rubi*, Spinach *Polyphaenis faunaria*, Sprawler *Asteroscopus sphinx*, Streak *Caradrina clavipalpis*, V-moth *Semiothisa or*, Wall brown *Lasiommata megera*, White Ermine *Spilosoma urticae*, White-letter Hairstreak *Satyrium w-album*, White-line Dart *Platyedra subcinerea*, and White-spotted Pinion *Cosmia pyralina*. The closest record relates to Small Heath *Coenonympha pamphilus*, located approximately 0.6km south of the site in August 1997. The most recent record pertains to White-letter Hairstreak *Satyrium w-album*, located approximately 0.7km northeast of the site in July 2022.

4.11.4. The data search also returned 2284 records of Local Priority Species. The closest records relate to Small Heath *Coenonympha pamphilus*, Small Skipper *Thymelicus sylvestris*, Essex Skipper *Thymelicus lineola*, and Small Copper *Lycaena phlaeas*, all located approximately 0.6km south of the site in 1997. The most recent records date from July 2022 and relate to White-letter Hairstreak *Satyrium w-album*, Small Skipper *Thymelicus sylvestris*, Essex Skipper *Thymelicus lineola*, and Small Copper *Lycaena phlaeas*. These records are situated approximately between 0.7km to 0.9km northeast of the site.

5. Ecological Evaluation

5.1. The Principles of Ecological Evaluation

5.1.1. The guidelines for ecological evaluation produced by CIEEM propose an approach that involves professional judgement, but makes use of available guidance and information, such as the distribution and status of the species or features within the locality of the project.

5.1.2. The methods and standards for site evaluation within the British Isles have remained those defined by Ratcliffe[7] . These are broadly used across the United Kingdom to rank sites so priorities for nature conservation can be attained. For example, current Sites of Special Scientific Interest (SSSI) designation maintains a system of data analysis that is roughly tested against Ratcliffe's criteria.

5.1.3. In general terms, these criteria are size, diversity, naturalness, rarity and fragility, while additional secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units are also incorporated into the ranking procedure.

5.1.4. Any assessment should not judge sites in isolation from others, since several habitats may combine to make it worthy of importance to nature conservation.

5.1.5. Further, relying on the national criteria would undoubtedly distort the local variation in assessment and therefore additional factors need to be taken into account, e.g. a woodland type with a comparatively poor species diversity, common in the south of England, may be of importance at its northern limits, say in the border country.

5.1.6. In addition, habitats of local importance are often highlighted within a local Biodiversity Action Plan (BAP).

5.1.7. Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the international level.

5.1.8. The legislative and planning policy context are also important considerations and have been given due regard throughout this assessment.

5.2. Habitat Evaluation

Designated Sites

5.2.1. **Statutory Sites**. There are no statutory sites within or directly adjacent to the site. The closest statutory site is Yeading Meadows Local Nature Reserve (LNR), located approximately 2.5km north of the site. The LNR is designated for its expanse of species-rich wildflower meadows, hosting an array of invertebrate

[7] Ratcliffe, D A (1977). *A Nature Conservation Review: the Selection of Biological Sites of National Importance to Nature Conservation in Britain.* Two Volumes. Cambridge University Press, Cambridge.

species including Rosel's Bush Cricket *Roeseliana roeselii*, Shield Bugs, Skipper Buttlerflies and Moths.

5.2.2. Given the distance of the site from the LNR and intervening land use, no adverse direct or indirect effects are considered likely on this designation, as a result of the development proposals.

5.2.3. **Non-statutory Sites.** There are no non-statutory sites within the site. London Canals Site of Importance for Nature Conservation (SINC) is located immediately adjacent to the site and contains the off-site woodland separating the site from the Grand Union Canal. SINCs are London's equivalent of Local Wildlife Sites. They are designated due to the important habitats they support They are provided a high level of protection within the planning system. SINCs are organised via a hierarchy; in order of importance, these are: Sites of Metropolitan Importance, Borough Importance (Grades 1 and 2) and Local Importance (the lowest tier).

5.2.4. London Canals SINC is a Site of Metropolitan Importance. The area includes the Grand Union Canal and its riparian zone. The SINC supports a wide range of aquatic flora, amongst which are a number of locally uncommon species including Narrow Leaved Water Plantain *Alisma lanceolatum,* Rigid Hornwort *Ceratophyllum demersum* and Shining Pondweed *Potamogeton lucens*. Many waterside plants including several locally rare species grow on the brickwork and banks of the canal. The canals also support important invertebrate fauna, a diverse fish community and breeding waterfowl.

5.2.5. The off-site woodland and underlying SINC designation are to be retained as part of the development. No work is proposed within the canal's riparian zone which is off-site. Adverse impacts to the woodland and Grand Union Canal can be addressed through pollution prevention measures including the erection of temporary fencing, restriction of refuelling and dust-generating operations and the storage of potentially harmful substances, in addition to the use of silt traps during construction. Such measures would aid in reducing impacts upon the river. A Construction Environmental Management Plan (CEMP) would be required, to ensure adverse impacts are avoided during the construction phase of the development, the final version of which can reasonably be controlled via planning condition.

5.2.6. Yeading Brook Meadows, Minet Country Park and Hitherbroom Park SINC, of Borough Importance Grade 1, is located approximately 0.3km northeast of the site. The SINC is designated due to its extensive mosaic of unimproved grassland habitat with diverse flora species including Sneezewort *Achillea ptarmica*, Meadowsweet *Filipendula ulmaria*, Ragged Robin *Lychnis flos-cuculi* and numerous Sedges and Rushes.

5.2.7. Crane Corridor SINC, of Metropolitan Importance, is located approximately 0.4km south of the site. The area is designated for its diverse wetland habitats including ponds and lakes, woodland pasture and areas of open water. The width of the river corridor is exceptional by London Standards. The river itself is one of the most natural in London and is a stronghold for uncommon aquatic species such as Arrowhead *Sagittaria*, Unbranched Bur-reed *Sparganium emersum,* River Water Crowfoot *Ranunculus fluitans* and Rigid Hornwort. At least four species of Pondweed are present including the London rarity Small

Pondweed *Potomogeton berchtoldii*. Breeding avifauna include Kingfisher, Grey Wagtail and Reed Warbler *Acrocephalus scirpaceus*. Water Vole is also present within the site.

5.2.8. Further SINCs are present in the surrounding area and are illustrated on Plan ECO1. The above designations and remaining SINCs are not expected to be impacted by the proposed development, due to the distance of these areas from the site and the intervening land use.

5.2.9. **Habitats.** Overall, the site is of low ecological value, comprising in the main of buildings and hardstanding. Of greatest importance is the woodland located in the northwest of the site, extending southwards to the Grand Union Canal. The off-site woodland and canal are designated a SINC as detailed above.

5.2.10. The on-site and off-site woodland will be retained as part of the development and mitigation measures put in place during construction, to avoid adverse impact occurring to these adjacent habitats. Aside from the woodland, all habitats will be lost from the site but given their overall limited ecological value and small area, this is not considered to be of significant detriment to local wildlife. The landscape strategy will diversify the habitats present on-site and include flower-rich and amenity grassland, pond, tree planting, hedgerow planting and brown roofs.

5.2.11. **Non-Native / Invasive Species.** Buddleia was identified within the site. While not listed as invasive under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), it is listed as invasive within the London Invasive Species Initiative (LISI). The control of species listed under the LISI is not a legal requirement, but where works result in the disturbance of this species, precautions should be taken to prevent its spread. Where vegetation is to be removed, the material should be disposed of at an approved facility.

5.2.12. **Biodiversity Net Gain**. A separate Biodiversity Net Gain (BNG) Assessment is being undertaken for the site. The current proposals are expected to deliver a net gain in habitat and hedgerow units in excess of 10%. The red line boundary does not cross into the Grand Union Canal's riparian zone and, as such, the watercourse is not included within the BNG Assessment. It is also not within the applicant's ownership and enhancements to this watercourse are not possible / considered feasible or appropriate in any case.

5.3. Faunal Evaluation

Bats

5.3.1. **Legislation**. All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 ("the Habitats Regulations"). These include provisions making it an offence to:

- Deliberately kill, injure or take (capture) bats;
- Deliberately disturb bats in such a way as to:-

- be likely to impair their ability to survive, to breed or rear or nurture their young; or to hibernate or migrate; or
- affect significantly the local distribution or abundance of the species to which they belong;
- To damage or destroy any breeding or resting place used by bats; and
- Intentionally or recklessly obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).

5.3.2. The words deliberately and intentionally include actions where a court can infer that the defendant knew that the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.

5.3.3. The offence of damaging (making it worse for the bat) or destroying a breeding site or resting place is an absolute offence. Such actions do not have to be deliberate for an offence to be committed.

5.3.4. In accordance with the Habitats Regulations the licensing authority (Natural England) must apply the three derogation tests as part of the process of considering a licence application. These tests are that:

1. the activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety;
2. there must be no satisfactory alternative; and
3. the favourable conservation status of the species concerned must be maintained.

5.3.5. Licences can usually only be granted if the development is in receipt of full planning permission.

5.3.6. **Site Usage**. The buildings within the site are not suitable for roosting bats, nor is the on-site tree and adjacent off-site trees. The buildings can be demolished without a licence granted by Natural England. Foraging and commuting opportunities are situated off-site along the Grand Union Canal and surrounding environs. Resources on-site are very limited.

5.3.7. **Mitigation / Recommendations**. The on-site and off-site woodland is to be retained as part of the development, providing continued opportunities for bats. The landscaping strategy will be based primarily around native species or species of known value to wildlife. The provision of new habitats such as flower-rich grassland, a pond, hedgerows and trees will increase the site's floristic diversity, thus attracting greater numbers of invertebrate prey, which in turn will benefit foraging bats.

5.3.8. Ecology Solutions has had correspondence with the lighting consultants to ensure that the lighting scheme for the site encourages the use of retained / newly established habitat by bats. Security lighting at this site will utilise directional downlights and only minor light spill is expected beyond the southern fence line, with minimal impact on vegetation adjacent to the Grand Union Canal. As such, the foraging corridor along this canal will not be adversely affected by new lighting. Additionally, low-level lighting bollards will be used

around the proposed pond area, and fencing will limit light spillage onto the retained woodland area.

5.3.9. The lighting scheme for the site will have full regard to the latest guidance from the Bat Conservation Trust and the Institute of Lighting Professionals. Lighting has been designed to avoid light spillage onto the on-site and off-site woodland, thus ensuring the underlying SINC designation and wildlife corridor remains dark. Warm LEDs, low pressure sodium or narrow spectrum (no UV) lights should be used, in conjunction with directional downlights.

5.3.10. The provision of bat boxes onto on-site and off-site woodland trees would provide new roosting opportunities for bats and maximise benefits for this species group. Details regarding bat boxes, in addition to further mitigation measures as detailed below, have been included within an Ecological Enhancement Scheme (11746.EES.vf2, Ecology Solutions February 2025), which can reasonably be controlled via planning condition.

Hedgehogs

5.3.11. **Legislation**. Hedgehog is a species of principal importance for the conservation of biodiversity under Section 41 (England) of the NERC Act 2006.

5.3.12. The NERC Act 2006 requires the Secretary of State to:

> **… take such steps as appear… to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section, or… promote the taking by others of such steps.**

5.3.13. **Site Usage**. No evidence of Hedgehog was recorded during the survey work undertaken. Opportunities are limited to the on-site and off-site woodland. The canal and surrounding industrial land use may present a dispersal barrier to this species, but its presence on-site cannot be ruled out.

5.3.14. **Mitigation / Recommendations**. The woodland on and off-site is to be retained. The provision of flower-rich grassland and hedgerow as part of the development will provide new foraging and commuting habitat for Hedgehog within the site.

5.3.15. Any trenches or deep pits associated with construction that are left open overnight pose a significant risk to dispersing Hedgehogs, especially if the trench fills with water. It is recommended that appropriate mitigation measures be put in place during the construction phase to safeguard against entrapment. Specifically, if trenches cannot be covered overnight, a means of escape needs to be provided. This can be achieved by placing rough planks or similar structures in the trenches as ramps to allow hedgehogs and other small animals to climb out safely. Open pipes that are left overnight should also be capped. In the event that a Hedgehog is found during construction works, the Hedgehog should be carefully placed in a lidded box (with air holes and vegetation cover) and safely translocated to an area of retained vegetation or within suitable off-site habitats away from construction areas and roads.

5.3.16. As a further enhancement, it is recommended that log hibernacula be created in the on-site woodland to provide hibernation and shelter opportunities for this species.

Otters

5.3.17. **Legislation.** Otters are subject to the same legislative protection as bats (see above). Otters are a UK BAP priority species and a London Priority Species.

5.3.18. **Site Usage.** No evidence of Otters was observed during the surveys but given the site's close proximity to the Grand Union Canal, the potential future presence of Otter along the southern site boundary cannot be ruled out. Metal fencing north of the woodland does provide a barrier to dispersal and as such, Otters are not expected to actively use (or be able to gain access to) the site.

5.3.19. **Mitigation and Enhancements.** The canal and adjacent woodland will not be impacted as part of the development. As such, an Otter survey is not considered necessary. By following pollution prevention measures, including the erection of temporary fencing, restriction of refuelling and dust-generating operations and the storage of potentially harmful substances, it is expected that the canal and Otters will not be adversely impacted by the development.

Birds

5.3.20. **Legislation**. Section 1 of the Wildlife and Countryside Act is concerned with the protection of wild birds. With certain exceptions, all wild birds and their eggs are protected from international killing, injuring, and taking; and their nests, whilst being built or in use, cannot be taken, damaged or destroyed.

5.3.21. Schedule 1 lists species which are protected by special (i.e. greater) penalties. These species also enjoy additional protection whilst breeding, as it is also an offence to disturb adults or their dependant young when at the nest.

5.3.22. **Site Usage**. The woodland, treeline and individual trees provide the greatest value for birds utilising the site, but given their limited availability, the off-site woodland presents the greatest opportunities. It is considered that birds would not be reliant on the site for any reason. Several common species were recorded adjacent to the site during the surveys conducted. Feral Pigeon were noted roosting / nesting within Building B1b.

5.3.23. **Mitigation / Recommendations**. In order to avoid impacts on nesting birds, and to avoid a potential offence under the Wildlife and Countryside Act 1981 (as amended), clearance of vegetation that is suitable for nesting birds should be undertaken outside of the nesting season (which is March to August inclusive) wherever possible. Where this cannot be achieved, a nest-check survey for birds should be undertaken by an ecologist 24-48 hours prior to vegetation removal. If any nests are confirmed, works should cease immediately, with the nest safeguarded by a 5m buffer and left in situ until the young have fledged.

5.3.24. It is recommended that Building B1b is also demolished outside of the nesting bird season on account of Feral Pigeon being recorded here. This species will often nest year-round, however; therefore, demolition of this structure may need to be undertaken using the Natural England General Licence (GL41). This

licence allows the killing of specific bird species, and allows the damage, removal or destruction of their nests and eggs. It is noted that this licence can only be used to preserve public health and public safety, and the terms and conditions of the licence must be adhered to.

5.3.25. The on-site and off-site woodland will be retained as part of the development. The proposed landscaping strategy includes the planting of new trees and hedgerow, offering new opportunities for nesting. In addition, the provision of wildflower grassland will be of benefit to foraging birds.

5.3.26. Further enhancements should be provided through the provision and installation of a variety of bird boxes onto on-site and off-site woodland trees. This would offer additional nesting opportunities for birds.

Invertebrates

5.3.27. **Site Usage**. Given the habitats present, it is likely that a common assemblage of invertebrate species would be present within the site. There is no reason to believe that any notable invertebrate species are present.

5.3.28. **Mitigation / Recommendations**. Proposed landscaping includes flower-rich grassland, amenity grassland, a pond, tree planting, hedgerow and brown roofs, all of which will increase the floristic diversity of the site and provide additional nectar resources for pollinating insects.

5.3.29. The provision of insect nesting aids of varying models in selected areas of proposed landscaping would provide suitable refuge opportunities for solitary bees, butterflies, saproxylic (beetles) and other invertebrate species.

6. Planning Policy Context

6.1. The planning policy framework that relates to nature conservation at the site, is issued at two main administrative levels: nationally through the NPPF, regionally through the London Plan and locally through the London Borough of Hillingdon Local Plan. The proposed development will be judged in relation to the policies contained within these documents that concern nature conservation.

6.2. National Policy

National Planning Policy Framework (December 2024)

6.2.1. Guidance on national policy for biodiversity and geological conservation is provided by the NPPF, published in March 2012, revised on 24 July 2018, 19 February 2019, 20 July 2021, 5 September 2023, 19 December 2023 and again in December 2024. It is noted that the NPPF continues to refer to further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system provided by Circular 06/05 (DEFRA / ODPM, 2005) accompanying the now-defunct Planning Policy Statement 9 (PPS9).

6.2.2. The key element of the NPPF is that there should be "a presumption in favour of sustainable development" (paragraph 11). It is important to note that this presumption "does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site" (paragraph 195). 'Habitats site' has the same meaning as the term 'European site' as used in the Habitats Regulations 2017.

6.2.3. Hence, the direction of Government policy is clear. That is, the presumption in favour of sustainable development is to apply in circumstances where there is potential for an effect on a European site, if it has been shown that there will be no adverse effect on that designated site as a result of the development in prospect.

6.2.4. A number of policies in the NPPF are comparable to those in PPS9, including reference to minimisation of impacts to biodiversity and provision of net gains to biodiversity where possible (paragraph 187).

6.2.5. The NPPF also considers the strategic approach that Local Authorities should adopt with regard to the protection, maintenance and enhancement of green infrastructure, priority habitats and ecological networks, and the recovery of priority species.

6.2.6. Paragraph 193 of the NPPF comprises a number of principles that Local Authorities should apply, including encouraging opportunities to incorporate biodiversity in and around developments; provision for refusal of planning applications if significant harm cannot be avoided, mitigated or compensated for; applying the protection given to European sites to potential Special Protected Areas (SPA), possible Special Areas of Conservation (SAC), listed or proposed Ramsar sites and sites identified (or required) as compensatory

measures for adverse effects on European sites; and the provision for the refusal for developments resulting in the loss or deterioration of 'irreplaceable' habitats – unless there are 'wholly exceptional reasons' (for instance, infrastructure projects where the public benefit would clearly outweigh the loss or deterioration of habitat) and a suitable compensation strategy exists.

6.2.7. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.

6.3. Regional Policy

The London Plan (March 2021)

6.3.1. The new London Plan was published in March 2021. This document sets out a framework for how London will develop over the next 20-25 years.

6.3.2. The policy areas within the London Plan are formed by six Good Growth objectives to ensure that London's growth is Good Growth. These policies are: GG1 Building strong and inclusive communities; GG2 Making the best use of land; GG3 Creating a healthy city; GG4 Delivering the homes Londoners need; GG5 Growing a good economy; and GG6 Increasing efficiency and resilience.

6.3.3. Of these objectives, GG2 is concerned with protecting and enhancing London's open spaces, including the Green Belt, Metropolitan Open Land, designated nature conservation sites and local spaces. It also seeks to promote the creation of new green infrastructure and urban greening, including aiming to secure net biodiversity gains where possible.

6.3.4. Five new policies have been introduced specifically relating to green infrastructure and the natural environment.

6.3.5. **Policy G1 Green Infrastructure.** This policy states that green features in the built environment, such as street trees and green roofs, should be planned, designed and managed in an integrated way to achieve multiple benefits.

6.3.6. **Policy G2 London's Green Belt.** This policy states that the Green Belt should be protected from inappropriate development.

6.3.7. **Policy G5 Urban Greening.** This policy requires major developments to incorporate measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.

6.3.8. **Policy G6 Biodiversity and Access to Nature.** This policy requires the protection of Sites of Importance for Nature Conservation (SINCs). Boroughs should also support the protection and conservation of priority species and habitats that sit outside of the SINC network and promote opportunities for enhancing them using Biodiversity Action Plans.

6.3.9. **Policy G7 Trees and Woodlands.** This policy is concerned with the protection of these features, including 'veteran' trees and ancient woodland not already in a protected site and identifying opportunities for tree planting in strategic

locations. It encourages the retention of existing trees, wherever possible, and the planting of new trees as part of development.

6.4. Local Policy

Hillingdon Local Plan: Part 1 – Strategic Policies (adopted November 2012)

6.4.1. The Hillingdon Local Plan Part 1 sets out the overall levels and broad locations of growth up to 2026. It comprises a spatial vision and strategy, strategic objectives, core policies and a monitoring and implementation framework with clear objectives for achieving delivery. These policies are supported by more detailed policies and allocations set out in the Local Plan Part 2.

6.4.2. Part 1 of the Local Plan contains three policies of particular relevance to nature conservation.

6.4.3. **Policy EM3: Blue Ribbon Network**. This policy states that the Council will promote and contribute to the enhancement of river and canal corridors and their associated habitats and species.

6.4.4. **Policy EM4: Open Space and Informal Recreation.** This policy relates in part to nature conservation, in that the Council will aim to protect existing tree and landscape features and enhance habitats for wildlife.

6.4.5. **Policy EM7: Biodiversity and Geological Conservation.** This policy states the aim of preserving and enhancing Hillingdon's biodiversity. SINCs will be protected from adverse impact and loss and populations of protected species will additionally be preserved. The policy also details that developers may be required to contribute to the SINC enhancements where the development site is in close proximity to a designated site. The provision of green roofs is also mentioned.

Local Plan: Part 2 –Development Management Policies (adopted January 2020)

6.4.6. Part 2 of the Local Plan comprises Development Management Policies, Site Allocations and Designations and the Policies Map. It delivers the detail of the strategic policies set out in the Local Plan Part 1. Several policies relate to nature conservation.

6.4.7. **Policy DMEI 1: Living Walls and Roofs and Onsite Vegetation.** This policy states that all major development should incorporate living roofs and / or walls into their design.

6.4.8. **Policy DMEI 5: Development in Green Chains.** This policy states that development in Green Chains will be supported if they conserve and enhance the landscape's nature conservation value.

6.4.9. **Policy DMEI 7: Biodiversity Protection and Enhancement.** This policy states that existing features of biodiversity value within the site should be retained and enhanced. Where significant features would be lost, features of equivalent biodiversity value should be provided as compensation. If a development is located on or near to a site with features of ecological value, appropriate surveys must be conducted to demonstrate that the development will have no

unacceptable impacts. All developments alongside the Grand Union Canal will be expected to contribute to additional biodiversity improvements.

6.4.10. **Policy DMEI 8: Waterside Development.** This policy relates to developments that adjoin or include watercourses. Such developments should have regard to Thames River Basin Management Plan and relevant Catchment Management Plans. Developments must also not extend to within eight metres of the bank top of a main river or five metres for an ordinary watercourse. Developments located adjacent to a watercourse should enhance the waterside environment and biodiversity.

6.5. Discussion

6.5.1. The proposals for the site would be judged against the policies summarised above. The development of the site is not likely to have a significant adverse effect on designated sites in the locality. A CEMP would detail mitigation measures to ensure that the Grand Union Canal, adjacent off-site woodland and underlying SINC designation are protected. The canal and its riparian zone are located off-site and will be retained and the site's green infrastructure improved overall, thus benefitting the waterside environment.

6.5.2. The provision of new habitats is expected to yield net gains in biodiversity in excess of 10% when measured using the Statutory Biodiversity Metric.

6.5.3. Following the mitigation measures set out in this report will ensure that significant adverse effects to biodiversity are avoided. The development is expected to comply with planning policy requirements as they relate to nature conservation at both the local, regional and national level.

7. Summary and Conclusions

7.1. Ecology Solutions was commissioned by Ark UP4 Limited in October 2024 to undertake an Ecological Assessment of the site at Union Park, land at Bulls Bridge Industrial Estate, Hayes, UB3 4QQ.

7.2. Ecology Solutions has conducted ecological survey work of the wider Union Park site in 2018 and 2020. This work was previously commissioned by Bruceshaw on behalf of Ark Estates 2 Limited and related to the redevelopment of Union Park and the construction of three data centre blocks, entitled UP1, UP2 and UP3. These blocks are currently under construction.

7.3. A further data centre block (UP4) is now proposed to the west of the wider Union Park site. This block will adjoin to the permitted UP3 block and will include an accompanying energy centre with associated landscaping and infrastructure.

7.4. The site and off-site canal were surveyed in October 2024.

7.5. **Statutory Sites**. There are no statutory sites within or directly adjacent to the site. The closest statutory site is Yeading Meadows LNR, located approximately 2.5km north of the site. Given the distance of the site from the LNR and intervening land use, no adverse direct or indirect effects are considered likely on this designation, as a result of the development proposals.

7.6. **Non-statutory Sites**. There are no non-statutory sites within the site. London Canals Site of Importance for Nature Conservation (SINC) is located immediately adjacent to the site and contains the off-site woodland separating the site from the Grand Union Canal. The off-site woodland and underlying SINC designation are to be retained as part of the development. No work is proposed within the canal's riparian zone, given its off-site location. Adverse impacts to the woodland and Grand Union Canal can be addressed through pollution prevention measures including the erection of temporary fencing, restriction of refuelling and dust-generating operations and the storage of potentially harmful substances, in addition to the use of silt traps during construction. Such measures would aid in reducing impacts upon the river. A CEMP would be required, to ensure adverse impacts are avoided during the construction phase of the development, which can reasonably be controlled via planning condition. Further SINCs are present in the surrounding area and are not expected to be impacted by the proposed development, due to the distance of these areas from the site and the intervening land use.

7.7. **Habitats**. Overall, the site is of low ecological value, comprising in the main of buildings and hardstanding. Of greatest importance is the woodland located in the northwest of the site, extending southwards to the Grand Union Canal. The off-site woodland and canal are designated a SINC as detailed above. The on-site and off-site woodland will be retained as part of the development and mitigation measures put in place during construction, to avoid adverse impact occurring to these adjacent habitats. Aside from the woodland, all habitats will be lost from the site but given their overall limited ecological value and small area, this is not considered to be of significant detriment to local wildlife. The landscape strategy will diversify the habitats present on-site and include flower-rich and amenity grassland, pond, tree planting, hedgerow planting and brown roofs.

7.8. **Non-Native / Invasive Species.** Buddleia was identified within the site. While not listed as invasive under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), it is listed as invasive within the London Invasive Species Initiative (LISI). The control of species listed under the LISI is not a legal requirement, but where works result in the disturbance of this species, precautions should be taken to prevent its spread. Where vegetation is to be removed, the material should be disposed of at an approved facility.

7.9. **Biodiversity Net Gain.** A separate Biodiversity Net Gain (BNG) Assessment is being undertaken for the site. The current proposals are expected to deliver a net gain in habitat and hedgerow units in excess of 10%. The red line boundary does not cross into the Grand Union Canal's riparian zone and as such, the watercourse is not included within the BNG Assessment. It is also not within the applicant's ownership and enhancements to this watercourse are not possible / considered feasible or appropriate in any case.

7.10. **Bats**. The buildings within the site are not suitable for roosting bats, nor is the on-site tree and adjacent off-site trees. The buildings can be demolished without a licence granted by Natural England. Foraging and commuting opportunities are situated off-site along the Grand Union Canal and surrounding environs; these habitats will be retained and safeguarded as part of the development. Resources on-site are very limited.

7.11. The landscaping strategy will be based primarily around native species or species of known value to wildlife. The provision of new habitats such as flower-rich grassland, a pond, hedgerows and trees will increase the site's floristic diversity, thus attracting greater numbers of invertebrate prey, which in turn will benefit foraging bats.

7.12. The lighting scheme for the site will have full regard to the latest guidance from the Bat Conservation Trust and the Institute of Lighting Professionals. Ecology Solutions has provided consultation regarding the lighting scheme to ensure opportunities for bats are retained / encouraged at the site. Security lighting at this site will utilise directional downlights and only minor light spill is expected beyond the southern fence line, with minimal impact on vegetation adjacent to the Grand Union Canal. As such, the foraging corridor along this canal will not be adversely affected by new lighting. Additionally, low-level lighting bollards will be used around the proposed pond area, and fencing will limit light spillage onto the retained woodland area. Lighting has been designed to avoid light spillage onto the on-site and off-site woodland, thus ensuring the underlying SINC designation and wildlife corridor remains dark. Warm LEDs, low pressure sodium or narrow spectrum (no UV) lights should be used, in conjunction with directional downlights.

7.13. The provision of bat boxes onto on-site and off-site woodland trees would provide new roosting opportunities for bats and maximise benefits for this species group. Their provision is detailed within and Ecological Enhancement Scheme provided by Ecology Solutions, which can be controlled via planning condition.

7.14. **Badgers**. The site offers limited opportunities for Badgers. No Badger setts or evidence of the species was recorded during the survey. Dispersal of this species would be greatly impacted via the presence of the Grand Union Canal, Great Western Railway, and expanse of industrial land in the site's vicinity. It is considered that this species is absent from the site and thus, there is no Badger constraint to the development.

7.15. **Hedgehogs**. No evidence of Hedgehog was recorded during the survey work undertaken. Opportunities are limited to the on-site and off-site woodland. The canal and surrounding industrial land use may present a dispersal barrier to this species, but its presence on-site cannot be ruled out.

7.16. The woodland on and off-site is to be retained. The provision of flower-rich grassland and hedgerow as part of the development will provide new foraging and commuting habitat for Hedgehog within the site. Any trenches or deep pits associated with construction that are left open overnight should have a means of escape. Open pipes that are left overnight should also be capped. As a further enhancement, it is recommended that log hibernacula be created in the on-site woodland to provide hibernation and shelter opportunities for this species.

7.17. **Otter.** No evidence of Otters was observed during the surveys but given the site's close proximity to the Grand Union Canal, the potential future presence of Otter along the southern site boundary cannot be ruled out. Metal fencing north of the woodland does provide a barrier to dispersal and as such, Otters are not expected to actively use (or be able to gain access to) the site.

7.18. The canal and adjacent woodland will not be impacted as part of the development. As such, an Otter survey is not considered necessary. By following pollution prevention measures, including the erection of temporary fencing, restriction of refuelling and dust-generating operations and the storage of potentially harmful substances, it is expected that the canal and Otters will not be adversely impacted by the development.

7.19. **Water Vole.** No evidence of Water Voles was recorded along the Grand Union Canal during the surveys undertaken. Given the lack of suitable emergent vegetation and cover, along with disturbance from walkers and boats and the modified banks, the presence of Water Vole within this stretch of watercourse is considered unlikely. There is no Water Vole constraint to the development.

7.20. **Other Mammals**. Evidence of Fox was noted in the off-site woodland. It is considered that small common mammal species could be present within the site such as Brown Rat. It is considered unlikely that any notable species would be present. No specific mitigation is considered necessary.

7.21. **Birds**. The woodland, treeline and individual trees provide the greatest value for birds utilising the site, but given their limited availability, the off-site woodland presents the greatest opportunities. It is considered that birds would not be reliant on the site for any reason. Several common species were recorded adjacent to the site during the surveys conducted. Feral Pigeon were noted roosting / nesting within Building B1b.

7.22. Clearance of vegetation that is suitable for nesting birds should be undertaken outside of the nesting season (which is March to August inclusive) wherever possible. Where this cannot be achieved, a nest-check survey for birds should be undertaken by an ecologist 24-48 hours prior to vegetation removal. It is recommended that Building B1b is also demolished outside of the nesting bird season on account of Feral Pigeon being recorded here. The demolition of this structure may need to be undertaken using the Natural England General Licence (GL41).

7.23. The on-site and off-site woodland will be retained as part of the development. The proposed landscaping strategy includes the planting of new trees and hedgerow,

offering new opportunities for nesting. In addition, the provision of a pond and grassland will be of benefit to foraging birds.

7.24. Further enhancements should be provided through the provision and installation of a variety of bird boxes onto on-site and off-site woodland trees. This would offer additional nesting opportunities for birds.

7.25. **Reptiles**. The habitats on-site are unsuitable for reptiles and the area is isolated from any suitable reptile habitat. There is no reptile constraint to the development.

7.26. **Amphibians**. The site is devoid of aquatic habitat and terrestrial habitat is very limited, with opportunities focused in the small woodland area to the northwest, which extends off-site. The canal offers sub-optimal habitat due to the presence of flowing water and is devoid of aquatic vegetation, making it unsuitable for breeding amphibians. There are no ponds within 500m of the site boundary. The site is not suitable for Great Crested Newt. There is no amphibian constraint to the development.

7.27. Post-development habitats will include SUDs and SUDs planting for biodiversity, increasing opportunities for amphibians onsite.

7.28. **Invertebrates**. Given the habitats present, it is likely that a common assemblage of invertebrate species would be present within the site. There is no reason to believe that any notable invertebrate species are present.

7.29. Proposed landscaping includes flower-rich grassland, amenity grassland, a pond, tree planting, hedgerow and brown roofs, all of which will increase the floristic diversity of the site and provide additional nectar resources for pollinating insects. The provision of insect nesting aids of varying models in selected areas of proposed landscaping would provide suitable refuge opportunities for solitary bees, butterflies, saproxylic (beetles) and other invertebrate species.

7.30. Overall, there is no overriding ecological reason as to why the site could not be developed. A series of mitigation and enhancement measures have been proposed to account of the potential presence of wildlife. The proposals appear to be in line with all relevant national, regional and local planning policy.

Plans

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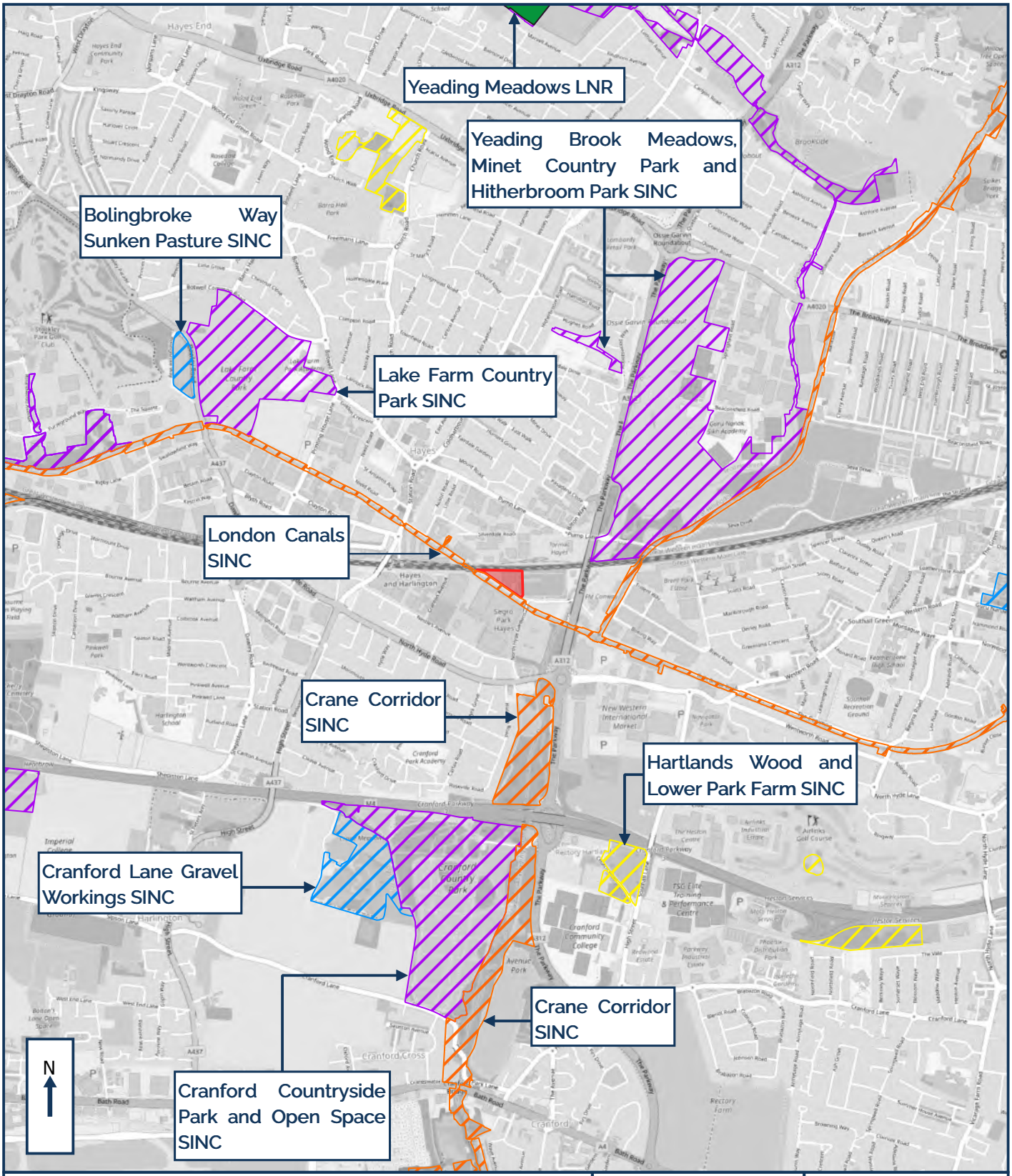
PLAN ECO1

Site Location and Ecological Designations



KEY:

- SITE BOUNDARY
- LOCAL NATURE RESERVE (LNR)

SITES OF IMPORTANCE FOR NATURE CONSERVATION (SINC)

- METROPOLITON IMPORTANCE
- BOROUGH IMPORTANCE GRADE 1
- BOROUGH IMPORTANCE GRADE 2
- LOCAL IMPORTANCE

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PLAN ECO1: SITE LOCATION AND ECOLOGICAL DESIGNATIONS

Rev: A

Nov 2024

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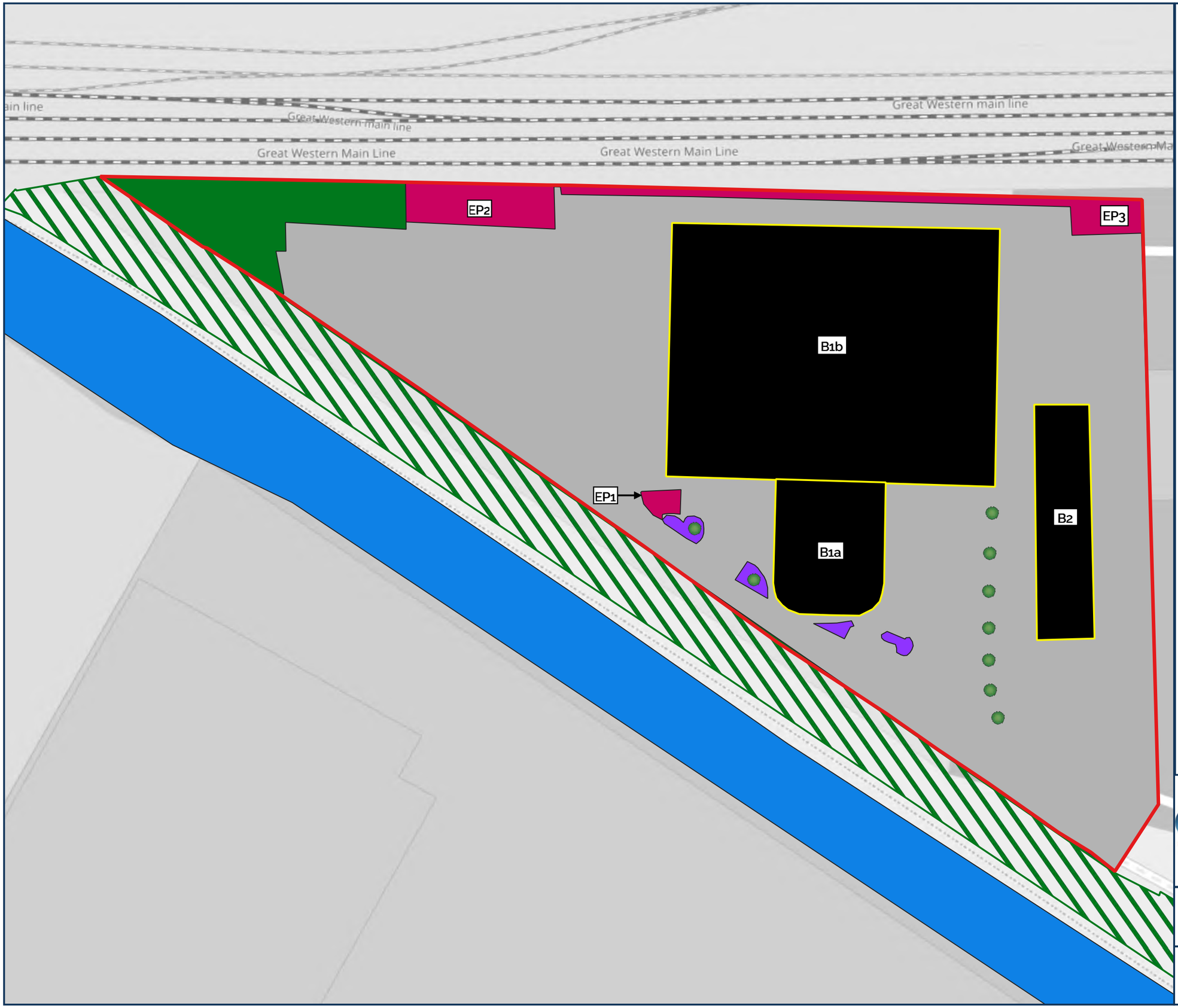
PLAN ECO2

Ecological Features



KEY:

- SITE BOUNDARY
- DEVELOPED LAND; SEALED SURFACE
- INDUSTRIAL BUILDING
- OTHER BROADLEAVED WOODLAND
- RUDERAL OR EPHEMERAL
- INTRODUCED SHRUB
- INDIVIDUAL TREE

OFFSITE HABITATS

- GRAND UNION CANAL
- OTHER BROADLEAVED WOODLAND

N

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PLAN ECO2: ECOLOGICAL FEATURES

Rev: A

Dec 2024

Photographs

PHOTOGRAPH 1: Building B1a

PHOTOGRAPH 2: Building B1b

PHOTOGRAPH 3: Building B2

PHOTOGRAPH 4: Other Broadleaved Woodland

PHOTOGRAPH 5: Ruderal / Ephemeral Vegetation

PHOTOGRAPH 6: Introduced Shrub

PHOTOGRAPH 7: Line of Trees

PHOTOGRAPH 8: Grand Union Canal (Off-Site)

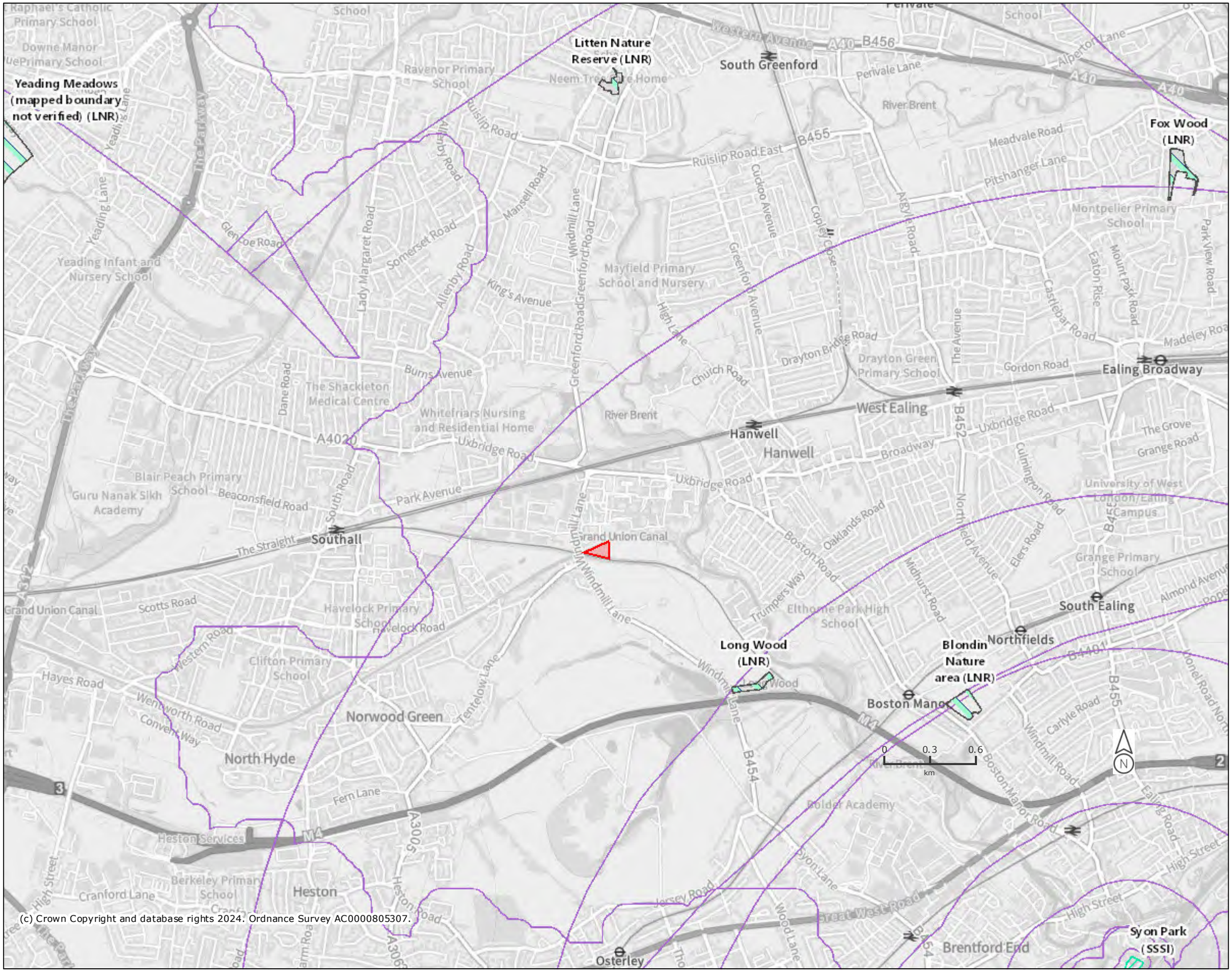
Appendices

APPENDIX1

Information Downloaded from Multi-Agency Geographic Information for the Countryside (MAGIC)

MAGiC

11746. UP4 Union Park, Bulls Bridge Industrial Estate, Hayes, UB3 4QQ



Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- SSSI Impact Risk Zones - for LPAs to determine likely impacts on terrestrial SSSIs and when to consult Natural England
- Special Areas of Conservation (England)
- Possible Special Areas of Conservation (England)
- Special Protection Areas (England)
- Potential Special Protection Areas (England)

Ancient Woodland (England)

- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Projection = OSGB36
xmin = 506000
ymin = 176200
xmax = 523000
ymax = 184000

0 0.5 1
km

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