



e3p

Preliminary Ecological Appraisal Report

Station Road, Milnrow, Oldham

Reference: 81-470-R2-1

Date: October 2023



PRELIMINARY ECOLOGICAL APPRAISAL REPORT

Station Road, Milnrow,
Oldham

Prepared for:
Obsidian Design & Build Ltd

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EXECUTIVE SUMMARY

Site Address	Station Road, Milnrow, Oldham, OL16 4HQ
Coordinates	E 392781, N 412382
Site Area	Approximately 1.7 ha
Current Site Use and Adjacent Site Use	The site comprised a warehouse and office building, and hardstanding associated with Maqio Toys, with an area of vegetation in the south-east of the site. Residential development surrounds the site to the south and west, with a railway and the River Beal to the south and north respectively.
Designated Sites	No designated sites lie within 1 km of the site. However, the site lies within the Impact Risk Zones of South Pennine Moors Special Area of Conservation (SAC), Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI), as well as Rochdale Canal SAC and SSSI. Additionally, Stanney Brook Site of Biological Importance (SBI) falls within 1 km of the site boundary. No impacts on designated sites are anticipated as a result of development. HRA screening, to assess any potential impacts of the development on the designated site is not required.
Survey Results	The site was found to comprise predominantly a building and hardstanding, however the site also contained areas of ephemeral/short perennial, scattered scrub, tall ruderal, dense scrub and amenity grassland, with some areas of hardstanding colonised by vegetation. Several scattered trees were also identified within the dense scrub. The site was found to have the following potential ecological constraints: ✿ Potential presence of common amphibians within the brash piles, tall ruderal, scattered scrub and dense scrub. ✿ The on-site building had Low bat roosting potential for crevice-dwelling species. ✿ Potential presence of nesting birds within the dense scrub and treelines. The on-site building is also suitable for nesting birds, particularly feral pigeon. ✿ Potential presence of badgers within the local area. ✿ Potential presence of otter within the River Beal adjacent to site. ✿ Potential presence of hedgehogs within the brash piles, tall ruderal, scattered scrub and dense scrub. ✿ Field horsetail and Himalayan balsam were identified on site.



Conclusions

The following further surveys are recommended:

- ✿ One Nocturnal Bat Survey on the on-site building between May and August (inclusive) **OR** on-site supervision of roof works (see below).

The following mitigation is recommended:

- ✿ Updated badger walkover prior to start of works.
- ✿ Precautionary Working Methods for badger.
- ✿ Precautionary Working Methods for otter.
- ✿ Lighting strategy to retain the trees surrounding the adjacent railway and river as dark areas for bats.
- ✿ Works to the warehouse roof are to be carried out under the supervision of an ecologist. This would comprise a search for bats prior to the works commencing, including crevices in the brickwork and any damaged or lifted roof tiles.
- ✿ Common amphibians are to be removed by hand from the working area during the clearance phase.
- ✿ If any parts of the building or vegetation requires removal, it should be removed outside of the breeding bird season (March to September inclusive). If this is not possible, a nesting bird check should be undertaken by a suitably qualified ecologist up to 24 hrs before works commence. If a nest, or nest in construction, is located, then a stand-off distance should be maintained until the young have fledged.
- ✿ During site clearance, any scrub and debris piles, that require removal, should be demolished by hand to ensure no sheltering hedgehogs are impacted by the works. It is recommended that vegetation clearance takes place outside of December-March to avoid impacting hibernating hedgehogs.

A gain in biodiversity will be required on-site. If this cannot be achieved onsite, a conservation offset payment, or off-site compensation may be required.



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1. INTRODUCTION

1.1. BACKGROUND

E3P were commissioned by Obsidian Design & Build Ltd to undertake a Preliminary Ecological Appraisal at Station Road, Milnrow, Oldham, hereafter referred to as “the site”.

This report has been prepared by Zach Squire-Watt BSc (Hons), MSc, QCIEEM, Graduate Ecologist at E3P. Zach has undertaken multiple Preliminary Ecological Appraisals and condition assessments for various projects across the UK.

1.2. PROPOSED DEVELOPMENT

Proposals include repair works to the existing warehouse roof and the construction of a new warehouse in the south-east of the site.

1.3. SITE LOCATION

The site is located in the south of the town of Milnrow. Station Road defines the site’s north-western boundary and meets Dale Street approximately 100 m north of site. A railway line and the River Beal define the site’s western and northern boundaries respectively. Please refer to Figure 1.1 for the approximate site location.

FIGURE 1.1 APPROXIMATE SITE LOCATION



1.4. OBJECTIVES

The objectives of the Preliminary Ecological Appraisal are as follows:

-  Identify the major habitats present.
-  Ascertain the presence or potential presence of any legally protected species and habitats.
-  Recommend any further surveys or mitigation that may be required.

The Preliminary Ecological Appraisal comprises a desk study and site walkover. This survey has been completed as a baseline assessment of the site, and as such please see the end of the report for further surveys and mitigation proposed.



2. METHODOLOGY

2.1. DESKTOP STUDY

The following sources of information and ecological records were consulted:

-  MAGIC – A web-based interactive mapping system, on which geographic information regarding key environmental schemes and designations are collated, including details of statutory conservation sites, accessed October 2023.
-  Aerial mapping and ordnance survey maps.
-  Local data records, including GMLRC– The Greater Manchester Local Records Centre, received 10th October 2023.

A 1 km search area was utilised for the data search, with this being deemed an appropriate distance for the Zone of Influence of the site. The 1 km search was selected due to the size of the site and the site largely being made up of man-made habitats associated with the warehouse. The surrounding areas have also been taken into account which is largely made up of residential estates associated with the town of Milnrow and therefore have limited value for wildlife.

The data search included the request for details of protected and notable species of flora and fauna within 1 km of the central grid reference of the site. In addition, a request was made for any non-statutory designated sites within 1 km of the site boundary.

Please note that a lack of up-to-date records does not confirm absence of a species from the area. Lack of records may simply be a result of a lack of protected species surveys being undertaken within the local area.

2.2. VEGETATION AND HABITATS

A Preliminary Ecological Appraisal of the proposed development site was undertaken by Zach Squire-Watt with assistance from Conor Evans, Consultant Ecologist, on 04th October 2023. The weather was dry, still and overcast.

The walkover survey was undertaken to the standard methodology as detailed by the JNCC Handbook for Phase 1 Habitat Survey, 2010. The assessment follows the methodology as per “Guidelines for Preliminary Ecological Appraisal” (CIEEM, 2017).

A vegetation and habitat plan has been produced for the proposed development site and the immediate surrounding area (please refer to Appendix I). The mapping is based on the Joint Nature Conservation Committee Phase I Habitat Survey Methodology (JNCC 2010).

Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act 1981 (as amended) and species which are indicators of important and uncommon plant communities. All plant nomenclature follows Stace (2019).



Searches were carried out for the presence of invasive species, including those listed on the revised (April 2010) Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) including Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*).

2.3. FAUNA

A thorough search of the site for signs of protected species of fauna was undertaken during the site walkover. These searches considered the following:

- ✿ Suitability of any ponds to support notable amphibians, and the suitability of the site's terrestrial habitats to support amphibians.
- ✿ Suitability of the site to support reptiles by way of habitat structure and refuge piles, as well as links to the wider landscape.
- ✿ Signs of badgers (*Meles meles*), by way of setts, mammal paths, foraging signs or latrines to indicate usage of the site by the species.
- ✿ Search of any watercourses for signs or suitability for water vole (*Arvicola amphibius*) and otter (*Lutra lutra*) by way of burrows, resting places, holts and foraging signs.
- ✿ Suitability of the site to support roosting, foraging and commuting bats.
- ✿ Suitability of the site to support notable bird species.
- ✿ Suitability of the site to support notable invertebrates.
- ✿ Search of the site for any invasive species.

2.4. PRELIMINARY ROOST ASSESSMENT

The Preliminary Roost Assessment (PRA) was undertaken by Zach Squire-Watt and Conor Evans on 04th October 2023.

The survey involved undertaking a systematic search of the structures and trees, searching for signs of bats, or spaces where bats would be able to access. The methodology followed that described in *Bat Surveys for Professional Ecologists, 4th Edition* (Collins, 2023).

The structures and trees were categorised for their bat roosting potential as described in Table 2.1 and Table 2.2 respectively in accordance with Collins (2023).

TABLE 2.1 BAT ROOSTING POTENTIAL CLASSIFICATION OF STRUCTURES

CATEGORY	DESCRIPTION
NONE	No habitat features likely to be used by any roosting bats at any time of the year.



CATEGORY	DESCRIPTION
NEGLIGIBLE	No obvious habitat features on site likely to be used by roosting biats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
LOW	A tree or structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
MODERATE	A tree or structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
HIGH	A tree or structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.

TABLE 2.2 BAT ROOSTING POTENTIAL CLASSIFICATION OF TREES

CATEGORY	DESCRIPTION
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

2.5. SURVEY LIMITATIONS

A Preliminary Ecological Appraisal does not constitute a full botanical survey. Instead, key species are identified to give a representative description of each habitat type.

This survey was undertaken in October and as a result of seasonal die-back, it is possible that some species of flora may have been missed or misidentified. It is possible that some invasive/non-native species could have been missed during the survey, however due to the quality of habitat on site this is not considered to be a major constraint.

Access to all areas within 30 m of the site was not possible as much of the site's surroundings were on private property, and access onto the land surrounding the adjacent river or railway line was not possible due to the presence of security fencing.

These constraints have been taken into consideration during the assessment.



3. SURVEY RESULTS

3.1. SITE CONTEXT

The site is located on Station Road and contained a functional warehouse and office space associated with Maqio Toys. The hardstanding surrounding the building was in use for deliveries and had been colonised in parts by vegetation.

The site comprised mainly building and associated hardstanding with some areas of vegetation also present. These features may provide foraging and resting habitat for bats, nesting birds and terrestrial mammals. The surrounding residential developments are anticipated to have limited ecological value.

Several areas of woodland are in proximity to the site, the closest being approximately 410 m north of site. This woodland parcel is connected to the site via the River Beal, which defines the site's north-eastern boundary. There is also a woodland plantation approximately 450 m south-east of site; this may provide some nesting and roosting habitat for bird and bat species, as well as some foraging opportunities for terrestrial mammals.

The River Beal itself is anticipated to provide valuable foraging resources for aquatic fauna, including waterfowl, Daubenton's bat (*Myotis daubentonii*) and otters. It is likely to also act as a key commuting feature, providing connectivity to distant habitats across the wider landscape.

A railway line defines the site's western boundary. This is likely to provide commuting features to terrestrial mammals across the landscape, as well as bat and bird species along the tree-lined sections of the tracks.

An area of lowland fen associated with Stanney Brook lies approximately 700 m west of site. This is anticipated to provide unique habitat for specialised species of wading birds, invertebrates and wetland flora.

An area of open mosaic habitat lies adjacent to the south-east. This type of habitat is often found in previously developed land and can provide resting habitat for terrestrial mammals such as hedgehog and brown hare (*Lepus europeus*), as well as ground nesting birds such as skylark (*Alauda arvensis*).

No waterbodies are present within the site boundary or within 250 m of the site.

3.2. DESIGNATED SITES

No statutory sites are located within the 1 km search area, however the site is located within the Impact Risk Zones (IRZ) of the following statutory sites:

-  Rochdale Canal Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI), located approximately 1.2 km north-west, is designated as a SSSI for its diverse assemblage of aquatic flora, including floating water-plantain (*Luronium natans*), as well as several species of *Potamogeton* pondweeds. Other notable species include water violet (*Hottonia palustris*), reed-sweet grass (*Glyceria maxima*) and the locally uncommon royal fern (*Osmunda regalis*). Rochdale Canal has also been designated an SAC for the presence of floating water-plantain, an Annex II species.



- 📍 South Pennine Moors SAC, Special Protection Area (SPA) and SSSI are located approximately 3.2 km north-east of site. These sites are designated for the presence of European dry heaths, blanket bogs and old sessile oak woods with *Ilex* and *Blechnum* in the British Isles, all of which are Annex I habitats. The site also contains the only UK breeding sites for twite (*Linaria flavirostris*). The site is also of European importance for moorland-breeding birds including merlin (*Falco columbarius*) and golden plover (*Pluvialis apricaria*), as well as rare acidic mire flora species such as bog asphodel (*Nartecium ossifragum*) and round-leaved sundew (*Drosera rotundifolia*).

The proposed development includes renovations to the existing building and the creation of a new warehouse unit on site, both of which are considered to be low impact and an increase in traffic would not be seen. As such, an air quality assessment will not be needed to assess the impact the proposed site and associated traffic will have on the floating water-plantain within Rochdale Canal SAC. In addition, the site is not deemed to provide any functionally linked land to the South Pennine Moors SPA. therefore an HRA will not be needed. The proposed plans will not require further consultation with Natural England to proceed.

One non-statutory site is located within the 1 km search area: Stanney Brook Site of Biological Importance (SBI), located approximately 750 m west of the site. The proposed works are not anticipated to have any impact on Stanney Brook SBI as pre-existing residential development, distance between the sites and the lack of functionally connected land are all likely to act as buffers to disturbance.



3.3. HABITATS

The main habitats encountered during the survey are described in the following subsections. Please refer to Appendix I for the Phase 1 Habitat Plan.

3.3.1. BUILDING AND HARDSTANDING

The majority of the site comprised a large building containing an office and warehouse that were both associated with Maqio Toys, with much of the site also covered by hardstanding. The hardstanding had been colonised in parts by flora comprising creeping thistle (*Cirsium arvense*), field bindweed (*Convolvulus arvensis*), herb robert (*Geranium robertianum*), field horsetail (*Equisetum arvense*) and ivy (*Hedera helix*).

The office and warehouse building and a wall were both present within the site boundary. A detailed assessment and further photographs of the building and walls are outlined within Appendix II.

PLATE 1 SHOWING AREA OF HARDSTANDING



3.3.2. AMENITY GRASSLAND

Two areas of amenity grassland were present in the north of the site, one bordering Station Road and the other comprising a small area on the building's eastern side. Species present included primarily perennial rye grass (*Lolium perenne*), with occasional red clover (*Trifolium pratense*), broadleaved dock (*Rumex obtusifolius*), nettle (*Urtica dioica*), smooth hawkbeard (*Crepis capillaris*), greater plantain (*Plantago major*), smooth sow thistle (*Sonchus oleraceus*) and bushes of firethorn (*Pyracantha* sp.). Several raised beds had also been built on the amenity grassland as part of a small community garden.



PLATE 2 SHOWING AMENITY GRASSLAND



3.3.3. EPHEMERAL/SHORT PERENNIAL

Two areas of ephemeral/short perennial were present within the site boundary; one in the south of the site, and another on the northern boundary bordering hardstanding. Both parcels shared species, which included butterfly bush (*Buddleia davidii*), smooth sow thistle, broadleaved dock, bramble (*Rubus fruticosus* agg.), petty spurge (*Euphorbia peplus*), red clover and dandelion (*Taraxacum officinalis*).

PLATE 3 SHOWING EPHEMERAL/SHORT PERENNIAL



3.3.4. TALL RUDERAL

Two areas of tall ruderal were present; one in the south of the site, and the other bordered the warehouse building in the east. Species present included rosebay willowherb (*Chamaenerion angustifolium*), ragwort (*Jacobaea vulgaris*), red clover, perennial rye grass, bramble, alder (*Alnus glutinosa*) saplings, creeping buttercup (*Ranunculus repens*), ribwort plantain (*Plantago lanceolata*), false oat grass (*Arrhenatherum elatius*), greater plantain, herb Robert and broadleaved dock.

PLATE 4 SHOWING TALL RUDERAL



3.3.5. SCATTERED SCRUB

A large area of scattered scrub lay in the south-east of the site, and comprised bramble, bracken (*Pteridium aquilinum*), rosebay willowherb and perennial rye grass. Two small brash piles were also present in the scattered scrub, formed presumably from vegetation cuttings from the site.



PLATE 5 SHOWING SCATTERED SCRUB



PLATE 6 SHOWING BRASH PILES



3.3.6. DENSE SCRUB

In the south of the site was an area of dense scrub. Present species included silver birch (*Betula pendula*) saplings, oak (*Quercus robur*) saplings, alder (*Alnus glutinosa*) saplings, bracken, nettle, hawthorn (*Crataegus monogyna*), Himalayan balsam (*Impatiens glandulifera*), goat willow (*Salix caprea*) saplings, wood avens (*Geum urbanum*) and herb Robert. A large rock mound was also present within the dense scrub, and had been covered by vegetation growth.

PLATE 7 SHOWING DENSE SCRUB



PLATE 8 SHOWING ROCK MOUND



3.3.7. SCATTERED TREES

Several scattered silver birch trees were present in the dense scrub, while an alder was identified within the amenity grassland in the north of site.

PLATE 9 SHOWING SCATTERED TREES



3.3.8. TREELINE

A line of ash (*Fraxinus excelsior*) trees was present in the north of the site and separated the hardstanding car park from the amenity grassland.



PLATE 10 SHOWING TREELINE



3.4. PROTECTED AND NOTABLE SPECIES

3.4.1. AMPHIBIANS

Consultation with GMLRC identified numerous records of great crested newts (*Triturus cristatus*) within the 1 km search area, with the closest records approximately 300 m north-west.

Consultation with MAGIC identified one great crested newt European Protected Species Licence with the 1 km search area approximately 340 m north-west of site, active between 2015 and 2017 for the destruction of a great crested newt resting place. Further consultation with MAGIC showed one licence return within 1 km of the site, located approximately 400 m north-west confirming the presence of the species in 2015.

Great crested newts' upper dispersal limit is generally considered to be up to 250 m from a waterbody (though occurrence of greater distances does exist where habitat connectivity is of high quality) (English Nature, 2001). As such, the presence of great crested newts on-site is reasonably discounted as no waterbodies were located on or within 250 m of the site.

Records of common toad (*Bufo bufo*) were identified within the search area, the closest being associated with an area of residential development approximately 760 m south-east of site.

Overall, it is assessed that the site has the potential presence of common amphibians, particularly within the tall ruderal, scattered scrub, brash piles, dense scrub and rock mound.



3.4.2. BATS

Consultation with GMLRC identified numerous records of bats within the search area, including common pipistrelle (*Pipistrellus pipistrellus*), Leisler's bat (*Nyctalus leisleri*), Nathusius' pipistrelle (*Pipistrellus nathusii*) and noctule (*Nyctalus noctula*). The majority of records were associated with an area of residential housing approximately 800 m north of site, while the closest to site was an unknown species recorded within residential gardens approximately 150 m east of site. Additionally, a confirmed bat roost was identified in the data search, at an industrial building approximately 130 m west of site.

Consultation with MAGIC identified the presence of one Natural England Bat Mitigation Licence, located approximately 340 m west of site and was active in 2015-21 for the destruction of a common pipistrelle and brown long-eared bat (*Plecotus auritus*) non-breeding roost.

A large warehouse building and connected office was located within the site boundary which was assessed for its suitability to support roosting bats, as detailed in Collins (2023). The on-site building was assessed as having Low potential for crevice-dwelling species, as no internal roost features were identified and the external features were only suitable for a small population of non-hibernating bats. The on-site wall was assessed as having Negligible potential, due to the lack of any features large enough to house roosting bats.

Please refer to Appendix II for a detailed description of the external features. All on-site trees were also assessed as having Negligible potential, due to their young age and a lack of any suitable roosting features present.

The majority of the site is anticipated to have some foraging value for bats within the tall ruderal, dense scrub and scattered trees. However, both the railway and river located west and north of the site respectively are likely to act as more important commuting and foraging routes for bats within the local area.

3.4.3. BADGER

Records of badger were identified within the 1 km search area. The site is assessed as having some suitability for badger as sett building opportunities are present within the dense scrub. No field signs of badger were observed.

3.4.4. OTHER TERRESTRIAL MAMMALS

Numerous records of European hedgehog (*Erinaceus europaeus*) were located within 1 km of the site boundary, with the closest approximately 150 m east and associated with an area of residential housing.

The site was assessed as having suitability for hedgehogs within the tall ruderal, scattered scrub and dense scrub, as well as the base of the treeline and scattered trees. The surrounding area was also assessed as having suitability due to the number of residential gardens within proximity to the site. Furthermore, the brash piles located within the scattered scrub may provide suitable resting habitat for species such as hedgehog.



3.4.5. OTTER AND WATER VOLE

Consultation with GMLRC identified records of water vole within 1 km of the search area, with the closest in an area of grassland associated with Stanney Brook, approximately 700 m west of site. No records of otter were identified.

No watercourses are present within the site boundary. The River Beal defines the site's northern boundary and is surrounded by woodland. Holt building opportunities may be present within the dense scrub, however, the banks of the river had been artificially reinforced, reducing the river's suitability for otter and water vole. Furthermore, given the site's current use, as well as the amount of urban development separating previous water vole records from the site, water vole can be discounted from discussion. However, otter may use the river for foraging and commuting purposes.

3.4.6. BREEDING BIRDS

Consultation with GMLRC identified numerous records of notable birds, including barn owl (*Tyto alba*), curlew (*Numenius arquata*), grey heron (*Ardea cinerea*), kingfisher (*Alcedo atthis*), little ringed plover (*Charadrius dubius*), bullfinch (*Pyrrhula pyrrhula*), dunnoek (*Prunella modularis*), grasshopper warbler (*Locustella naevia*), herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), lesser redpoll (*Carduelis cabaret*), reed bunting (*Emberiza schoeniclus*), skylark (*Alauda arvensis*), song thrush (*Turdus philomelos*), starling (*Sturnus vulgaris*) and yellow wagtail (*Motacilla flava*).

During the survey, woodpigeon (*Columba palumbus*), feral pigeon (*Columba livia domestica*), jackdaw (*Corvus monedula*), carrion crow (*Corvus corone*) and common gull (*Larus canus*) were identified on site.

Common bird species are anticipated to be present within the dense scrub, treeline and scattered trees. Species such as feral pigeon (*Columba livia domestica*) may also utilise the on-site building as nesting habitat, with signs of nesting pigeon in the external canopies in the west and south of the building. The site is assessed as having negligible value for ground nesting birds due to the limited area and lack of suitable habitat.

3.4.7. REPTILES

Consultation with GMLRC did not identify any records of reptiles within the search area.

The site was found to provide some value for reptiles, particularly within the dense scrub and treelines. However, given the site's current usage as a distribution warehouse and that the urban surroundings of the site are likely to act as a barrier to dispersal, reptiles can be discounted from further assessment.



3.4.8. INVERTEBRATES

The data search identified numerous notable invertebrate within the search area, including autumnal rustic (*Eugnorisma glareosa*), broom (*Ceramica pisi*), buff ermine (*Spilarctia luteum*), cinnabar (*Tyria jacobaeae*), dark-barred twin-spot carpet (*Xanthorhoe ferrugata*), dot moth (*Melanchra persicariae*), dusky brocade (*Apamea remissa*), ear moth (*Amphipoea oculea*), ghost moth (*Hepialus humuli*), mottled rustic (*Caradrina morpheus*), powdered quaker (*Orthosia gracilis*), rosy rustic (*Hydraecia micacea*), small heath (*Coenonympha pamphilus*), small square-spot (*Diarsia rubi*) and white ermine (*Spilosoma lubricipeda*). Overall, the presence of notable invertebrates within the site is reasonably discounted due to a lack of good quality habitat that would support notable invertebrates.

3.5. INVASIVE PLANT SPECIES

Consultation with GMLRC did not identify any records of invasive species within the search area.

Field horsetail and Himalayan balsam were identified during the site visit, in the hardstanding and dense scrub respectively.



4. ECOLOGICAL CONSTRAINTS AND MITIGATION

4.1. DEVELOPMENT PROPOSALS

Proposals include repair works to the warehouse roof and the construction of a new warehouse in the south-east of the site.

4.2. POLLUTION PREVENTION MEASURES

It is recommended that a minimum 10 m buffer zone is maintained around the River Beal in which no works are permitted. In addition, all best practice guidance relating to pollution will be adhered to in order to protect the watercourse. This will include best practice use of refuelling machinery to avoid fuel spills. Site drainage will need to be considered to ensure that no highly silted or polluted run-off from the site workings will enter the watercourse. All site operatives will undergo a site induction which will brief them as to their working limits and legal responsibilities.

Best practice protection measures as detailed within PPG5 Pollution Prevention Guidelines (2007) are to be put in place to protect the watercourse. The following control measures would be required during any ground works and during the construction phase to ensure there are no impacts on the watercourse and water table or any wildlife utilising it:

- ✿ All operational plant will be kept well maintained and should not enter/be stored within the buffer zone.
- ✿ Turning off plant when not in use.
- ✿ Dampening of the operational areas will be regularly undertaken during dry weather conditions to avoid dust. Dust management will be extended to cover the plant and all operational areas and will be complied with throughout the period of development.
- ✿ Measures to prevent pollutants from entering ground and surface water is standard construction practice through the use of a bunded fuel storage and refuelling area at a discrete distance from any watercourses. These measures should be underwritten by spill management equipment being kept on-site and capable of being effectively utilised by trained operatives to contain any accidental spillage within any part of the operational area.
- ✿ A toolbox talk should be completed by a qualified ecologist to ensure contractors are aware of the River Beal and its ecological importance.
- ✿ During night hours, no lighting is to be located towards the River Beal to ensure no wildlife are deterred from using it.
- ✿ A 'Site Tidy' protocol is to be put in place on-site. All litter is to be appropriately controlled, whilst on-site materials are to be adequately stored overnight.
- ✿ All excavations will be battened at a 45-degree angle to allow escape should animals become trapped.



4.3. HABITATS

The site comprises habitats that were found to be widespread within the local area; however, they did contain value for wildlife such as bats, birds and terrestrial mammals. The hardstanding is of lowest value for wildlife, with the dense scrub comprising the area of highest value.

4.3.1. SCATTERED TREES & TREELINE

It is anticipated that the treeline in the north of site is to be retained. Effort should be made to retain the scattered trees in the south of the site, however if any trees are to be removed, they should be replaced as soon as practicable. Any replacement planting should endeavour to be on the same aspect as that to be lost.

It is recommended that the landscape planting comprises native species and species known to be of value for the attraction of wildlife. This will include fruiting and flowering species. Species deemed suitable for this development could include berry-bearing native species such as:

- ✿ Hawthorn.
- ✿ Rowan (*Sorbus aucuparia*).
- ✿ Holly (*Ilex aquifolium*).
- ✿ Whitebeam (*Sorbus aria*).
- ✿ Spindle (*Euonymus europaea*).
- ✿ Dog rose.
- ✿ Guelder rose (*Viburnum opulus*).
- ✿ Elder.

All planting should be from a trusted pest-free source and, where possible, be of local provenance. Any trees or shrubs within the site or boundary, to be retained, are to be appropriately protected during the construction phase. Temporary protective demarcation fencing will be used to protect the trees and shrubs. The fencing must extend outside the canopy of the retained trees and must remain in position until all plots have been developed to ensure protection is provided throughout the construction phase.

The fencing will be in accordance with BS 5837:2012 *Trees in Relation to Design, Demolition and Construction: Recommendations*.

4.4. PROTECTED AND NOTABLE SPECIES

4.4.1. AMPHIBIANS

The site may support small numbers of common amphibians within the tall ruderal, scattered scrub, brash piles, dense scrub and rock mound. It is recommended that during the clearance phase of works, any common amphibians encountered be moved by hand, away from construction activities.



4.4.2. BREEDING BIRDS

The site was assessed as having value for common bird species within the dense scrub, scattered trees and treeline, as well as parts of the building on site. The scattered trees and treeline are of highest value for the species group.

Efforts should be made to retain the on-site vegetation. It is anticipated that the scattered trees in the south of the site are to be removed, if this is to be completed within the breeding bird season (March–September inclusive), a suitably qualified ecologist must inspect the area no more than 24 hours prior to the removal. The building should also be checked for nesting birds prior to works commencing. Should any nests, or nests in construction be located, a suitable stand-off distance should be maintained until the young have fledged. The ecologist will advise on suitable stand off and provide a toolbox talk to all site contractors regarding their working limits and legal implications.

Post-development, bird boxes could be installed throughout the development to enhance the site's value for the species group.

4.4.3. BATS

The tall ruderal, dense scrub and scattered trees are anticipated to provide limited foraging and commuting habitat for bats and the on-site building were deemed as having Low bat potential. Therefore, it is recommended that the proposed lighting plan considers the habitats of highest importance and maintains the treelines as dark areas. It is recommended that any security lighting during construction is appropriately placed to avoid being directed at retained habitats. If this is not feasible, activity surveys will be needed to assess the levels of activity around the woodland and river.

It is recommended that lighting is to be pre-fixed on the proposed building, located near retained habitats or proposed habitats, to minimise the impact of lighting. Lighting should follow the protocols outlined in the Institute for Lighting Engineers document "Guidance for the Reduction of Obtrusive Lighting" (2005) and BCT's "Bats and Artificial Lighting in the UK" (2018) to minimise disturbance and sky-glow off site.

Due to the on-site building having Low bat potential for crevice-dwelling species, it is recommended that either one Nocturnal Bat Survey is carried out (see Section 5) **OR** an ecologist will attend site during the initial phases of the works to the warehouse roof, in which works affecting the sensitive areas will be supervised. This would comprise a search for bats prior to the works commencing, including the crevices in the brickwork and any damaged or lifted roof tiles.

It is recommended that any planting within the site be of native fruiting/flowering species in order to enhance the site for foraging bats post-completion. Bat boxes could be installed throughout the site post-construction to enhance the site for the species group.

4.4.4. BADGERS

No badger setts were located during the survey, though the habitats were identified as being suitable for the species and field signs of badger were observed during the site visit. Badgers are highly mobile and can create new setts in a short period of time.



It is recommended that an updated site walkover prior to the development is carried out to identify any new badger setts. If a badger sett is located, a stand-off distance may be required as well as precautionary working methods. If the sett requires closure, a Natural England Badger Licence would be required. Please note that badger licences can only be obtained between July and November each year to avoid potential impact on pregnant females.

The following precautionary working methods will be adhered to during construction phase to ensure that no badgers within the local area are impacted by the proposed development:

- ✿ All site operatives will be inducted to the presence of the species and their working limits and legal responsibilities.
- ✿ All site operatives will be inducted as to identifying potential badger setts, and should be vigilant if they suspect they locate a new sett during works and inform the project ecologist immediately.
- ✿ All excavations will be battened at a 45-degree angle to allow escape should animals become trapped.
- ✿ All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November each year when extra care is needed to avoid potential impacts on pregnant females.

It is not anticipated that the development will have a significant negative impact on badgers within the local area.

4.4.5. OTTERS

The River Beal which defines the site's northern boundary was assessed as having suitability for foraging and commuting otters. No otter holt building opportunities were present within the site, but parcels of woodland up and down stream of the site may contain provide these opportunities within the roots of trees.

All site operatives will be given a Toolbox Talk on the presence of the species and its legal protection. Site operatives will be required to sign the Toolbox Talk in order to confirm they have understood the details provided. Contact details of the ecologist will be provided to the site operatives.

The following Precautionary Working Methods should be adhered to for all works on-site:

- ✿ All site personnel are to be inducted through use of a Toolbox Talk, on the presence of otters, their legal protection and working limits.
- ✿ No artificial lighting will be installed, both during the works period and following on from the completion of the project, to ensure the river is maintained as a dark area for otter.
- ✿ Any temporarily exposed open pipe system should be capped in such a way as to prevent otters gaining access, as this may happen when contractors are off-site.
- ✿ As otters are naturally inquisitive, any excavations that are left overnight will include a ramp of 45° or less on one face to allow otter and other wildlife to climb out should they fall into the excavation.



-  Commuting otters may lie-up in stacked pipes or beneath pallets. These features should be inspected daily before the start of works.

4.4.6. HEDGEHOGS

During site clearance, the dense scrub, scattered scrub and tall ruderal is to be strimmed to 50 cm and checked for hedgehog prior to clearance to ground level. If any, trees within the treeline are to be removed, their bases should be checked prior to removal for sheltering hedgehogs. The brash piles should be deconstructed by hand and removed from site to reduce the risk of hedgehogs returning to site. It is recommended that vegetation clearance takes place outside of December-March (inclusive) to avoid impacting hibernating hedgehogs. If hedgehogs are located, they should be carefully moved by hand to an area outside of construction workings.

Post-development, a series of hedgehog houses could be installed throughout the site to enhance the site's value for the species group.

4.4.7. INVASIVE SPECIES

Himalayan balsam was identified during the site walkover. As such, it is recommended, prior to the development, that this should be eradicated following the most current guidance set out by the Environment Agency by a qualified contractor.

Field horsetail was also identified during the survey and it is recommended that this eradicated due to the damage it can cause to areas of hardstanding. Field horsetail is not listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) and therefore does not require removal legally.



5. FURTHER SURVEYS

5.1. BATS

The on-site building was assessed as having Low bat roosting potential for crevice-dwelling species. While the building is not due to be demolished, works to the warehouse roof are anticipated which may disturb roosting bats, therefore a single Nocturnal Bat Survey is required on the building between May and August. The survey would be valid for two years to inform a planning application. If bats are identified roosting within the building, a further two surveys would be required to characterise the roost and a European Protected Species Licence will be required with up-to-date surveys from the survey season prior to the application submission. Alternatively, works to the warehouse roof may be supervised by an ecologist during the works (see Section 4.5.3).

Additionally, as previously mentioned it may be unfeasible to maintain the river and railway as dark areas due to their proximity to the site and the need for security lighting given the site's commercial usage. If this is the case, Night-time Bat Walkover (NBW) surveys will be required. One survey visit per season will need to be undertaken (spring – April/May, summer – June/July/August, autumn – September/October). Static detector surveys are to be undertaken in conjunction with the activity surveys, the data is to be collected for a minimum of five consecutive nights per month (April – October) in appropriate weather conditions. All surveys should follow guidance detailed in Collins (2023).

5.2. TABLE OF FURTHER SURVEYS

Please refer to Table 5.1 for a summary of further surveys required to inform a planning application.

TABLE 5.1 FURTHER SURVEYS RECOMMENDED

SURVEY TYPE	TIMESCALES
NOCTURNAL BAT SURVEYS	One survey between May and August (inclusive)
NIGHT TIME BAT WALKOVER SURVEYS	One survey visit per season will need to be undertaken (spring – April/May, summer – June/July/August, autumn – September/October). Static detector surveys for a minimum of five consecutive nights per month (April – October)



6. BIODIVERSITY NET GAIN

The scheme should strive to achieve a 10% in biodiversity net gain. In line with The Environment Act 2021, this will be a mandatory requirement from January 2024. Full details of this and a calculation of net gain could be finalised after detailed landscape plans have been prepared. It is recommended that an ecologist is consulted during the design stage to ensure, where possible, biodiversity net gain can be achieved. The following habitat measures will increase the on-site biodiversity:

-  Retention of pre-existing scattered trees and dense scrub.
-  Native Hedgerow Planting.
-  Native Scrub Planting.
-  Broadleaved Trees.

Habitat measures should be provided within areas of open space or designated wildlife zones. A 30-year management plan should be produced to ensure biodiversity is secured on-site.



7. REFERENCES

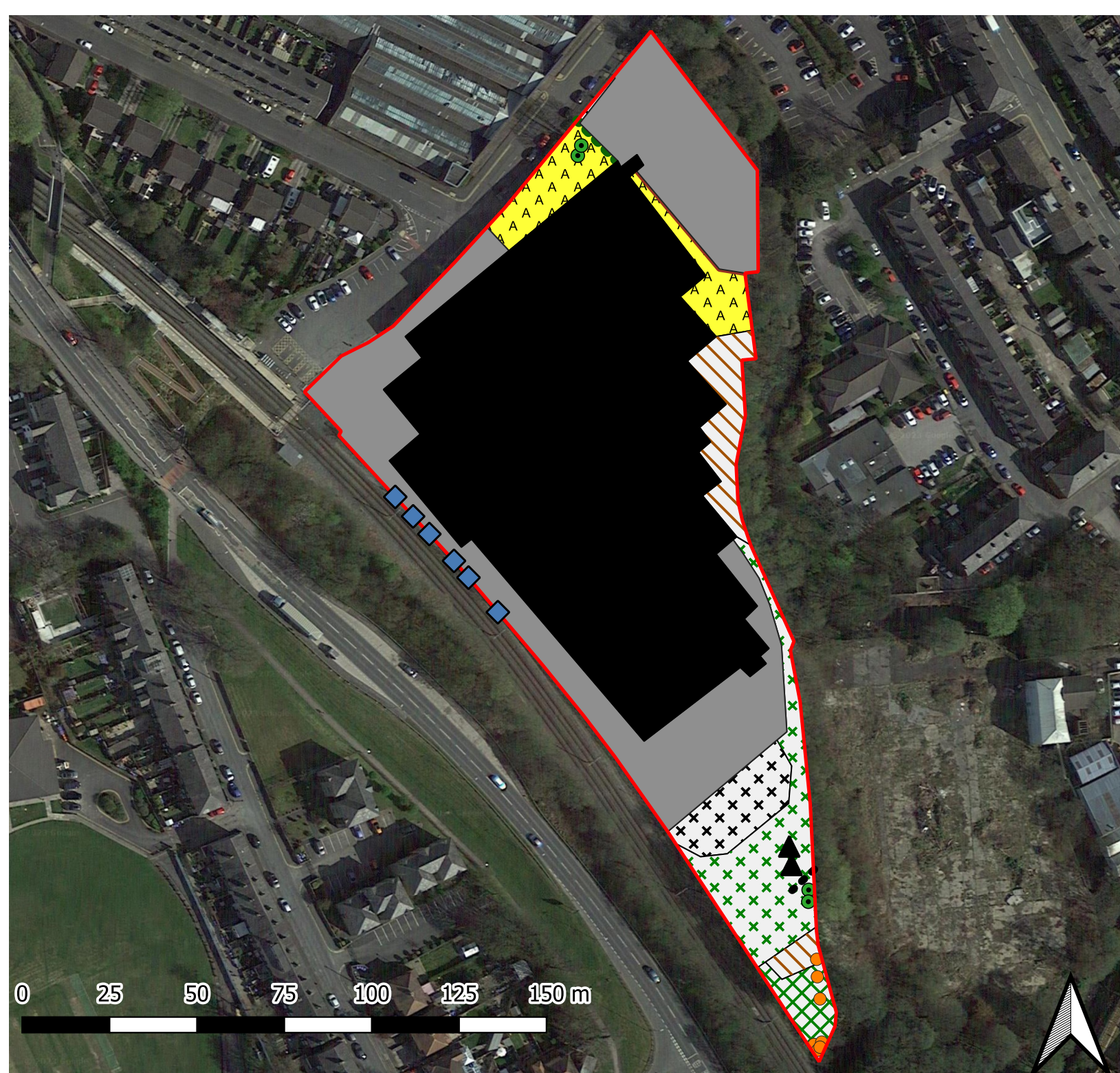
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END OF REPORT



APPENDIX I

PHASE 1 HABITAT PLAN



Key:

- Site boundary
- A Amenity grassland
- Buildings
- x Ephemeral/short perennial
- X Dense scrub
- Hardstanding
- + Scattered scrub
- / Tall ruderal
- Wall
- Line of trees
- Mammal path
- ▲ Brash piles
- Scattered trees
- Himalayan balsam
- ◆ Field horsetail

Notes

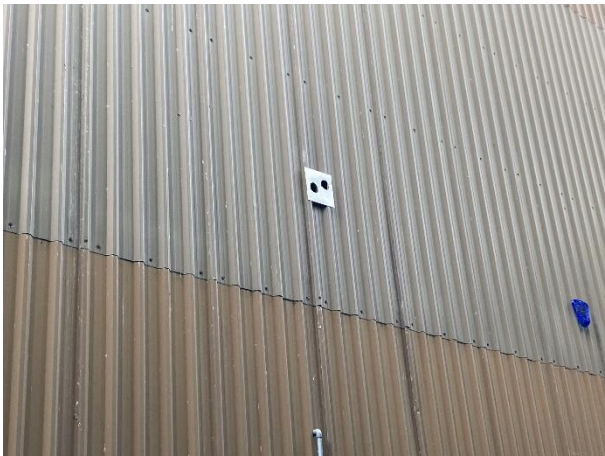
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Client: Obsidian Design & Build Ltd			Job No. 81-470	Date: 04/10/2023
			Drawing No. 81-470-001	Scale: 1 : 2500 @A4
Job title: Station Road, Milnrow, Oldham			Drawing title: Phase 1 Habitat Plan	



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APPENDIX II STRUCTURE DESCRIPTIONS

FEATURE	DESCRIPTION	PHOTOGRAPH
F1	Access point: A broken window on the western side of the warehouse, approximately 3 m high. No roost feature present.	
F2	Exposed insulation around a now bricked-up exit on the south-east of the warehouse, approximately 1.5 m high. Gaps between the wall and the old doorway could provide roosting opportunities for crevice dwellers on an occasional basis. F2 was assessed as having Low potential.	
F3	Access point: A vent through the warehouse on the eastern side, approximately 3 m high. No roost feature present .	



FEATURE	DESCRIPTION	PHOTOGRAPH
F4	Several gaps between the roof tiles and the warehouse, as well as lifted tiles, were observed on a south-facing aspect of the warehouse. Approximately 6 m high. Could provide roosting opportunities for crevice dwellers on an occasional basis. F4 was assessed as having Low potential.	
F5	Several lifted roof tiles were observed, as well as gaps between tiles and the underlying roof on a south-facing aspect of the warehouse. Approximately 6 m high. Could provide roosting opportunities for crevice dwellers on an occasional basis. F5 was assessed as having Low potential.	
F6	Access point: Numerous ground-floor entrances into a currently disused room in the east of the warehouse, between 1-2 m high. No roost feature present.	



FEATURE	DESCRIPTION	PHOTOGRAPH
F7	Gaps between the wall ledge and brickwork on the eastern face of the office building, approximately 10 m high. Could provide roosting opportunities for crevice dwellers on an occasional basis. F7 was assessed as having Low potential.	
F8	Gaps in the brickwork and weep holes on the north-eastern corner of the building, approximately 4 m high. Could provide roosting opportunities for crevice dwellers on an occasional basis. F8 was assessed as having Low potential.	
F9	Weep holes around the windows on the northern aspect of the office building, approximately 4 m high. Could provide roosting opportunities for crevice dwellers on an occasional basis. F9 was assessed as having Low potential.	



FEATURE	DESCRIPTION	PHOTOGRAPH
F10	Gaps between the soffit boxes and the wall, cracks in the brickwork and weep holes on the north-western corner of the building. Approximately 9 m high. Could provide roosting opportunities for crevice dwellers on an occasional basis. F10 was assessed as having Low potential.	
F11	Gaps underneath the roof and lifted lead flashing on the northern aspect of the warehouse, approximately 5 m high. Could provide roosting opportunities for crevice dwellers on an occasional basis. F11 was assessed as having Low potential.	
WALL	No gaps in the bricks large enough to house roosting bats. The wall was assessed as having Negligible potential.	

