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Construction Environmental Management Plan (Biodiversity) and Ecological Mitigation, Enhancement and Management Plan (CEMP/EMEMP)

Survey site: Land between Blackmoorfoot Road and Felks Stile Road, Huddersfield, HD4 7AE

Client: LNT Care Developments Ltd

Date: 4th June 2026

Project:

This report is prepared to inform a planning application Kirklees Council**.** The proposal is described as: *The development of a care home and associated landscaping.*

Planning Application Reference:

Not yet submitted.

1.0 Introduction

This Construction Environmental Management Plan (Biodiversity) and Ecological Mitigation, Enhancement and Management Plan (CEMP/EMEMP) has been prepared for the above-named client to outline the measures to be implemented during the construction and operational phases of the proposed development at the above-named site.

The purpose of this plan is to ensure the protection of ecological receptors, the implementation of appropriate mitigation and enhancement measures, adherence to best practice and relevant industry standards, and the provision of ecological supervision where required. The CEMP/EMEMP also outlines the management framework required for the delivery and long-term maintenance of ecological features associated with the development in accordance with local and national planning policy.

As such, this document aims to provide sufficient information to assist in the discharge of Conditions 25 (Construction Environmental Management Plan (Biodiversity), 26 (Landscape Ecological Management Plan), 27 (Ecological Design Strategy) and 28 (Biodiversity Enhancement Management Plan) of the approved planning permission.

Table 1. Ecological context of the site and details any associated planning conditions.

Site Context and Landscape History
The Site comprises approximately 1.21 ha of land located off Blackmoorfoot Road, Huddersfield, centred on Ordnance Survey National Grid Reference SE 11370 14757, within the administrative area of Kirklees Council. The Site forms part of the wider Blackmoorfoot Road development allocation and is proposed for the construction of a residential care home with associated access, parking, landscaping and ancillary infrastructure. The Site is bordered by existing residential development to the north, Blackmoorfoot Road to the east and land associated with the wider development allocation beyond. Previous ecological assessments undertaken across the wider allocation established the ecological baseline and informed the development framework for the area. An Ecological Addendum Note prepared in 2020 confirmed that no

significant changes had occurred to the ecological baseline and that the conclusions of the previous ecological assessment remained valid. Subsequent ecological walkovers undertaken in 2023 and 2024 concluded that the ecological baseline remained unchanged. The proposed development includes a comprehensive landscape scheme incorporating native tree planting, native shrub planting, amenity grassland and species-rich grassland habitats.

The Site forms part of the wider Blackmoorfoot Road and Felks Stile Road development allocation, for which outline planning permission has been granted.

Since the completion of the original ecological assessments, the care home parcel has been prepared for development as part of the wider site delivery programme. The approved ecological baseline for the care home parcel identified modified grassland, and this habitat classification remained unchanged during subsequent ecological walkovers undertaken in 2023 and 2024. The approved landscape strategy seeks to establish a network of native planting and species-rich habitats that will contribute to the ecological value of the Site and integrate the development within the wider landscape framework.

Planning Conditions	
This CEMP/EMEMP has been prepared to provide sufficient information to assist in the discharge of Conditions 25, 26, 27 and 28 attached to planning permission 2024/70/92614/W for Land off Blackmoorfoot Road and Felks Stile Road, Huddersfield.	
*Condition **25** – Construction Environmental Management Plan (Biodiversity)*	Requires the submission and approval of a Construction Environmental Management Plan (Biodiversity) detailing measures to avoid, minimise and mitigate impacts on ecological receptors during construction works. This report provides construction-phase ecological protection measures, working methods and site management procedures to ensure compliance with wildlife legislation and planning policy.
*Condition **26** – Landscape Ecological Management Plan (LEMP)*	Requires the submission and approval of a Landscape Ecological Management Plan detailing the management objectives, prescriptions and monitoring requirements for habitats and ecological features associated with the development. This report outlines the management framework required to establish and maintain the proposed habitats and landscape features.

*Condition **27** – Ecological Design Strategy (EDS)*	Requires the submission and approval of an Ecological Design Strategy demonstrating how ecological mitigation, compensation and enhancement measures will be incorporated into the development. This report identifies the ecological features proposed within the development and explains how biodiversity enhancements will be delivered.
*Condition **28** – Biodiversity Enhancement Management Plan (BEMP)*	Requires the submission and approval of a Biodiversity Enhancement Management Plan detailing the long-term management of biodiversity enhancement measures incorporated within the development. This report sets out the management objectives and prescriptions necessary to ensure the successful establishment and maintenance of ecological enhancements.

Ecological Background Information

Detailed using desk study and site survey.

Habitats identified within the approved ecological baseline comprise predominantly modified grassland. Subsequent ecological walkovers undertaken in 2023 and 2024 confirmed that the approved baseline remained unchanged.

The proposed landscape scheme includes native tree planting, native shrub planting, amenity grassland, species-rich grassland, native hedgerow and ornamental hedgerow planting in accordance with the approved landscaping proposals.

Value for protected species on the Site comprises the following:

- **Birds** – Boundary vegetation and habitats within the wider development allocation provide nesting and foraging opportunities for common bird species.
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- **Bats** – Boundary vegetation and habitats within the wider landscape provide opportunities for bat commuting and foraging.

- **Hedgehogs and terrestrial mammals** – Boundary vegetation and surrounding habitats provide opportunities for the movement and shelter of common terrestrial mammals, including hedgehog. The proposed landscape planting will help maintain habitat connectivity and provide additional foraging opportunities.

- **Amphibians and reptiles** – The Site is dominated by bare ground and managed habitats, which provide limited opportunities for amphibians and reptiles. However, precautionary measures during construction are recommended to safeguard any individuals that may occasionally utilise the Site.

No evidence of badger activity, active badger setts, or other protected mammal resting places was identified within the Site during the most recent ecological assessment. Similarly, no evidence was recorded to indicate that the Site supports significant populations of reptiles, amphibians or other protected species. Ecological mitigation and enhancement measures have therefore been designed proportionately to the ecological value and constraints identified within the Site.

Aims and Objectives

This report aims to identify key ecological constraints and stakeholder requirements, ensure compliance with relevant wildlife legislation, planning policy and best practice guidance, minimise potential adverse effects on ecological receptors during construction, and provide site-specific measures to avoid, reduce and mitigate impacts on biodiversity.

The report also aims to identify and deliver appropriate ecological enhancement measures associated with the proposed development and to establish a management framework to ensure the successful establishment, long-term maintenance and enhancement of habitats and biodiversity features within the Site.

Work Schedules and Ecological Presence

Work schedules will be developed to ensure activities with specific timing requirements are carried out in a manner that minimises harm to ecological receptors. These schedules will be provided to all relevant personnel and contractors involved in the project.

Ecological Clerk of Works (ECoW)

A suitably qualified ecologist will be available to provide ecological advice throughout the construction phase and undertake site visits as required. Prior to the commencement of works, all site personnel will receive an ecological toolbox talk outlining the ecological constraints associated with the Site, relevant legal protections and the mitigation measures detailed within this report.

Should any protected species, active nests or other notable ecological features be identified during construction works, all works within the affected area will cease immediately and a suitably qualified ecologist will be consulted. Works will not recommence until appropriate mitigation measures have been agreed and implemented in accordance with relevant legislation and best practice guidance.

Persons Responsible and Lines of Communication

A Development Biodiversity Champion is selected for the construction phase of the development. The Biodiversity Champion will be someone with significant influence during construction, such as the contract, site or project manager. They are responsible for ensuring all actions outlined in the approved CEMP/EMEMP are implemented including the provision of a toolbox talk prior to works commencing. Any queries with regards to the mitigation prescriptions will be addressed to the project ecologist and communication will be retained between the Development Biodiversity Champion and the ECoW throughout the construction phase of the development where necessary to ensure the mitigation is applied and impacts to adjacent ecological receptors are effectively minimised. The project ecologist's contact details are located on the title page of this report. It is recommended that the Biodiversity Champion informs the ECoW of the commencement of construction works and provides updates where necessary. The ECoW will provide ecological expertise and guidance throughout.

2.0 Construction and Ecological mitigation measures

Details regarding the measure required to obtain or comply with planning permission or other consent and to comply with legislation can be found in Table 2.

Table 2. Construction and Ecological mitigation measures

Ecological Mitigation Measures	This table includes any measure required to obtain or comply with planning permission or other consent and to comply with legislation.
Risk during development	
1. Vegetation clearance and tree removal: Vegetation clearance and site preparation works have already been completed as part of the wider development allocation, and no trees are present within the care home development parcel. As such, no vegetation clearance or tree removal works are required as part of the proposed development. Consequently, the risks typically associated with vegetation clearance, including impacts to nesting birds, bats and other fauna, are not anticipated. **2. Groundworks and excavation** Could injure ground-based fauna seeking, particularly in densely vegetated areas on site such as the woodland. **3. Construction traffic and movement of plant/machinery/materials** Could lead to the spread of pollutant. Noise, vibration and light disturbance could impact protected fauna such as breeding birds. Could lead to physical damage to retained vegetation. **4. Storage of materials, machinery and waste** Improper storage could lead to spread of pollutants into nearby habitat. **5. Light and noise during construction**	

Artificial lighting could disrupt nocturnal species such as bats, owls and invertebrates. Increase noise levels Could disturb nesting birds, roosting bats and mammals.	
Ecological Protection Areas and Buffer Zones	
Ecological protection areas and buffer zones within the project site. These areas will be demarcated using physical means of protection, such as exclusion fencing, to prevent unauthorised access and minimise disturbance to sensitive habitats. The vegetated area to the southeast of the site will act as a receptor zone for fauna identified during construction works. No storage of materials, fuel, machinery, or waste will be permitted within the buffer zone, and access by personnel or vehicles will be strictly prohibited unless for ecological monitoring or emergency reasons. Signage will be installed to reinforce compliance. *Appropriate handling/movement technique is detailed below under 'Precautionary Methods of Working'.*	
Construction Measures	
Pollution Prevention	
Risk	Pollution resulting from increased levels of water run-off, noise and dust generation during construction works has the potential to adversely affect retained grassland habitats, scattered trees and boundary vegetation within and adjacent to the Site. This could reduce habitat quality and temporarily disturb ecological receptors including nesting birds, commuting and foraging bats, hedgehogs and other terrestrial mammals. Appropriate pollution prevention measures will therefore be implemented throughout the construction phase to minimise the risk of contamination and disturbance to ecological features.
Statutory Compliance	To limit impacts of pollution resulting from the construction phase of the development, construction works must be completed in accordance with current statutory guidelines relating to pollution prevention (Environmental Agency 2016). Furthermore, although withdrawn in 2015, pollution prevention guidelines detailed within guidance document: *PPG6: Working at Construction and Demolition Sites* (Environment Agency 2010) remain applicable to the site. Considering both the relevant statutory requirements and best practice measures detailed within guidance document PPG6, the below

	mitigation prescriptions are considered suitable to mitigate impacts of pollution during the construction phase of the development. The allocated Biodiversity Champion will be responsible for ensuring the below mitigation recommendations are undertaken successfully during the works.
Materials Storage and Surface Water Runoff	It is recommended that the Biodiversity Champion ensures that: • No stockpiles are created on exposed ground areas and ensure that all materials and chemicals are stored securely and safely on site in accordance with current Control of Substances Hazardous to Health (COSHH) regulations (HSE 2002). • Stockpiles are located as far away as possible from retained habitats, trees and vegetated areas and on level ground to prevent any accidental run-off. • Contaminated materials, chemicals, and other hazardous substances must be stored on an impermeable surface, in a bunded area, within any area of the site. • All chemicals and hazardous substances are stored away from areas where there is heightened risk of damage from impact or collision such as site traffic. • All chemicals and hazardous substances are labelled, containers are sealed when not in use and inspected regularly and fit for purpose. • Any damaged or old containers are replaced in line with the duty of care requirements. Note such containers may be considered hazardous waste. • Staff are trained in use of spill kits and emergency procedures. • Ensure there is a designated 'responsible person' on site at all times. • Lock storage facilities when not in use.
Site Drainage	It is recommended that the Biodiversity Champion ensures that:

	• Pollution risks are identified pre-construction. • Pollutants are prevented from entering drains where possible. • If any pollutant enters a drain, immediately stop the pollution with a physical block, stop the activity causing the pollution, then notify the Environment Agency for surface water drains or the local sewerage provider for foul water drains. If there's a spill, accident, or emergency, try and prevent pollutants entering the drains. • Report all pollution incidents to site management and the Environment Agency. • Inspect drains and protection measures frequently and maintain them during the construction activity. Well maintained drains will also reduce risks of flooding and subsequent surface water run-off. • As a last resort, should any pollutants be required to enter the drainage system on site, permission from Environment Agency or the local sewerage provider must be sought before discharging anything other than clean uncontaminated surface water to a drain and other surface waters or groundwater. Apply for permission early, as authorisation can take up to four months.
Airborne particle suppression	It is recommended that the Biodiversity Champion ensures that: • Effective water suppression is used during demolition operations. Handheld sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition, high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground. • Bag and remove any biological debris or damp down such material before demolition. • Carry out regular site inspections to monitor compliance. • Ensure all vehicles switch off engines when stationary. • Only use cutting, grinding, or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction.

	• Ensure an adequate water supply on the site for effective dust/ particulate matter suppression/ mitigation, using non-potable water where possible and appropriate.
Noise	The Biodiversity Champion must ensure that noise levels are kept to a minimum in accordance with best practice as defined in the Control of Pollution Act 1974 to avoid unacceptable levels of noise and vibrations. Further guidance can be found in British Standard 5228-1:2009. Such measures applicable to the proposed development primarily include agreed working hours limiting night work, using the quietest equipment and plant available, shutting down equipment when not in use, and completing deliveries during working hours only. Most notably, prescriptions as to limit noise of plant machinery as detailed within **Table B.1** within the code of practice for noise control (British Standards Institution, 2014) is likely to have the most significant impact during construction activity. Table B.1 is shown below.

Table B.1 **Methods of reducing noise levels from construction plant**

Plant	Noise reduction of plant			Alternative plant
	Source of noise	**Possible remedies** (to be discussed with machine manufacturers)	**A-weighted sound reduction** dB	
Hammer drive piling equipment	Pneumatic/diesel hammer or steam winch vibrator driver	Enclose hammer head and top of pile in acoustic screen	5 to 10	Bored piling Vibratory system Drop hammer completely enclosed in box with opening at top for crane access Steel jacket completely enclosing drop hammer with dolly and polystyrene chips fed to impact surface to dissipate energy Pressed-in piling which generates its driving force from the frictional restraint of other piles
	Sheet pile	Acoustically dampen sheet steel piles to reduce levels of resonant vibration		
	Impact on pile	Use resilient pad (dolly) between pile and hammer head. Packing needs to be kept in good condition		
	Cranes cables, pile guides and attachments	Careful alignment of pile and rig		
	Power units or base machine	Fix more efficient sound reduction equipment or exhaust. Acoustically dampen panels and covers. When intended by the manufacturer, engine panels need to be kept closed. Use acoustic screens when possible		
Earth-moving plant: • bulldozer • compactor • crane • dump truck • dumper • excavator • grader • loader • scraper	Engine	Fit more efficient exhaust sound reduction equipment Manufacturers' enclosure panels need to be kept closed	5 to 10	Alternative super silenced plant might be available. Consult manufacturers for details

Table B.1 **Methods of reducing noise levels from construction plant** *(continued)*

Plant	Noise reduction of plant			Alternative plant
	Source of noise	**Possible remedies** (to be discussed with machine manufacturers)	**A-weighted sound reduction** dB	
Compressors and generators	Engine Compressor or generator body shell	Fit more efficient sound reduction equipment	Up to 10	Super silenced plant is available. Consult manufacturers for details Electric-powered compressors are available as opposed to diesel or petrol Sound-reduced compressor or generator can be used to supply several pieces of plant. Use centralized generator system
		Acoustically dampen metal casing		
		Manufacturers' enclosure panels need to be kept closed		
	Total machine	Erect acoustic screen between compressor or generator and noise-sensitive area. When possible, line of sight between top of machine and reception point needs to be obscured	Up to 10	
		Enclose compressor or generator in ventilated acoustic enclosure	Up to 20	
Pneumatic concrete breaker, rock drills and tools	Tool	Fit suitably designed muffler or sound reduction equipment to reduce noise without impairing machine efficiency	Up to 15	Hydraulic and electric tools are available For large areas of concrete, machine designed to break concrete in bending can be used Thermic lance
		Ensure all leaks in air line are sealed		
	Bit	Use dampened bit to eliminate ringing		
	Total machine	Erect acoustic screen between compressor or generator and noise-sensitive area. When possible, line of sight between top of machine and reception point needs to be obscured	Up to 10	
		Enclose breaker or rock drill in portable or fixed acoustic enclosure with suitable ventilation	Up to 20	
Rotary drills, diamond drilling and boring	Drive motor and bit	Use machine inside acoustic shed with adequate ventilation	Up to 15	Thermic lance

Table B.1 **Methods of reducing noise levels from construction plant**

Plant	Noise reduction of plant			Alternative plant
	Source of noise	**Possible remedies** (to be discussed with machine manufacturers)	**A-weighted sound reduction** dB	
Hammer drive piling equipment	Pneumatic/diesel hammer or steam winch vibrator driver	Enclose hammer head and top of pile in acoustic screen	5 to 10	Bored piling Vibratory system Drop hammer completely enclosed in box with opening at top for crane access Steel jacket completely enclosing drop hammer with dolly and polystyrene chips fed to impact surface to dissipate energy Pressed-in piling which generates its driving force from the frictional restraint of other piles
	Sheet pile	Acoustically dampen sheet steel piles to reduce levels of resonant vibration		
	Impact on pile	Use resilient pad (dolly) between pile and hammer head. Packing needs to be kept in good condition		
	Cranes cables, pile guides and attachments	Careful alignment of pile and rig		
	Power units or base machine	Fix more efficient sound reduction equipment or exhaust. Acoustically dampen panels and covers. When intended by the manufacturer, engine panels need to be kept closed. Use acoustic screens when possible		
Earth-moving plant: • bulldozer • compactor • crane • dump truck • dumper • excavator • grader • loader • scraper	Engine	Fit more efficient exhaust sound reduction equipment Manufacturers' enclosure panels need to be kept closed	5 to 10	Alternative super silenced plant might be available. Consult manufacturers for details

Implementation of the Waste Hierarchy	The Biodiversity Champion must ensure that all construction activity is completed in accordance with the Waste Hierarchy (Defra 2011) in an attempt to reduce the amount of waste produced during the construction phase of the development. As such, the construction phase must be completed in accordance with the below core principles: *In the first instance:* • Re-use products and materials where possible.

	• Recycle and compost material resources where possible. • Attempt to recover energy from waste. *Where none of the above options offer an appropriate solution, waste disposal is the final option:* • Only transfer controlled waste to an "authorised person" (Waste Collection Authority, the holder of an Environmental Permit, Registered Water Carrier or Waste Disposal Authority). • Ensure that non-hazardous waste is transferred under a Waste Transfer Note which must be retained for two years. • Hazardous waste is moved under a waste consignment note that provides a clear description of the waste material. The consignment note must be retained for three years. • The waste is the responsibility of the company until it has been fully recovered or finally disposed of.
Wildlife Protection – Precautionary Methods of Working-	
Herpetofauna	Only common amphibians are assumed to be present at the site. The site is in addition suitable for reptiles, with limited opportunities for shelter and basking provided by retained grassland and boundary vegetation. Suitable habitats are primarily located within the Site margins and surrounding habitats beyond the Site boundary. Whilst no evidence of reptiles was identified during the most recent ecological assessment, it remains possible that low numbers could be present within suitable habitats associated with the wider landscape. The proposed works are not anticipated to lead to any levels of habitat loss or fragmentation likely to affect local population status for either amphibians or reptiles; however, individuals may be injured or killed during construction activities.

	The precautionary methodology outlined below has therefore been developed to safeguard amphibians and reptiles that may be present during the construction phase. **Ecological Clerk of Works** Vegetation clearance and site preparation works have already been undertaken as part of the wider development allocation, and the care home parcel is being provided as a serviced development site. As such, no vegetation clearance works are required as part of the proposed development and an Ecological Clerk of Works (ECoW) is not required to supervise vegetation clearance activities. **Vegetation Clearance** Vegetation clearance and site preparation works have already been completed as part of the wider site delivery programme. Consequently, no further vegetation clearance is required within the care home parcel and the precautionary vegetation clearance measures outlined above are not applicable to the proposed development. **Site Management During Construction** ▪ During the course of construction works, a site-wide check for reptiles and amphibians shall be carried out by contractors at the commencement of each working day, with any individuals encountered relocated to suitable retained habitat beyond the construction area by a suitably qualified ecologist. Any materials shall be stored on pallets away from tall vegetation and site boundaries.

	▪ Rubble created during the development shall be safely disposed of within a skip. If a skip is not available, rubble shall be stored off the ground (e.g. on pallets) until it can be removed from site, to prevent reptiles and amphibians from using rubble piles as refugia or hibernation sites. ▪ All trenches shall, where practicable, be backfilled before nightfall, or a suitable means of escape (such as a ramp) shall be provided to allow amphibians and other wildlife to exit safely. Any trench left open overnight shall be checked for reptiles and amphibians prior to works recommencing. ▪ Any chemicals or pollutants used or generated during the development shall be stored, handled and disposed of in accordance with COSHH regulations and relevant pollution prevention guidance. ▪ Where rubble, spoil or other materials are left on the ground for an extended period, they shall be dismantled or moved carefully by hand prior to removal to ensure no reptiles or amphibians are sheltering beneath. ▪ Any reptiles or amphibians encountered shall be encouraged to move away of their own accord. Where an individual is in immediate danger and unable to move safely, it may be carefully relocated by a suitably qualified ecologist to adjacent retained habitat. Amphibians shall not be handled with bare hands due to their permeable skin. ▪ If reptiles or amphibians are encountered during development, works in the affected area shall cease and advice shall be sought from a suitably qualified ecologist prior to works recommencing.
Birds	The scattered trees, grassland margins and bramble scrub associated with the Site provide foraging and nesting habitat for a wide range of species. Previous surveys undertaken across the wider Blackmoorfoot development site confirmed breeding

	territories of several common bird species, together with notable species including song thrush, starling, bullfinch and dunnock. Only limited habitat areas are being affected, keeping other areas of the Site retained for nesting birds to continue using. However, works can see active nests destroyed in habitat areas to be removed, and disturbance to nesting birds in proximity to and near the edges of retained habitat areas. The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. Proposed development could result in the disturbance and/or destruction of nests of Schedule 1 species. Vegetation clearance has already been completed as part of the wider site preparation works. As such, no further vegetation clearance is proposed within the development parcel. Should any areas of vegetation establish prior to commencement of construction works, these will be checked by a suitably qualified ecologist prior to removal where required. The buffer will need to be increased in the event of the presence of any Schedule 1 species as reckless disturbance, as well as destruction of the nests of such species, is an offence. Buffer zones regarding Schedule 1 species are on a case-by-case, species-by-species basis and must be reflected accordingly. If Schedule 1 species are identified nesting, these areas must be retained, and suitable fencing and signage installed to prevent encroachment into these areas. It is an offence to recklessly disturb adult and independent young in proximity to their nests, as well as the nests themselves. Examples of appropriate installed work signs are shown in Figure 1. Signs can also be installed in regard to non-Schedule 1 species, installed in full view in areas where nesting birds have been identified on the pre-work checks.

	 **Figure 1.** Work signage regarding nesting birds on the site. Source- www.Britishsafetysigns.co.uk
Bats	Bat roosts are not expected to be directly impacted by the development but may be disturbed during commuting and foraging activities. A lighting strategy is provided later within the report.
Badgers and other terrestrial mammals	The following recommendations are given in order to mitigate against potential harm to hedgehogs, badgers and other mammalian fauna during the development works. • The work zone will be checked for wildlife prior to works commencing, with any fauna encouraged to move away via their own volition or transported by gloved hand to the reptile receptor area if this not be possible. This will only apply to smaller mammal species. Larger mammals such as badgers and foxes will not be transported by hand. • Any inadvertently injured wildlife will be taken to an appropriate local wildlife carer or vet.

	• Any trenches dug will ideally be backfilled before contractors leave. If this is not possible they will be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. They must be checked for wildlife before backfilling. • Security lighting must be directed away from undergrowth and vegetated site boundaries. • Any chemicals or pollutants used or created by the development will be stored and disposed of correctly according to COSHH regulations. **Badgers** Badgers are known to occur within the wider landscape surrounding the Site. Prior to the commencement of works, the Site shall be checked for any evidence of badger activity, including newly established setts, paths, latrines or foraging signs. Should any previously unidentified badger sett or evidence of significant badger activity be identified within or immediately adjacent to the Site, works in the affected area shall cease and advice shall be sought from a suitably qualified ecologist prior to works recommencing. No materials, chemicals or machinery shall be stored within retained vegetated areas or immediately adjacent to habitats that may be used by badgers and other terrestrial mammals.
Lighting Strategy	
The habitats on site have high habitat value for roosting, commuting and foraging bats and other nocturnal wildlife within what is at present a dark area. Additional lighting could impact behaviour of wildlife and adversely affect the integrity of roosting and foraging resources. Any proposed external lighting will be installed in accordance with current guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals: Guidance Note 08/18: Bats and Artificial lighting in the UK (BCT & ILP 2018).	

The below strategy utilises light prescriptions detailed within this guidance to limit impacts of artificial lighting on bats and other light sensitive species using retained habitats on and directly adjacent to the site including badgers and hedgehogs.

In particular, the lighting strategy seeks to influence the lighting design so that impacts can be avoided to key habitats of value including:

- Retained boundary vegetation, scattered trees and adjacent woodland habitats which may be used by commuting and foraging bats, nesting birds, badgers, hedgehogs and other wildlife.
- Ecological corridors formed by retained vegetated boundaries and habitat connections to the wider Blackmoorfoot development site and surrounding landscape.
- The species-specific habitat enhancements detailed below, including any bird boxes, bat boxes and other ecological enhancement features incorporated into the development.
- Newly proposed landscaping, including tree planting, shrub planting, species-rich grassland and other habitat creation areas which may provide future habitat for protected and notable species.
- Retained habitats on and directly adjacent to the Site, ensuring that dark corridors are maintained wherever possible to facilitate continued wildlife movement through the wider landscape.

The following lighting design prescriptions are considered suitable for the type and scale of the Development to minimise the impacts of artificial lighting on site or within the public realm on bats and other light sensitive species.

Lighting design prescriptions recommended for the Site comprise:

- The key habitats identified above must not be illuminated to ensure the present dark zones are retained.
- Reducing the operating time of any installed public realm lighting and levels of illuminance provided via: Part-night operation. Turning off lights between certain hours, for example between midnight and 06:00.
- The use of motion sensors will be avoided to ensure no unnecessary light spill occurs during night-time hours. Where the use of motion sensors cannot be avoided, lights must be set to be turned on for no longer than 1 minute.
- External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.

- Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on.
- Avoiding light spill via: The use of directional lighting by using luminaires with rear shields and an upwards lighting ratio of zero; and Consideration to the height and spacing between lighting columns where practicable. There will be no bare bulbs and no light pointing upwards. The spread of light will be kept in line with or below the horizontal. Use low-level lighting in conjunction with hoods, cowls, louvers and shields.
- Lights will be directional to ensure that light is directed to the intended areas only.
- Light type: Use of lamps that minimise UV emissions or use UV filters to reduce the attractiveness of the lamp to invertebrates. LED luminaires are recommended due to their sharp cut off and dimming capability, in addition to the variety on the market capable of meeting the required standards.
- The use of landscaping as to block light spill where appropriate.
- Use narrow spectrum light sources to lower the range of species affected by lighting.
- Use light sources that emit minimal ultra-violet light.
- Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content, they will be of a warm white temperature <2,700kelvin, with a peak wavelength of at least 550nm
- All lighting on the developed site will make use of the most up to date technology available.

Consideration will be taken for internal lighting as well as external light. Measures in order to reduce light spillage from internal lighting are displayed below in ***Figure 2.***

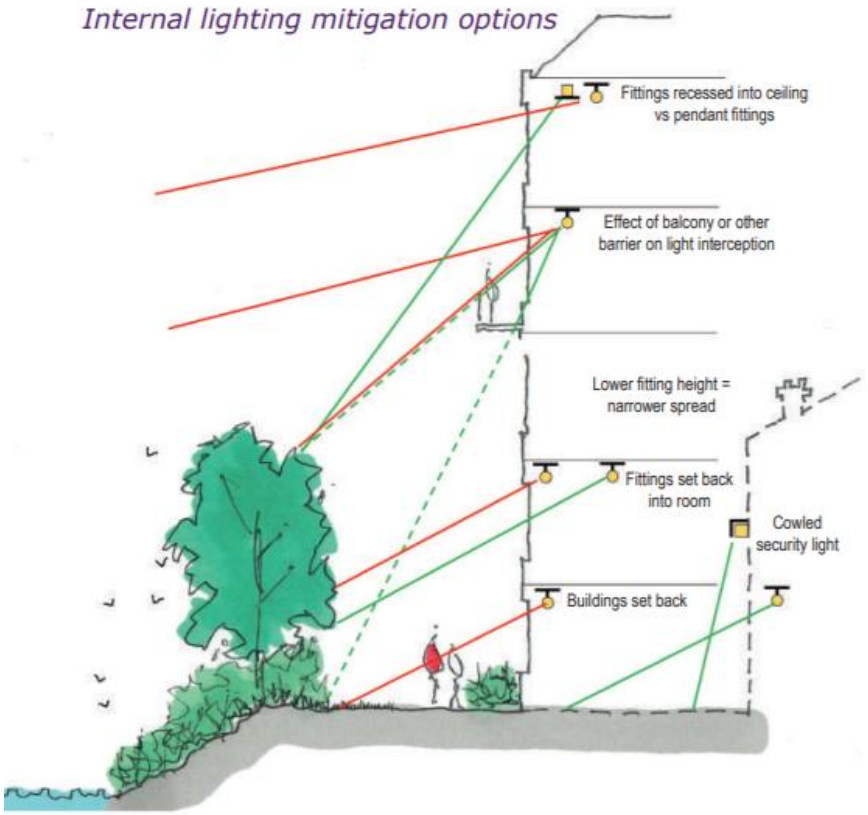


Figure 2. Mitigation measures for internal lighting.

3.0 Habitat Creation and Biodiversity Enhancement Measures (Only if enhancement measure required)

Table 3 shows habitat creation and biodiversity enhancement measures for the site. These are also illustrated in **Appendix 2 for habitat and 3 for fauna species.**

Table 3. Ecological/Biodiversity enhancement and management measures

Ecological/Biodiversity enhancement and management measures	**This table includes any measure required to obtain or comply with planning permission, conditions, or other consent and to comply with legislation.**
Works	**Specification**
Bat Boxes integrated	**Overview:** A total of four bat boxes will be installed on site. These will be integrated into the building during construction within the walls. The proposed locations are shown on the plans provided in **Appendix 2.** Details of the bat boxes recommended for the sites are as follows: ***General installation guidance*** • Ensure all the packaging is removed prior to installation • Ensure the bat box is installed in the correct orientation • Ensure the bat boxes are installed outward facing, with the entrance being free from obstruction • Installed bat boxes per manufacturer guidance (if available) • Once installed the ECoW will inspect the bat box to ensure correct installation. In the case a bat box has been installed incorrectly, it will be removed and reinstalled. ***Integrated bat boxes to be integrated into the façade of new buildings*** • The recommended integrated bat bricks will be constructed of woodcrete/ woodstone. Boxes of this construction are known to require minimal maintenance and have a lifespan of 25 years plus. • 4 No. Integrated Eco Bat Box with Cavity (or similar) (see **Figure 3**) will be installed into the façade of new buildings within the new building. This bat brick type is suitable for integration into a range of building types including brick walls,

timber cladding, and stone and are suitable to support a range of species including common pipistrelles *Pipistrellus pipistrellus* and soprano pipistrelles *Pipistrellus pygmaeus* which are likely to be present in the local area.

- The bat boxes will be positioned 3-5m above ground level facing a southwest elevation with a clear flight path to and from the entrance, away from artificial light and facing vegetated habitats.



Figure 3. Integrated Eco Bat Box with cavity suitable for a range of crevice dwelling bat species. Source - https://www.wildcare.co.uk/integrated-eco-bat-box-cavity.html

Recommended management:

The proposed bat boxes are designed to require no management or maintenance. Furthermore, preventing physical disturbance of bat boxes will increase the chances of occupation by roosting bats. However, it is recommended that the bat boxes are inspected annually for the first five years outside of the typical active season for bats (May to September inclusive) following installation. Bat boxes must be replaced if they are damaged, removed, or have fallen from their recommended location.

Bird Boxes integrated	A total of four bird boxes will be installed on site. These will be integrated into the walls of the proposed building and will comprise house sparrow terrace boxes and integrated swift boxes. The proposed locations are shown on the plans provided in Appendix 2. ***General installation guidance*** • Ensure all the packaging is removed prior to installation • Ensure the bird box is installed in the correct orientation • Ensure the bird boxes are installed outward facing, with the entrance being free from obstruction • Installed bird boxes per manufacturer guidance (if available) • Once installed the ECoW will inspect the bird box to ensure correct installation. In the case a bird box has been installed incorrectly, it will be removed and reinstalled. ***Bird box specification: Integrated House Sparrow Boxes*** Integrated bird boxes will be incorporated into the façade of the proposed building. • The recommended bird boxes will be constructed of woodcrete/woodstone. Boxes of this construction are known to have minimal maintenance requirements and a lifespan exceeding 25 years. • 2 No. Vivara Pro WoodStone House Sparrow Terrace Boxes (or similar approved equivalent) (see **Figure 4**) will be integrated into the façade of the building. This bird box type is designed to provide enhanced nesting opportunities for house sparrow Passer domesticus. House sparrow is a Priority Species listed under Section 41 of the NERC Act. Alternative species such as tits may also utilise these boxes. • These must be installed a minimum of 5m in height and have clear and direct open flight paths, unobstructed by trees, vegetation or other buildings.



Figure 4. Vivara Pro WoodStone House Sparrow Nest Box Nest Box. Source - arkwildlife.co.uk

Bird box specification: Integrated Swift bricks

- The recommended bird boxes will be constructed of woodcrete/ woodstone. Boxes of this construction are known to have minimal maintenance and have a lifespan of 25 years plus.
- 2 No. Pro UK Visible Build-in Swift Boxes (or similar approved equivalent) (see **Figure 5**) will be integrated into the façade of the building. This bird box type is designed to provide enhanced nesting opportunities for swifts.
- The bird box will be positioned approximately 3m above ground level facing a northern elevation where they will be sheltered from prevailing wind, rain and strong sunlight.

	 **Figure 5.** Pro Uk Visible build-in swift boxes. Source - www.nhbs.co.uk ***Recommended Management:*** The proposed bird boxes are designed to require no management or maintenance. Furthermore, preventing physical disturbance of bird boxes will increase the chances of occupation by nesting birds. It is recommended that the bird boxes are inspected annually for the first five years following installation, outside of the typical nesting bird season (March to September inclusive). Integrated bird boxes should not be blocked, removed or otherwise altered following installation.
Invertebrate house	***Insect box*** adjacent to the proposed species-rich grassland and shrub planting areas in a sun facing, sheltered location, as shown on the plans in Appendix 2. An insect box suitable for the site (or a similar alternative brand) can be found here: https://www.nhbs.com/national-trust-apex-insect-house



Figure 6. Insect box. Source - https://www.nhbs.com/national-trust-apex-insect-house)

The proposed habitat removal to facilitate the development does include habitats of value to invertebrates. Without appropriate compensatory habitat creation, there could be an overall reduction in opportunities for other animals foraging at the site. However, there is excellent scope to provide additional refugia and deadwood provision at the site for invertebrates to provide enhanced opportunities post-development.

Provision of log pyramids

2 log pyramids will be constructed to enhance opportunities at the site for invertebrates, the locations of which are shown on the plan in **Appendix 2**. Adjacent to retained boundary vegetation along the eastern boundary and to the proposed tree and shrub planting within a quiet corner of the site.

Log pyramids are of particular value to invertebrates which rely on deadwood of varying degradation states to fulfil their lifecycle. The log pyramids will be constructed using logs from deciduous trees removed from the site no smaller in diameter than 100mm.

A variation of log sizes is optimum. Logs will be installed partially underground within a shaded location, such as adjacent to tree or hedge planting areas. This will allow the logs to remain damp and subsequently degrade. The proposed log pyramid specification is illustrated on **Figure 7**. Further guidance regarding the construction of log pyramids can be found here: https://ptes.org/wp-content/uploads/2020/05/Build-a-log-pyramid-for-stag-beetles.pdf.

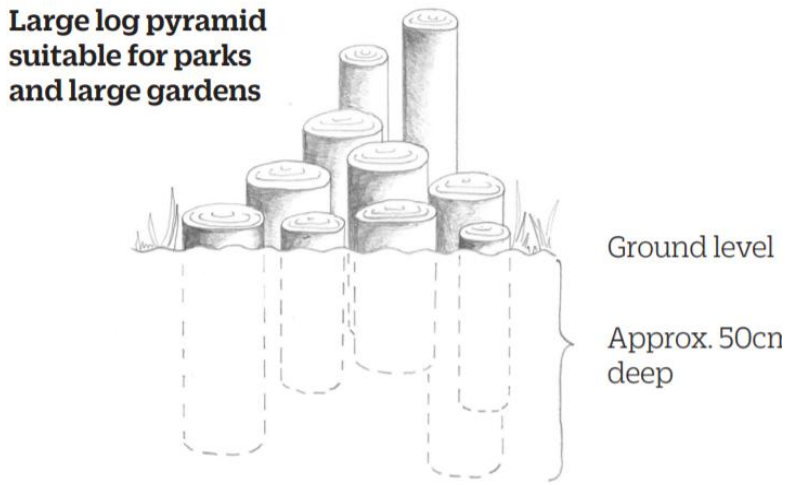


Figure 7. A schematic representation of a log pyramid. Source - https://ptes.org/wp-content/uploads/2020/05/Build-a-log-pyramid-for-stag-beetles.pdf.

Provision of bee bricks

Bee bricks will be installed into the fabric of the walls of the new buildings during construction. Two bee bricks will be installed within the eastern elevation of the proposed building at approximately 2–3m above ground level. The bee bricks will be positioned adjacent to the proposed species-rich grassland, scrub and native planting areas, providing nesting opportunities for solitary bees in close proximity to suitable foraging habitat whilst avoiding areas of regular use by residents within the secure garden.

	 **Figure 8.** Variety of bee brick colours. Source - https://www.nhbs.com/ Habitat piles comprising logs and deadwood may be incorporated within suitable landscaped areas to provide refuge opportunities for invertebrates, small mammals and other wildlife. This will provide deadwood for invertebrate species, as well as provide additional refuge opportunities for invertebrates, small mammals and other wildlife. This will also continue to provide a food source for other fauna, such as hedgehogs. The location of the log pile is noted on the map in Appendix 3.
Hedgehog House	A hedgehog house will be installed adjacent to retained boundary vegetation and proposed shrub planting within a quiet area of the Site, as shown on the plans in Appendix 2. A hedgehog house suitable for the site (or a similar alternative brand) can be found here: https://www.nhbs.com/hedgehog-house (Figure 12). This is to be installed in a quiet area, near retained or created

shrub and hedgerows. This will be an area where it will not be regularly disturbed. Hedgehog houses can also be partially buried underneath turf to hide it greater. (Figure 9) to create a more permanent structure.



Figure 9. Hedgehog house. Source - Www.nhbs.co.uk

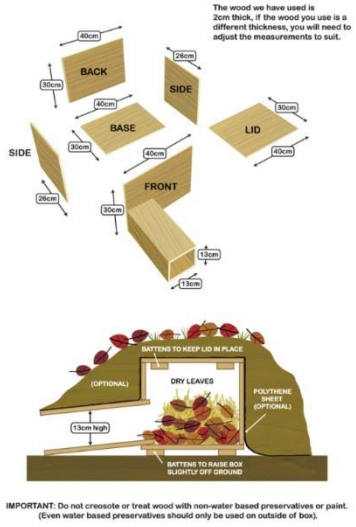


Figure 10. Permanent buried hedgehog house. Source - www.Britishhedgehogs.org.uk

Compliance and Reporting

The EMEMP and CEMP requires stakeholders to comply fully with the pre-construction and construction-related elements of any mitigation strategies agreed with the Local Planning Authority and Natural England under any license requirements. Construction activities will therefore be conducted strictly in accordance with the approved CEMP. Regular inspections and monitoring will be undertaken to ensure compliance with the plan's requirements.

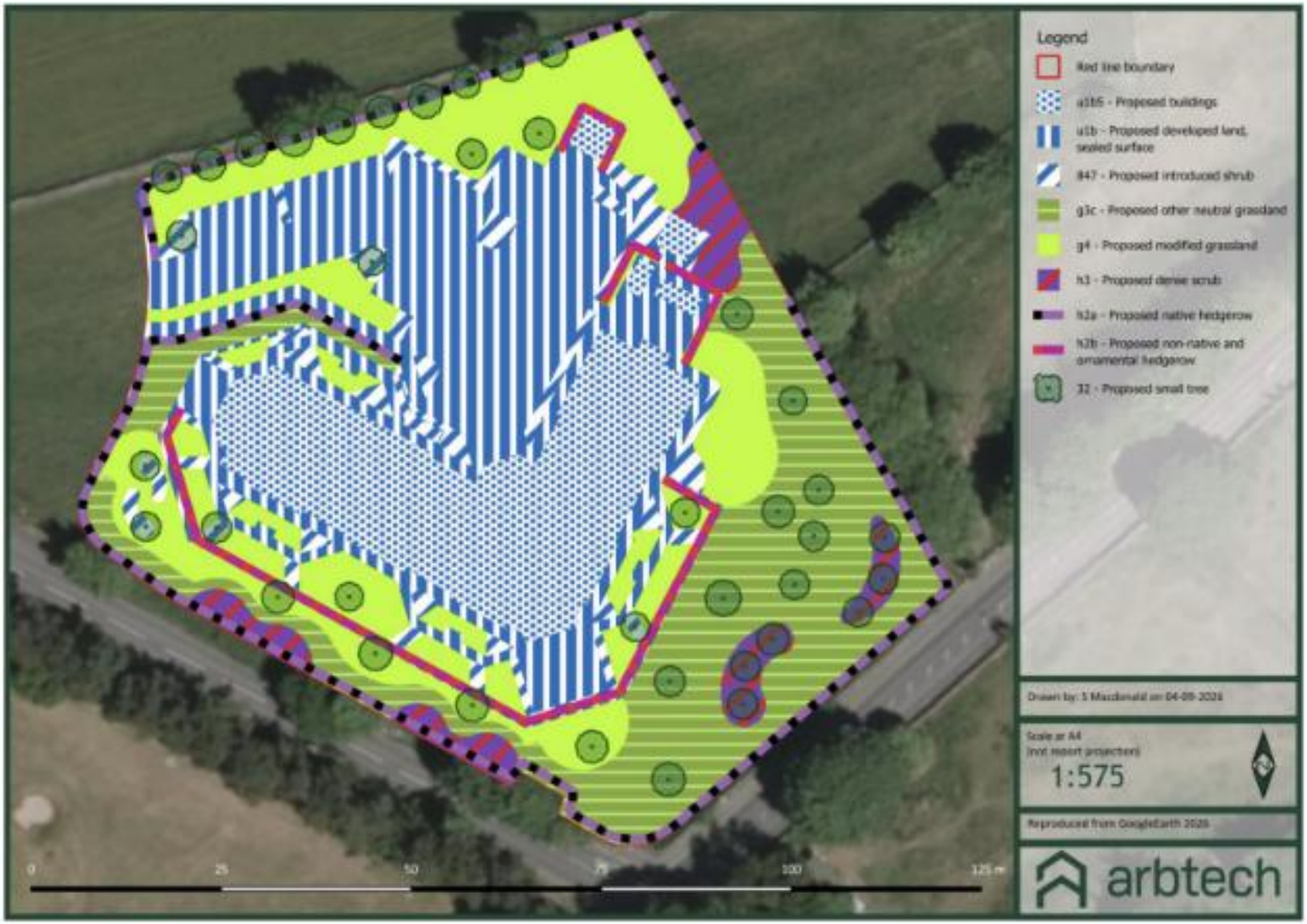
Any deviations or incidents that may affect ecological receptors will be immediately reported to the designated ecologist / Natural England. Updates to the EMEMP and CEMP will be relayed to the Local Planning Authority.

The EMEMP and CEMP will be periodically reviewed and updated as necessary throughout the construction phase to address changing site conditions and evolving ecological considerations.

Appendix 1: Site Landscape master plan



Appendix 2: Habitat on-site creation and enhancements.



Appendix 3: Species specific enhancements.



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Validity

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

Version control			
Status	**Issue**	**Name**	**Date**
Draft	0.1	Amal Waheed BSc (Hons), MSc Graduate Ecologist	04/06/2026
Review	0.2	Harry Brindle BSc (Hons), Consultant Ecologist	10/06/2026
Final	1.0	Amal Waheed BSc (Hons), MSc Graduate Ecologist	
Updated	2.0		19/06/2026
Updated – New Landscaping Plans	3.0		10/09/2026