Preliminary Ecological Appraisal & Biodiversity Metric Assessment

Chirk Retail Park
Chirk
Wrexham
LL14 5AZ

Planning Reference:		**Report Reference:**	251217 rev00C
Client:	InstaVolt Ltd.		
Architect/Agent:	N/A		
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SECTION 1 SUMMARY

1.1 Introduction

It is proposed to install six charging bays and associated infrastructure at Chirk Retail Park, Wrexham, LL14 5AZ.

1.2 Survey Results

The survey site consisted of three relatively small parcels (Figure 2.1); a parcel of hardstanding, a parcel of hardstanding and modified grassland, and the third parcel was an extent of mixed scrub (0.02 ha in total). The mixed scrub is suitable to provide habitat for common amphibians (terrestrial), foraging/dispersing bats, birds, hedgehog and invertebrates.

1.3 Impacts

The proposal will result in the loss of a limited extent mixed scrub (47 m^2) and grass land (36 m^2), which will remove a limited extent of habitat for, and/or negatively impact common amphibians, foraging/dispersing bats, birds, hedgehog and invertebrates.

1.4 Recommendations

Recommendations for mitigation, compensation, and enhancement measures to ensure there are no negative impacts upon protected species are included within Section 6.

1.5 Biodiversity Metric Assessment / Biodiversity Net Gain

The Biodiversity Metric Assessment demonstrates that the proposal will result in a decrease of 0.05 (-100%) 'area' habitat units through the removal of extents of modified grassland and mixed scrub.

Due to the loss of habitat units, the proposal needs 0.06 habitat units to compensate for the loss and to achieve a 10% net gain. The habitat units would need to be of medium distinctiveness or higher to satisfy the BMA trading rules.

The development will be required to achieve a biodiversity net gain of +10% for area habitat. It is understood that the development will include the purchase of off-site habitat units/statutory credits to compensate for the habitat removal.

1.6 Conclusion

The Biodiversity Metric Assessment indicates that the proposal currently represents a negative ecological impact through the removal of modified grassland and mixed scrub. It is considered that this habitat loss will need to be compensated for through the purchase of off-site habitat units/statutory credits.

The impacts for protected species have been assessed, with mitigation, compensation and enhancement measures recommended to reduce any predicted negative impacts and ensure opportunities for these species are retained and/or increased following development.

With the purchase of off-site habitat units/statutory credits, sufficient to achieve the equivalent of a biodiversity net gain of +10%, it is considered that the proposal would achieve a minor positive ecological impact.

SECTION 2 INTRODUCTION

2.1 Site Location & Description

The survey site was located northeast of Chirk, Wrexham, and measured 0.02 ha. The site consisted of hardstanding carparking with mixed scrub to the east. The three surveyed areas were an area of hardstanding, an area of hardstanding and modified grassland, and an area of mixed scrub (Figure 2.1). The surrounding landscape consisted of roads, retail, fields and housing.

2.2 Proposals

It is proposed to install four standard charging bays and two large charging bays, with associated infrastructure (a Schneider 8-Way Feeder Pillar, and SPEN Specific substation) at Chirk Retail Park, Wrexham, LL14 5AZ, developing further on two existing charging bays at the site.

2.3 Survey Objectives

A Preliminary Ecological Appraisal (PEA) and Biodiversity Metric Assessment (BMA) were undertaken to consider and assess the perceived ecological impacts associated with the proposal, including any perceived impacts to:

- Legally protected species or species of conservation concern;
- Legally protected habitats or habitats of conservation concern;
- Any statutory or non-statutory sites of conservation interest; and,
- Opportunities to provide biodiversity enhancement(s).



Figure 2.1. Survey site boundaries at Chirk Retail Park (red outline)

SECTION 3 SURVEY METHODS

3.1 Preliminary Ecological Appraisal

3.1.1 Scope of the Assessment

The zone of influence covers the extent of the site, the site boundaries and areas directly adjacent to the site. The assessment considers designated sites, habitats and species of importance for biodiversity conservation and protected species.

3.1.2 Desk-based Review

A desk-based review was undertaken, reviewing ecological data from the following resources:

- Review of the Government's (DEFRA) mapping website MAGIC; and,
- Review of the Natural Resources Wales Interactive Map.
- Review of DataMapWales.

Review of the ecological data included a search of:

- International & European designated sites (Natura 2000 sites[1]) – within the survey area and within 10 km of the survey area boundaries;
- Statutory sites (e.g. Sites of Special Scientific Interest (SSSIs)) within 1 km of the survey area boundaries;
- Non-statutory sites (e.g. Local Wildlife Sites (LWS)) designated for wildlife conservation within a 1 km radius of the site;
- Priority habitats – within the survey area and within 1 km of the survey area boundaries;
- European protected species license (EPSL) records issued by Natural England since 2009 – within the survey area and within 4 km of the survey area boundaries;
- Great crested newt pond survey records within 1 km of the survey area boundaries; and,
- Location of the site within a consultation/risk zone designated for a protected species.

[1] Natura 2000 is a European Union-wide network of nature conservation sites established under the EC Habitats and Birds Directives comprising Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

3.1.3 Field Survey

The field survey consisted of a walkover assessment of all areas of the site using the UK Habitat Classification System methodology (UKHab Ltd., 2023). This is a standard technique designed for classifying and mapping British habitats. A condition assessment for each habitat was undertaken on site, where applicable, following the Statutory Biodiversity Metric Condition Assessment Methodology (Defra, 2024).

Each habitat was assigned the appropriate alphanumeric code followed by any relevant secondary codes in accordance with UKHab Category Definitions v2.0 (UKHab Ltd., 2023). These codes are shown on the UK Habitat Classification Map (Appendix 1). Apart from buildings, habitat areas below the minimum mappable unit of 25 m^2 will be denoted by target notes and secondary codes. Target notes are used to indicate specific features, important habitats and/or field signs. An indicative list of observed plant species was compiled with the common name used in the main body of the report, and both the common and scientific names provided within Appendix 2.

The site survey was undertaken on 28th December 2025 by Andrew Charles. All areas within the site were surveyed and assessed for indicators of ecological value, including the presence or signs of any protected or rare habitats and species.

3.2 Statutory Biodiversity Metric Assessment

As recommended by the Defra Statutory Biodiversity Metric (2024), the habitat types were defined using the UK Habitat Classification System 2.0 (2023). For each site habitat feature, the metric records:

- Habitat type;
- Area or length;
- Distinctiveness;
- Strategic significance; and,
- Connectivity.

From the recorded parameters the metric calculates:

- ‘Habitat units’ for area habitats (e.g. grassland, woodland etc.);
- ‘Hedgerow units’ for hedges and lines of trees; and,
- ‘River units’ for rivers and streams.

The habitat values assigned to created and enhanced habitats include factors associated with 'risk' relating to the difficulty and/or time required to establish the new habitat type.

The following were used for the calculation of the parameters, pre- and post-development:

- The site visit was undertaken on 28th December 2025;
- Desk-based review results (Section 4.1); and,
- Proposed site layout.

SECTION 4 SURVEY RESULTS

4.1 Desk-based review

4.1.1 Statutory Designated Sites

Internationally Designated Sites of Nature Conservation

The desk-based review identified two statutory sites designated for nature conservation of international importance within 10 km of the site (Table 4.1).

Table 4.1. Statutory Designated Sites of International Importance

Name of site	Location in reference to site	Designation	Reason for designation
River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid	1.26 km north	Special Area of Conservation (SAC)	Large river/lake SAC designated for key riverine species (incl. migratory fish and mammals) and qualifying habitats associated with the Dee catchment.
Johnstown Newt Sites	6.2 km northwest	Special Area of Conservation (SAC)	Designated for one of the largest known populations of great crested newt in Great Britain.

Nationally Designated Sites of Nature Conservation

The desk-based review identified one statutory site of nature conservation of national importance within 1 km of the site (Table 4.2).

Table 4.2. Statutory Designated Sites of International Importance

Name of site	Location in reference to site	Designation	Reason for designation
River Dee / Afon Dyfrdwy	0.9 km northeast	Sites of Special Scientific Interest (Wales)	The River Dee is designated for its diverse river habitats, geological interest, rare plants, important fish and lamprey populations, otter, and notable aquatic invertebrates.

4.1.2 Non-Statutory Designated Sites

The desk-based review identified no non-statutory sites of nature conservation within 1 km of the site.

4.1.3 Priority Habitats

The desk-based review identified priority habitat woodland approximately 0.6 km to the northeast, 0.7 km to the northwest, 0.8 km to the southwest and 1 km to the southeast of the site.

4.1.4 European Protected Species Licences (EPSLs)

Bats

The desk-based review identified two EPSLs granted for bats within 4 km of the site. The nearest of these was granted in 2019 for the destruction of a breeding and resting place for common pipistrelle located 2.4 km southeast of the survey site.

4.1.5 Great Crested Newt Survey Records

The desk-based review did not identify any class survey licence returns or positive pond survey results (2017-2019) for great crested newt within 4 km of the site.

4.1.6 Consultation/Risk Zones

The desk-based review did not identify that the site lies within any consultation/risk zones for a protected species.

4.2 Field Survey

The environmental conditions for the field survey are provided in Table 4.2.

Table 4.2. Environmental conditions on 30th July 2025

Temperature (°C)	Wind Speed (Beaufort Scale)	Cloud cover (%)	Precipitation	Sunset time
5	2	100	0	N/A

Constraints:
The Preliminary Ecological Appraisal records the plants species present at the time of the survey; therefore, plants that appear during different times of the year may not be recorded. Botanical diversity was considered sufficient to classify and assess the habitats present.

4.2.1 Habitats

The survey site consisted predominantly of modified grassland located within two separate parcels, which formed a larger extent of grass verge associated with the commercial unit. An electrical junction box with gravel access was located within the eastern parcel. A UK Habitat map for the site is provided in Appendix 1. Each habitat was assigned the appropriate alphanumeric code in accordance with UKHab Category

Definitions v2.0 (UKHab Ltd., 2023).

Built linear features – A1 & A2 (u1e)

Parcel A1

Parcel A1 was located at the northern extent of the retail park and consisted of hardstanding car park (Figure 4.1).

Parcel A2

Parcel A2 was located within the central extent of the site and consisted of hardstanding car park (Figure 4.1).

Modified grassland – A3 (g4)

Parcel A3 was located along the east of parcel A2, central to the site, and consisted of modified grassland (Figure 4.2 and Figure 4.3). The grassland was frequently mown and supported a short sward height of approximately 5 cm. 5 species per m² were recorded with species identified including: Perennial rye-grass & annual meadow grass, with daisy, dandelion, common mouse ear, creeping buttercup, bittercress, scarlet pimpernel and shepherd's purse. The modified grassland within Parcel A1 was in moderate condition due to good species diversity but high levels of management.

Mixed Scrub – A4 (h3h)

Parcel A4 was located at the north east of the site and was consisted of mixed scrub enclosed by a man-made bank and fencing. Species present included bramble, ash, dog rose, gorse and alder, and was in moderate condition (Figures 4.4, 4.5 and 4.6).

Built-up Area – A5 (u1)

Parcel A5 was located within Parcel A2 and was in the form of an electrical junction box (Figure 4.2).



Figure 4.1. Parcels A1 & A2, photo taken facing north



Figure 4.2. Parcels A3 & A5



Figure 4.3. Species composition of Parcel A3



Figure 4.4. Road to the east of Parcel A4



Figure 4.5. Parcel A4



Figure 4.6. Parcel A4

4.3 Habitat Suitability for Protected & Priority Species

4.3.1 Amphibians

The mixed scrub and grassland margin is suitable to provide terrestrial habitat for amphibians.

4.3.2 Badger

There were no signs of badger identified during the field survey. However, in conjunction with the wider landscape, the site will provide a limited extent of foraging and dispersal habitat for badger.

4.3.3 Bats

Roosting

There was no suitable roosting habitat identified for bats within the survey areas.

Foraging & Dispersal

The mixed scrub and grassland margin will provide a limited extent of foraging and dispersal habitat for bats in conjunction with the wider landscape.

4.3.4 Birds

The mixed scrub will provide nesting sites for bird species. The mixed scrub and grassland margin will provide a limited extent of foraging habitat for birds.

4.3.5 Dormouse

The mixed scrub is suitable to provide habitat for dormouse.

4.3.6 Hedgehog

In conjunction with the wider landscape, the site will provide a limited extent of habitat for hedgehog.

4.3.7 Invertebrates

The mixed scrub and grassland will provide suitable habitat for invertebrate species.

4.3.8 Reptiles

The mixed scrub margin and grassland edge could provide suitable habitat for reptiles.

4.4 Biodiversity Metric Assessment

The Biodiversity Metric Assessment demonstrates that the proposal will result in a decrease of 0.05 (-100%) 'area' habitat units through the removal of modified grassland and mixed scrub.

The strategic significance of each habitat present on site has been assigned through consideration of the location within the landscape, habitat type and ecological importance for protected species. In the absence of a Local Nature Recovery Strategy (LNRS) the guidance states that creation of specific habitat types considered as ecologically important within the local plans or alternative documents may be considered as 'high' strategic significance. Accordingly, the habitats identified are considered to be of 'low' strategic significance.

The baseline and proposed habitats, including habitat distinctiveness, condition, strategic significance, and biodiversity units, are presented in Table 4.3 and biodiversity unit change is summarised in Table 4.4. The baseline and proposed maps are presented in Appendix 3.

Table 4.3. Number of Biodiversity Units for On-site and Off-site Area Habitats at Baseline

Map Ref	Habitat Type	Area (ha)	Habitat Distinctiveness	Habitat Condition	Strategic Significance	Baseline Biodiversity Units
A1, A2 & A5	Developed land; sealed surface	0.014	V. Low	N/A	Low	0.00
A3	Modified grassland	0.0036	Low	Moderate	Low	0.01
A4	Mixed scrub	0.0047	Medium	Moderate	Low	0.04
	Total On-site Area Habitat Biodiversity Units					**0.05**

Table 4.4. Area Habitat Biodiversity Unit Change Summary

Biodiversity Unit Type	Description		Biodiversity Units
Area Habitat	On-site baseline area habitat biodiversity units		0.05
	On-site area habitat retention, creation, and enhancement of biodiversity units:		
	Created	0.0083 ha developed land; sealed surface	0.00
Overall Net Unit Change			**-0.05**
Overall On-site Net % Change			**-100.00%**
Trading Rules Satisfied			**No**

SECTION 5 DISCUSSION

5.1 Proposal

It is proposed to install four standard charging bays and two large charging bays, a Schneider 8-Way Feeder Pillar, and SPEN Specific substation at Chirk Retail Park, Wrexham, LL14 5AZ, developing further on two existing charging bays at the site.

5.2 Desk-based review

5.2.1 Statutory Designated Sites

Internationally Designated Sites of Nature Conservation

The desk-based review identified two statutory sites designated for nature conservation of international importance within 10 km of the site.

Due to the nature of the character of the proposed works and the intervening distances between the site and the internationally designated sites of nature conservation, it is considered that there will be no direct or indirect impacts.

Nationally Designated Sites of Nature Conservation

The desk-based review identified one statutory sites of nature conservation of national importance within 1 km of the site

Due to the nature of the character of the proposed works and the intervening distances between the site and the nationally designated site of nature conservation, it is considered that there will be no direct or indirect impacts.

5.2.2 Non-Statutory Designated Sites

The desk-based review did not identify any non-statutory sites of nature conservation within 1 km of the site.

5.2.3 Priority Habitats

The desk-based review identify priority habitat woodlands within 1 km of the site.

Due to the nature of the character of the proposed works and the intervening distances between the site and the nationally designated site of nature conservation, it is considered that there will be no direct or indirect impacts.

5.3 Protected & Priority Species Assessment

5.3.1 Amphibians

The mixed scrub and grassland margin is suitable to provide terrestrial habitat for amphibians.

Great Crested Newt

The desk-based review did not identify any EPSLs, class survey licence returns or pond survey results for great crested newt within 4 km of the site.

The presence of great crested newt is typically associated with the presence of ponds, which form aquatic breeding habitat, and therefore tend to have relatively 'localised' distributions.

Due to the lack of proximity to pond/s and/or available connectivity between suitable aquatic breeding habitat and the limited extent of suitable terrestrial habitat on-site, it is considered that great crested newts are absent on-site.

Common Amphibians

Common amphibians such as common frog, common toad, smooth newt and palmate newt, are less dependent on established ponds and have a widespread distribution.

Common toad is listed within Section 41 of the Natural Environment and Rural Communities Act (NERC, 2006) and must be considered through the planning process. Public bodies, including LPAs, are minded to ensure due regard to the conservation of biodiversity of such species. Such considerations may seek to protect, re-establish or create habitat suitable for amphibian's post development.

It is understood that a limited extent of mixed scrub and modified grassland will be removed to facilitate the development, which will remove habitat for amphibians. Accordingly, mitigation and compensation measures are provided in Section 6 to ensure common amphibians are not harmed during the development.

5.3.2 Badger

There were no signs of badger identified during the field survey. However, in conjunction with the wider landscape, the site will provide a limited extent of foraging and dispersal habitat for badger.

Badgers are protected by the Protection of Badgers Act 1992 and the Wildlife and Countryside Act 1981 (as amended), Schedule 6. Under the Wildlife and Countryside Act, it is illegal to intentionally kill, capture, injure or ill-treat any badger.

It is considered that the proposals will have no significant effect upon badgers, however, precautionary mitigation measures should be employed to ensure badgers are not harmed or injured during the construction period of the development. These measures are detailed within Section 6.

5.3.3 Bats

The desk-based review identified two EPSLs granted for bats within 4 km of the site.

Roosting

There was no suitable roosting habitat identified for bats within the survey areas. The works, therefore, will not disturb roosting bats or significantly affect the distribution or abundance of local bat populations.

Foraging & Dispersal

The mixed scrub and grassland margin will provide a limited extent of foraging and dispersal habitat for bats in conjunction with the wider landscape.

As a signatory to the Bonn Convention (Agreement on the Conservation of Bats in Europe) the UK has committed to protecting bat habitats, which necessitates the identification and protection from damage or disturbance of foraging areas and commuting routes.

It is understood that a limited extent of mixed scrub and modified grassland will be removed to facilitate the development, which will remove a limit extent of foraging and dispersal habitat for bats. Therefore, mitigation measures detailed within Section 6, will be required to ensure that dispersing and foraging bats are not negatively impacted by the proposal.

5.3.4 Birds

The mixed scrub will provide nesting sites for bird species. The mixed scrub and grassland margin will provide a limited extent of foraging habitat for birds.

All birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended).

It is understood that a limited extent of mixed scrub and modified grassland will be removed to facilitate the development, which will remove foraging habitat for birds. Accordingly, precautionary and enhancement measures are provided in Section 6 to ensure that birds and their nests are not disturbed or damaged during the proposed works and that opportunities for nesting birds are increased following the development.

5.3.5 Hedgehog

In conjunction with the wider landscape, the site will provide a limited extent of habitat for hedgehog.

Hedgehog are listed as a species of principal importance under Section 41 of the Natural Environment and Rural Communities Act (2006) with public bodies, including LPAs, minded to ensure due regard to the conservation of biodiversity of such species. Such considerations may seek to protect, re-establish or create habitat suitable for hedgehog post development.

It is understood that a limited extent of mixed scrub and modified grassland will be removed to facilitate the development, which will remove habitat for hedgehog. Mitigation and compensation measures are provided in Section 6 to ensure hedgehog are not negatively impacted by the development.

5.3.6 Invertebrates

The mixed scrub and grassland will provide suitable habitat for invertebrate species.

It is understood that a limited extent of mixed scrub and modified grassland will be removed to facilitate the development, which will remove habitat for invertebrate species. Measures will be incorporated to ensure opportunities for invertebrate species are available post-development.

5.3.7 Reptiles

The mixed scrub margin and grassland edge could provide suitable habitat for reptiles.

Reptiles are protected against intentional killing and injury under the Wildlife and Countryside Act 1981 (as amended). Natural England states that activities such as site investigations and movements of machinery may breach this legislation by causing death or injury to reptiles (English Nature, 2004).

It is understood that a limited extent of mixed scrub and modified grassland will be removed to facilitate the development, which will remove habitat for reptiles. Accordingly, mitigation and compensation measures are provided within Section 6 to ensure reptiles are not harmed or injured during the works.

5.4 Biodiversity Metric Assessment

The Biodiversity Metric Assessment demonstrates that the proposal will result in a decrease of 0.05 (-100%) 'area' habitat units through the removal of modified grassland (Appendix 3).

The development will be required to achieve a biodiversity net gain of +10% for area habitat. To demonstrate a net gain of 10% for area habitats, the following approaches could be undertaken singularly or in combination:

- Creation and/or enhancement of 'area habitats' offsite (outside of the redline boundary); and/or,
- Purchase of 'habitat units' from a Habitat Bank.

The following is required to achieve +10%:

- Area habitats: 0.06 units*.

* Note, the BMA calculator produces outputs to two decimal places. Accordingly, the +10% requirement has been rounded up to 0.06 units. The habitat units would need to be of medium distinctiveness or higher to satisfy the BMA trading rules.

SECTION 6 RECOMMENDATIONS

6.1 Ecological Impacts

The proposal will result in the loss of a limited extent mixed scrub (47 m^2) and grass land (36 m^2), which will remove a limited extent of habitat for, and/or negatively impact common amphibians, foraging/dispersing bats, birds, hedgehog and invertebrates.

6.2 Mitigation Measures

To ensure the identified protected species are not negatively impacted during and post-development, the following measures will be undertaken (Appendix 3).

- **Scrub Removal:** the scrub must be removed in two phases:

  Phase 1:

  Wooded vegetation must be initially removed outside the nesting bird season – i.e. during September to February (the bird nesting season is considered to be March-August inclusive; although, depending on the species, geographical area and weather nesting can take place outside of these times).

  Wooded vegetation should be reduced to approximately 150 mm, being cut with hand tools only, e.g. chainsaw and brushcutter, with all cutting removed (ideally utilised to create habitat piles within retained vegetation).

  This is to prevent the removal of the wooded scrub vegetation, destroying active bird nests or maternity nests for dormice.

  Phase 2:

  The cut wooded stems must remain undisturbed for at least 48 hrs, with ground vegetation subsequently cleared during September, October, March or April.

  Ground vegetation may be removed using hand tools only, e.g. brushcutter or strimmer, with the area subsequently managed with a short sward until works commence.

  This is to avoid the hibernation period and allow amphibians, reptiles, dormice, hedgehog etc. the opportunity to disperse away from the working area.

- **Grassland Management:** The modified grassland should be maintained with a short sward height prior to and during the works to discourage establishment by amphibians or reptile.

- **Retained Habitats:** The root protection areas (RPA) of any off-site adjacent retained habitats (scrub and trees) must be considered and buffered accordingly. This is to avoid direct damage through the compaction and disturbance of root protection areas, which could cause the deterioration of the retained hedgerows/trees.

- **Excavations/Pipework:** Any excavations or pipework, which are to remain open overnight, should be fenced or covered to prevent potential entrapment and/or injury of species such as badger or hedgehog.

6.3 Compensation & Enhancement

The National Planning Policy Framework outlines the Government's commitment to minimise impacts on biodiversity and provide increases in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

The following compensation and enhancement measures should be included within the proposal to compensate for the loss of, or to enhance habitat for protected species (Appendix 5):

- **Bat, Bird & Invertebrate Provisions:** at least one bat roosting provision (Appendix 5), one bird nesting provision (Appendix 6) and one invertebrate provision (Appendix 7) are to be installed upon suitable trees within close proximity to the development site.

- **Habitat piles:** creation of habitat piles consisting of stone, logs (including above and below ground), utilising branches/brash, grass cuttings etc., resulting from any forms of habitat/site management (Appendix 8).

6.4 Biodiversity Net Gain

The Biodiversity Metric Assessment demonstrates that the proposal will result in a decrease of 0.05 (-100%) 'area' habitat units through the removal of modified grassland (Appendix 3).

Due to the loss of habitat units, the proposal needs 0.06 habitat units to compensate for the loss and to achieve a 10% net gain. The habitat units would need to be of medium distinctiveness or higher to satisfy the BMA trading rules.

Units may be purchased from an off-site supplier, such as:

- https://biodiversity-netgain.co.uk/; and,
- https://environmentbank.com/.

If no offsite units are available for purchase, statutory BNG credits can be purchased from the government at a premium:

- https://www.gov.uk/guidance/statutory-biodiversity-credit-prices.

6.5 Conclusion

The Biodiversity Metric Assessment indicates that the proposal currently represents a negative ecological impact through the removal of modified grassland. It is considered that this habitat loss will need to be compensated for through the purchase of off-site habitat units/statutory credits.

The impacts for protected species have been assessed, with mitigation, compensation and enhancement measures recommended to reduce any predicted negative impacts and ensure opportunities for these species are retained and/or increased following development.

With the purchase of off-site habitat units/statutory credits, sufficient to achieve the equivalent of a biodiversity net gain of +10%, it is considered that the proposal would achieve a minor positive ecological impact.

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Wildlife & Countryside Act 1981, as amended. HMSO.

APPENDICES

Appendix 1: UK Habitat Classification Map

Appendix 2: Biodiversity Metric Assessment

Appendix 3: Mitigation & Constraints Plan

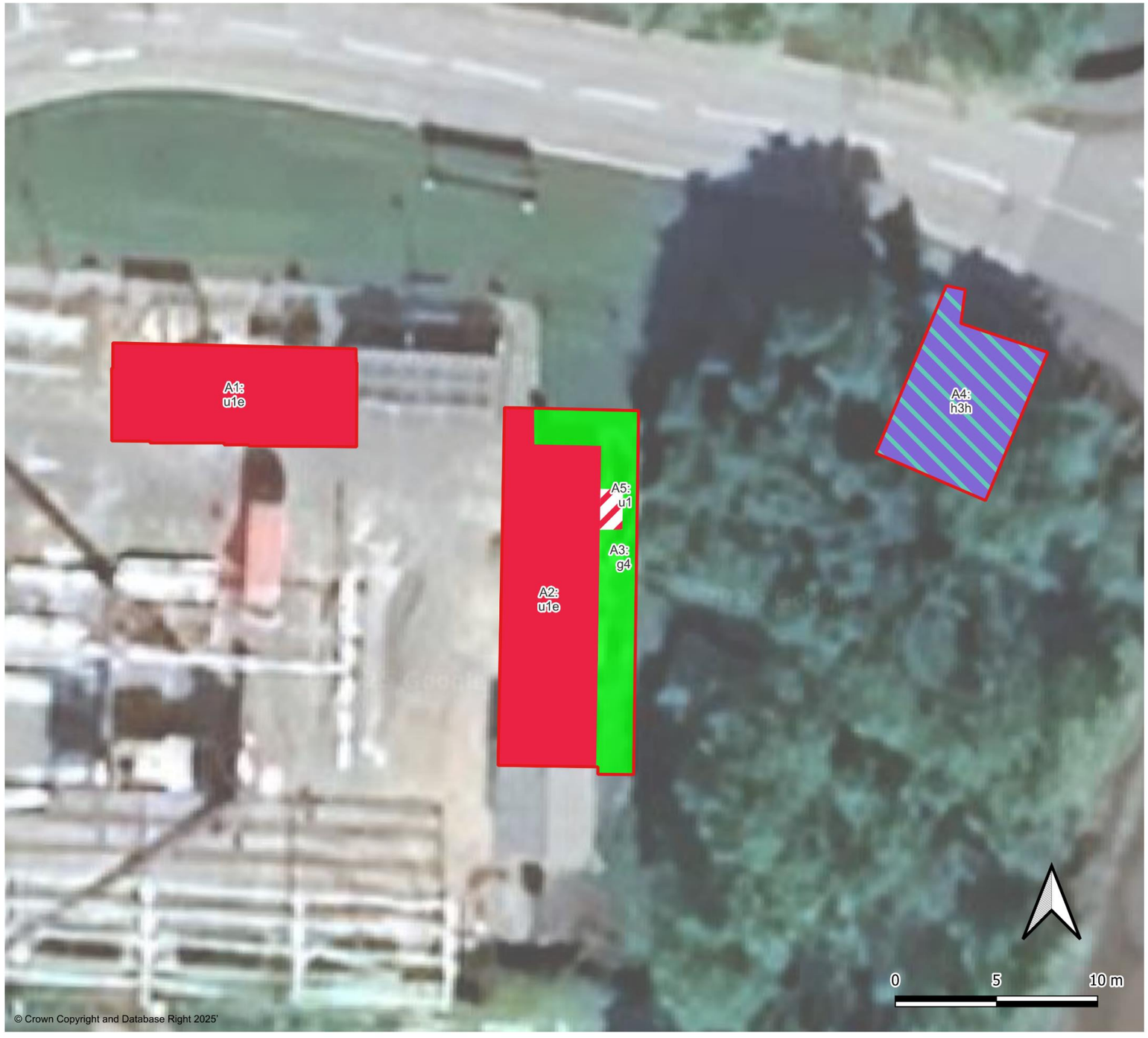
Appendix 4: Compensation & Enhancement Plan

Appendix 5: Examples of Bat Roosting Provisions

Appendix 6: Examples of Bird Nesting Provisions

Appendix 7: Example of an Invertebrate Provision

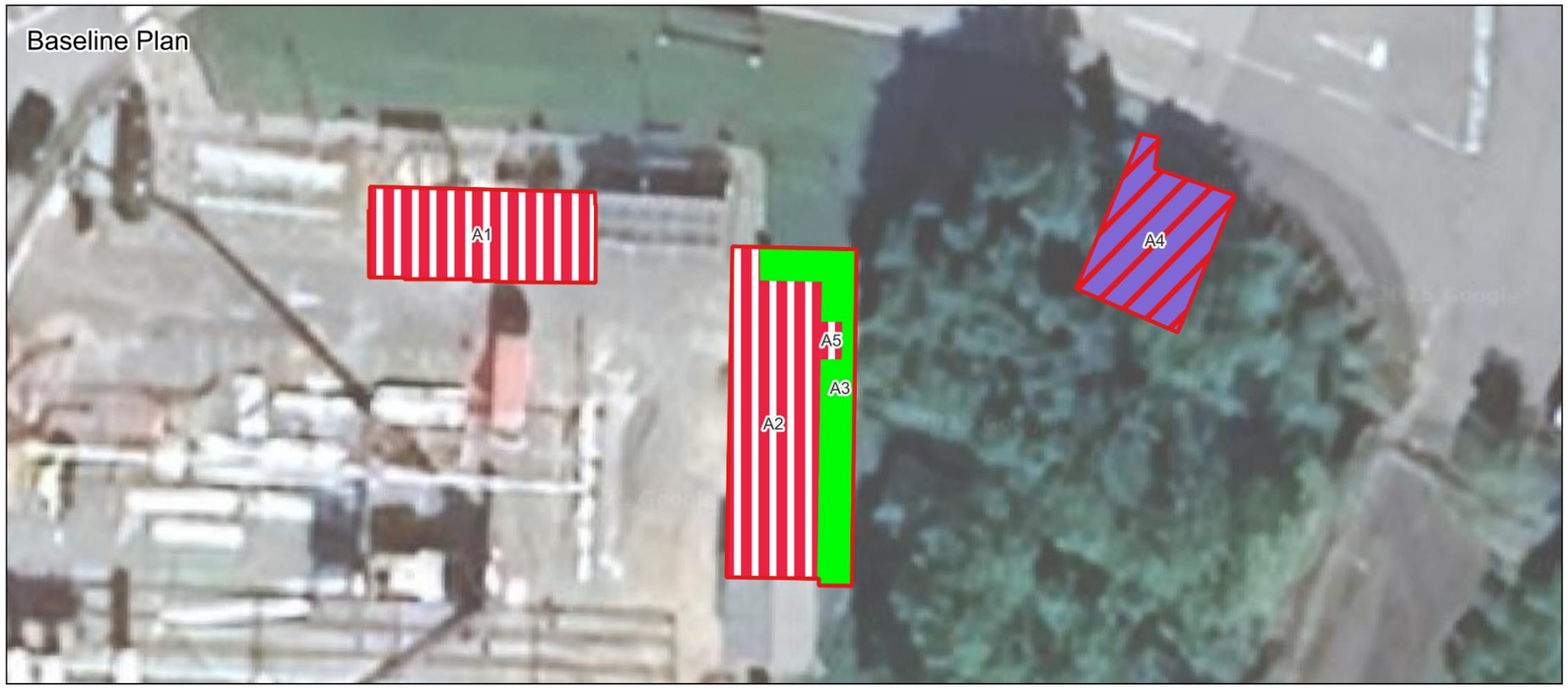
Appendix 8: Habitat Pile Construction



Key

- Red Line Boundary
- g4 - modified grassland
- h3h - mixed scrub
- u1 - built-up areas and gardens
- u1e - built linear features

UK Habitat Classification Map	
Client: InstaVolt Ltd.	
Project: Charging Bays at Chirk Retail Park (McDonalds)	
Date: 12/01/2026	Ref: 251217
Scale (A3): 175	Author: Kit Williams



Baseline Key

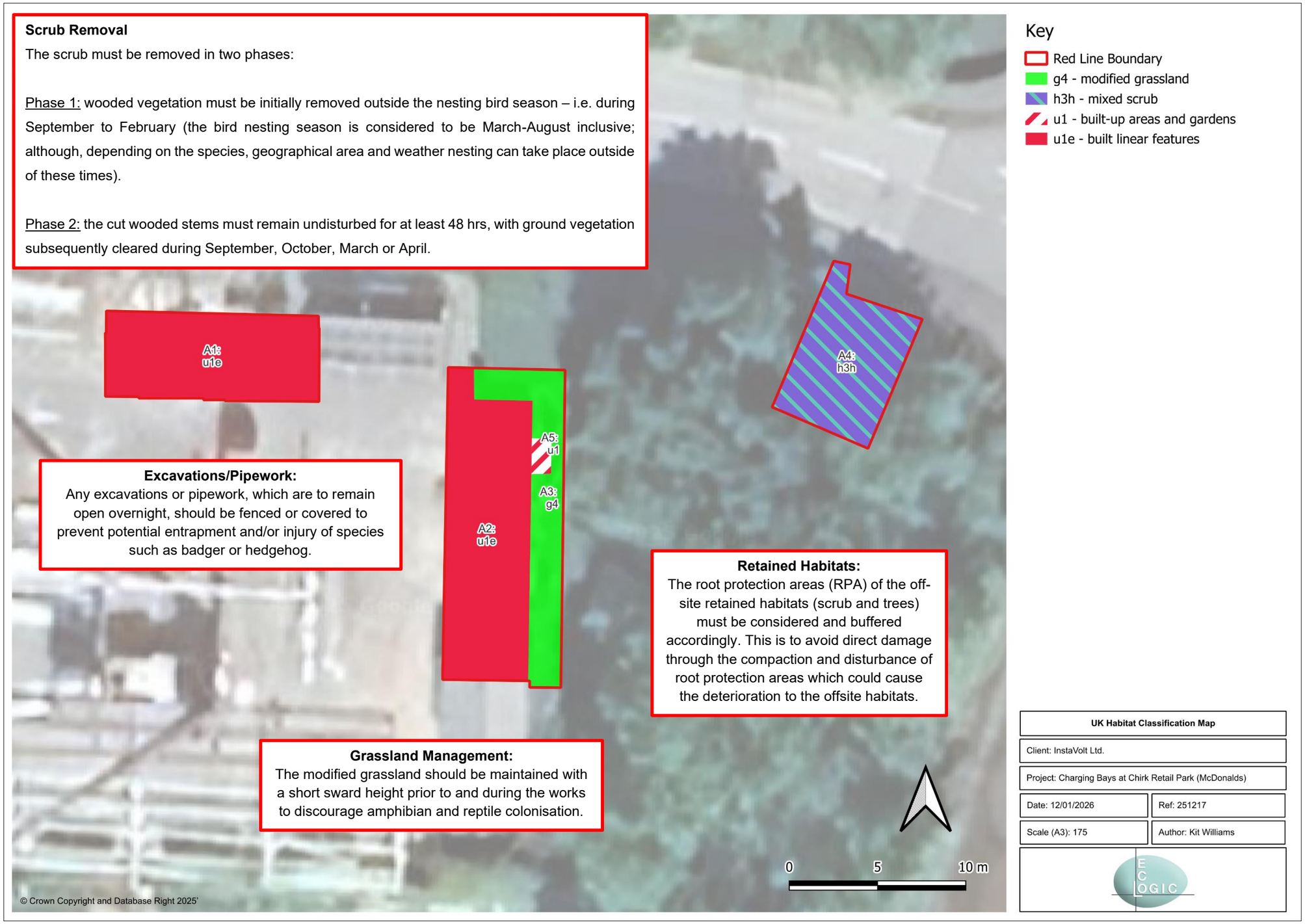
- Red Line Boundary
- Developed land; sealed surface
- Mixed scrub
- Modified grassland



Proposed Key

- Red Line Boundary
- Developed land; sealed surface

Biodiversity Metric Assessment	
Client: InstaVolt Ltd.	
Project: Charging Bays at Chirk Retail Park (McDonalds)	
Date: 12/01/2026	Ref: 251217
Scale (A3): 1:250	Author: Kit Williams



Scrub Removal

The scrub must be removed in two phases:

Phase 1: wooded vegetation must be initially removed outside the nesting bird season – i.e. during September to February (the bird nesting season is considered to be March-August inclusive; although, depending on the species, geographical area and weather nesting can take place outside of these times).

Phase 2: the cut wooded stems must remain undisturbed for at least 48 hrs, with ground vegetation subsequently cleared during September, October, March or April.

Excavations/Pipework:

Any excavations or pipework, which are to remain open overnight, should be fenced or covered to prevent potential entrapment and/or injury of species such as badger or hedgehog.

Retained Habitats:

The root protection areas (RPA) of the off-site retained habitats (scrub and trees) must be considered and buffered accordingly. This is to avoid direct damage through the compaction and disturbance of root protection areas which could cause the deterioration to the offsite habitats.

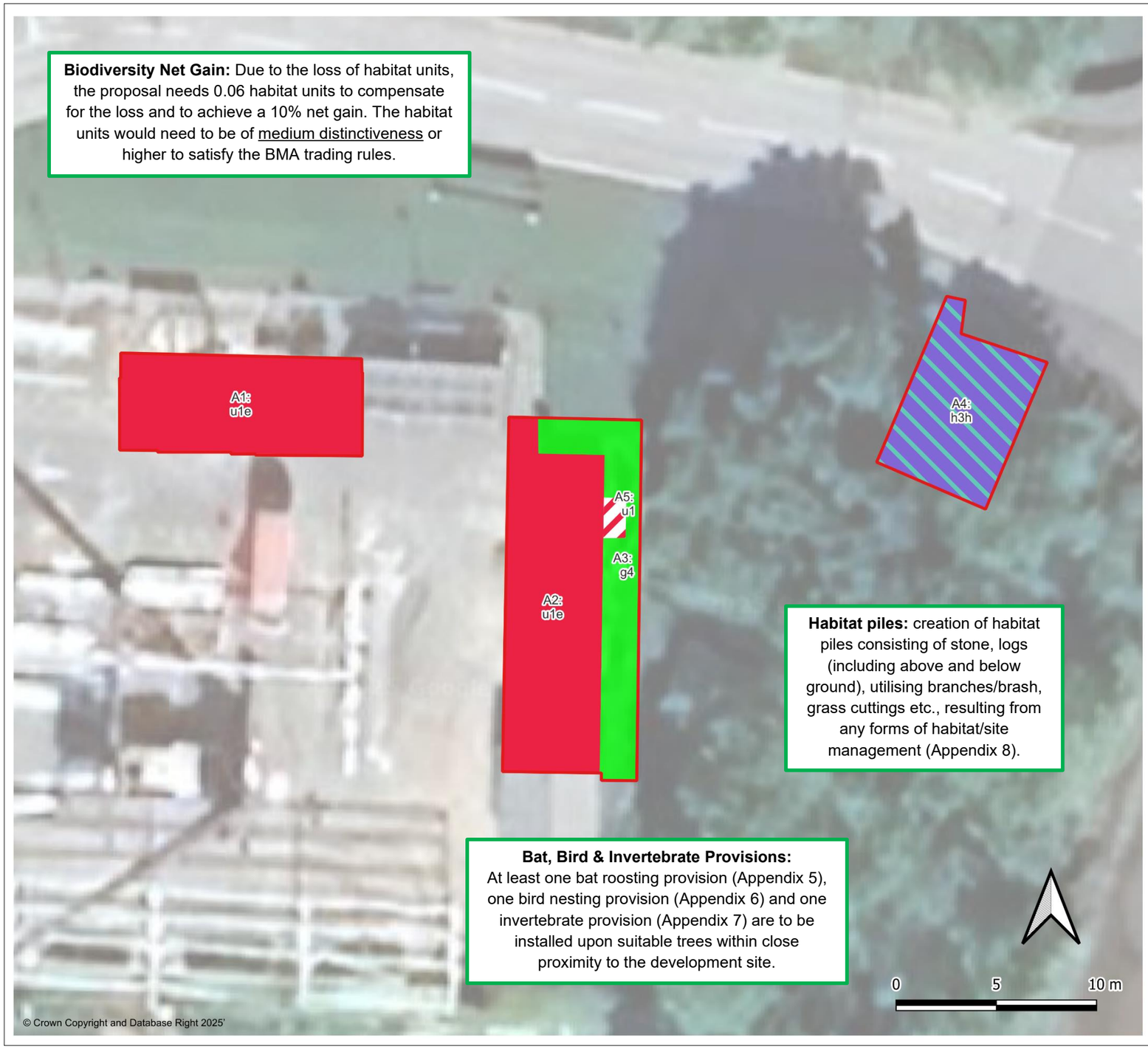
Grassland Management:

The modified grassland should be maintained with a short sward height prior to and during the works to discourage amphibian and reptile colonisation.

Key

- Red Line Boundary
- g4 - modified grassland
- h3h - mixed scrub
- u1 - built-up areas and gardens
- u1e - built linear features

UK Habitat Classification Map	
Client: InstaVolt Ltd.	
Project: Charging Bays at Chirk Retail Park (McDonalds)	
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APPENDIX 5 EXAMPLES OF BAT ROOSTING PROVISIONS

General Purpose Bat Box

Material: Wood Concrete

Diameter: 180 mm
Height: 360 mm
Weight: 4.5 kg

Position: In a south facing location, minimum of 3 m above ground level.



Bark Box – Standard Bat Box

Material: Recycled polyamide combined with cement and recycled cellulose fibre mix.

Width: 130 mm
Height: 330 mm
Weight: 6 kg

Position: In a south facing location, minimum of 3 m above ground level.



Chavenage Bat Box

Material: Wood

Width: 380 mm
Height: 180 mm
Depth: 100 mm
Weight: 1.2 kg

Position: In a south facing location, minimum of 3 m above ground level.



Vivara Pro Barcelona Woodstone Open Nest Box

Suitable for wren, robin, pied wagtail and blackbird
Material: Woodstone

Height: 240 mm
Width: 190 mm
Depth: 175 mm

Position: Externally, at a minimum height of 3 m



Vivara Pro Seville 32mm Woodstone Nest Box

Suitable for: House sparrow, blue & great tit, nuthatch
Material: Woodstone

Height: 310 mm
Width: 200 mm
Depth: 200 mm
Weight: 6.9 kg

Position: Externally, at a minimum height of 3 m



Eco Sparrow Tower

Suitable for: House sparrow and individual blue & great tits
Material: Recycled LDPE plastic & FSC certified OSB

Height: 650 mm
Width: 170 mm
Depth: 170 mm
Weight: 2.8 kg

Position: Externally, at a minimum height of 2 m



Woodstone Insect Block

Suitable for bees, lacewings and ladybirds.

Material: Woodstone

Height: 270 mm
Width: 185 mm
Depth: 90 mm

Position: Site in a southerly facing location, adjacent to garden or boundary habitats at a minimum height of 2 m.



Bee Brick
Each bee brick includes nesting compartments for solitary nesting bees, including for egg laying and hibernation
http://greenandbluebuild.co.uk/product/bee-brick/
Height: 216mm
Width: 105mm
Depth: 65mm

Position: Place the insect hotel in southerly facing location, which includes part or full sun, between 1 m to 2 m above ground level, and ideally facing garden or boundary habitats.



Habitat Pile



Size: 2-8 m long x 1-1.5 m high

Materials: Logs, brash, bramble cuttings, grass cuttings

Location: Create in marginal habitats adjacent to both low, open vegetation and dense vegetation

Creation:

- A mixture of materials, shapes and sizes should be used to increase complexity of the structure
- The central core of the structure should be compacted and the outer layers laid loosely on top



Management:

- Add additional material to the habitat pile as it decomposes
- Consider partially burying, anchoring or securing with wire if located on a site with high public access

