

Preliminary Ecological Appraisal

Survey site:

Land at Reservoir Street, Dewsbury Kirklees WF13 4LW

Client:

Jade 3 Architecture

Survey date:

15th October 2025

Project:

This report is prepared to inform a planning application with Kirklees Metropolitan Council. The proposal is described as:
Residential development of the site.

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024](#).

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

Site Location and Context					
The survey site is centred on National Grid Reference SE 23473 22251 and has an area of approximately 0.186ha. The site comprises an area of grassland, with some self-set trees that border the site. It is located within the town of Dewsbury, 12km south-west of the city of Leeds and 10km north-east of the town of Huddersfield. The site is situated within a predominantly urban setting, being bound by dwellings to the north and east, Reservoir Street to the south and a water treatment facility to the west. The wider landscape is dominated by extensive areas of built form, associated with the town of Dewsbury, with limited pockets of greenspace interspersed throughout the wider landscape. The underlying geology for the site comprises sandstone (Birstall Rock), which is overlaid by slowly permeable seasonally wet acid loamy and clayey soils, typical habitats of which include seasonally wet pastures and woodlands.					
Survey Details					
The site survey was undertaken by Gareth Hey BSc (Hons), MSc, ACIEEM (Natural England Protected Species Licence Numbers: [Bats] (2021-51195-CLS-CLS) [Great Crested Newts] (2017-30374-CLS-CLS) [Barn Owl] (CL29/00097) (Natural Resource Wales Protected Species Licence Number: [Bats] (S094455/1)					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
15/10/2025	15	64	90	2	None
Survey limitations					
It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records. A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.					

Ecological Survey Factor Conclusion, Impact or Recommendations	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, proposal plan in appendix 3 and photos in appendix 4). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
<i>Summary of Survey Findings</i> <i>(UKHab codes used)</i>	The site does not contain any habitats listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Overall, the habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km, but they are limited in their extent and proximity to the site. On-site habitat descriptions <u>u1b6 – Other developed land</u> Located in the north-eastern corner of the site is a small pocket of hardstanding. There is no associated vegetation and this area is of minimal ecological value. BNG Condition Assessment – N/A (pre-determined by the metric) <u>g4 – Modified grassland with scattered trees [32]</u> The site is dominated by a small, enclosed area of species poor grassland. At the time of the survey, the sward was approximately 30–40 cm tall. Species composition is poor and dominated by perennial rye-grass (<i>Lolium perenne</i>), with occasional common nettle (<i>Urtica dioica</i>), fescue (<i>Festuca</i> sp.), and Yorkshire fog (<i>Holcus lanatus</i>). There are some small patches of scrub present, comprising self-set patches of maple, that have occurred at the site from surrounding more mature specimens and as such, scrub covers approximately 10% of the total area of grassland. Physical damage is evident from public

	use of the site as a cut-through to other pedestrianised areas and as a dog-walking patch, and as such, affects approximately 20% of the grassland. There are no areas of bare ground recorded, and no invasive Schedule 9 plant species were observed within this parcel. BNG Condition Assessment – Poor Located around the boundary of the site are approximately 10 immature and semi-mature trees, with species including willow, sycamore and field maple all present. The trees are all small specimens (for BNG purposes), having a DBH below 30cm. The trees are not subject to a routine pruning regime, not subject to vandalism and oversale areas of vegetation below them, formed of the grassland they are situated within. BNG Condition Assessment – Good Local notable habitats There are limited areas of priority habitat as designated under Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006 within a 2km radius of the site. The closest is an area of deciduous woodland, located 180m north-east of the site, separated from the site by extensive areas of built form, consisting of dwellings.
<i>Foreseen Impacts</i>	On-site habitats The proposed development will result in the loss of all of the habitats within the site. This could result in a net loss in biodiversity at the site. Notable habitats No direct impacts to any notable habitats will occur as a result of the proposed development, due to the small scale of the proposals and distance from such habitats and surrounding urban landscape.
<i>Recommendations</i>	On-site habitats To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated:

	• Creation of species rich grassland; and • Planting of native trees and shrubs throughout the site. Notable habitats None required. Biodiversity net gain The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	On-site designations The site is not subject to any designation. Statutory designated sites (within 2km) There is one statutory site within 2km of the site, as detailed below: • Lower Spen Wildlife Area LNR – 1.35km south-west. Woodland, scrubland, meadow, wetland. The meadows contain flowers that attract butterflies and bees. Woodland areas provide shelter and nest sites for birds. The water quality in the River Spen is improving, and it supports a wide range of wildlife on the shallow stony bed and well-vegetated riverbanks. The site lies within the impact risk zone for Denby Grange Colliery Ponds SSSI. Statutory designated sites (within 5km)

	No national network sites (SAC, SPA, Ramsar) are located within 5km. Non-statutory designated sites The presence of non-statutory designated sites within 2km of the site cannot be established without data from the local records centre.
<i>Foreseen Impacts</i>	On-site designations No impacts foreseen. Statutory and non-statutory designated sites No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers. The site lies within the impact risk zone for Denby Grange Colliery Ponds SSSI. The proposed development type is not listed as a possible high risk for this designation.
<i>Recommendations</i>	On-site designations None required. Statutory and non-statutory designated sites None required.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species recorded on site.
<i>Foreseen Impacts</i>	N/A
<i>Recommendations</i>	No further surveys but remain vigilant.
Invertebrates	

Summary of Survey Findings	The habitats present on-site, including grassland and trees likely provide common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.														
Foreseen Impacts	None foreseen.														
Recommendations	No further surveys.														
Bats															
Summary of Survey Findings	EPSL data A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. There are two EPSLs within a 2km radius of site as detailed below: <table><tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr><tr><td>2019-38940-EPS-MIT</td><td>Common pipistrelle</td><td>0.6km south-east</td><td>Destruction of a resting place</td></tr><tr><td>EPSM2011-3454</td><td>Common pipistrelle</td><td>0.66km north</td><td>Destruction of a resting place</td></tr></table> There are no Special Areas of Conservation designated for bats within 10km of the site. Foraging and commuting habitat The grassland and trees within the site may provide some value for foraging bats, however, there is an absence of vegetated linear features within the site and surrounding landscape and as such, it is determined the site is largely isolated from other areas of suitability. Furthermore, the site is surrounded by areas of built form with high levels of lighting present, which may deter use of the site by foraging and commuting bats. Roosting habitat			EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2019-38940-EPS-MIT	Common pipistrelle	0.6km south-east	Destruction of a resting place	EPSM2011-3454	Common pipistrelle	0.66km north	Destruction of a resting place
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EPSM2011-3454	Common pipistrelle	0.66km north	Destruction of a resting place												

	The trees to be impacted by the proposed development are assessed for their suitability to support roosting bats below. No evidence of roosting bats was identified on or within any of the surveyed trees on-site.
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<i>Trees description</i>	<i>Photographs</i>
<i>Summary</i> All of the trees within the site are largely immature and are generally in good condition, containing no features that could be utilised by roosting bats (cavities, knot holes, woodpecker holes etc). As such, the trees within the site are determined to be PRF-NONE.	 Trees on the northern boundary of the site

<i>Foreseen Impacts</i>	Roosting habitat [Trees] No features were identified on any of these trees and as such there are unlikely to be any impact to bats as a result of their felling. Foraging and commuting habitat The proposed development will result in the loss of small areas of grassland and immature trees, but given their low value and the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats. Artificial lighting The proposed development may lead to an increase in the amount of current lighting, however this is likely to be inconsequential for bats owing to the urban location of the site and high levels of lighting currently surrounding the site.
<i>Recommendations</i>	Roosting habitat [Trees] In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. Artificial lighting None required. Suggested biodiversity enhancements The installation of two bat boxes at the site will provide additional roosting habitat for bats.

	The bat boxes will be incorporated into the fabric of the new dwellings. Suitable bat boxes include Habibat Bat Box, Ibstock Enclosed Bat Box or similar alternative brand. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light.
Birds	
<i>Summary of Survey Findings</i>	Trees and vegetation No bird nests were identified within the vegetation on-site, however they all offer nesting opportunities and nest-building resources for birds. Barn owls The site does not appear to provide any suitable nesting sites for barn owls. Overwintering birds Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.
<i>Foreseen Impacts</i>	Trees and vegetation The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. Barn owls None foreseen. Overwintering birds None foreseen.
<i>Recommendations</i>	Trees and vegetation

	Any vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. Barn owls None required. Overwintering birds None required. Suggested biodiversity enhancements The installation of a minimum of two bird boxes on new buildings will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box Schwegler 1SP Sparrow Terrace Woodstone Nest Box Or a similar alternative brand. Swift and sparrow boxes should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction.
Reptiles	
<i>Summary of Survey Findings</i>	EPSL data A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site.

	Habitat suitability The site's rough grassland offers some potential suitability for reptiles, providing areas of varied vegetation structure and open ground that could support basking, foraging, and shelter opportunities. However, despite these microhabitat features, the likelihood of reptile presence is considered low. The site is situated within a heavily urbanised environment and is largely isolated from other areas of suitable habitat, restricting opportunities for colonisation or population connectivity. As reptiles typically have limited dispersal capabilities and depend on connected habitat networks, this isolation significantly reduces the potential for their occurrence on site.
<i>Foreseen Impacts</i>	Small areas of grassland within the site will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present.
<i>Recommendation</i>	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures: • Vegetation will be maintained at a short sward (5cm) to discourage reptiles. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist.
Amphibians	

<i>Summary of Survey Findings</i>	EPSL and survey data A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. Further, no positive class survey licence return or DLL historic survey data (2017 – 2019) were present within 2km of the site. Aquatic habitat suitability (including ponds within 500m) Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). No ponds are present on site or within 500m of the site. Terrestrial habitat suitability The rough grassland in the site may offer refuge for these species, however given the urban nature of the surrounding landscape (i.e. dominated by roads and hard standing which are sub-optimal for amphibians) it is unlikely that amphibians will migrate on to site. Further, there is limited suitable terrestrial habitat across the wider landscape reducing the likelihood of amphibians being present on site and across the surrounding areas.
<i>Foreseen Impacts</i>	Given the lack of suitably connected breeding ponds within 500m of the site, the presence of GCN on-site is considered unlikely and therefore impacts to amphibians as a result of the proposed development are deemed to be acceptably low.
<i>Recommendations</i>	None required.
Badger	
<i>Summary of Survey Findings</i>	No badger setts were noted on site or within a 30m radius of the site. The site is considered unsuitable for badgers given the lack of suitable sett excavation areas/ground. Further, there is limited suitable badger foraging habitat on site given the lack of fruiting trees/scrub. The site is also surrounded by urban development (i.e. roads and buildings), which is sub-optimal habitat therefore reducing the likelihood of badgers being present within the surrounding area of the site.

<i>Foreseen Impacts</i>	No impacts are anticipated on badgers as a result of the proposed development.
<i>Recommendations</i>	None required.
Riparian animals	
<i>Summary of Survey Findings</i>	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	EPSL data A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. Habitat suitability The site lies outside of the known current range for hazel dormice and there are no suitable habitats within the development area. As such it is considered likely that hazel dormice are absent from site.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None foreseen.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The grassland on site provides suitable habitat for foraging and commuting hedgehogs within the urban landscape.
<i>Foreseen Impacts</i>	All of the grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.
<i>Recommendations</i>	A precautionary working method will be implemented during construction, including the following measures:

- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.
- The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use.
- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.

If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.

Suggested biodiversity enhancements

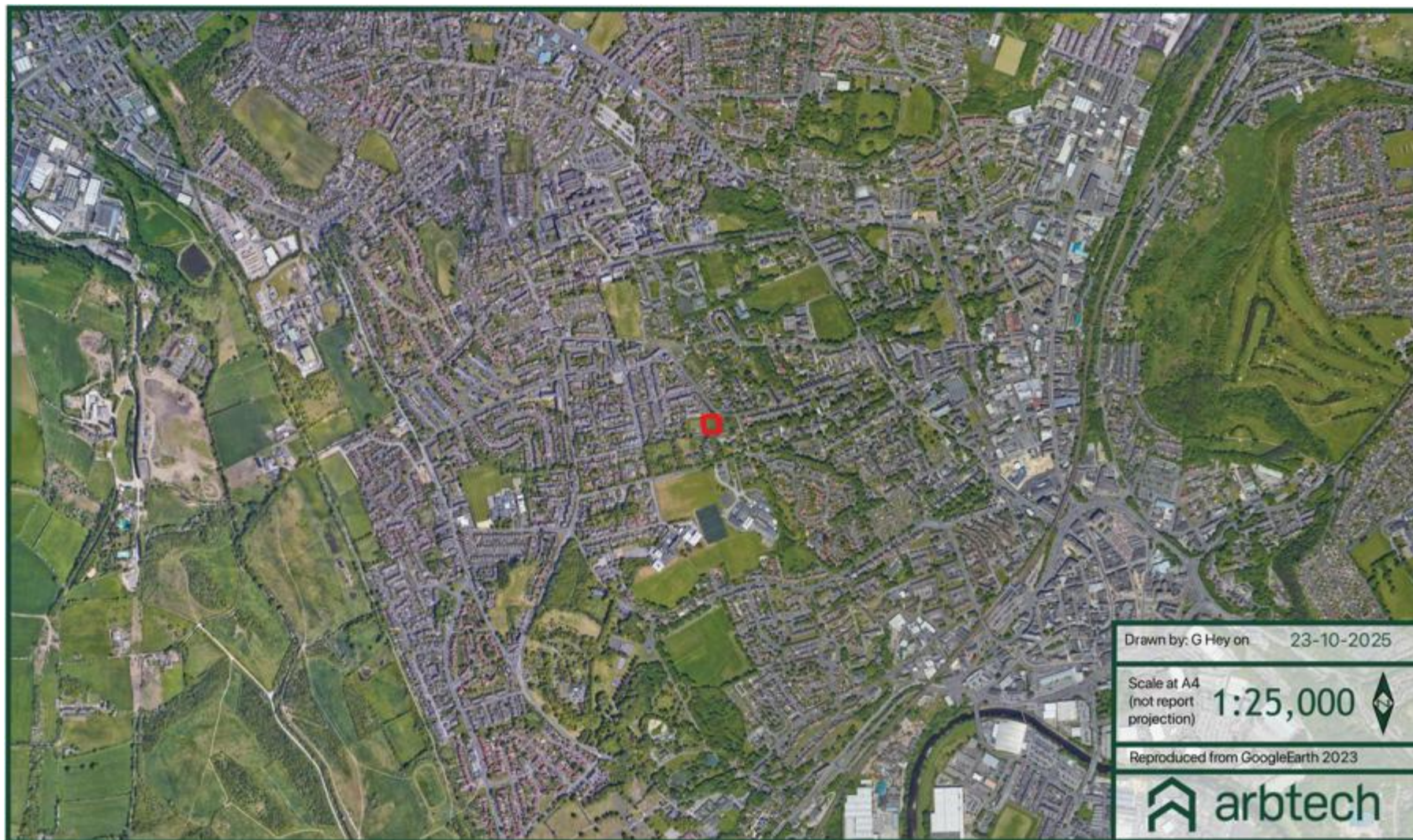
The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs:

- Planting fruit bearing trees and species-rich grassland to increase foraging opportunities.
- Creation of brash piles or installation of hedgehog houses in shady areas.
- Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.

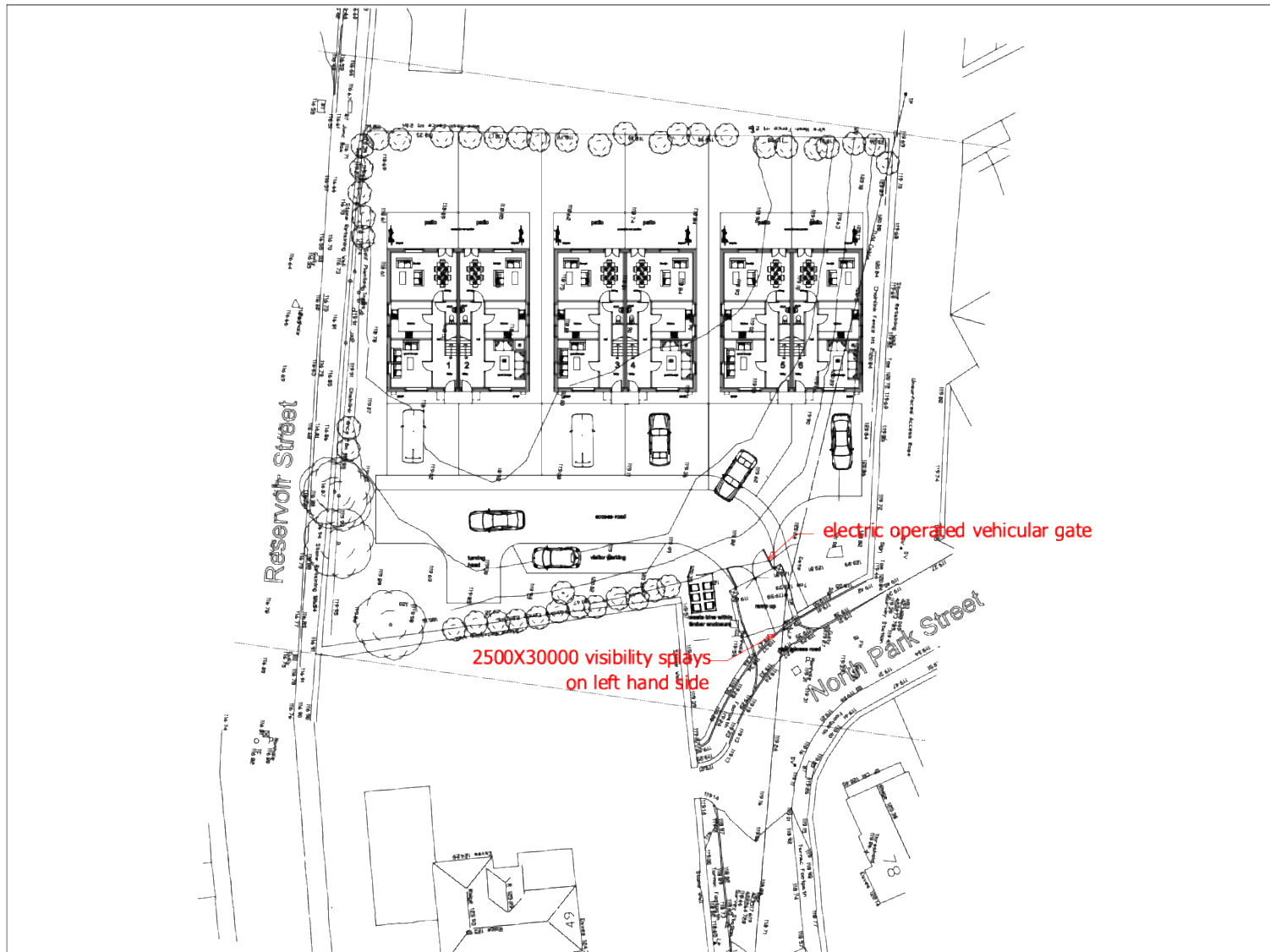
Appendix 1: Survey/Habitat map



Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Habitat Photos

Modified grassland	
Photograph	Description
	Figure 1: Grassland that dominates the site.
Scattered trees	
Photograph	Description
	Figure 2: Amenity grass lawn on site (to rear of B1)

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Draft	0.1	Gareth Hey BSc (Hons) MSc ACIEEM, Ecological Consultant	23/10/2025
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