



e3p

Preliminary Ecological Appraisal Report

Heatherdale Drive, Cheetham Hill

Reference:80-924-R1-1

Date: February 2024



PRELIMINARY ECOLOGICAL APPRAISAL REPORT

Heatherdale Drive
Cheetham Hill

Prepared for:
Mosscafe St. Vincents

Report Ref: 80-924-R1-1
Date Issued: 28/02/2024

E3P

Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

+ 44 (0) 161 707 9612
<https://e3p.co.uk/>

Registered in England
CRN: 08725262

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PREPARED BY	L. Shaw		
QUALIFICATIONS	BSc (Hons), Graduate Ecologist		
CHECKED BY	C. Bass		
QUALIFICATIONS	BSc (Hons) Consultant Ecologist		
AUTHORISED BY	C. Barlow		
QUALIFICATIONS	BSc (Hons), MSc, MEnvSc, CEnv, MCIEEM, Associate Director		

EXECUTIVE SUMMARY

Site Address	Heatherdale Drive, Cheetham Hill, Manchester, M8 0ET
Coordinates	E 384070, N 400703
Site Area	Approximately 15.5 ha
Current Site Use and Adjacent Site Use	The site comprised a large area of modified grassland and small areas of bare ground. The site was located on public open spaces on a housing estate within the urban area of Cheetham Hill. Further residential developments surrounded the site on all aspects.
Designated Sites	There are no statutory or non-statutory designated sites located within 1 km of the site boundary. Due to the small size and nature of the proposed works and the distance between the proposed site and the SSSI, no detrimental impacts on the statutory designated site are anticipated as a result of the development. Furthermore, as per the criteria listed on MAGIC (accessed February 2024), the proposed site will not require further consultation with Natural England to proceed in relation to the SSSI. Additionally, due to the distance of the site from the SAC and the urban built-up nature of the land between them limiting connectivity, a Habitat Regulation Assessment (HRA) screening assessment will not be required to assess whether the proposed development will have any 'likely significant effects' on the SAC.
Survey Results	The site was found to comprise large areas of modified grassland with smaller areas of developed land: sealed surface, bare ground and individual urban trees present within the site boundary. The site was found to have the following potential ecological constraints: - One tree (T1) found to have Low (PRF-I) bat roosting potential. - Potential presence of nesting birds within the individual trees. - Potential presence of badgers within the local area. - Potential presence of hedgehogs within the modified grassland and the understories of the individual urban trees.



Conclusions

No further surveys are recommended to inform a planning application.

The following mitigation is recommended:

-  Precautionary Working Methods for badger.
-  T1 should be soft felled under ecological supervision.
-  Vegetation should be retained where possible. If any 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.

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



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1. INTRODUCTION

1.1. BACKGROUND

E3P were commissioned by Mosscafe St. Vincents to undertake a Preliminary Ecological Appraisal at Heatherdale Drive, Cheetham Hill, hereafter referred to as “the site”.

This report has been prepared by Luke Shaw BSc (Hons), Graduate Ecologist at E3P. Luke holds a qualifying membership of CIEEM and has undertaken Preliminary Ecological Appraisals and protected species surveys on several sites in the UK.

1.2. PROPOSED DEVELOPMENT

Development proposals include the construction of residential buildings, with associated landscaping.

1.3. SITE LOCATION

The site is located within Cheetham Hill, within a predominantly residential area. Waterloo Road lies adjacent to the western site boundary, with the A6010 approximately 160 m south of the site Heatherdale Drive borders the southern boundary with Alderford Parade bordering the north of the site. Bellot Street Dog Park is located approximately 100 m north of the site. The New Testament Church of God Faith Tabernacle is located approximately 150 m north of the site. 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 February 2024.
- ✦ Aerial mapping and ordnance survey maps.
- ✦ Local data records from the past 10 years provided by the Greater Manchester Ecology Unit (GMEU) on 13th December 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 urban built-up nature of the surrounding area.

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 Luke Shaw with assistance from Carlin Jones BSc (Hons) Consultant Ecologist at E3P on 23rd January 2024. Carlin hold a level 3 Field Identification Skills Certificate. The weather was overcast and raining.

The walkover survey was undertaken to the standard methodology as detailed by the UK Habitat Classification Version 2.0 (UKHab, 2023). 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 (please refer to Appendix I). The mapping is based on the UK Habitat Classification Version 2.0 (UKHab, 2023).

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 Luke Shaw and Carlin Jones, who holds a Natural England Bat Licence (2023-11074-CL17-BAT), on 05th November 2020.

The survey involved undertaking a systematic search of the 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 trees were categorised for their bat roosting potential as described in Table 2.1 in accordance with Collins (2023).

TABLE 2.1 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

An 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 January and as a result of seasonal vegetation die back, it is possible that some species of flora may have been missed or misidentified, including some invasive non-native species. However, due to the urban nature of the habitats on site as well as the lack of vegetation diversity, this is not considered to be a major constraint.

An inspection of all areas within 30 m of the site to search for field signs of badger could not be undertaken during the survey, due to the presence of private residential properties on all aspects. Due to the urban nature of these habitats, this is not considered to be a major constraint.

These constraints have been taken into consideration during the assessment.



3. SURVEY RESULTS

3.1. SITE CONTEXT

The site is located in a predominantly residential area in Cheetham Hill, north Manchester. The site comprises modified grassland, developed land; sealed surface, bare ground, and urban trees. These habitats are anticipated to have limited ecological value. However, the scattered trees may provide suitability for nesting birds and foraging bats.

The land surrounding the site predominantly comprises urban, built-up land with limited ecological value. However, birds may nest within buildings and scattered trees. Additionally, Bignor Street Park is located adjacent to the north-east of the site boundary. Bignor Street Park comprises amenity grassland, hardstanding, scattered trees and a treeline. Whilst the amenity grassland and hardstanding are anticipated to have limited ecological value, the scattered trees and treeline are anticipated to provide foraging, commuting and refuge opportunities for local fauna including birds and bats.

Several areas of Open Mosaic Habitat on Previously Developed Land are located within 1 km of the site boundary. The closest such area is located approximately 210 m south-west of the site boundary. Open mosaic habitat is known to offer resources for local wildlife, particularly for birds and invertebrates. Multiple areas of Deciduous Woodland Biodiversity Action Plan (BAP) Priority Habitat are also located within 1 km of the site boundary, the closest of which is located approximately 250 m south-west of the site boundary. These are anticipated to provide valuable habitat for a range of protected species including nesting birds, roosting, and foraging bats, badgers, hedgehogs (*Erinaceus europaeus*), and common amphibians. However, the site lacks connectivity to these Open Mosaic and Woodland habitats, due to the lack of habitat corridors present within the urban built-up land surrounding the site.

The River Irk is located approximately 1 km east of the site boundary. The River Irk is anticipated to act as a valuable foraging, commuting and resting resource for aquatic specialist species, including otter, Daubenton's bat (*Myotis daubentonii*), fish, aquatic invertebrates, and a variety of waterfowl. The site is separated from the River Irk by hardstanding roads and buildings.

No waterbodies are located within 250 m of the site boundary.

3.2. DESIGNATED SITES

There are no statutory or non-statutory designated sites located within 1 km of the site boundary.

The site is located within the impact risk zone of the Rochdale Canal Site Special Scientific Interest (SSSI) and Special Area of Conservation (SAC), located approximately 4.9 km east of the site boundary. Rochdale Canal SAC is designated for its significant population of floating water-plantain (*Luronium natans*). Rochdale Canal SSSI is designated for its important habitats of emergent vegetation and submerged aquatic plants, which includes extensive colonies of nationally scarce floating water-plantain. The site also supports a diverse range of aquatic vegetation, most notably its assemblage of pondweeds (*Potamogeton* sp.). The canal also provides habitat for a variety of birds, including coot (*Fulica atra*), mallard (*Anas platyrhynchos*), moorhen (*Gallinula chloropus*), kingfisher (*Alcedo atthis*) and grey wagtail (*Motacilla cinerea*).



Due to the small size and nature of the proposed works and the distance between the proposed site and the SSSI, no detrimental impacts on the statutory designated site are anticipated as a result of the development. Furthermore, as per the criteria listed on MAGIC (accessed February 2024), the proposed site will not require further consultation with Natural England to proceed in relation to the SSSI. Additionally, due to the distance of the site from the SAC and the urban built-up nature of the land between them limiting connectivity, a Habitat Regulation Assessment (HRA) screening assessment will not be required to assess whether the proposed development will have any 'likely significant effects' on the SAC.

3.3. HABITATS

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

3.3.1. GRASSLAND - MODIFIED GRASSLAND (G4)

The majority of the site comprised modified grassland mown to a short length. The flora in these areas included broad-leaved dock (*Rumex obtusifolius*), ox-eye daisy (*Leucanthemum vulgare*), rosebay willowherb (*Chamaenerion angustifolium*), ribwort plantain (*Plantago lanceolata*), creeping thistle (*Cirsium arvense*), creeping buttercup (*Ranunculus repens*), clover (*Trifolium spp.*), common dandelion (*Taraxacum officinale*), cleavers (*Galium aparine*), foxtail (*Alopecurus spp.*), common nettle (*Urtica dioica*), herb Robert (*Geranium robertianum*) and lords and ladies (*Arum maculatum*).

PLATE 1 SHOWING MODIFIED GRASSLAND



3.3.2. INDIVIDUAL TREES – URBAN TREES (U, 32)

Many individual urban trees were located within the modified grassland areas. The tree species comprised cherry species (*Prunus spp.*), field maple (*Acer campestre*), common beech (*Fagus sylvatica*), sweet chestnut (*Castanea sativa*), sycamore (*Acer pseudoplatanus*), horse chestnut (*Aesculus hippocastanum*) and silver birch (*Betula pendula*).



PLATE 2 SHOWING INDIVIDUAL URBAN TREES



3.3.3. URBAN - BARE GROUND (U, 510)

A small area of bare ground was located in the north of the site, which was colonised by blackthorn (*Prunus spinosa*), dandelion, ribwort plantain, ragwort (*Senecio jacobaea*), clover, buddleia (*Buddleja sp.*) and bramble (*Rubus fruticosus*).

PLATE 3 SHOWING BARE GROUND



3.3.4. URBAN - DEVELOPED LAND; SEALED SURFACE (U1B)

Numerous tarmac paths were present on site. These were predominantly well-sealed, although colonised in areas by dandelion and white clover.

PLATE 4 SHOWING DEVELOPED LAND; SEALED SURFACE



3.4. PROTECTED AND NOTABLE SPECIES

3.4.1. AMPHIBIANS

Consultation with GMEU did not identify any records of great crested newts (*Triturus cristatus*) with the 1 km search area.

Consultation with MAGIC identified no great crested newt European Protected Species Licences with the 1 km search area. The closest such licence was located approximately 4.6 km north-west of the site, active in 2014 to 2015 for the destruction of a great crested newt resting place.

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). No waterbodies were located on site or within 250 m of the site boundary. As such, great crested newts have been discounted from further assessment.

No records of any other common amphibians were identified within 1 km of the site boundary. The site predominantly comprised modified grassland and developed land, which do not provide suitable shelter for common amphibians. Whilst individual tree understories can offer suitable shelter for the species group, the small area and poor quality of those present on site, as well as their isolation from higher quality habitat further afield, means that common amphibians are not anticipated to be present within the individual tree understories on site. As such, the species group are discounted from further assessment.



3.4.2. BATS

Consultation with GMEU identified records of common pipistrelle (*Pipistrellus pipistrellus*) and pipistrelle species (*Pipistrellus* sp.) within the 1 km search area. The closest such record was for an adult pipistrelle in 2021, located approximately 580 m south of the site boundary within an industrial area.

Consultation with MAGIC did not identify the presence of a Natural England Bat Mitigation Licence located within the 1 km search area. The closest licence was located approximately 1.1 km east of the site, which was active in 2010 until 2012 for the destruction of a common pipistrelle and soprano pipistrelle (*Pipistrellus pygmaeus*) non-breeding roost.

Numerous trees were located on site which were assessed for their suitability to support roosting bats as per Collins (2023). One tree (T1) was assessed as Low (PRF-I) bat roosting potential. The remaining trees on site were assessed as having negligible bat roosting potential, due to a lack of maturity and/or potential roost features. Please see Table 3.1 for further detail relating to T1. .

TABLE 3.1 BAT ROOSTING POTENTIAL CLASSIFICATION OF ON-SITE DEAD TREE

REFERENCE	DESCRIPTION	PHOTOGRAPH
T1	Tree 1 (T1) comprised a dead silver birch. Holes and areas of lifted bark were present throughout the trunk, which could provide shelter and protection for opportunistic crevice dwelling bat species. However, the features lack the size to support higher numbers of bats, and there are limited foraging opportunities within the surrounding area, which predominantly comprises poor-quality urban habitat. The features present would also be exposed to rainfall. Due to the small size and exposed nature of the features within the tree, T1 was assessed as having Low bat roosting potential (PRF-I).	



The site is anticipated to offer minimal foraging value for bats, due to the expanse of modified grassland and bare ground habitats. The scattered trees on-site may attract invertebrate prey for bats. However, due to their small numbers, urban setting and isolation from high-quality habitat further afield, they are not anticipated to support a high number and diversity of invertebrate species. As such, the scattered trees on site are not expected to form high-value foraging features, and the site is anticipated to provide minimal value for local bat species .

3.4.3. BADGER

Consultation with GMEU did not identify any records of badger within the 1 km search area. No badger setts or field signs of badger were located on-site or within 30 m of the site boundary where access was possible.

The site offers limited opportunities for badger. However, the species may use the amenity grassland and bare ground for foraging.

3.4.4. OTHER TERRESTRIAL MAMMALS

Two records of European hedgehog (*Erinaceus europaeus*) were located within 1 km of the site boundary. The closest record was located approximately 600m north-east of the site and was identified in 2020 within a residential garden.

The site was assessed as having foraging suitability for hedgehogs within the modified grassland, although the site lacks sheltering opportunities for the species, due to the short sword length.

3.4.5. OTTER AND WATER VOLE

Consultation with GMEU did not identify any records of otter or water vole within the 1 km search area.

No watercourses are present within the site boundary. The closest watercourse is River Don, located approximately 760 m east of the site at its closest point. Due to the lack of suitable aquatic habitat for otter and water vole within and adjacent to the site, both species have been ruled out of further assessment.

3.4.6. BREEDING BIRDS

Consultation with GMEU identified records of dunnock (*Prunella modularis*), house sparrow (*Passer domesticus*) and starling (*Sturnus vulgaris*) within the 1 km search area.

Common bird species are anticipated to be present within individual trees. The site is assessed as having negligible value for ground nesting birds due to the limited area, short height (and disturbance of the grassland) which would provide no cover from predators.

3.4.7. REPTILES

Consultation with GMEU did not identify any records of reptile within the 1 km search area.

The site was found to provide limited value for reptiles, given the majority of the site comprised modified grassland with areas of developed land, which lacks the structure and habitat quality to support the species group.



3.4.8. INVERTEBRATES

Consultation with GMEU did not identify any records of notable invertebrates within the 1 km search area.

Overall, the presence of notable invertebrates within the site is reasonably discounted due to a lack of good quality habitat and floristic diversity.

3.5. INVASIVE PLANT SPECIES

Consultation with GMEU did not identify any records of invasive plant species within the 1 km search area.

No invasive plant species were identified during the site walkover.



4. ECOLOGICAL CONSTRAINTS AND MITIGATION

4.1. DEVELOPMENT PROPOSALS

Development proposals include the construction of residential buildings, with associated landscaping.

4.2. HABITATS

The site comprises habitats that were found to be widespread within the local area; however, they did contain some value for wildlife such as bats, birds and terrestrial mammals. The hardstanding and modified grassland are of lowest value for wildlife, with the individual trees comprising the areas of highest value.

4.3. PROTECTED AND NOTABLE SPECIES

4.3.1. BREEDING BIRDS

The site was assessed as having value for common bird species within the individual trees. As such, it is recommended that these trees are retained where possible.

If any trees require removal, they should be removed outside of the breeding bird season (March to September inclusive). If this is not possible, a nesting bird check will be undertaken by a suitably qualified ecologist up to 24 hours before works commence. 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.

4.3.2. BATS

T1 was assessed as having Low (PRF-I) bat roosting potential. The tree should be retained if possible. If the tree does require removal, it should be soft felled under the supervision of an ecologist. The tree should be cut into sections and lowered to the ground, avoiding the potential roosting features. The tree should then be inspected on the ground for the presence of bats. If the feature cannot be fully inspected, the tree should be left overnight, with the feature facing upwards, to allow any bats within the tree to escape prior to chipping the following day.

The site was also found to have some, although limited, foraging value for bats amongst the individual trees. As such, the following recommendations are advised for the lighting strategy, to reduce any potential impacts on retained trees:

- ✿ Lighting should be pre-fixed on any proposed buildings, to ensure impacts on sensitive areas such as the scattered trees are diminished.
- ✿ Warm white tones are preferable to blue toned lights (3000k).



-  LED lights are preferable as they produce minimal UV.
-  To avoid light spill skyward, ensure lights face downward.
-  Make use of vegetation to block light spill into dark areas.

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 at Night” (2023) to minimise disturbance and sky-glow off site.

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.

4.3.3. BADGERS

No badger setts were located during the survey, though the habitats were identified as providing suitable foraging habitat for the species. The following precautionary working methods will be adhered to during the 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 battered at a 45 degree angle to allow escape should animals become trapped. Alternatively, a ramp will be installed, or excavations will be covered at night.
-  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.

4.3.4. HEDGEHOGS

The modified grassland and the base of individual trees offer some foraging habitat for hedgehogs. They should therefore be retained where possible. The measures detailed in section 4.3.3 should also be followed.

Post-development, a series of hedgehog houses could be installed throughout the site to enhance the site’s value for the species. In addition, gaps in residential fences could be provided to allow the species to commute through the site.



5. BIODIVERSITY NET GAIN

The scheme will need to achieve a 10% in biodiversity net gain, in line with The Environment Act 2021. 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:

-  Retaining the scattered trees and scrub
-  Enhancing the grassland on-site
-  Native scrub planting
-  Native tree planting

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.



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END OF REPORT



APPENDIX I

UKHAB HABITAT PLAN

Key:

-  Red Line Boundary
-  Existing Large Urban Tree
-  Existing Medium Urban Tree
-  Developed land; sealed surface
-  Modified grassland
-  Bare ground

Notes

Issue: 1	Revision: 1	Date: 22/02/2024	Drawn: LS	Authorised: CK
Client: Mosscaire St. Vincents			Job No. 80-924	Date: 22/02/2024
			Drawing No. 80-924-001	Scale: 1:1350@A4
Job title: Heatherdale Drive, Cheetham Hill			Drawing title: UKHab Habitat Plan	



Environmental Engineering Partnership Ltd
Manchester Office
Taylor Road, Urmston M41 7JQ
Tel: 0161 707 9612
Email: info@e3p.co.uk
Website: www.e3p.co.uk

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