

Argosy Drive Development - Building 305 Demolition

Preliminary Ecological Appraisal Report

Columbia Threadneedle Investment

January 2022

Quality information

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1. Executive Summary

Site Details	The Site comprises a single building, referred to as Building 305 (or B305). The approximate centre of the Site is located at Ordnance Survey national grid reference (OSNGR) SJ 80843 85099. The Site is approximately 0.1 hectares (ha) in size.
Scheme Details	The Scheme seeks to redevelop the Site which will include the demolition of building 305.
Ecological Features that may be affected by the Scheme	The Scheme will not result in the loss of any semi-natural or landscaped habitats.
Recommendations for Mitigation	Avoidance of loss of any habitats surrounding the Site. If this is not possible, any habitats will be reinstated. Habitats outside of Site boundary to be protected by fencing, including tree with potential bat roosting features. Invasive non-native species management plan required if invasive species cannot be avoided during construction. Requirement for areas containing Invasive non-native species to be fenced off and avoided during construction.
Potential for Ecological Enhancements and Biodiversity Net Gain	Enhancement and / or planting of semi-natural habitats, such as wildflower-rich grasslands, trees or species-rich hedgerows. Removal / management of Schedule 9 invasive, non-native plant species. Installation of bird, bat and invertebrate boxes. Inclusion of hedgehog passes (positioned to avoid directing animals toward roads) in any fencing to be installed; and, Installation of wildlife interpretation boards.

2. Introduction

Background

- 2.1 This Preliminary Ecological Appraisal report (PEAR) has been prepared by AECOM on behalf of Columbia Threadneedle Investment (CTI), to assess the ecological constraints in connection with the proposed demolition of building 305 at Manchester Airport (hereafter referred to as the Scheme). The Scheme is located to the west of Manchester Airport and is bordered by Viscount Drive to the southeast, Avro Way to the southwest, as shown on Figures 1 and 2 in [Appendix A](#). Building 305 is enclosed within the red line boundary within these Figures is hereafter referred to as the 'Site'.
- 2.2 The assessment of ecological constraints has been undertaken with reference to current good practice¹ and forms part of the technical information commissioned by CTI in connection with the Scheme. The PEAR addresses relevant wildlife legislation and planning policy as summarised in [Appendix B](#) and is consistent with the requirements of *British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development*.
- 2.3 This PEAR is intended for advice in respect of Scheme design, Site layout and / or Site investigation. Further ecological surveys and / or ecological impact assessment (including detailed mitigation measures) may be required in connection with a planning application or to contribute to an Environmental Impact Assessment once the Scheme proposals have been finalised and any required surveys have been completed.

The Site

- 2.4 The Site comprises building 305, and is surrounded by a car park amenity grassland, introduced shrub, individual trees and a thin band of planted broadleaved woodland. The approximate centre of the Site is located at Ordnance Survey national grid reference (OSNGR) SJ 80843 85099. The Site is approximately 0.1 hectares (ha) in size.

The Scheme

- 2.5 The Scheme seeks to demolish building 305.

Purpose of the Preliminary Ecological Appraisal

- 2.6 This PEAR presents ecological information obtained during the following:
- A desk-study undertaken between December 2021 and January 2022, to obtain records of designated sites and protected and notable species² and habitats³ within a 2 kilometre (km) radius (reduced to 1 km for ancient and veteran trees due to the unlikelihood of impacts beyond this distance) of the Site (the area covered by the desk study is hereafter referred to as the Study Area). Species records were not obtained for two relatively small areas within the southeast and southwest of the Study Area no closer than 1.5 km from the Site, beyond the River Bollin where the border between Greater Manchester and Cheshire lies as this would have required an additional data search from Record in Cheshire and it was considered proportionate to omit this based on the distance from the Site and additional cost for the data; and,
 - A walkover survey of the Site and surrounding land up to an unobstructed 50 metre (m) radius was undertaken on 15th December 2021 (the area covered by the survey is hereafter referred to as the Survey Area).
- 2.7 The purpose of the PEAR is to provide a high-level ecological appraisal of the Site, specifically to:

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

² Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the *Natural Environment and Rural Communities Act 2006*; any species listed in an IUCN Red Data Book; and any other species listed under the Greater Manchester Biodiversity Action Plan (BAP).

³ Notable habitats are taken as principal habitats for the conservation of biodiversity listed under Section 41 of the *Natural Environment and Rural Communities Act 2006*; habitats listed under the Greater Manchester Biodiversity Action Plan; hedgerows identified as being 'important' under the wildlife criteria of the *Hedgerow Regulations 1997*, ancient woodlands and veteran trees.

- Establish baseline conditions and determine the presence of Important Ecological Features (IEF)⁴ (or those that could be present), as far as is possible;
 - Identify potential ecological constraints to the Scheme and make initial recommendations to avoid impacts on IEFs, where possible;
 - Identify requirements for mitigation, where possible, including mitigation measures that will be required and those that may be required (depending on results of further surveys or final scheme design);
 - Establish any requirements for more detailed surveys; and,
 - Identify any opportunities offered by the Scheme to deliver biodiversity enhancements.
- 2.8 The methodologies followed for undertaking the desk study and field surveys, including any limitations to the assessment, are provided in Appendix C.

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

3. Ecological Baseline, Constraints and Recommendations

- 3.1 The following sections detail the results of the desk and field-based studies undertaken to inform this PEAR. Where necessary, recommendations for mitigation measures to protect known IEFs, or further surveys to determine the presence or likely absence of likely IEFs, are provided.
- 3.2 With regard to background data, 'recent' records are considered to be those no older than 10 years from the date of the desk study. Records outside of this period are historical and have only been reported where more recent records for a feature do not exist. Exceptions to this are detailed in the appropriate sections below. Non-statutory Local Wildlife Sites (LWS) are also referred to as Sites of Biological Importance (SBI) within Greater Manchester; therefore, the terms LWS and SBI can be used interchangeably.

Designated Sites Desk Study

- 3.3 Table 1 summarises the statutory and non-statutory designated sites situated within the Study Area. The statutory designated sites are shown on Figure 1 in [Appendix A](#).

Table 1. Designated Sites within Study Area

Designated Site	Reason for Designation	Location of Designated Site ⁵
Cotteril Clough Site of Special Scientific Interest (SSSI) and Local Wildlife Site (LWS) / Site of Biological Importance (SBI)	The SSSI / SBI predominantly comprises woodland (the most diverse clough woodland in Greater Manchester) and Cotteril Brook with associated stream habitat; a grassland embankment adjacent to the A358, which bisects the SSSI / SBI, is also present. The woodland features three distinct zones, each dominated by birch-oak (<i>Betula-Quercus</i>), ash-wych elm (<i>Fraxinus-Ulmus</i>) and alder (<i>Alnus glutinosa</i>), including a diverse understorey and ground layer flora. Notable fauna associated with the SSSI / SBI include birds (green, lesser spotted and great spotted woodpeckers (<i>Picus viridis</i>, <i>Dryobates minor</i> and <i>Dendrocopos major</i>, respectively), spotted flycatcher (<i>Muscicapa striata</i>), blackcap (<i>Sylvia atricapilla</i>) and whitethroat (<i>Curruca communis</i>)), 79 species of spiders and the rare beetle <i>Dropephylla grandiloqua</i>.	0.66 km south of Site
Davenport Green Wood LWS / SBI	Priority deciduous woodland.	0.68 km north of Site
Sunbank Wood and Ponds LWS / SBI	Priority deciduous woodland and series of ponds.	0.71 km south of Site
Ponds Near Manchester Airport Runway LWS / SBI	Series of ponds and priority purple moor grass and rush pasture.	1.08 km south of Site
Painswick Park Meadow LWS / SBI	Grassland / meadow.	1.13 km north of Site
Road Cutting at Castle Hill LWS / SBI	Priority good quality semi-improved grassland.	1.25 km south of Site

⁵Where designated sites are situated outside of the Site boundary, the distance and direction is given at the closest point of the designated site from the Site

Designated Site	Reason for Designation	Location of Designated Site ⁵
Wood Near Chapel Lane LWS / SBI	Priority deciduous woodland.	1.31 km southwest of Site
Well and Double Wood LWS / SBI	Priority deciduous woodland.	1.44 km south of Site
Rossmill LWS / SBI	Priority deciduous woodland.	1.47 km west of Site
Ponds at Davenport Green LWS / SBI	Series of ponds.	1.55 km northwest of Site
Bentley and Tomfield Banks LWS / SBI	Priority deciduous woodland and watercourse.	1.81 km west of Site

Constraints and Recommendations

3.4 Cotteril Clough SSSI / SBI is located over 0.6 km from the Site, with no functional (including hydrological) link considered present. Therefore, direct and indirect adverse impacts as a result of the Scheme are considered unlikely. However, the Site is situated within the SSSI Impact Risk Zone for Cotteril Clough and therefore Natural England should be consulted as a formality. As the negative impacts are considered unlikely, however, the SSSI is not discussed further within this report.

3.5 There are no additional designated sites within the Study Area.

Desk Study

3.6 Table 2 summarises the records of notable habitats within the Study Area.

Table 2. Notable Habitats within Study Area

Habitat/ Flora Feature	Reason for Conservation/ Notable Interest	Location of Habitat/ Flora ⁶
Urban managed greenspace (amenity grassland)	Local Biodiversity Action Plan (LBAP) habitat	Within and adjacent to Site
Ancient woodland	Natural Environment and Rural Communities (NERC) Act (2006) Section 41 habitat of principal importance and LBAP habitat	Seven located between 0.52 and 1.92 km from the Site
Priority deciduous woodland	NERC Act (2006) Section 41 habitat of principal importance	One hundred and thirty-three discrete parcels located between 0.15 and 1.99 km from the Site
Priority good quality semi-improved grassland	LBAP habitat	Two located 1.06 and 1.26 km from the Site
Priority purple moor grassland	NERC Act (2006) Section 41 habitat of principal importance and LBAP habitat	One located 1.1 km south of Site
Traditional orchard	NERC Act (2006) Section 41 habitat of principal importance	One located 1.46 km south of Site

⁶Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the designated site from the Site

Habitat/ Flora Feature	Reason for Conservation/ Notable Interest	Location of Habitat/ Flora ⁶
Priority habitats where no main habitat is classified, but others / several are present	N/A	Three located 1.04 km north, 1.46 km south and 1.82 km south of the Site

Field Survey

- 3.7 Summary descriptions of the habitats within the Survey Area are provided below and shown on Figure 2 within [Appendix A](#), with notable features highlighted by target notes (TNs). TN descriptions and photographs are provided in [Appendix D](#).
- 3.8 The Survey Area comprises both the Site (Building 305) and the surrounding area to 50m which partially includes four other buildings understood to be used as a combination of offices and a warehouses, in addition to a car park connecting to Argosy Drive, roads and pavements (all categorised as hardstanding), amenity grassland, introduced shrub, individual trees and a small section of planted broadleaved woodland. Descriptions of the more noteworthy habitats are provided below.

Planted Broadleaved Woodland

- 3.9 A parcel of planted broadleaved woodland is present along the western boundary of the Site. The trees forming the canopy are of a similar age and include birch (*Betula* sp.), willow (*Salix* sp.), oak (*Quercus* sp.) and alder (*Alnus glutinosa*), with an understorey of hazel (*Corylus avellana*), apple (*Malus* sp.) and ornamental shrub (unknown species composition, but thought to include possible Cotoneaster species, as discussed further below). The ground layer is dominated by nettle (*Urtica dioica*), bramble (*Rubus fruticosus* agg.) and rose (*Rosa* sp.).

Introduced Shrub

- 3.10 Nine discrete parcels of introduced shrub are present within the Survey Area; these are dominated by ornamental species. Species identified during the survey include privet (*Ligustrum* sp.), Cotoneaster (*Cotoneaster* sp.), with infrequent ivy (*Hedera helix*) and oak. Management of all areas of introduced shrub is considered likely to be intensive, due to the well-defined shape of each parcel. Some Cotoneaster species are listed on Schedule 9 of the Wildlife and Countryside Act, 1981 (as amended) (WCA), therefore, this is discussed further within the Invasive Non-native Species section below.

Amenity Grassland

- 3.11 Fourteen parcels of amenity grassland are present within the Survey Area. All grasslands comprise a similar species composition and are dominated by perennial rye-grass (*Lolium perenne*). Other species observed within the grasslands include white clover (*Trifolium repens*), dandelion (*Taraxacum* agg.), daisy (*Bellis perennis*), nettle, creeping thistle (*Cirsium arvense*) and moss (unidentified species, but possibly springy turf moss (*Rhytidiadelphus squarrosus*)). All grasslands appeared recently mown and it is considered likely that intensively managed (mown) throughout each year. Some areas of grassland featured mole (*Talpa europaea*) hills and evidence of rabbit activity (*Oryctolagus cuniculus*), although no warrens (burrows) were found.

Broadleaved Scattered Trees

- 3.12 Sixteen individual and one discrete parcel of broadleaved scattered trees are present within the Survey Area. All scattered trees are considered likely to have been planted for ornamental purposes, although evidence of management was not observed. This habitat type includes birch, willow, oak, rowan (*Sorbus aucuparia*) and alder, with the addition of hornbeam (*Carpinus betulus*) contributing to the area of scattered trees outside the southern corner of the Site.

Constraints and Recommendations

- 3.13 The Scheme will not result in the removal or modification of any habitats within the Survey Area with the acceptance of building 305 which will be demolished. The habitats present within the Survey Area are, however, considered to be common and of no more than local importance. Of all habitats present, only amenity grassland is considered to be notable due to the inclusion of amenity grassland within the Urban

Managed Greenspace category as part of the Greater Manchester Biodiversity Action Plan (BAP). However, the amenity grassland is not likely to be of significant ecological value due to its comparatively small amount in relation to the wider area, and fact that it is heavily managed and therefore unlikely to provide important habitat for other wildlife. Although no trees are due to be affected, it is noted trees are cited within Policy EN 9 (Green Infrastructure) within the Manchester Core Strategy: *"The Council will seek to protect existing street trees and promote new planting, particularly where this can enhance green links in the urban area"* and within Policy EN 15 (Biodiversity and Geological Conservation): *"The Council will seek to maintain or enhance sites of biodiversity and geological value throughout the City. Particular consideration will be given too... the Council's objective to protect and conserve the City's existing trees and woodland and the aim for a net increase in trees across the City"*⁷. Policy EN 15 also states that *"any adverse impacts on biodiversity will need to be justified against the wider benefits of the proposal... Where adverse impacts are unavoidable, developers will be required to provide appropriate mitigation and/or compensation"*.

- 3.14 It is recommended that the habitats surrounding the Site boundary are protected from construction by the use of suitable fencing.
- 3.15 Habitats adjacent to the Site are potentially at risk of disturbance and indirect effects such as changes in air or water quality during construction works. Therefore, standard pollution prevention measures and construction environmental management procedures should be adhered to during all works.
- 3.16 The Phase 1 habitat survey was conducted outside the optimal period to confidently identify habitats and plant species, however, given the relatively simple nature of the habitats within the Survey Area, all habitats were considered to be identified appropriately and additional habitat surveys would not provide any additional benefit beyond the identification of a small number of additional plant species. Therefore, there are considered to be no significant constraints to the assessment.

Invasive, Non-native Plants

- 3.17 A search for invasive, non-native plant species was undertaken during the survey. Cotoneaster species were identified within the introduced shrub planting within the Survey Area. Some species within the Cotoneaster genus are listed on Schedule 9 of the WCA and it is therefore an offence to allow the spread of those plants listed. Additionally, a single montbretia (*Crocsmia x crocosmiiflora*) plant, another Schedule 9 species, was observed to the northeast of the Site and is shown by Target Note 2 in Figure 2, Appendix A.

Constraints and Recommendations

- 3.18 The Scheme is not due to affect any vegetation. However, if this changes, it is recommended that a Schedule 9 invasive plant species management plan and method statement should be produced and adhered to during work to avoid an offence being committed under the WCA. Furthermore, it is recommended that all areas of shrub, trees and the single montbretia plant are fenced off from works to ensure these are not impacted.

Badger (*Meles meles*) Desk Study

- 3.19 There is one recent record of a badger sett, and six recent records of badger field signs (e.g., footprints) within the Study Area.

Field Survey

- 3.20 A search for evidence of badger was carried out during the survey. Although small amounts of habitat (woodland and grassland to the west of the Site) potentially suitable for badger is present within the Survey Area, it is considered unlikely that this species would utilise these habitats due to the heavily urbanised nature of the wider area, poor connectivity (built up urban landscape) between the Survey Area and suitable habitats within the wider landscape, and regular human presence. No evidence of badger was identified during the survey and this species is considered to be absent and therefore not discussed further within this report.

⁷ Manchester Core Strategy. Accessed 11th January 2022 at https://secure.manchester.gov.uk/downloads/download/5672/core_strategy

Bats

Desk Study

- 3.21 The desk study returned records of nine bat roosts, including whiskered (*Myotis mystacinus*), soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*Pipistrellus pipistrellus*) and brown long-eared (*Plecotus auritus*), within the Study Area. The closest of these is of a whiskered bat roost approximately 0.65 km from the Site. Furthermore, there are 33 records of other bat activity (e.g., foraging) within the Study Area; the closest is of soprano pipistrelle, common pipistrelle and *Myotis* species foraging approximately 0.23 km north of the Site.

Field Survey

- 3.22 A ground-based external potential roost appraisal was carried out on the trees and buildings within the Survey Area following the latest good practice guidelines⁸ and in accordance with the British Standards Institution (2015) BS 8596:2015 *Surveying for bats in trees and woodland – guide*. All trees and buildings were categorised as offering negligible suitability for roosting bats, with the exception of a single tree (unidentifiable species). This tree, as indicated by Target Note 1 (TN1) on Figure 2, [Appendix A](#), was categorised as offering low roost suitability due to its size, presence of rotting bark and relatively dense ivy covering which could obscure any features suitable for bats. Table 3 summarises the buildings and tree TN1 within the Survey Area, photographs of these are provided within [Appendix D](#).

Table 3. Summary of buildings within Survey Area and tree potentially suitable for roosting bats

Feature	Description
Building B305 (the Site)	Two storey brick and glass walled building with ridged roof which wraps over edge and down top section of walls. Office use. Well-sealed– no features potentially suitable for roosting bats observed.
Tree TN1	Unknown tree species with dense ivy covering trunk and therefore covering any potential features suitable for roosting bats, if present.
Building B303	Large two storey brick walled building with ridged metal roof which wraps over edge and down walls. Large garage door / shutters also present in walls on northeast side. Warehouse / freight and possibly office use. No features potentially suitable for roosting bats observed.
Building B308	Three storey brick walled building with ridged roof which wraps over edge and down top section of walls. Office use. Well-sealed– no features potentially suitable for roosting bats observed.
Building B316	Large two storey brick walled building with ridged metal roof which wraps over edge and down walls. Large garage door / shutters also present in walls on southwest side. Warehouse / freight and possibly office use. Well-sealed– no features potentially suitable for roosting bats observed.
Building B317	Large two storey brick walled building with ridged metal roof which wraps over edge and down walls. Large garage door / shutters also present in walls on southwest side. Warehouse / freight and possibly office use. Well-sealed– no features potentially suitable for roosting bats observed.

- 3.23 The habitats within the Survey Area are considered to offer limited opportunities for foraging and / or commuting bats.

Constraints and Recommendations

- 3.24 The Scheme is not due to affect the only feature considered to offer any bat roost suitability (TN1). However, should this change, and it be necessary to remove or undertake works on tree then this tree will need to be soft-felled following a method statement. This should involve removing the ivy by hand and

⁸ Collins, J.(ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edition). The Bat Conversation Trust. London

cutting the branches and trunk in stages. Fencing around the tree should be implemented to avoid damage and protect the potential bat roosting features.

Great Crested Newt (*Triturus cristatus*)

Desk Study

- 3.25 There are seven recent records of great crested newt within the Study Area. The closest of these is situated approximately 0.96 km south of the Site.
- 3.26 No waterbodies were identified within 250 m of the Site with habitat connectivity during the desk study.

Field Survey

- 3.27 No waterbodies were identified during the survey and the terrestrial habitats are considered to be too isolated from any potentially suitable newt habitats within the wider area to allow animals to migrate to the Survey Area. Therefore, it is considered unlikely that great crested newts are present within the Survey Area and this species is not discussed further within the report.

Birds

Desk Study

- 3.28 There are recent records for 44 notable⁹ bird species within the Study Area. These include two species peregrine (*Falco peregrinus*) and kingfisher (*Alcedo atthis*) listed on Annex I of the EC Birds Directive, four species (peregrine, hobby (*Falco subbuteo*), black redstart (*Phoenicurus ochruros*) and kingfisher) listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), 12 Species of Principal Importance (SPI), 8 species on the Birds of Conservation Concern 4 (BoCC4) Red list and 4 species on the BoCC4 Amber list. The records also include species of bird that are priority species in Greater Manchester listed on the Greater Manchester BAP; namely black redstart and farmland birds (specific details of species not available).

Field Survey

- 3.29 The woodland, scattered trees and introduced shrub habitats within the Survey Area are considered to offer potential for nesting birds. Furthermore, a colony of house sparrows (*Passer domesticus*) were observed within a parcel of introduced shrub within the immediately south of the Site. Building 305 is not considered suitable to support nesting birds.

Constraints and Recommendations

- 3.30 Of the four species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), there are no recent data to indicate any of these species breed within close enough proximity to potentially be at risk from construction works within the Site. Furthermore, the habitats present within the Survey Area are not considered to offer suitable nesting opportunities for these species. Vegetation removal / modification works are not due to be included as part of the Scheme. However, should this change, other breeding bird species are likely to be present adjacent to the Site, therefore vegetation that may support breeding birds (woodland, scattered trees and introduced shrub) which requires clearance should be removed outside the nesting season (typically considered to be March to August, inclusive). Should avoidance of these timings not be possible, removal should be carried out within 24 hours following a nesting bird check, undertaken by a suitably experienced ecologist; this should be avoided where possible and only implemented under exceptional circumstances.
- 3.31 All active bird nests are protected by the Wildlife and Countryside Act, 1981 (as amended). Should an occupied nest be found during the construction works, a buffer zone will need to be incorporated to reduce the risk of the nest being abandoned by the birds until the nest is no longer in use / dependent offspring have fledged; the distance of the buffer zone will need to be determined by the ecologist. Additional measures would apply if the species was listed on Schedule 1 of the Wildlife and Countryside Act 1981

⁹ Notable bird species are taken as those listed: on Annex I of the EC Birds Directive (2009/147/EC); on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); as Species of Principal Importance (SPI) for the Conservation of Biodiversity in England listed in Section 41 of the Natural Environment and Rural Communities Act 2006; as Red or Amber in the Birds of Conservation Concern (BoCC) 5 (Stanbury, A, Eaton MA, Aebischer NJ, Balmer, D, Brown A, Douse, A, Lindley, P, McCulloch N, Noble DG and Win I (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114: 723-747); bird species or groups listed under the Greater Manchester BAP.

(as amended), which affords birds additional protection from disturbance when nesting, although the presence of such species is considered unlikely within the Survey Area.

Other Notable Species

Desk Study

- 1.1 There are six recent records of other notable species¹⁰ within the Study Area; all of which are of hedgehog (*Erinaceus europaeus*). The closest of these records is of a hedgehog within the grounds of Manchester Airport, approximately 0.58 km northeast of the Site, whilst all other records are located no closer than 1.5 km from the Site.

Field Survey

- 3.32 Areas of introduced shrub and woodland adjacent to the Site are considered to offer limited suitable habitat for commuting, resting and / or foraging hedgehog.

Constraints and Recommendations

- 3.33 It is considered possible that small numbers of hedgehog may occur within the Site. Although not vegetation removal / modification works are due to be carried out as part of the Scheme, any animals found should be carefully moved to sheltered habitat (i.e. the woodland) beyond works areas, but as close as possible to where they were found.

¹⁰Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any species listed in an IUCN Red Data Book; and any other species listed under the Greater Manchester BAP that are not referred to in previous sections of the report.

4. Opportunities for Enhancements

4.1 This section highlights opportunities for providing ecological enhancements, based on the current Scheme details.

Other Enhancements

4.2 The following enhancements could be delivered for biodiversity as part of the Scheme. Such measures may not necessarily contribute towards the calculation of Biodiversity Net Gain (BNG) assessment but could still deliver significant improvements for biodiversity in general:

- Enhancement and / or planting of semi-natural habitats, such as wildflower-rich grasslands, trees or species-rich hedgerows (although not comprising those which produce berries, fruits or nuts due to their potential to attract flocks of birds within the vicinity of the airport) – such species / habitats should comprise native species of local provenance;
- Removal / management of Schedule 9 invasive, non-native plant species;
- Installation of bird, bat and invertebrate boxes;
- Inclusion of hedgehog passes (positioned to avoid directing animals toward roads) in any fencing to be installed; and,
- Installation of wildlife interpretation boards.

5. Conclusion

- 5.1 This PEAR is based on a desk study and survey undertaken between December 2021 and January 2022, to assess the ecological constraints to the Scheme and to provide advice in respect of Scheme design, Site layout and / or Site investigation.
- 5.2 The following further surveys and / or mitigation, summarised in Table 4, are recommended to support a planning application.

Table 4. Summary of Recommendations

Feature	Recommendation	Timing
Invasive, non-native plant species	Fence off vegetation to ensure works do not affect invasive species.	N/A
Hedgehog	Any animals found should be carefully moved to sheltered habitat (i.e. the woodland) beyond works areas, but as close as possible to where they were found.	N/A
Bats	Not necessary unless removal or other works required on the single tree (TN1) categorised as offering low bat roost suitability. If this changes then this tree will need to be soft-felled following a method statement. This should involve removing the ivy by hand and cutting the branches and trunk in stages.	Any time of year
Birds	Vegetation works are not required based on the current Scheme plans. However, should this change then vegetation that may support breeding birds (e.g., woodland, trees and introduced shrub) which requires clearance should be removed outside of the nesting season (typically March to August, inclusive). If this is not possible, removal should be carried out within 24 hours of a nest search undertaken by a suitably experienced ecologist.	Nesting season is typically considered to be March to August inclusive Any time of year

Re-Survey of Site

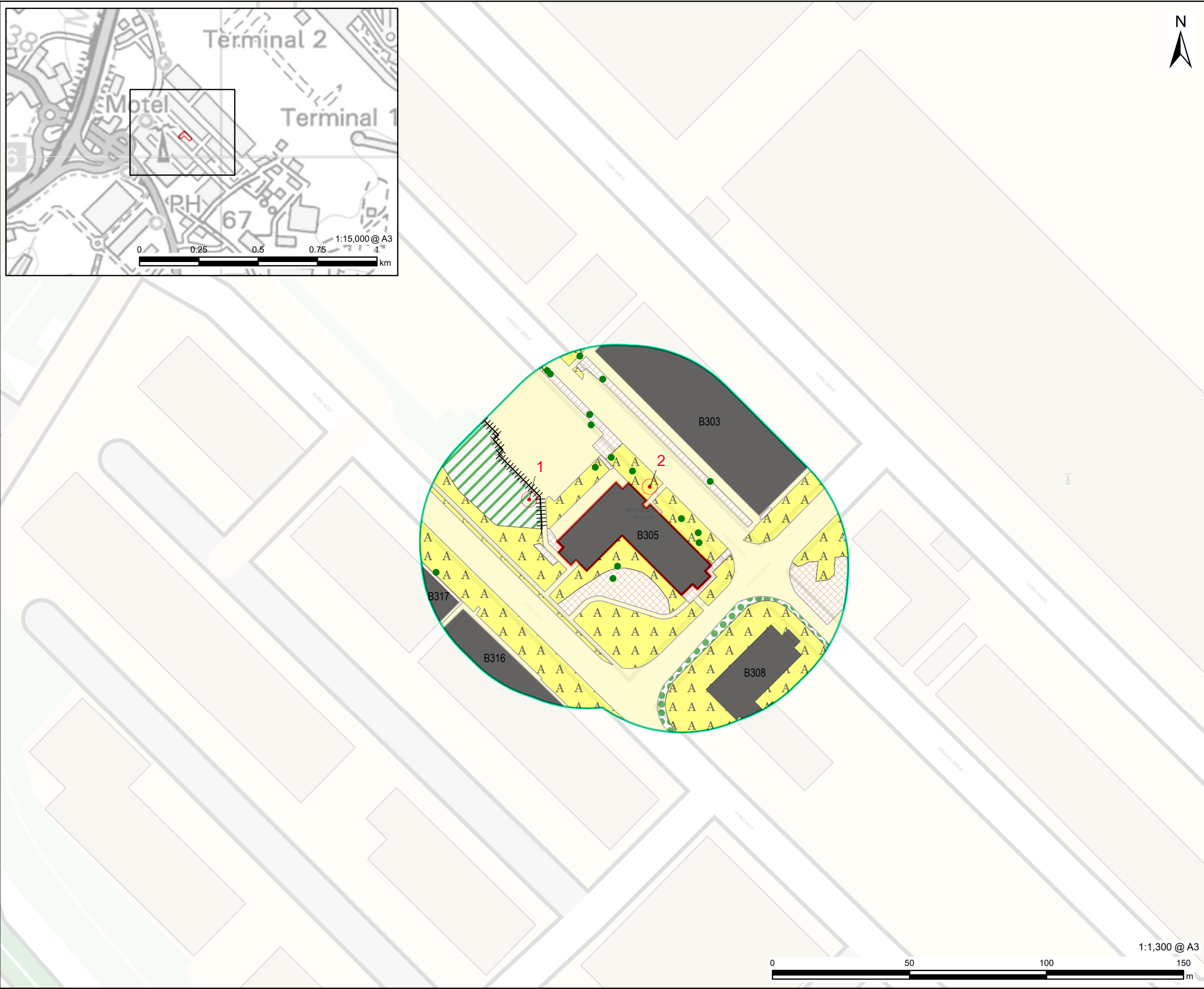
- 5.3 Due to the mobility of animals and the potential for colonisation of the Survey Area, it is recommended that an updated ecological survey be undertaken prior to the redevelopment of this Site should this not occur within 12 months of the date of the Site survey (15th December 2021).

Appendix A Figures

Figure 1 – Designated Sites Plan

Figure 2 – Phase 1 Habitat Plan





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PROJECT

Building 305
Redevelopment

CLIENT

Columbia Threadneedle
Investment

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LEGEND

- Site Boundary
- Survey Area
- A3.1 - Broadleaved parkland/
scattered trees
- Target Note
- J2.4 - Fence
- A1.1.2 - Broadleaved woodland
- plantation
- A3.1 - Broadleaved parkland/
scattered trees
- J1.2 - Cultivated/disturbed land
- amenity grassland
- J1.4 - Introduced shrub
- J3.6 - Buildings
- Z99 - Hardstanding

NOTES

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ISSUE PURPOSE

FINAL

PROJECT NUMBER

60663052

FIGURE TITLE

Phase 1 Habitats

FIGURE NUMBER

Figure 2

1:1,300 @ A3



Appendix B Relevant Legislation and Planning Policy

Legislation

- 5.4 The UK is no longer a member of the European Union (EU). EU legislation as it applied to the UK on 31 December 2020 is now a part of UK domestic legislation. EU legislation which applied directly or indirectly to the UK before 11.00 p.m. on 31 December 2020 has been retained in UK law as a form of domestic legislation known as 'retained EU legislation'.
- 5.5 The Environment Act 2021 was passed in law across the UK in November 2021. The Act seeks to provide a post-Brexit legal framework for environmental governance and make provision improvements to the natural environment.
- 5.6 The Secretary of State for the Environment, Food and Rural Affairs and Welsh Ministers have made changes to parts of the *Conservation of Habitats and Species Regulations 2017* (referred to as the 2017 Regulations) so that they operate effectively. Most of these changes involve transferring functions from the European Commission to the appropriate authorities in England. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

Designated Sites

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

- 5.7 These sites in the UK no longer form part of the EU's Natura 2000 ecological network. The *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019* (referred to as the 2019 Regulations) have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes:
- existing SACs and SPAs; and
 - new SACs and SPAs designated under these Regulations
- 5.8 Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network.
- 5.9 Formal Appropriate Assessment is required to be undertaken by the competent authority before undertaking, or giving consent, permission or other authorisation for any work which are likely to have a significant effect on such a site.

Wetland of International Importance (Ramsar site)

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

Sites of Special Scientific Interest

- 5.11 Under the *Wildlife and Countryside Act 1981* (as amended), it is an offence to carry out or permit to be carried out any operations likely to damage the Site of Special Scientific Interest (SSSI). These operations are listed in the SSSI notification.
- 5.12 Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 of the *Wildlife and Countryside Act 1981* (as amended), before undertaking operations likely to damage a SSSI.

National Nature Reserve

- 5.13 National Nature Reserves (NNR) are established under the National Parks and Access to the Countryside Act 1949. Most NNRs are also underpinned by SSSIs and are therefore protected by the measures

detailed above. For NNRs not underpinned by SSSIs it is still an offence to carry out or permit to be carried out any potentially damaging operation.

- 5.14 NNRs are given protection through policies in a local development plan.

Local Nature Reserve

- 5.15 A Local Nature Reserve (LNR) is a statutory designation made under National Parks and Access to the Countryside Act 1949, by principal local authorities (district, borough or unitary councils).
- 5.16 The local authority must control the LNR land - either through ownership, a lease or an agreement with the owner.
- 5.17 LNRs are given protection through policies in a local development plan.

Locally Designated Sites

- 5.18 Local Wildlife Sites (LWS) / Sites of Biological Importance (SBI) are sites with 'substantive nature conservation value'. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species within a region.
- 5.19 They are usually selected by the relevant Wildlife Trust, along with representatives of the local authority and other local wildlife conservation groups.
- 5.20 The LWS / SBI selection panel, select all sites that meet the assigned criteria, unlike SSSIs, which for some habitats are a representative sample of sites that meet the national standard. Consequently, many sites of SSSI quality are not designated and instead are selected as LWSs / SBIs. Consequently, LWSs / SBIs can be amongst the best sites for biodiversity.

Protected Species

Bats / Great Crested Newt

- 5.21 These species, known as European Protected Species, are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill an animal; deliberately disturb an animal; or damage or destroy a breeding site or resting place used by an animal.
- 5.22 Deliberate capture or killing is taken to include "accepting the possibility" of such capture or killing. Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.
- 5.23 Where development works are at risk of causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal.
- 5.24 These species are also protected under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb an animal in such a place.
- 5.25 Lower levels of disturbance not covered by the *Conservation of Habitats and Species Regulations 2017* remain an offence under the *Wildlife and Countryside Act 1981* although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

Nesting Birds

- 5.26 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended), with some species afforded greater protection under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended). In addition to the protection from killing or taking that all birds receive, Schedule 1 birds and their young must not be disturbed at the nest.
- 5.27 There are no licensing purposes that explicitly cover development activities affecting wild birds.

Badger

- 5.28 Badgers and their setts are protected under the *Protection of Badgers Act 1992* (as amended). This makes it an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.
- 5.29 It is not illegal to carry out disturbance activities near setts that are not occupied, i.e. those that do not show signs of current use.
- 5.30 Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England. Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process.
- 5.31 When assessing the requirement for a licence in respect of development, Natural England¹¹ state that badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.
- 5.32 Licences are normally not granted from December to June inclusive (the badger breeding season) because dependent cubs may be present within setts.

Species and Habitats of Principal Importance for the Conservation of Biodiversity

- 5.33 Section 40 of the Natural Environment & Rural Communities Act (NERC) 2006 sets out the duty for public authorities to conserve biodiversity in England.
- 5.34 Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act for England. The list, known as the 'England Biodiversity List', of habitats and species can be found on the Natural England web site.
- 5.35 The 'England Biodiversity List' is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 to have regard to the conservation of biodiversity in England when carrying out their normal functions.

Invasive, Non-native Plant Species

- 5.36 Under the Wildlife and Countryside Act 1981 (as amended), it is an offence to plant or otherwise cause these species to grow in the wild.
- 5.37 Any contaminated soil or plant material is classified as controlled waste and should be disposed of in a suitably licensed landfill site, accompanied by appropriate Waste Transfer documentation, and must comply with section 34 of the *Environmental Protection Act 1990*.

Planning Policy

National Planning Policy Framework, 2019

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

Local Planning Policy

- 5.39 The Manchester Core Strategy¹², which was adopted on 11th July 2012 and covers the 2012 – 2027 period, provides details of two policies which relate to ecology and nature conservation, these are:
- Policy EN 15 – Biodiversity and Geological Conservation; and,
 - Policy EN 9 – Green Infrastructure.

¹¹ Interpretation of 'Disturbance' in relation to badgers occupying a sett, Natural England (2009)

¹² Manchester Core Strategy. Accessed 11th January 2022 at https://secure.manchester.gov.uk/downloads/download/5672/core_strategy

Local Biodiversity Action Plans

5.40 The Greater Manchester BAP is the Local Biodiversity Action Plan (LBAP) relevant to the Scheme. It has been developed by a wide partnership of organisations and individuals and supports the actions needed to safeguard and enhance local wildlife and habitats.

5.41 The Greater Manchester BAP lists all the Priority Habitats and Species identified as threatened and requiring conservation action; these include 10 species / species groups (e.g. farmland birds) and nine habitats, in addition to those listed nationally. The species and habitats directly relevant to the Site include:

- **Species:** all bat species, black redstart and farmland birds; and,
- **Habitats:** Grasslands, urban managed greenspace (including amenity grassland) and native woodlands.

Appendix C Methodology

Desk Study

Background Records Search

- 5.42 The preliminary ecological assessment includes a desk study to obtain background records relevant to a Site and the Scheme. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage is not possible.
- 5.43 The Study Area is dependent upon the nature, timing and scale of the Scheme, as well as the location of the Site and the surrounding landscape. These variables all contribute to what is referred to as the Zone of Influence (ZoI) of the Scheme, which is the area over which ecological features may be affected by biophysical changes because of the works and associated activities.
- 5.44 In December 2021 Greater Manchester Local Records Centre (GMLRC) was contacted to obtain the following ecological data:
- Records of non-statutory designated sites within 2 km of the Site boundary;
 - Records of legally protected and notable species (fauna and flora) within 2 km of the Site boundary, including Species of Principal Importance for the Conservation of Biodiversity listed under Section 41 of the Natural Environment & Rural Communities Act 2006 in the England Biodiversity List¹³.
- 5.45 The Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk) was reviewed for the following information:
- Designated sites of nature conservation importance (statutory sites only) within 2 km of the Site.
 - Notable habitats within 2 km of the Site, these being areas of ancient woodland (reduced to 1 km) and 'Habitats of Principal Importance for the Conservation of Biodiversity' included in the England Biodiversity List¹⁴.

Great Crested Newt Pond Search

- 5.46 Ordnance Survey maps and the *Where's the Path* website (<https://wtp2.appspot.com/wheresthepath.htm>) have been used to identify the presence of water bodies within 250 m of the Site boundary, in order to help establish if the land within and immediately surrounding the Site could be used by great crested newts. This species can use suitable terrestrial habitat up to 500 m from a breeding pond¹⁵, though there is a notable decrease in great crested newt abundance beyond 250 m from a breeding pond¹⁶.

Field Survey

- 5.47 The preliminary ecological assessment includes a walkover survey of the Survey Area (all land within the Site), broadly following the Phase 1 habitat survey methodology as set out in Joint Nature Conservation Committee guidance (JNCC, 2010)¹⁷. This survey method records information on habitat types and is 'extended' to record any evidence of and potential for protected or notable species to be present. Plant names recorded during the survey follow Stace (2010)¹⁸.
- 5.48 During the walkover survey, the following protected or notable species are considered:

¹³ Section 40 of the Natural Environment & Rural Communities Act 2006 requires that The Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the [England Biodiversity List](#)

¹⁴ Section 40 of the Natural Environment & Rural Communities (NERC) Act 2006 requires that The Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the [England Biodiversity List](#)

¹⁵ Great Crested Newt Mitigation Guidelines (English Nature, 2001).

¹⁶ Natural England. An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576) <http://publications.naturalengland.org.uk/publication/134002>.

¹⁷ Joint Nature Conservation Committee (2010) *Handbook for Phase 1 habitat survey - a technique for environmental audit*.

¹⁸ Stace, C E (2010) *New Flora of the British Isles*, 3rd edition. Cambridge University Press.

- **Badger:** the survey involves searching for signs of badger activity including setts, tracks, snuffle holes and latrines, following the methodology detailed in Scottish Badgers (2018)¹⁹ and Harris et al (1989)²⁰;
- **Bats:** the survey involves searching for potential roosting sites for bats within trees and structures (such as buildings, bridges or underground features such as mines) and categorising the suitability of those trees or structures to support roosting bats (negligible to high, or confirmed roost), in accordance with Bat Conservation Trust (BCT) guidance (2016)²¹;
- **Birds:** the survey involves assessing the potential of habitats within the Survey Area to support breeding, wintering or migrating birds, either individually notable species or assemblages of both common and rarer species;
- **Great crested newt:** the survey involves assessing the potential of habitats within the Survey Area to support great crested newt, following English Nature (2001)²² and Froglife (2001)²³ guidance;
- **Protected or Notable species of plants:** the survey involves recording protected or notable plant species;
- **Other notable species:** the survey involves assessing the potential of habitat within the Survey Area to support other Notable Species, such as hedgehog, brown hare, polecat or common toad;
- **Non-native invasive plant species:** the survey involves recording evidence of the presence of invasive plants listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) and subject to strict legal control.

Limitations and Assumptions

- 1.2 Records obtained as part of the desk study provide some indication of the presence of certain species. They do not, however, represent a definitive inventory of all species present within the Study Area. The inclusion of a species, or conversely the absence of a species does not necessarily mean that species remains present or absent beyond the time of that record.
- 1.3 The Phase 1 habitat survey was conducted outside the optimal period to confidently identify habitats and plant species, however, given the relatively simple nature of the habitats within the Survey Area, all habitats were considered to be identified appropriately and additional habitat surveys would not provide any additional benefit beyond the identification of a small number of more plant species. Therefore, there are considered to be no significant constraints to the assessment.

¹⁹ Scottish Badgers (2018). *Surveying for Badgers: Good Practice Guidelines*. Version 1.

²⁰ Harris, S. Cresswell, P. and Jefferies, D. (1989). *Surveying Badgers*.

²¹ Collins, J.(ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edition). The Bat Conservation Trust. London.

²² English Nature (2001). *The Great Crested Newt Mitigation Guidelines*.

²³ Froglife (2001). *The Great Crested Newt Conservation Handbook*.

Appendix D Target Notes and Photographs

Target Note (TN) Reference / Feature	Photograph
Building B305	
TN 1 - tree with low bat roost suitability	

Target Note (TN) Reference / Feature	Photograph
	
TN 2 - Montbretia (<i>Crocasmia x crocosmiiflora</i>)	

Target Note (TN) Reference / Feature	Photograph
Example of Cotoneaster species adjacent to Site	
Building B303	

Target Note (TN) Reference / Feature	Photograph
	
Building 308	
Building 316	

Target Note (TN) Reference / Feature	Photograph
Building 317	
Planted broadleaved woodland adjacent to Site	

Target Note (TN) Reference / Feature	Photograph
Example of amenity grassland adjacent to Site	
Example of introduced shrub parcels adjacent to Site	
Area of introduced shrub adjacent to Site	

Target Note (TN) Reference / Feature	Photograph
Parcel of scattered trees adjacent to Site	

