HAREFIELD COMPOSTING FACILITY, UXBRIDGE

VERIFICATION ASSESSMENT

BMD.21.0069.RPE-TN.806.Verification Assessment
DATE: DECEMBER 2024

BRADLEY MURPHY DESIGN LTD
Studio 3, Floor 18
Alpha Studios
Alpha Tower
Suffolk St Queensway
Birmingham
B1 1TT

e: info@bradleymurphydesign.co.uk
t:+44 (0) 121 815 9127
www.bradleymurphydesign.co.uk

Ecological Verification Assessment 2024

Harefield Composting Facility, Uxbridge

Project:	21.0069	**Ref**:	BMD.21.0069.RPE-TN.806.Verification Assessment
Subject:	Ecological Verification	**Date:**	December 2024
Status:	CONDITION DISCHARGE	**Rev:**	-

Originated	**Technical reviewed**	**Approved**
KD/LT	KD	JP

SUMMARY

This Technical Note has been produced to identify any potential changes in the baseline ecology associated with land at Harefield Composting Facility, Uxbridge (hereafter referred to as 'the Site'), since the last survey in November 2022 (as presented in BMD.21.0069.RPE/P1.802.-.Ecology). The report is instructed by Envar Composting Ltd.

A Site walkover was undertaken in November 2024 to verify the previous findings and to inform discharge of Condition 19 of the associated planning application (ref: 39755/APP/2023/652).

Condition 19 states:

Prior to the first use of the extended site area approved by this permission, an Ecological Enhancement and Management Plan to support long-term maintenance and habitat creation shall be submitted to and approved in writing by the Local Planning Authority. This plan shall also include timelines for its implementation. The development shall be carried out in accordance with the approved plan.

REASON: To avoid damaging the site's nature conservation value, in compliance with Policy EM7 of the adopted Hillingdon Local Plan: Part 1 (2012), policy DMEI 7 of the Hillingdon Local Plan: Part 2 (2020), and London Plan Policy G6 (2021).

Declaration of compliance with professional code of ethics or conduct
The information which we have prepared and provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bonafide opinions.

Every reasonable attempt has been made to comply with the relevant best practice guidelines and BS42020:2013 (Biodiversity: Code of practice for planning and development).

1. CONTEXT

1.1 Background

1.1.1 The Site is approximately a 7 ha parcel of presently developed/disturbed land associated with an active Composting Facility. Situated in a semi-rural context within the London Green Belt northwest of the London Borough of Hillingdon, the Site lies approximately 2.3 kilometres southeast of the village of Harefield, 1 kilometre north of the locality of Ickenham and 500 m west of Ruislip. The Site is approximately centred on national grid reference: TQ 07102 88155.

1.1.2 In order to determine if there have been any significant changes and to inform the need for further survey works associated with this proposal, a walkover and review of the previous assessment and professional judgement has been undertaken to provide up to date baseline data. The previously prepared ecological assessment (February 2023) has been verified and summarised within this report.

1.1.3 The assessment drew the following conclusions in relation to the outcome of the previous ecological summary report:

- Protected and Notable Species: Minor changes to conclusions; and
- Habitats on Site: Changes to the extent of habitat on Site but no implications to potential protected/notable species use of the Site.

1.2 Landscape

1.2.1 The Site is an area of semi-natural habitat comprising ruderal, scrub and poor semi-improved grassland. In the north of the Site, HS2 is currently active within the Site and some areas of the Site were restricted and worked ground. There is also an area of hardstanding and limited habitat areas within a composting site under active management associated with a previously submitted ecological assessment (BMD.21.0069.RPE/P1.801.-.Ecology).

1.2.2 The Site is approximately a 7 ha parcel of presently developed/disturbed land associated with an active Composting Facility. Situated in a semi-rural context within the London Green Belt northwest of the London Borough of Hillingdon, the Site lies approximately 2.3 kilometres southeast of the village of Harefield, 1 kilometre north of the locality of Ickenham and 500 m west of Ruislip. The Site comprises of an existing maturation area of bare ground with limited ephemeral and colonising vegetation with peripheral areas of mixed planting. There is then further areas of grassland, ruderal and scrub around the peripheries of the Site. The existing compost maturation area is located on Pylon Farm. Ongoing HS2 works are present within and adjacent to the Site.

1.2.3 The majority of the Site is bounded by open arable land to the north, northeast and northwest, with four residential units situated to the southwest along Newyears Green Lane and St Leonard's Farm to the east of the Site. Ongoing construction works are present to the north of the Site associated with the major infrastructure project HS2.

1.2.4 Within the wider context, the landscape surrounding the Site consists of primarily arable landscape and hedgerows, with some patches of developed land situated along roadways such as a composting facility that lies approximately 320 m southeast from the Site along Breakspear Road and a recycling site that lies along Newyears Green Lane approximately 550 m southwest of the Site. Furthermore, a large block of ancient woodland (Bayhurst Woods) associated with Ruislip Woods is located adjacent to the north of the Site, and the Chiltern Main Line railway that runs west-east into Ruislip is located approximately 1 km south of the Site. Denham Country Park lies approximately 2 km southwest of the Site and contains multiple man-made lakes, the Grand Union Canal, the River Misbourne and the River Colne which flows 2.5 kilometres west of the Site in a north-south course. The Grand Union Canal also follows the same course as the River Colne through the Country Park.

1.3 Proposed development

1.3.1 Full planning application has been granted on the 21st June 2024 for regularisation of the existing green waste composting operations and proposed extension to the green waste open windrow compost maturation yard, construction of a storage container, site offices, welfare building, weighbridge/weighbridge offices, 2 no. leachate holding tanks, 2 no. 180kW generator sets, landscaping and areas of ecological enhancement, including a change of use of the land from pasture to a waste management use.

1.4 Ecological Context

1.4.1 A previous ecological assessment was completed by BMD in February 2023 (ref: BMD.21.0069.RPE/P1.802.-.Ecology) with the Phase 1 survey conducted in November 2022. This section considers and summarises the key points made during previous ecological assessments of the Site.

- No further surveys are considered necessary in order for the LPA to validate this activity.
- No statutory Nature Conservation Sites will be negatively impacted by the proposed works.
- The Site lies within the Impact Risk Zone (IRZ) of two statutory designated sites of nature conservation importance: Ruislip Woods SSSI, NNR & LNR and the Mid Colne Valley SSSI. The proposed application is included on the list of developments that are considered likely to cause a risk to the corresponding SSSI's, therefore, Natural England should be consulted during the application.
- No Non-statutory Nature Conservation Sites will be negatively impacted by the proposed works.
- No S41/Priority Habitats will be negatively impacted by the proposed works.
- No protected or notable species will be negatively impacted if appropriate mitigation and precautions are followed, as set out in this report.
- With the implementation of the proposed biodiversity measures set out above, the proposal will be compliant with the NPPF and Policy G6 (D) of the London Plan and biodiversity net gain will be achieved.

1.4.2 Additionally, a Biodiversity Net Gain assessment for the Site was undertaken by BMD in February 2023 (Ref: BMD.21.0069.RPE-IA.803.Biodiversity Net Gain Plan).

1.5 November 2022 Preliminary Ecological Appraisal results

Desk Study:

1.5.1 The desk study highlighted the following:

- Statutory sites: There are no statutory designated sites of nature conservation importance within the Site itself. There are five designated sites within 1 km of the Site, the closest of which is Ruislip Woods, Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR), which lies adjacent to the northern boundary of the Site. Ruislip Woods SSSI & NNR is designated for its mosaic of habitats including extensive ancient woodland, acidic grass-heath and wetland areas. The site is of particular interest for its floral and insect species diversity (*MAGIC*, 2022).
- Impact Risk Zones (IRZs): The Site lies within the IRZs of Ruislip Woods SSSI & NNR and the Mid Colne Valley SSSI.
- Non-statutory sites: The are a total of seven non-statutory designated sites of nature conservation importance within 1 km of the Site, the closest of which is Breakspear Road South Pond Site of Importance for Nature Conservation (SINC) which lies 500 m southeast (GiGL, 2022). The site is designated due to high water quality and diverse marginal vegetation.
- Local records: local records for protected and notable species are provided by Greenspace Information for Greater London and are fully detailed within the Ecological Headlines document – Ref: BMD.21.0069.RPE-TN.801.EcoHeadlines (BMD, 2022).

Habitats:

1.5.2 A Site walkover was undertaken in November 2022 and a detailed survey carried out of the Site and the local environment. The following habitats were recorded on Site:

"Hard-standing, a small water body (with high nutrient content), and screening machinery. Elsewhere are areas of semi-natural habitat comprising ruderal, scrub and poor semi-improved grassland. HS2 is currently active within the north of the Site and some areas of the Site were restricted and worked ground".

1.5.3 Full details of the previous ecological report are provided in BMD.21.0069.RPE/P1.802.-.Ecology.

Species:

- Amphibians (including great crested newt): There are storage tanks within the Site which are completely sealed, thus they are unsuitable for any fauna. there was one ephemeral pond noted in the Site which is unlikely to hold water during the GCN breeding months and thus unlikely to support GCN. Elsewhere there are no other known aquatic waterbodies within and adjacent to the Site. Furthermore, dispersal capacity of newts is expected to be

much reduced within the land parcels, owing to the absence of ponds and sub optimal habitat. Overall, the Site is considered to be negligible for great crested newt. There are some areas of terrestrial habitat within the Site including rough grassland areas which provide commuting links to the wider landscape such as the deciduous woodland to the north. However, the Site lacks suitable habitat to support significant populations of amphibians. Ultimately it is considered that the Site is unlikely to support great crested newt or large populations of amphibians yet may provide some limited habitat for small populations of common amphibians.

- Bats (Brown long eared bat, soprano pipistrelle, common pipistrelle, Leisler's bat and Daubenton's bat): No trees were recorded as providing features which could support roosting bats. Bats in the area may utilise the Site for foraging in close association with other habitat areas such as the grassland, scrub, adjacent deciduous woodland and hedgerows around the peripheries of the Site. There are no buildings with bat suitability on Site. All buildings on Site are considered negligible for roosting bats. The potential for commuting and foraging bats using the Site is estimated as low – moderate given the proximity to deciduous woodland to the north. However, the rest of the Site is considered to offer low suitability for foraging and commuting bats. This is owing to the presence of limited well-vegetated habitat corridors that run across the Site. There is also limited resources such as scattered vegetation within the Site. Commuting and foraging bats within the local landscape are considered likely to use the Site relatively frequently in association with wider commuting routes to habitat features in the areas such as woodland blocks to the north of the Site.
- Birds: The scrub, hedgerows and scattered trees on site provide some limited opportunities for common and widespread species such as feral pigeon and carrion crow which were observed during the survey. However, it is considered inherent disturbance from adjacent land will limit the number of breeding birds within the Site.
- Hedgehogs: One live hedgehog record was recorded 529 m west of the Site on the Big Hedgehog Map within 1 km of the Site (PTES, 2022) as of 17/11/2022. The Site does support areas of boundary habitat; however, they are considered to be limited for foraging and commuting hedgehogs. Therefore, it considered only small numbers of hedgehog may use the Site for commuting given there is optimal habitat in the wider landscape.
- Reptiles: The areas of grassland, as well as some edge habitats provide some limited shelter, basking and foraging habitat for common reptile species such as grass snake and common lizard. Furthermore, the Site has connectivity to the wider landscape through adjacent woodland blocks, areas of scrub and hedgerows. In the locality of the Site there were brash/log piles which provided refugia for reptiles. Overall, there is some opportunity for reptiles to be present, however the Site is considered to provide opportunity for only a small number of individuals owing to the active nature and inherent disturbance associated with the Site and the more suitable habitat present in the wider landscape.
- Other Fauna: Adjacent to the Site boundary there was extensive evidence of deer and rabbits utilising the agricultural landscape.
- Invasive species: No invasive species were recorded during the walkover.

2. SURVEY

2.1.1 A walk-over survey was undertaken on site on 8th November 2024 to reassess the area affected by the proposed development and with particular reference to the following:

- Habitat change since November 2022 and any subsequent implication to potential protected and notable species.
- Habitat suitability across the Site for:
  - Amphibians
  - Bats;
  - Birds;
  - Reptiles;
  - Invasive species; and
  - Potential for the Site to support other Protected and Notable Species, such as hedgehog.

2.1.2 The survey will inform the need for further species-specific surveys necessary to provide sufficient baseline data to assess ecological impacts pertaining to developing the Site.

3. RESULTS

3.1.1 The results of the Ecological Verification Assessment, in relation to the condition of the Site in 2022, are set out below with supporting photographs appended to this report.

3.1.2 An updated desk study for the Site was completed using *MAGIC* on the 5th December 2024.

3.1.3 Local records of protected and notable species as well as non-statutory sites of nature conservation importance and non-native invasive species are detailed within the previous Ecological Headlines document prepared for the Site (Ref: BMD.21.0069.RPE-TN.801.EcoHeadlines).

3.2 Desk study

Statutory Designated Sites of Nature Conservation Importance

3.2.1 The updated data search identified an additional statutory site of nature conservation importance within 2 km of the Site. Mid Colne Vally SSSI is situated approximately 1.8 km west of the Site. The SSSI is designated due to its ornithological interest, particularly for the diversity of breeding wetland and woodland birds and supporting larger numbers of wintering birds.

3.2.2 There have been no changes to the remaining previously identified statutory sites of nature conservation importance within 2 km of the Site.

3.2.3 The Site remains within the Impact Risk Zones (IRZs) of two statutory designated sites of nature conservation importance: Ruislip Woods SSSI & NNR and the Mid Colne Valley SSSI. As depicted by *MAGIC,* it is deemed that any development within the Site has the potential to have a harmful effect on the named SSSIs. Therefore, it remains that Natural England are to be consulted regarding advice on the nature of the potential impacts and appropriate avoidance and mitigation measures.

Priority Habitats

3.2.4 There have been some changes to Priority Habitats within 1 km of the Site since the desk study undertaken in the previous ecological assessment (Ref: BMD.21.0069.RPE-P1.802.-.Ecology) as depicted by *MAGIC.* These changes include alternative results for deciduous woodland habitat as well as the absence of lowland meadows within 1 km of the Site of which were previously identified. The results of the updated desk study in relation to Priority Habitats within the Site and 1 km of the Site are as follows:

- **Deciduous woodland** – 17 blocks of 19 parcels, the closes of which borders the northern Site boundary, associated with Bayhurst Woods.
- **Open mosaic habitat** – 1 parcel located approximately 350 m southwest of the Site.

Notable Habitats

3.2.5 There have been some changes to Notable Habitats within the Site and 1 km of the Site since the desk study undertaken in the previous ecological assessment, as depicted by *MAGIC*. These

changes include the identification of new good quality semi-improved grassland as well as differing results in the extent of 'no main habitat but additional habitat exists' habitat within the Site and 1 km of the Site. The results of the updated desk study in relation to Notable Habitats within the Site and 1 km of the Site are as follows:

- **Good quality semi-improved grassland** – 2 blocks of four parcels, the closest of which is located approximately 880 m southeast of the Site. All parcels are associated adjacent to the River Pinn watercourse corridor.
- **Ancient semi-natural woodland –** 3 parcels, the closest of which borders the northern Site boundary, associated with Bayhurst Woods.
- **No main habitat but additional habitat exists –** 6 blocks of 7 parcels, the closest of which is located on Site along the western and southern periphery before cutting centrally through the Site to the eastern boundary and beyond. This new mapping represents a potential shift in habitat categorisation since the last desk study, which only recognised three parcels within 1 km of the Site, none of which intersected the Site boundary. No main habitat but additional habitat exists is assigned where priority habitat may be present, but it is not mapped as the area is smaller than the minimum mapping unit, has complex mosaics, has potentially mis-recorded habitats or has low confidence due to a lack of data.
    - Current Habitat Condition: Upon conducting the recent verification walkover, it was determined that the areas in question within the Site did not meet the criteria of meeting priority habitat and thus 'no main habitat but additional habitat exists'. The central mapped strip consisted of recently cleared bare ground with minimal ruderal vegetation remaining, associated with the ongoing HS2 works. The condition of the habitat within the section bordering the western and southern boundaries was similar to that assessed in the previous ecological assessment (Ref: BMD.21.0069.RPE-P1.802.-.Ecology). Habitat consisted of broadleaf semi-natural woodland and mixed parkland/scattered trees, both of which failed to meet priority habitat criteria due to reasonings outlined within the previous ecological assessment. Additionally, these habitat areas along the southern and western boundary are proposed to be retained and incorporated into landscaped planting of the Site.

3.2.6 A review of the Woodland Trust Ancient Tree Inventory (Woodland Trust, 2024) as of 05/12/2024 highlighted some changes to known ancient, veteran or notable trees within 1 km of the Site, these new include: Two notable wild service trees, the closest of which is located approximately 250 m northwest of the Site, and one veteran pedunculate oak tree located approximately 810 m northwest of the Site.

Protected species

3.2.7 An updated review of *MAGIC* concluded there are no records of great crested newt within 1 km of the Site of which are within the last ten years, including granted European Protected Species applications, class survey licences and pond survey data.

3.2.8 There remain no statutory designated sites within 5 km of the Site that are designated for bats.

3.2.9 An updated search on MAGIC returned no new licence applications within 5 km of the Site relating to bats since the previous desk study within the prior ecological assessment. There remains a total of thirty-seven licence applications within 5 km of the Site. The details of each development bat licence application is summarised within the previous ecological assessment report (Ref: BMD.21.0069.RPE-P1.802.-.Ecology).

3.2.10 No other protected species records were present within 1 km of the Site, remaining consistent with the findings within the previous ecological assessment.

Notable species

3.2.11 There have no changes to the results presented in the previous ecological assessment (Ref: BMD.21.0069.RPE-P1.802.-.Ecology) regarding farmland bird assemblages and bird species known to occur within the Site and 1 km of the Site (as depicted by *MAGIC*).

3.2.12 The updated desk study identified an increase in live hedgehog records to six records presented on the Big Hedgehog Map within 1 km of the Site (PTES, 2024) as of 05/12/2024. Most records are associated with the suburban areas of Ruislip however, the closest record is situated approximately 425 m west of the Site within a parcel of grassland.

3.3 General

3.3.1 The Site is dominated by disturbed/bare ground associated with ongoing HS2 works within the northern extent and hardstanding within the southern extent associated with the active composting site. Boundary vegetation remains present alongside small areas of dense scrub and a hedgerow feature within the northern extent.

3.3.2 The following habitats were recorded immediately adjacent to the Site:

- **North:** The northern boundary of the Site is partly bounded by a block of ancient woodland, associated with Bayhurst Woods. Further areas of cleared bare ground lie adjacent to the northeastern Site boundary as part of ongoing HS2 works.
- **West:** The western boundary of the Site is bound by a mixed landscape including further ancient woodland, grassland and disturbed areas of ground, presumably associated with the HS2 works.
- **South:** The Site is partly bound to the south by Newyears Green Lane with associated road verge habitats. The southeastern boundary is bound by land associated with a haulage business, consisting of areas of hardstanding and scrub/tree vegetation.
- **East:** To the east of the Site lies further areas of cleared ground, presumably as part of the HS2 works, within adjacent grassland field parcels with associated hedgerow, scrub and tree features.

3.3.3 The habitat verification survey concluded that the extent of habitat recorded within the Site had mostly changed since the Phase I survey in November 2022 with the majority of scrub, ruderal, grassland, hedgerow and scattered tree habitat now cleared as part of ongoing HS2 works within the Site. Some areas of habitat had remained the same including the western peripheral

landscaped feature and the maturation area associated with West London Composting facility. The changes are listed in detail below.

3.4 General: Habitat focused

Poor semi-improved grassland

3.4.1 There has been a significant reduction in the extent of poor semi-improved grassland throughout the Site with the majority of habitat lost, previously recorded within the northern and central extent of the Site during prior assessments (BMD.21.0069.RPE-TN.P1.802.-.Ecology). The areas of grassland have been cleared as part of ongoing HS2 works within the Site replaced by bare/worked ground, with only limited patches remaining associated with peripheral areas of scrub (Photograph 1).

Ruderal

3.4.2 The extent of ruderal vegetation recorded throughout the Site during the 2024 verification walkover had reduced significantly since the previous assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology) where a large area of ruderal vegetation occupied a central section of the Site. The vegetation had been cleared as part of the ongoing HS2 works, replaced by areas of bare/worked ground. Remaining areas of ruderal vegetation were limited and largely associated with the peripheries of the remaining areas of scrub, a thin strip within the central section of the Site and occasional ruderal vegetation beginning to colonise the large soil bunds within the Site created through the HS2 works. Species mainly consisted of spear thistle, nettle and dock sp.

Scrub

3.4.3 The extent of scrub recorded throughout the Site during the 2024 verification walkover had reduced significantly since the previous assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology). At the time of the survey, only a few patches of scrub remained within the northern extent of the Site, further north and northeast of the maturation area (Photograph 2). Areas of scrub had been removed as part of the ongoing HS2 works associated within the northern extent of the Site, replaced by bare/worked ground. Species predominantly consisted of bramble.

Hedgerows

3.4.4 There has been changes to the previous ecological assessment which states that the Site has three hedgerows throughout the extent of the Site. During the 2024 verification walkover, it was observed that only one hedgerow feature remained as a result of the clearance works (Photograph 3), referred to as H3 in the previous assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology) within the northern extent of the Site, connected to the adjacent woodland. Species within the hedgerow feature consisted of blackthorn, hawthorn, dog rose and occasional ivy. Species associated with the understorey were comprised of cleavers, common nettle, common mugwort and ragwort.

Hardstanding

3.4.5 There have been no changes to the extent of hardstanding recorded during previous ecological assessments (BMD.21.0069.RPE-TN.P1.802.-.Ecology & BMD.21.0069.RPE-P1.801.-.Ecology). A large maturation area remains present within the western, southern and central extent of the Site associated with West London Composting facility (Photograph 4). The underlying habitat within this maturation area is comprised of hardstanding.

Mixed parkland/scattered trees – landscape planting

3.4.6 There have been no changes to the conclusions made during previous ecological assessments (BMD.21.0069.RPE-TN.P1.802.-.Ecology) regarding western peripheral landscaped areas of mixed parkland/scattered trees. Along the western boundary of the maturation area, the mixed plantation screening feature remained, comprised mostly of semi-mature cypress trees, as well as hawthorn, blackthorn and goat willow (Photograph 5).

Other habitat – worked ground

3.4.7 There has been a significant increase of bare/worked ground habitat within the Site since the previous assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology). The Site is now dominated by areas of cleared and actively worked ground with large soil bund features associated with ongoing HS2 works including a temporary haul route (Photograph 6). These areas have been created through clearance of various vegetation that was previously recorded at the Site.

Ponds

3.4.8 There have been no changes to the condition of the pond adjacent to the Site outlined within the previous ecological assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology). The pond remains absent of emergent and aquatic vegetation, and it is still considered that the feature rarely holds water during the spring and summer months.

Scattered trees

3.4.9 The 2024 verification walkover identified an absence of scattered tree features within the Site, previously recorded within BMD.21.0069.RPE-TN.P1.802.-.Ecology. It is assumed that these scattered tree features that once occupied the central section of the Site, associated with scattered scrub, have been cleared alongside the scrub as part of the ongoing HS2 works and temporary haul route.

Semi-natural broadleaved woodland

3.4.10 There have been no changes to the broadleaved woodland habitat previously recorded within BMD.21.0069.RPE-TN.P1.802.-.Ecology, bordering the south of the Site alongside Newyears Green Lane. The habitat remains a small, established wooded area with limited diversity and woodland structure as well as high levels of disturbance due to the adjacent composting facility.

3.5 General: Species focused

Bats

3.5.1 Further to the habitat verification, there has been no change to the conclusions drawn in the previous ecological assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology) in regards to roosting potential for bats.

3.5.2 It is considered that foraging and commuting opportunities for bats within the Site has reduced to low potential due to the clearance of habitats including scrub, semi-improved grassland and hedgerows since the previous assessment. However, due to the Site's proximity to the adjacent woodland, bats within the locality of the Site may still utilise remaining patches of vegetation for foraging as well as commuting through the Site to reach the adjacent habitat areas of elevated value.

Amphibians (including great crested newt)

3.5.3 There has been no change to the conclusions made in the previous ecological assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology) in regard to great crested newt, the Site maintains negligible potential to support the species. Further to this, based on the recent verification survey, the Site is now considered to support negligible potential for small numbers of common amphibians due to loss of habitat and a lack of connectivity between remaining vegetation across the Site following the recent clearance. The pond feature adjacent to the Site remains highly unlikely to support amphibians due to limited evidence that suggests the pond holds water for the majority of the year.

Reptiles

3.5.4 In relation to the previous ecological assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology), there has been some changes that have impacted the Site's potential to support reptile species. Due to recent habitat clearance, including the removal of semi-improved grassland areas, hedgerow features and most scrub habitat, remaining areas of vegetation are limited and isolated within the predominantly bare ground and hardstanding nature of the Site. Whilst the Site remains connected to the wider landscape through the adjacent woodland, the extent of bare ground and lack of habitat connectivity throughout the Site offers negligible potential for reptile species. It is considered, however, that reptiles may still utilise remaining habitats bordering the Site to the west and north within the local context of the Site.

Breeding birds

3.5.5 In reviewing the findings from the previous ecological assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology), it is considered that nesting opportunities for birds within the Site are even more limited due to the recent habitat clearance leaving predominantly bare ground throughout the Site as well as the increased volume of disturbance within the Site. Small patches of vegetation remain including scrub, a hedgerow feature and boundary trees, however, these lack connectivity and are surrounded by active works. Overall, the verification survey identified less

opportunities for nesting birds than the previous assessment, and any species that may utilise the remaining features on Site are likely to be common and widespread only.

3.5.6 Despite these habitat changes, it is still suggested, however, that pre-works checks are to be conducted prior to any clearance of remaining vegetation undertaken during the core nesting season (March-August inclusive) to remove the risk of harm to nesting birds. This approach remains in line with best practices for ecological conservation and management, ensuring that development activities are conducted with due consideration for the local wildlife and their habitats.

Invasive species

3.5.7 No invasive species were recorded on Site. It is possible that invasive species are present in the locality.

Other Protected and Notable Species

3.5.8 There has been no change from the conclusions and recommendations made in the previous ecological assessment (BMD.21.0069.RPE-TN.P1.802.-.Ecology). Although some notable and protected species are recorded within the locality of the Site it is considered that the Site does not support populations of other notable or protected species. This is owing to the size and active works resulting in a lack of suitable habitat on Site.

3.5.9 No other protected or notable species were recorded on Site.

4. RECOMMENDATIONS

4.1.1 Based on the evaluation documented in Section 3, no further surveys are deemed appropriate and/or necessary to provide a fuller evaluation of the proposed development. However, pre-works checks will be required ahead of construction activities. Pre work checks and appropriate mitigation is detailed in the Preliminary Ecological Appraisal associated with the Site (BMD.21.0069.RPE-P1.802.-.Ecology).

5. OPPORTUNITIES FOR ACHIEVING BIODIVERSITY GAIN

5.1 Habitat retention and enhancement

5.1.1 Due to the nature of the proposals, there would be areas of clearance associated with the grassland, ruderal and areas of scrub. Where feasible the boundary areas and habitats should be retained.

5.1.2 Habitat creation within the Site proposals include:

- An area of new proposed broadleaved woodland to sit adjacent to the ancient woodland and strengthen the corridor in the area
- New native thicket planting is proposed along the Site boundaries, in order to widen the existing hedgerows here and to form a firm boundary to the development. This habitat will provide complimentary structural diversity to the adjacent ancient woodland.
- Landscape planting associated with peripheries of the developed area
- New species-rich native hedgerow planting

5.2 Species enhancement

5.2.1 Based on the habitats on Site and desk study data the following species-specific enhancement would be appropriate:

- Amphibians:
  - Retention, protection and enhancement of sheltered movement corridors where possible, e.g. existing treelines to be retained; and,
  - Existing refugia, such as dead wood piles and half buried features, to be retained where possible.
- Bats (all species):
  - Retention, protection and enhancement of suitable onsite commuting, foraging, and roosting habitats, i.e. hedgerow, woodlands, and scattered trees; and,
  - Provisions for bat boxes on retained trees with the final installation details to be agreed with the project ecologist.
- Birds:
  - Retention, protection and enhancement of suitable onsite foraging and nesting habitats, i.e. hedgerow, grassland and woodlands; and,
  - Provisions for nest bird boxes on retained trees with the final installation details to be agreed with the project ecologist.
- Hedgehogs:
  - Retention, protection and enhancement of suitable onsite commuting, foraging and hibernation habitat, i.e. grassland and woodlands; and
  - Retention, protection and enhancement of sheltered movement corridors where possible, e.g. existing treelines to be retained.

- Invertebrates:
  - Retention, protection and enhancement of key onsite habitats, i.e. grassland and woodlands; and,
  - Provisions for artificial nesting and sheltering features in development buildings and landscaped areas. So-called ‘Bee Blocks’ (or similar units designed for solitary bee occupancy) should be included within onsite enhancement schemes, with the final installation details to be agreed with the project ecologist.
- Reptiles:
  - Installation of hibernacula features within the Site boundaries. Final installation details to be agreed with the project ecologist.
  - Retention, protection and enhancement of suitable onsite basking, commuting, and foraging habitat, i.e. grasslands, earth bunds, and woodland edges; and
  - Retention, protection and enhancement of sheltered movement corridors where possible, e.g. existing treelines to be retained.

6. REFERENCES AND BIBLIOGRAPHY

Amphibian and Reptile Groups of the UK (2010). ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index. Herpetological Journal 10(4), pp. 143-155.

Baker, J (2016). Biodiversity Net Gain Good Practice Principles for Development

Baker, J., Hoskins, R., Butterworth, T. (2019). Biodiversity Net Gain. Good Practice Principles for Development. A Practical Guide. CIRA

BMD (2022) Ecological Headlines: Harefield Composting Facility. Bradley Murphy Design: 21.0069.RPE-TN.801.EcoHeadlines.

BMD (2023) Ecological Assessment: Harefield Composting Facility, Uxbridge. Bradley Murphy Design: BMD.21.0069.RPE/P1.802.-.Ecology.

BMD (2023) Biodiversity Net Gain Plan: Harefield Composting Facility, Uxbridge. Bradley Murphy Design: BMD.21.0069.RPE-IA.803.Biodiversity Net Gain Plan.

BRIG (2011). UK Biodiversity Action Plan (BAP) Priority Habitat Descriptions. Ed. Ant Maddock.

British Standards Institute (BSI) (2013). BS42020 - Biodiversity Code of Practice for Planning and Development. BSI, London.

CIEEM (2017). Guidelines on Ecological Report Writing (2nd edn). Winchester: CIEEM.

CIEEM (2018). Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland (2nd edn). Winchester: CIEEM.

Collins, J. (ed) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. (4th ed) Bat Conservation Trust. London

Eaton et al. (2021) *Birds of Conservation Concern 5: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man.* British Birds.

English Nature (2001) Great crested newt mitigation guidelines.

Environment Agency (2012). Working at Construction and Demolition Sites: PPG6 Pollution Prevention Guidelines (2nd edn). Bristol: Environment Agency.

Froglife (1999). Reptile Survey – An Introduction to Planning, Conducting, and Interpreting Surveys for Snake and Lizard Conservation. Froglife Advice Sheet 10. Halesworth: Froglife.

Fuller, R.J. (1980). A Method for Assessing the Ornithological Importance of Sites for Nature Conservation. Biological Conservation, 17, pp. 229-239.

Harris S, Cresswell P and Jefferies D (1989). Surveying Badgers. Mammal Society.

HM Government (1981). Wildlife and Countryside Act 1981 (as amended).

HM Government (2000). Countryside and Rights of Way Act, 2000.

HM Government (2005). ODPM Circular 06/05 Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.

HM Government (2006). Natural Environment and Rural Communities Act 2006.

HM Government (2024). National Planning Policy Framework. Department for Communities and Local Government.

HM Government (2021). The Environment Act 2021.

Maddock, A (ed.) (2008). UK Biodiversity Action Plan; Priority Habitat Descriptions (Updated Dec 2011).

Mitchell-Jones, A.J. & McLeish (2004). *Bat Workers' Manual*, 3rd edition, JNCC, Devon.

Natural England (2009). Guidance on 'Current Use' in the definition of a badger sett (WML-G17). Natural England, Peterborough.

Natural England (2010). Higher Level Stewardship Farm Environment Plan Manual (3rd ed).

Natural England (2022). https://www.gov.uk/guidance/reptiles-protection-surveys-and-licences [Accessed 10/12/2024].

Scottish Natural Heritage (2003). Best Practice Guidance - Badger Surveys. Inverness Badger Survey 2003. Commissioned Report No. 096

The Bat Conservation Trust (2014). *The State of the UK's Bats 2014*.

The Conservation of Habitats and Species Regulations 2017, as amended.

7. GLOSSARY

7.1 Scientific Terms and Acronyms

CIEEM Chartered Institute of Ecology and Environmental Management, the professional organisation and provider of professional codes of conduct for ecological consultancy.

EPS European Protected Species For the purposes of this report EPS are species that require particular licences to allow certain works to go ahead. Species falling within the following situations are not considered as EPS within this report:

Birds listed on Appendix 2 of the Bern Convention (European legislation). The protection requirements of this Appendix are fully integrated in UK law, notably through the Wildlife and Countryside Act 1981 (as amended).

Birds listed on Annex 1 of the Birds Directive (European legislation). The protection of such species survival and reproduction within their geographic distribution is ensured through special conservation measures in relation to their habitats. Such measures are implemented through the establishment of Special Protection Areas. Therefore, any implications are considered at regional habitat and country level rather than individual bird/species level.

Level of protection – 'EU' Protected under the Conservation of Habitats and Species Regulations (2017).

Level of protection – 'UK' Protected under the Wildlife and Countryside Act 1981 (as amended).

Non-native invasive species For the purposes of this report: species listed on Schedule 9 of the wildlife and Countryside Act 1981 (as amended). Widely naturalised species, such as grey squirrel, are excluded.

Notable species A species which is listed as a UK Priority Species, carries an unfavourable conservation status (e.g. scarce, rare, threatened, Red-listed), is invasive or is otherwise worthy of note from an ecological perspective.

Protected species A species protected under specific UK or European legislation, including Habitats Directive, Wildlife and Countryside Act.

SAC Special Area of Conservation. Designated under European Union Habitat Directive (92/43/EEC) to protect species and habitat of European interest.

SPA Special Protection Area. A site designated under the European Union Directive on the Conservation of Wild Birds.

SSSI Site of Species Scientific Interest. Statutory designation of biological or geological importance.

UK Priority Habitat and species A habitat or species identified as a priority for conservation in accordance with Section 40 of the Natural Environment and Rural Communities Act (2006). Section 40 of the Act places a duty on public authorities to have regard for the conservation objectives of these habitats and species.

7.2 Scientific Names

7.2.1 Scientific names of species mentioned in this report are outlined in Table 7.1, excluding those that were recorded on Site (see Appendix B).

Table 7.1 Scientific names of species mentioned within this report excluding those recorded on Site

English Name	Scientific Name
Amphibians	
Great crested newt	*Triturus cristatus*
Birds	
Carrion crow	*Corvus corone*
Feral pigeon	*Columba livia domestica*
Mammals (including bats)	
Brown long-eared bat	*Plecotus auritus*
Common pipistrelle	*Pipistrellus pipistrellus*
Daubenton's bat	*Myotis daubentonii*
Deer sp.	*Cervidae sp.*
Hedgehog	*Erinaceus europaeus*
Leisler's bat	*Nyctalus leisleri*
Rabbit	*Oryctolagus cuniculus*
Soprano pipistrelle	*Pipistrellus pygmaeus*
Plants	
Pedunculate oak	*Quercus robur*
Wild service	*Sorbus torminalis*
Reptiles	
Common lizard	*Zootoca vivipara*
Grass snake	*Natrix helvetica*

APPENDICES

SITE PHOTOGRAPHS

Photograph 1: A small patch of remaining poor semi-improved grassland associated with an area of retained scrub.

Photograph 2: An example of a remaining patch of bramble scrub.

Photograph 3: The remaining hedgerow feature H3 within the northern extent of the Site.

Photograph 4: Active maturation area on hardstanding within the central/western extent of the Site.

Photograph 5: Peripheral area of mixed parkland/scattered trees along the western periphery.

Photograph 6: Extensive new areas of cleared worked/bare ground associated with ongoing HS2 works.

A. METADATA, SURVEY CONDITIONS AND LIMITATIONS

A.1 Metadata

Factor	Detail
Data	Ecological verification of an assessment conducted in 2022
Reason for collection	To identify ecological constraints and to confirm/inform appropriate mitigation in relation to proposed works.
Location	West London Composting Facility, Harefield, Greater London. Approximately centred on national grid reference: TQ 07102 88155.
Date	8th November 2024
Method of collection	Ecological verification assessment based on JNCC Phase 1 Habitat assessments.
Who collected	Katie Dalton BSc (Hons) MRSB ACIEEM Jasmine Whitmore BSc (Hons) Lili Timms BSc MSc

A.2 Survey Conditions

Date	Start Time	Cloud (%)	Sun	Precipitation
08/11/2024	10:30	100	Overcast	None

A.3 Limitations Review

Consideration	Comment
Survey & data	
Personal competence, i.e. qualifications, training, skills, understanding, experience	All survey works were undertaken by or directly supervised by personnel experienced in ecological surveying (see meta data). Katie Dalton BSc (Hons) MRSB ACIEEM has over 6 years' experience in ecological consultancy, including an experience of performing the survey work and assessments undertaken at Site along with technical reporting. Katie holds a level 2 bat and GCN class licence. Jasmine Whitmore BSc (Hons) has over one years' experience in ecological consultancy, including an experience of carrying out survey work and assessments undertaken at Site, along with technical writing. Lili Timms BSc MSc has over a year of experience in ecological consultancy, including an experience of assisting in survey work and assessments undertaken at Site along with technical reporting. James Patmore CEcol CEnv MCIEEM has over 22 years experience in ecological consultancy, including an extensive amount of experience performing and directing the survey work and assessments undertaken at the Site.
Resources (equipment and/or personnel)	Appropriate resources and suitably qualified personnel were used.
Time spent surveying	Sufficient time was spent on site to undertake all surveys. No surveys were 'cut short'.
Data (e.g. arising from incomplete or inappropriate surveys)	The data collected were sufficient for the purpose of the works.
Lack of statistical robustness and higher uncertainties	Statistical analysis of data was not deemed necessary for the purpose of the current works.
Old and out of date data	The data used to complete this Ecological Verification Assessments were current and up to date.

Consideration	Comment
Timing or seasonal constraints and suboptimal survey periods	The survey was conducted in November 2024. This is a sub-optimal survey period but is not considered to be a limitation in the case
Partial use of and/or departures from good practice guidelines	All surveys accorded with the relevant best practice guidelines.
Site conditions & other factors	
Adverse weather conditions	No significantly adverse weather conditions were encountered during the survey work undertaken at the Site that would be considered to have significantly adversely impacted the reliability and/or accuracy of data collected.
Restricted access to site or part of site	None
Unrealistic deadlines	No restrictions on survey data collected or analysed to date are as a result or unrealistic deadlines.
Unproven or untested measures for mitigation and compensation	N/A
Evaluation of conservation value and impacts	The evaluation of the conservation value of habitats and species associated (or potentially associated) with the Site and impacts of the development, are based on the current information available. This evaluation will need to be reviewed and updated as necessary should a considerable period of time (24 months) elapse and/or more data from other survey work (on and within 1 km of the Site) becomes available.

B. DETAILED SURVEY RESULTS

B.1 Species Recorded on Site

English Name	Scientific Name
Plants	
Ash	*Fraxinus excelsior*
Blackthorn	*Prunus spinosa*
Bramble	*Rubus fruticosus agg.*
Cleavers	*Galium aparine*
Cocksfoot	*Dactylis glomerata*
Common nettle	*Urtica dioica*
Cypress sp.	*Cupressus sp.*
Dock sp.	*Rumex sp.*
Dog rose	*Rosa canina*
Goat willow	*Salix caprea*
Hawthorn	*Crataegus monogyna*
Ivy	*Hedera helix*
Mugwort	*Artemisia vulgaris*
Ragwort	*Jacobaea vulgaris*
Spear thistle	*Cirsium vulgare*

BMD

E: info@bradleymurphydesign.co.uk
W: www.bradleymurphydesign.co.uk
T: 0121 815 9127

BIRMINGHAM | ALPHA TOWER