

Construction Ecological Mitigation Plan

Survey site: Cloud Park Farm, Dial Lane, Congleton, CW12 3QJ

client: Mr S Davies

Date: 24/06/2025

Project:

This report is prepared to inform a planning application with **Staffordshire Moorland District Council**. The proposal is described as: *Change of use of single-storey agricultural building to dwelling and associated external domestic amenity; new vehicular access; temporary siting of static caravan*

Planning Application Number:

SMD/2024/0361

A Construction Ecological Mitigation Plan (CEMP) has been prepared for the above-named client to outline measures to be implemented before and during construction works begin at the site.

The purpose of this plan is to ensure the protection and mitigation of ecological receptors, adhere to best practices and industry standards. The CEMP also outlines the management frameworks required for the planning and implementation of construction activities that comply with legislation and the environmental commitments.

CEMP The below table provides the wider ecological context of the site and details any associated planning conditions.

Site Context and Landscape History
A Preliminary Ecological and Roost assessment, (PEA/PRA) report was produced by Arbtech consulting in 2024, this also includes bat emergence surveys (BERS) as well as Biodiversity Net Gain (BNG) in 2024 The survey site is centred on National Grid Reference SJ 90246 62334 and has an area of approximately 0.39ha. The site is comprised of one barn (B1), two dilapidated outbuildings (B2, B3), developed land; sealed surface, other neutral grassland and large areas of recently cleared bare ground that was previously modified grassland. Clearance has occurred due to a large covering of Himalayan balsam identified in a previous ecological appraisal (Elite Ecology, 2022), it should be noted that there are stumps on site from the removal of small trees, there is also still Himalayan balsam present on site, and an area of Japanese knotweed has been identified outside the site boundary but within the site ownership. The site is situated within a rural area ~5km east of Congleton town centre. Aerial imagery shows the local landscape to have a rural character, with several small copses and woodland swathes in close proximity to the site a band of broadleaved woodland running adjacent to the western site boundary. Water bodies can be found nearby, including a brook running outside of the southwest boundary to the site, and four ponds located ~290m, ~310m, ~480m and ~530m to the east. Such features likely enhance the area for a variety of species, including bats, amphibians and reptiles.
Planning Conditions

Condition	As per Staffordshire Wildlife Trust’s comments. <i>“As per the PEA, a CEMP should be produced to minimise the possibility of pollution affecting the nearby deciduous woodland must be implemented during construction.”</i>
-----------	---

The below table describes the ecological baseline conditions on site.

Ecological Background Information
Detailed using desk study and site survey.
The site had a PEA undertaken by Arbtech consultancy in September 2024, this was followed by secondary surveys such as Bat Emergence and Re-entry surveys (BERS)
Habitats identified at the site include- • Modified grassland • Other Neutral grassland • Scattered trees • Bare ground • Buildings • Developed land
Adjacent to the site- Deciduous woodland.
Value for protected species on the site includes the following- • Birds- No bird nesting was seen at the site at the time of the survey, but could be present in the woodland adjacent. • Bats- The main buildings on site have value for roosting bats. The habitats on the site would also provide good quality foraging and commuting for bats due to the volume of trees in the landscape. • Amphibians- The site itself provides limited terrestrial habitat for amphibians due to current management. But there are multiple ponds within 500m of the site, and with woodland habitat nearby, amphibians may commute around the edges of the site.

- **Terrestrial mammals-** Mammals such as badgers and hedgehogs could be present in woodland adjacent to the site and may come to the site for foraging.

Scope

This CEMP outlines construction and ecological measures for the following works:

Change of use of single-storey agricultural building to dwelling and associated external domestic amenity; new vehicular access; temporary siting of static caravan .

Aims and Objectives

This report aims to identify key stakeholder requirements, ensure compliance by all stakeholders with all relevant legislation, minimise potential adverse effects on the environment and protected habitats, and provide site-specific methods to avoid, minimise and mitigate construction effects on the environment and notable habitats.

Work Schedules and Ecological Presence

Work schedules will be developed by the client 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. The following measures will be implemented:

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 contractor, site or project manager. They are responsible for ensuring all actions outlined in the approved CEMP are implemented including the provision of a toolbox talk prior to work 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 project ecologist and/or a suitably qualified Ecological Clerk of Works (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 project ecologist

and designated ECoW of the commencement of construction works and provides updates where necessary. The ECoW will provide ecological expertise and guidance throughout.

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.
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.	
Tree Protection	
Tree root protection areas will be identified based on the existing tree inventory. A buffer from adjacent woodland will be established and protected throughout the duration of construction activity in line the site plan agreed with Client/contractor. No trenches or ground works will be completed within the specified buffer of any retained trees on site. Trees will be appropriately protected in accordance with BS 5837:2012 - “Trees in relation to design, demolition and construction – Recommendations”. As such, it is recommended that the trees be separated from construction works by protective fencing throughout the duration of the construction phase of the development. A fencing specification is included within Figure 1 below. Appropriate signage is to be included on the fencing in order to ensure that the fences are not moved after being established. As shown in Figure 2	

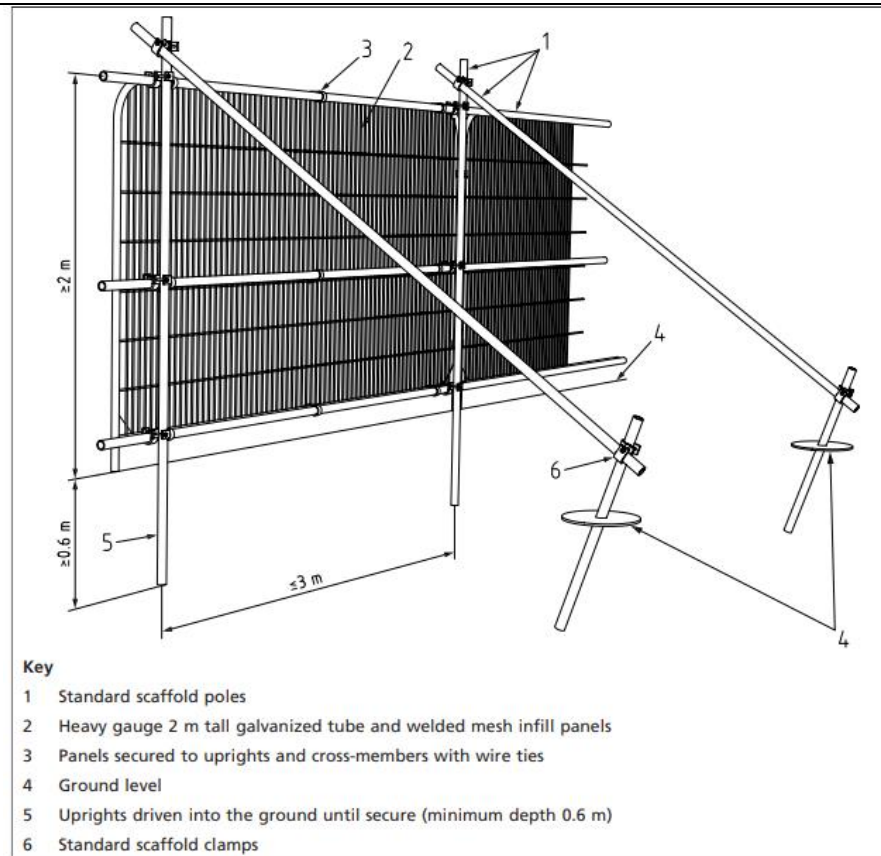


Figure 1: Default protective barrier specification (British Standards Institute 2012).



Figure 2 Appropriate signs to be attached to root protection zone fencing- Source- www.Safetysignsandnotices.co.uk

Pollution Prevention	
<i>Risk</i>	Pollution resulting from increased levels of water run-off, noise, and dust creation during construction works has the potential to pollute the adjacent woodland, which is likely to have adverse impacts upon both plant and animal diversity.
<i>Statutory Compliance</i>	To limit the 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 the guidance document: <i>PPG6: Working at Construction and Demolition Sites</i> (Environment Agency 2010) remain applicable to the site. Considering both the relevant statutory requirements and best practice measures detailed within guidance document PPG6, the following mitigation prescriptions are considered suitable to mitigate the 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.
<i>Buffer from construction activities</i>	A minimum 10m buffer from any tree must be retained from construction activity and material storage for the duration of the construction phase in accordance with current guidelines (Environmental Agency 2016). If a 10m buffer cannot be retained, then secondary containment measures must be put in place in this area to prevent pollution entering the adjacent broadleaf woodland for both hazardous and non-hazardous waste. Secondary measures implemented within 10m must comprise the use of a secondary containment system such as the construction of an impermeable bund or the use of drip trays. Secondary containment systems must be implemented in accordance with current guidance published by the Construction Industry Research and Information Association (CIRIA) within guidance document <i>C736F: Containment systems for the prevention of Pollution</i> (CIRIA 2014).
<i>Materials Storage and Surface Water Runoff</i>	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 the broadleaf woodland edges 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. • A storage and parking area will be placed beside the temporary static caravan at 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.
<i>Site Drainage</i>	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.

<i>Airborne particle suppression</i>	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. • Avoid explosive blasting, using appropriate manual or mechanical alternatives. • 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. • Avoid the use of petrol- or diesel-powered generators and use mains electricity or battery power where possible. • 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. • Use enclosed shuts and conveyors and covered skips.
<i>Noise</i>	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
	Sheet pile	Acoustically dampen sheet steel piles to reduce levels of resonant vibration		Drop hammer completely enclosed in box with opening at top for crane access
	Impact on pile	Use resilient pad (dolly) between pile and hammer head. Packing needs to be kept in good condition		Steel jacket completely enclosing drop hammer with dolly and polystyrene chips fed to impact surface to dissipate energy
	Cranes cables, pile guides and attachments	Careful alignment of pile and rig		Pressed-in piling which generates its driving force from the frictional restraint of other piles
	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	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
	Compressor or generator body shell	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	
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	
Rotary drills, diamond drilling and boring	Drive motor and bit	Enclose breaker or rock drill in portable or fixed acoustic enclosure with suitable ventilation	Up to 20	Thermic lance
		Use machine inside acoustic shed with adequate ventilation	Up to 15	

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
	Sheet pile	Acoustically dampen sheet steel piles to reduce levels of resonant vibration		Drop hammer completely enclosed in box with opening at top for crane access
	Impact on pile	Use resilient pad (dolly) between pile and hammer head. Packing needs to be kept in good condition		Steel jacket completely enclosing drop hammer with dolly and polystyrene chips fed to impact surface to dissipate energy
	Cranes cables, pile guides and attachments	Careful alignment of pile and rig		Pressed-in piling which generates its driving force from the frictional restraint of other piles
	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 waster 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. <i>Where none of the above options offer an appropriate solution, waste disposal is the final option:</i> • 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.
<i>Invasive/non-native Species</i>	Japanese knotweed and Himalayan balsam was identified on the site from previous reports, some of which are against the woodland boundary to the east. Construction activities risk spreading this species around the site, as well as being tracked into the wider environment via plant tyres, as well as through unwashed boots. There have already been measures and some eradication of these species, but there is a chance of the species recovering, or self-seeding and re-establishing. This risk will be managed via the implementation of appropriate biosecurity measures as listed below.
<i>Biosecurity</i>	A Biosecurity Declaration Form will be distributed via email to all contractors intending to send plant machinery to the development site. This instructs that power washing of all plant prior to entry on site to remove all traces of mud debris etc. The completed form must be returned to the site Biodiversity Champion prior to deliver/access.

	This form and a copy of the CEMP will be sent to all subcontractors that intend to bring machinery onto the site. Upon arrival to site the plant item is inspected at a designated quarantine area. This inspection ensures the delivered plant item has been thoroughly cleaned. Should the item of plant be deemed to be inadequately cleaned it will be refused entry. Knotweed and Himalayan balsam Species will be removed before plant machinery enters the site. This will include topsoil stripping around the plants in order to remove potentially soil contaminated with seeds. This will be disposed off with appropriate controlled waste measures. For additional Himalayan balsam removal The following measures will be implemented to control and/or eradicate any additional Himalayan balsam from the site: • Himalayan balsam removal will be undertaken between April and June, prior to seeding. • Pull the plant up by grasping the base of the stem and giving a steady gentle pull to bring up roots. • Dispose of Himalayan balsam in line with appropriate controlled waste measures or by leaving it in a pile to compost down (this stops the balsam re-growing from the roots or the nodules on the stem). • Ensure biosecurity measures are in place and clean boots, clothing and vehicle tyres before leaving site. For Japanese knotweed An invasive species management plan will be required to control and/or eradicate <i>Advice for Contractors on Site.</i>
--	---

1. Avoid taking any vehicles onto the parkland beyond those essential in completing works, keep to established tracks and park vehicles on established parking areas away from the woodland.
2. Arrive at the site with clean equipment and vehicle, paying particular attention to wheels.
3. Ensure equipment and footwear is clean (visually from soil and debris) before leaving the site.
4. Ensure the vehicle is kept clean - in particular, remove any accumulated mud before leaving the site.
5. Facilities will be provided on the site in the work zone surrounding the buildings to clean footwear/equipment.
6. Keep access to a minimum.
7. Plan visits so that the highest risk site/area is visited last.
8. Do not visit the adjacent woodland for any unnecessary reason.

Such robust biosecurity measures will prevent the leaving behind of a degraded environment and subsequent financial bills for the control of introduced invasive species, or any species that may alter communities within nearby woodland.

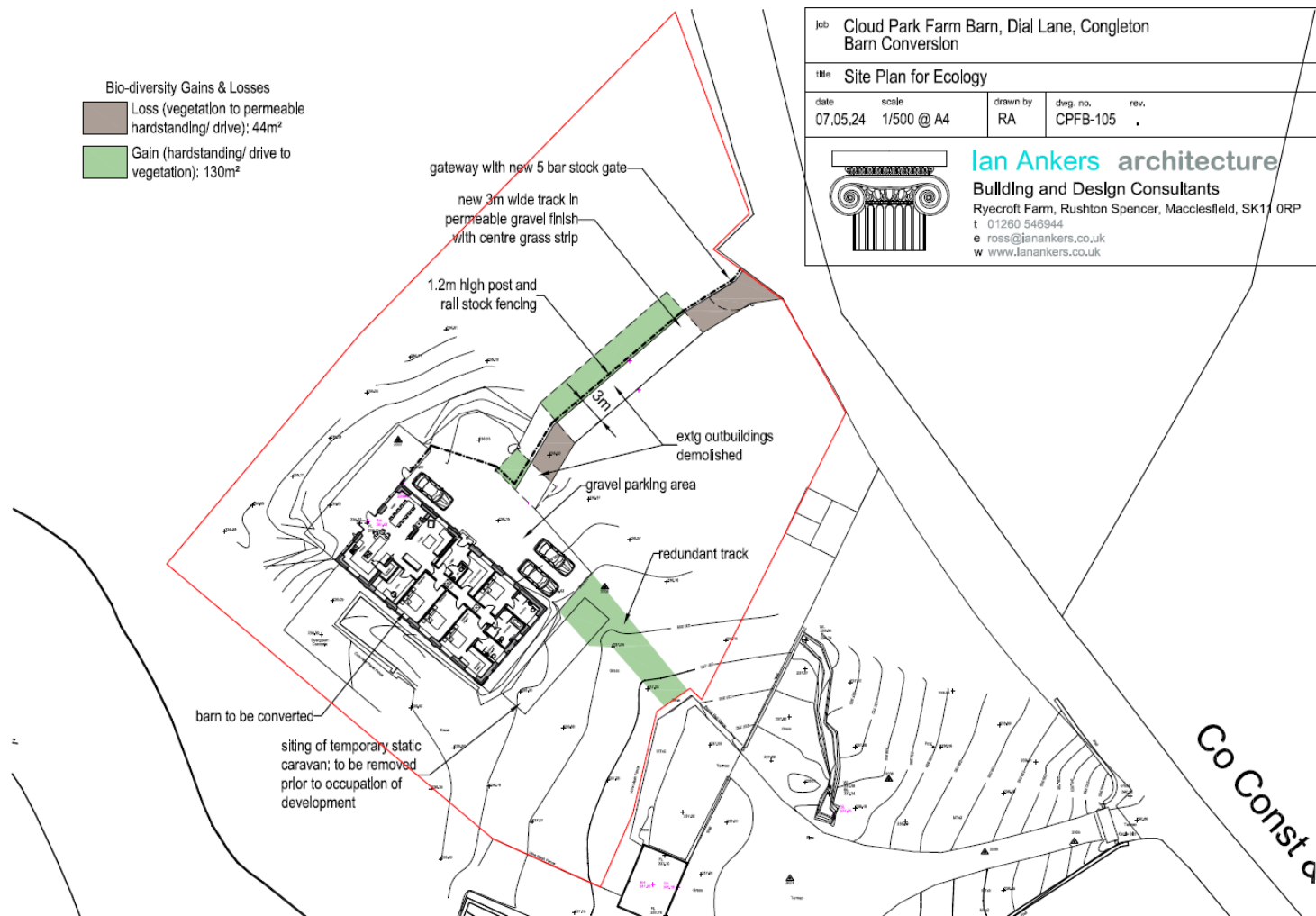
Compliance and Reporting

The 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 CEMP will be relayed to the Local Planning Authority.

The 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 Plan



Limitations and Copyright

Legal

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

Arbtech cannot be held responsible for any project management failures, delays or unforeseen costs arising from failure to read and ensure understanding of the content with in, Nor is Arbtech responsible for any adverse outcomes arising from failure to account for ecological advice given at any stage throughout the project collaboration.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

Limitations and Copyright Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited. © This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.			
Status	Issue	Name	Date
Draft	1.0	Annabel Sharpe, Bsc (Hons) Consultant Ecologist	20/06/2026
Final	2.0	Annabel Sharpe Bsc (Hons) Consultant Ecologist.	24/06/2026
Amended			