

PRELIMINARY ECOLOGICAL APPRAISAL

Proposed Waste Transfer Facility

Wedal Road
Roath
Cardiff
CF14 3QX

ON BEHALF OF:

Mark Farrar



Site Address	Wedal Road, Roath, Cardiff, CF14 3QX	
Report Reference	JM15324	
Survey Date	31 July 2024	
Report Issue	09 October 2024	
Report Expiry	11 th January 2026	
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1 Executive Summary

- 1.1 The site of the former household waste recycling centre on Wedal Road in Roath, Cardiff is to be redeveloped into a waste transfer facility. To support the proposals, a Preliminary Ecological Appraisal was conducted in July 2024 by an ecologist.
- 1.2 The site mainly comprises a rectangular area of concrete and tarmac, with shipping containers, secured by high fencing and a lockable gate on the northern boundary. It is situated on a strip of land south of the A48 between the north and south parts of Cathays Cemetery. The immediate surroundings are a mixture of green space (the cemetery, allotments and parks) and the residential streets of Roath.
- 1.3 Protected species and their potential presence on site were considered as part of the assessment. The southern part of Cathays Cemetery, adjacent to the site and separated by a wire fence, has numerous, recent records for slow worm and other reptiles. Although the site is not generally favourable for reptiles, there are piles of refuse covered in black plastic close to the fence and these would be attractive to reptiles and amphibians for shelter. These should be removed under a method statement to ensure that no wildlife is harmed in the process.
- 1.4 Breeding birds are likely to be present on site, due to the mature trees on the boundaries. Breeding birds and all results of their breeding activities are protected under the Wildlife and Countryside Act 1981 (as amended). Any trimming of trees and shrubs must be timed to occur during winter, outside the breeding season. Effectively, vegetation clearance must be conducted between September and February, inclusive.
- 1.5 No further survey effort is recommended for the site at this time. The area on the northern boundary which is planted with trees and shrubs is the most valuable for biodiversity on site and must be retained. Other recommendations are made in this report relating to enhancing the biodiversity of the site post-development, and the creation of a sensitive lighting scheme to consider the likely presence of nocturnal fauna on site.

2 Introduction

- 2.1 The site at Wedal Road was originally a household waste recycling centre which closed in 2018. Cardiff and the Vale University Health Board now own the site and plan to set up a waste transfer facility to serve the University Hospital of Wales. To support the proposals, Just Mammals Limited was commissioned to conduct a Preliminary Ecological Appraisal (PEA) in July 2024.
- 2.2 The site is located around National Grid Reference ST 18070 78973 at an altitude of approximately 18m Above Ordnance Datum.
- 2.3 This report makes recommendations concerning the ecological value of the site, as well as the need for further survey work as appropriate. The different types of habitat were assessed, and the potential presence of protected species, such as badger (*Meles meles*), otter (*Lutra lutra*), dormouse (*Muscardinus avellanarius*), reptiles and amphibians, as well as bats and nesting birds were considered.

3 Survey Team Experience

- 3.1 Lead surveyor was Catherine Povey who is also author of this report. After graduating from Swansea University and UCL Catherine worked in medical research and as a practitioner. Since the first year of her degree when she studied Zoology and Botany, she has retained a keen interest in the natural world and has worked with Bannau Brycheiniog National Park on a number of projects including peat conservation. She is employed by Just Mammals Limited as an Assistant Ecologist and has conducted a variety of surveys with the company.

4 Survey Methodology

- 4.1 A Preliminary Ecological Appraisal (PEA) was conducted on Wednesday 31st July 2024. Details of the survey activities and weather conditions are provided in Table 1.
- 4.2 Prior to the site visit, a desktop study was undertaken, which involved a standard search area of a 2km radius from the site (using a central grid reference), using the MAGIC website. Details of statutory sites designated for nature conservation were obtained. A record search was also commissioned from the Local Biological Records Centre.

- 4.3 The assessment comprised a survey employing the Phase 1 habitat survey methodology. This is a standardised technique for classifying and mapping British habitats. All areas within the site were inspected and assessed for indicators of ecological value, including the presence and/or field signs of any protected or rare habitats and species. The site was walked over, recording all plant species and features onto a custom-made recording sheet. Habitats and notes were drawn onto a map of the survey site and photographs were taken. A coloured Phase 1 habitat map was produced (see Figure 2).
- 4.4 Assessment for the presence or potential absence of other protected species, including hazel dormouse, badger, reptiles and amphibians, was undertaken by considering the features of the site. Such features include grassland and dense vegetation. The potential suitability of the site for nesting birds was also considered.

5 Site Description

- 5.1 The site is rectangular, approximately 0.25 hectares and located on Wedal Road in Roath, a suburb of Cardiff approximately 2.5km north of the city centre. The A48 dual carriageway runs parallel to and north of Wedal Road and together they form a strip that bisects Cathays Cemetery. The cemetery is the third largest in the UK at 100 acres in total and extends to the north and south with the southern section directly adjacent to the southern boundary of the site. Most of the site is constructed of tarmac and concrete and access is gained from Wedal Road on the northern border of the site through high, lockable metal gates with security spikes. The northern border is planted with ornamental trees and shrubs which screen the site from Wedal Road.
- 5.2 High wooden fencing secures the site on the eastern boundary, a high metal wire fence bounds the southern edge and walls and fences divide the western side from the neighbouring property. There are concrete ramps around the site with Gabion basket walls and railings acting as dividers. Ten metal shipping containers were noted across the site with large piles of refuse covered with black plastic at the southern end.
- 5.3 Within 2km of the site are a number of parks and recreational areas including Roath Park and Lake and Heath Park. The remaining land is mostly residential.

6 Survey Constraints

- 6.1 No major constraints were encountered during the assessment. All areas of the site were accessible by the surveyor for the purposes of the survey.

7 Desktop Study

- 7.1 No part of the site is within a statutory designated site of conservation value (e.g. a Site of Special Scientific Interest (SSSI); Special Area of Conservation (SAC); Special Protection Area (SPA); or National Nature Reserve (NNR)).
- 7.2 There are four Sites of Importance for Nature Conservation (SINCs) within a kilometre of the site, the closest being Cathays Cemetery which is directly adjacent to the site on the southern boundary. The SINCs are listed below with distances from the centre of the site in metres:
- Cathays Cemetery (44m)
 - Roath Brook (482m)
 - Roath Park Lake (506m)
 - Heath wood and park (806m)
- 7.3 Restored Ancient Woodland Sites are predominantly broadleaf and are believed to have been continually wooded for over 400 years. These sites are priority sites for Natural Resources Wales (NRW) and there are two in the vicinity; one in Cathays Cemetery approximately 80m to the south-west and another approximately 500m to the north-west.
- 7.4 A record search was commissioned from the Biodiversity Information Service (BIS) (unique reference code – 0245-311) to ascertain whether protected species have been recorded at or close to the site. The search revealed no records of priority species at the site.
- 7.5 The data set revealed protected species records within 2km of the site. These are briefly summarised below:
- Birds account for 1365 species records including: lesser spotted woodpecker (*Dryobates minor*), song thrush (*Turdus philomelos*), wren (*Troglodytes troglodytes*), dunnoek (*Prunella*

- modularis*), redwing (*Turdus iliacus*) and goldcrest (*Regulus regulus*). The closest record is for green woodpecker (*Picus viridis*), 145m from the site.
- Terrestrial mammals, not including bats, account for 131 species. Recent records include: hedgehog (*Erinaceus europaeus*) approximately 150m from the site and otter approximately 500m away. Hazel dormouse is recorded with the closest recent records more than 1km from the site.
 - Reptiles account for 15 records including three records for slow worm (*Anguis fragilis*) in the southern part of Cathays Cemetery within 400m of the site. The closest reptile record is for slow worm approximately 100m from the southern boundary of the site. Grass snake (*Natrix natrix*) and adder (*Vipera berus*) are also recorded, approximately 500m away. A non-native reptile – red-eared terrapin (*Trachemys scripta elegans*) is recorded in Roath Park Lake approximately 600m north-east of the site.
 - There are 46 records for amphibians, the closest being smooth and palmate newt (*Lissotriton vulgaris* and *L. helveticus*) recorded in a garden approximately 300m north-west of the site. There are a number of records for great crested newt (*Triturus cristatus*) within 2km of the site, the closest being approximately 800m away. There are also records for common toad (*Bufo bufo*) and common frog (*Rana temporaria*) in the area.
 - Bats make up 54 of the species' records within 2km of the site. Species recorded recently include common and soprano pipistrelle (*Pipistrellus pipistrellus* and *P. pygmaeus*) and noctule (*Nyctalus noctula*). There are also a number of unspecified bat records (*Chiroptera*) in the area.

8 Survey Results

- 8.1 Details of the conditions under which survey was conducted is given in Table 1. Wind speeds given employ the Beaufort scale.

Table 1: Summary of Survey Activity and Weather Conditions

Survey Type and Location	Dates	Timing	Weather Conditions
Day time visual inspection, botanical survey and habitat assessment, including protected species assessment (CP)	31/07/2024	11:00 – 13:00 hours Greenwich Mean Time	Air temperature: 24°C Cloud cover: 6/8 oktas Wind speed: F2, light breeze Conditions: Dry
Surveyors	Catherine Povey (CP)		

- 8.2 The site was divided into nine different types of habitat for recording purposes. Table 2 below provides details of the various habitats and the dominant species for each of them. A coloured Phase 1 habitat map was produced (see Appendix III).

Table 2: Summary of Phase 1 Habitat Notes

Habitat	Phase 1 Classification	Description of Area and Typical Species
Type 1	J5 – Other – tarmac and concrete	This habitat is dominant and comprises most of the site. The majority is concrete with ramps around the boundaries. There is a small amount of vegetative growth in cracks. Species present include: dandelion (<i>Taraxacum sp.</i>)
Type 2	J1.3 – Cultivated/disturbed ground – ephemeral/short perennial	This habitat forms the boundaries to the east, south and west of the site. Species present include: creeping thistle (<i>Cirsium arvense</i>), prickly lettuce (<i>Lactuca serriola</i>), common ragwort (<i>Senecio jacobaea</i>) and herb robert (<i>Geranium robertianum</i>)
Type 3	J1.4 – introduced shrub	The westerly side of the northern boundary of the site adjacent to the access gate comprises a planted area of shrubs screening the site from Wedal Road. The planted shrubs include: butterfly bush (<i>Buddleja davidii</i>) and cherry laurel (<i>Prunus laurocerasus</i>)
Type 4	Scattered trees	Amongst the shrub area on the northern boundary are scattered trees. Species present include: sycamore (<i>Acer pseudoplatanus</i>), fastigate oak (<i>Quercus robur fastigiata</i>), walnut (<i>Juglans regia</i>) and cherry (<i>Prunus sp.</i>)
Type 5	J3.6 Buildings	The buildings on site consist of ten metal shipping containers. There are no floral species associated with this habitat
Type 6	I2.4 Refuse tip	There are a number of piles of refuse across the site, some of which are covered with black plastic.

Type 7	Gabion basket walls	There are no floral species associated with this habitat A number of these divide up the site. In places there is some ruderal vegetative growth associated. Species include: herb robert and hedge bindweed (<i>Calystegia sepium</i>)
Type 8	A1.1.2 – Broadleaved woodland - plantation	The southern boundary of the site comprises an area of mature deciduous trees separating the site from Cathays Cemetery. The tree species represented are ash (<i>Fraxinus excelsior</i>) and sycamore (<i>Acer pseudoplatanus</i>)
Type 9	J2.4 - fence	

- 8.3 Ecological assessment included identification of the potential for protected species to be present on site.
- 8.4 No reptiles were observed during the survey. Reptiles make use of rank habitats which provide a mixture of open areas and cover. Most of the site consists of bare concrete and tarmac which is not suitable for reptiles. However, there are areas on site with the diverse habitat composition that reptiles require for shelter and basking. These are on the margins of the site: the verges on the east and west boundaries, the covered rubbish piles in the southernmost part of the site and the shrubby section to the north at the entrance. There are also Gabion baskets filled with stones used as barriers and walls throughout the site. These also offer suitable habitat for reptiles to shelter and bask.
- 8.5 No amphibians were observed during the survey. During the terrestrial part of their lifecycle, amphibians have similar habitat requirements to reptiles, therefore, as noted above, most of the site is not suitable to support amphibians. However, as above, on the margins of the site, there are areas suitable to provide shelter for amphibians. There are no ponds or other still bodies of water present on site ruling out the possibility for amphibians to breed on site.
- 8.6 No evidence of bats was observed during the survey. Bats utilise trees for roosting where they will exploit gaps, cracks and crevices in the bark. There are mature trees on three of the boundaries which may be suitable for roosting bats. The southern edge of the site is bounded by large mature trees in Cathays cemetery where bats have been recorded. The vegetated boundaries of the site are likely to attract a variety of invertebrate fauna attractive to foraging bats.
- 8.7 Hazel dormice are associated with well-defined, connected hedgerows that link to further suitable habitats elsewhere in the landscape. No evidence of dormice was recorded during the survey and there is no suitable habitat on site to support them. It is not considered likely that dormice are using the site at this time.
- 8.8 No evidence of badger was noted during the survey, such as setts, footprints, hairs, latrines or other indicators of their presence. Badgers are highly mobile and can range great distances, favouring sloping ground in wooded areas where they can dig their setts and forage away from disturbance. Such habitats are absent from site.
- 8.9 Habitats on site, such as the trees and shrubs are considered suitable to support birds of various sizes and their breeding activities. No nesting or breeding activity was noted but woodpigeon (*Columba palumbus*) was observed on site during the survey.
- 8.10 Species such as otter, white-clawed crayfish and water vole are highly reliant on water bodies. No water bodies are present on or immediately adjacent to the site. Roath Brook is approximately 500m to the east and Roath Park Lake is approximately 550m to the north-east.

9 Discussion and Conclusions

- 9.1 The former household waste recycling centre on Wedal Road is to be redeveloped for use as a waste transfer facility by the University Hospital of Wales. The redevelopment will not require any major building work and the site will not be much changed. Assessment for protected species, as well as their presence or likely absence was carried out as part of the survey effort and no further survey is considered necessary.
- 9.2 With regard to a general assessment of the site's ecological value, the vegetation is limited by the nature of the site. The most valuable area for biodiversity currently is the planted area on the northern boundary which must be retained as removal of any trees or shrubs will result in the loss of important habitat for bats and birds. The structural complexity of the combination of trees and shrubs in this area will support an abundance of invertebrates which are an essential food source for larger invertebrates, birds, bats and small mammals.

- 9.3 As already mentioned, although the majority of the site is made up of concrete and tarmac, there are areas that would be attractive and useful to both amphibians and reptiles. There are records of both in the area with slow worm records being of particular note. These are well-recorded in the southern part of Cathays cemetery which is directly adjacent to the site on its southern border separated by a wire fence. The fence would offer no obstacle to the passage of reptiles or amphibians and the large piles of refuse abutting the fence covered with black plastic sheeting would be particularly attractive to both for shelter and basking. The Gabion baskets throughout the site has potential to also be utilised by reptiles and amphibians for the purposes already mentioned.
- 9.4 It is unlikely that the site is exclusively sustaining populations of reptiles or amphibians given the lack of suitable habitat, but there is potential for both to access the site from the cemetery. It is presumed that the piles of refuse will be removed from the site as part of the development and as these may be sheltering reptiles or amphibians. All British reptiles are protected from injury and killing by the Wildlife and Countryside Act 1981 (as amended). Recommendations to protect these animals are made below.
- 9.5 The mature trees on site offer potential to commuting, foraging and roosting bats. If the trees are not affected by the development, there is no need for further survey for bats at this time. The development of the site must not negatively impact the potential for bats to use the site and recommendations are made below to ensure that this is the case and the site is made more favourable for use by bats.
- 9.6 No evidence of hazel dormice was found during the survey and there is no suitable habitat on site. Records for dormice are more than a kilometre away without good connectivity to the site itself, so it is considered to be extremely unlikely that dormice are using the site. Further targeted survey is not considered to be necessary.
- 9.7 Evidence of badger was not found on site and there is no suitable habitat present to support badgers. As there are no records of badger within 2km and the site is secure, no further survey for badger is considered to be necessary.
- 9.8 No nesting or breeding activity by birds was noted during the survey. However, the shrubs and trees on site are considered to provide suitable habitat for birds to nest. All nesting birds, their chicks, eggs and nests whilst in use are protected under the Wildlife and Countryside Act 1981 (as amended). Recommendations for best practices regarding nesting birds are made below.

10 Recommendations

- 10.1 No further survey effort is required at the site at this time. The nature of the site, being mostly concrete and tarmac, means that the site is restricted in its usefulness to wildlife. Recommendations are given below to protect reptiles, foraging bats and nesting birds, as well as enhance the biodiversity of the site.
- 10.2 An Ecological Method Statement (EMS) must be produced to protect reptiles and amphibians from any adverse impacts from the development. Contents will include safe working practices, sensitive timing of workings, procedures to follow in the event of finding a reptile, etc. This document must be written and approved by the Local Planning Authority prior to works commencing on site.
- 10.3 Potential presence of nocturnal animals, such as foraging bats on site requires a sensitive lighting scheme. Any new lighting columns must not exceed 4m in height, and must be affixed with cowls, hoods or shrouds to minimise upward light spill. Luminosity should be limited to the absolute minimum required by Health and Safety standards and be timed to be extinguished for as long a period as possible during the night. All lights must face downwards and must not point directly at any natural features such as the planted area on the northern boundary or the treelines. This is also important for any temporary lighting installed for use during construction. If the site is to be locked up at night, overnight lighting should be restricted to movement-sensing security lighting. Any new lighting installed must adhere to the ILP (2023) guidelines for bats and artificial lighting at night.
- 10.4 If building work is carried out, the site must be made safe for visiting wildlife. To protect small mammals, such as hedgehog that may pass through the site, trenches must be covered overnight or left with a 45° sloping side to prevent animals becoming trapped. Similarly, any unconnected pipes must be capped overnight to prevent animals becoming stuck.
- 10.5 Any trimming of vegetation must be done outside of the bird nesting season, which runs between March and August, inclusive. All nesting birds, their chicks, eggs and nests whilst in use are protected under the Wildlife and Countryside Act 1981 (as amended). If, whilst the vegetation is

- being removed, an active nest is discovered, all works, within a 2m radius of the nest, must be immediately stopped, and not recommenced until all chicks have fledged.
- 10.6 Invertebrates are also supported by the ruderal growth on the verges bounding the site to the east, south and west. Species identified there include prickly lettuce and herb robert which support beetles, aphids, moths and butterflies as well as other invertebrates. The vegetation in these areas should be enhanced by the sowing of a native wildflower seed mix. Emorsgate EM3 wildflower seed mix with twenty-five wild plant and grass species (or similar) is recommended. This will increase the number and variety of invertebrates on site which will in turn benefit birds, bats and small mammals.
 - 10.7 The raised area bounded by Gabion baskets in the north-west corner should be similarly improved. It currently contains dumped rubbish with some ruderal plant growth. This should be cleared and as above wildflowers should be planted to support invertebrates on site. By planting up this area and the verges there will be good connectivity all around the site from the shrub and tree area on the north boundary to Cathays Cemetery on the southern boundary.
 - 10.8 In creating and maintaining the planting, it is important to implement good horticultural practice including the use of peat-free composts, mulches and soil conditioners. The use of pesticides (i.e. herbicides, insecticides, fungicides and slug pellets etc) must be discouraged to prevent cumulative fatal effects to animals via the food chain, particularly invertebrates, birds and mammals.

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Appendix I Site Maps and Plans

Figure 1: Aerial view of the site

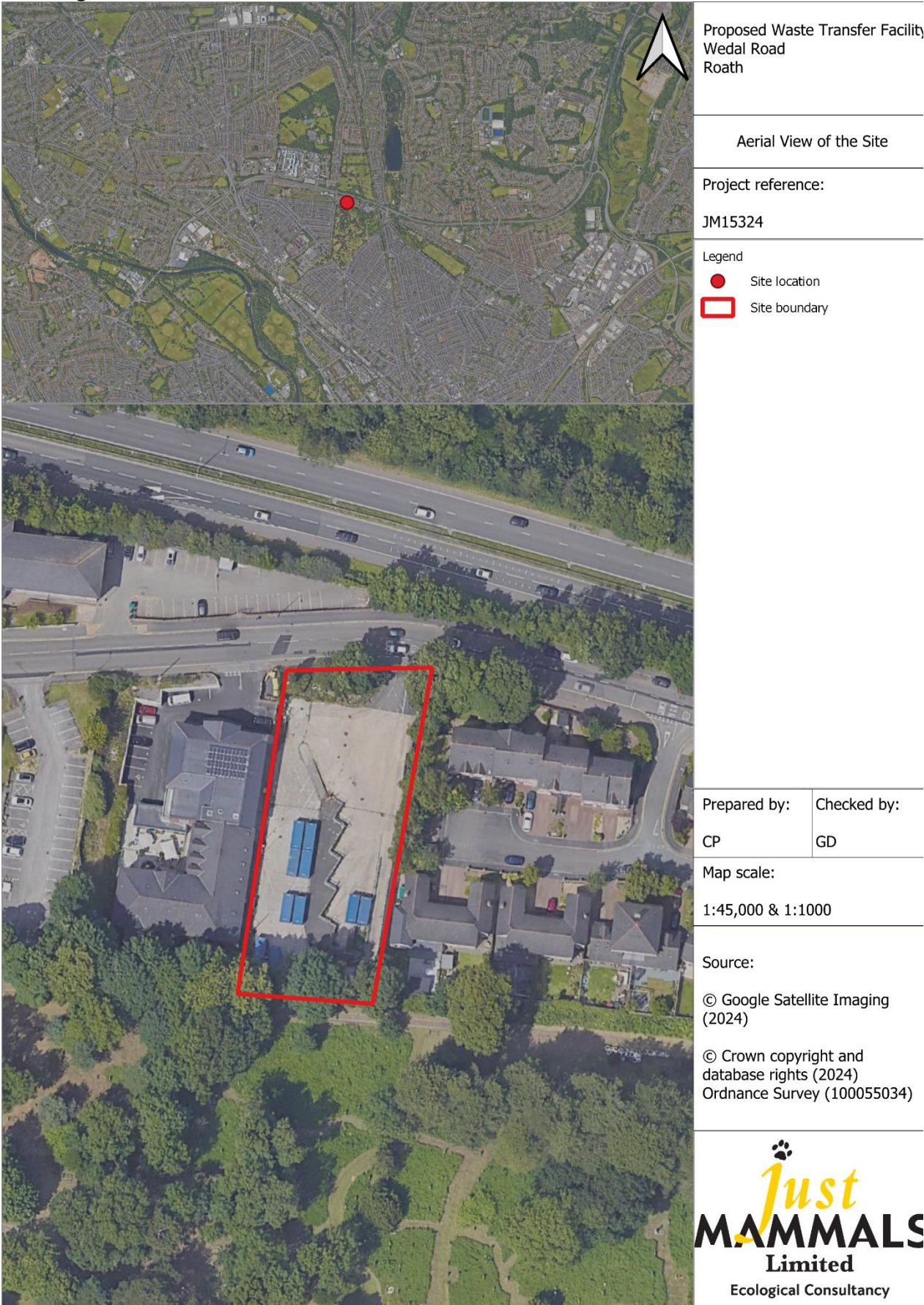
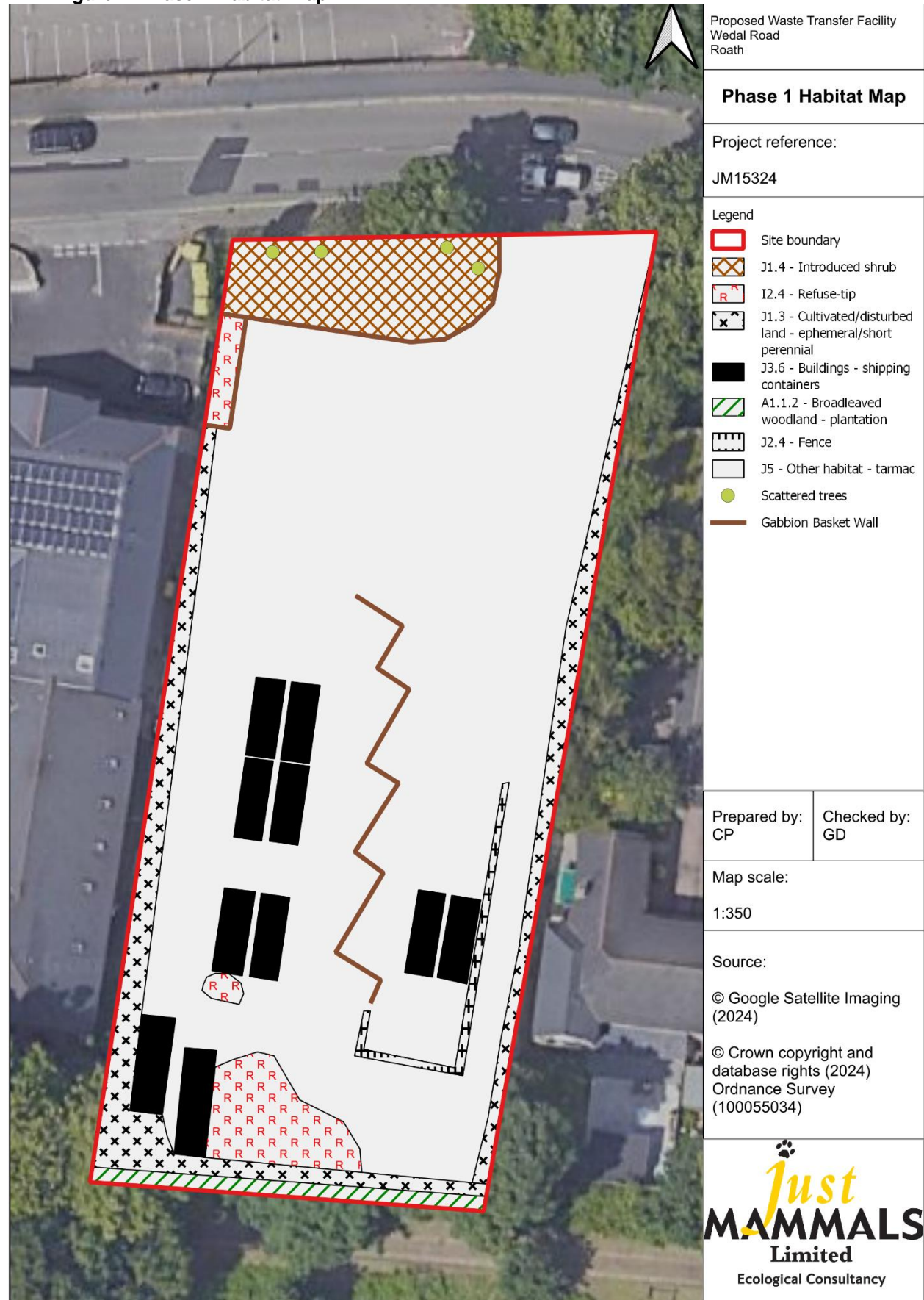


Figure 2: Phase 1 Habitat Map



Appendix II Site Photographs

Plate 1: From northern boundary looking south



Plate 2: From southern boundary looking north



Plate 3: Treeline on southern boundary



Plate 4: Trees and shrubs on northern boundary



Plate 5: Ruderal growth on site edges



Plate 6: Covered piles of rubbish on the southern border



Plate 7: Overgrown Gabion baskets



Plate 8: Discarded refuse on site edges with ruderal plant growth



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