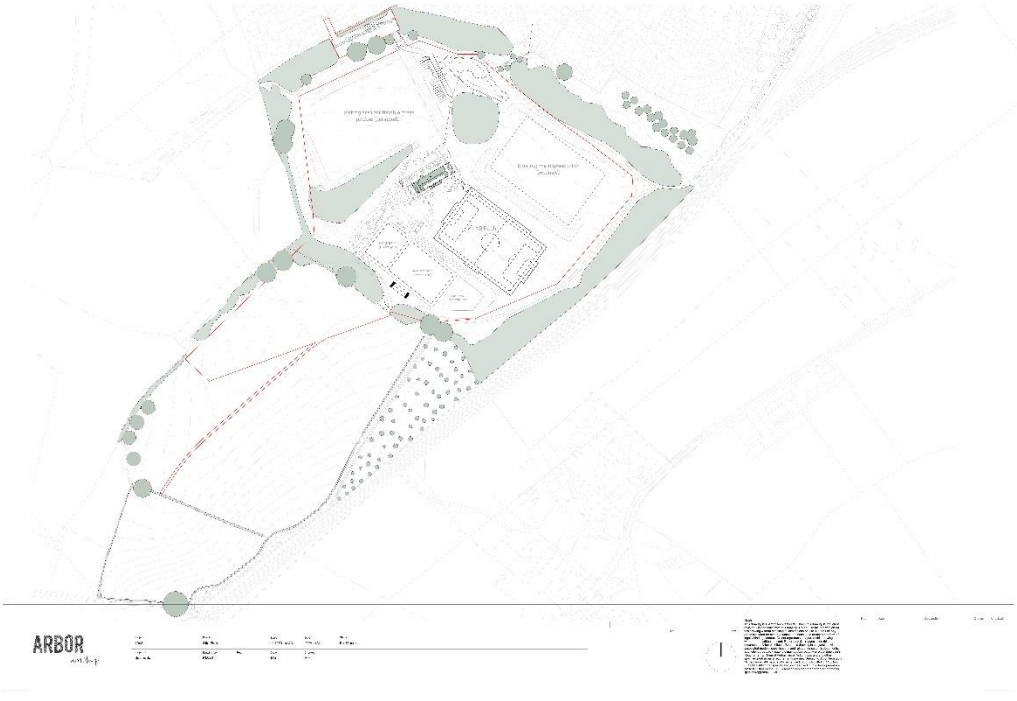
ATW ECOLOGY

Southside Project, Land at Ashley Farm, Grafton Court Close, Grafton, Hereford, HR2 8BL

for Arbor Architects

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN



June 2024

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Report control

Title	Construction Environmental Management Plan		
Site address	Southside Project, Land at Ashley Farm, Grafton Court Close, Grafton, Hereford, HR2 8BL		
Version	**Date**	**Ecologist**	**Action**
1.0	29 March 2024	Andrew Tillson-Willis	Document created
1.0	30 June 2024	Andrew Tillson-Willis	Document completed & issued

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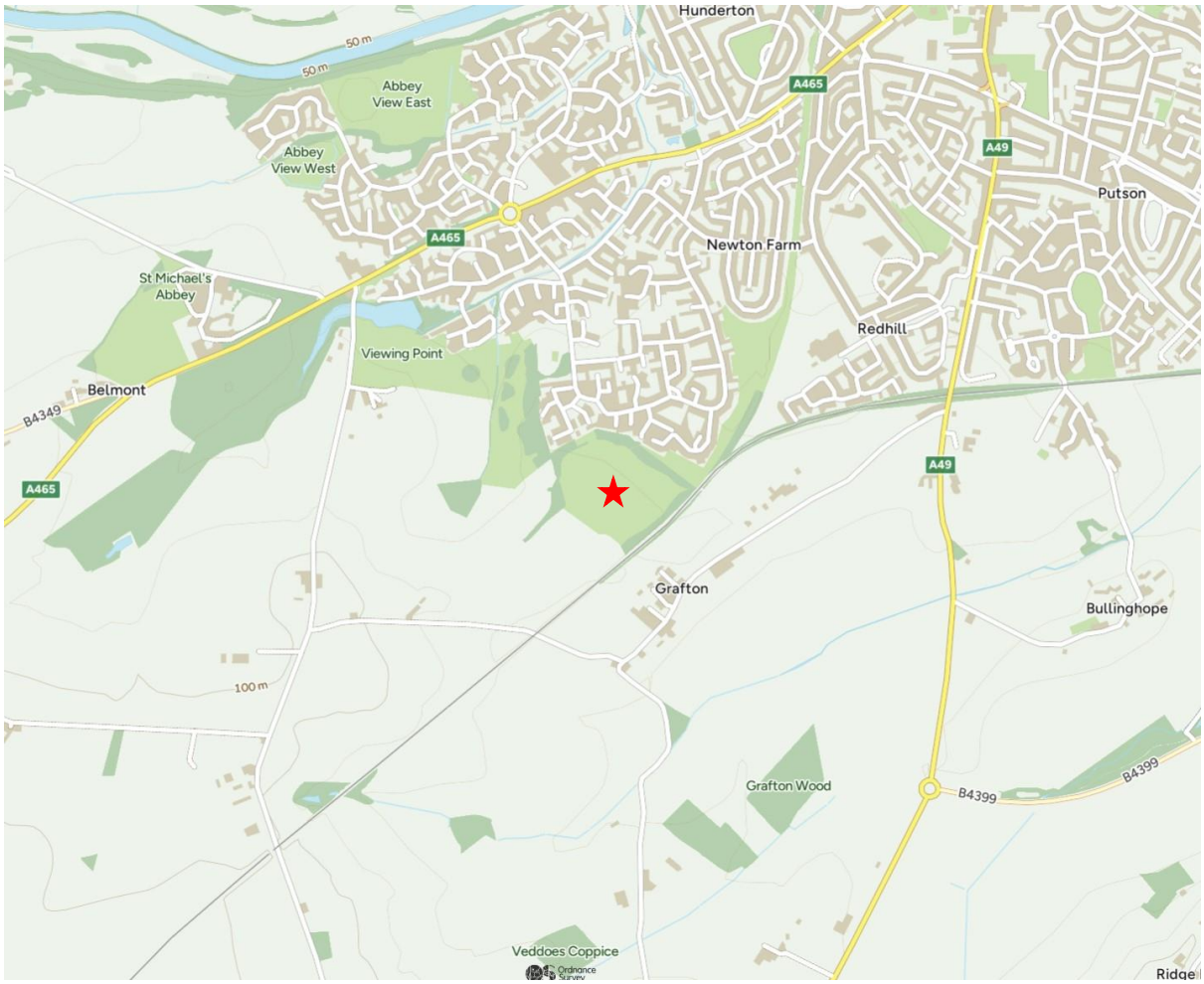
Introduction

This Construction Environmental Management Plan has been prepared to support the creation of a mixed use development to provide community hub with enhanced recreation facilities including a 3G pitch, car park and access roads, change of use of land from agricultural to allotments and productive gardens, new buildings to provide changing facilities, classrooms, equipment storage, polytunnels, cafe and kitchen.

The site is located on Land at Ashley Farm, Grafton Court Close, Grafton, Hereford, HR2 8BL. Ordnance Survey Grid Reference: SO 49489 37472.



This plan has been created to:

- To outline measures required to prevent impacts on protected species and habitats so o avoid committing offences under the relevant legislation.
- Address condition 10, of Herefordshire County Council outline planning permission reference 223281:

"No longer than twelve months prior to any works or site preparation commencing a full, Construction Environmental Management Plan (CEMP) – including but not limited to detailed ecological working methods and consideration of all environmental effects of

construction processes shall be submitted to and agreed in writing by the Local Planning Authority.

The approved CEMP shall be implemented in full for the duration of all construction works at the site unless otherwise approved in writing by the Local Planning Authority.

If works are to be undertaken in phases, then the CEMP should clearly identify this.

Reason: To ensure that all species are protected and habitats enhanced having regard to the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019' (the 'Habitats Regulations'), Wildlife and Countryside Act 1981,), National Planning Policy Framework (2021), NERC Act (2006) and Herefordshire Local Plan - Core Strategy policies SS1, SS6, LD1, LD2 and LD3 and the council's declared Climate Change & Ecological Emergency."

The recommendations made within this report are based on:

- Site walkover conducted by Andrew Tillson-Willis MRSB MCIEEM of ATW Ecology Ltd. 12 March 2024.
- Preliminary Ecological Appraisal. Acer Ecology. May 2022.
- Arboricultural impact assessment. Bearwood Associates Ltd. October 2022.
- Design and Access Stateent, and planning drawing numbers GA020, PL001, PL010, PL020, PL030, PL050, PL055, PL100, PL101, PL102, PL105, PL106, PL107, PL108, PL120, PL121, PL122, PL123, PL200, PL201, PL202, PL203, PL204, PL600, PL601, PL800, PL801, SK101. Arbor Architects Ltd.
- Landscape Design and Access Statement, and drawing numbers PLA0089DD001R00, PLA0089DD100R00, PLA0089DD200R00, PLA0089DD300R00, PLA0089DD301R00. PLAN Design Landscape Architects Ltd.
- 1672-Belmont Wanderers-STORM-CALCS, and Civil Engineering General Arrangement Overall Layout drawing numbers C01, C03, C04, and C05. Infrastructure Design Studio Ltd.
- Fire Safety Strategy. Hydrock. June 2024.
- Email from Peter Richards of Network Rail dated 05 February 2024.
- Flood Risk Assessment. Berrys. September 2022.

The site supervisor of the main contractor shall be responsible for the implementation of this CEMP. Unless otherwise stated it is their duty to ensure that all site staff follow the recommendations contained within the CEMP, to undertake regular site inspections and audits, provide training to site staff where required, report on performance, and ensure compliance with relevant legislation.

At the time this CEMP was compiled a principal contractor has not been appointed. Upon appointment the principal contractor shall be required to produce a construction management plan containing further details on the implementation of recommendations contained within this CEMP.

Summary of baseline ecology

The preliminary ecological appraisal report produced by Acer Ecology, May 2022, identified the site to comprise amenity grassland and playing fields to the north enclosed by a ring of woodland, with the south of the site comprising agricultural fields (used for grazing and hay/silage) enclosed by hedgerow. Grassland within the site is recorded as 'modified' with scattered trees and scattered scrub. Woodland is a mixture of other broadleaved woodland and lowland mixed deciduous woodland. Hedgerows are native species-poor with scattered trees. Concrete paths (other developed land) cross the site.

The PEA report identifies a number of records of protected and notable species, those of note are:

- Hazel dormouse. Eight records of signs and individuals located within the woodland and hedgerow in the centre of the site.

A range of common and widespread birds were recorded on site. No active or defunct nests were recorded on site, however hedgerows and woodland were noted as providing suitable habitat for nesting birds

No potential bat roosting features were recorded on existing structures (shipping containers). Twenty trees were identified as having potential to support roosting bats, of these 4 were recorded as having high suitability, 13 moderate suitability, and 3 low suitability, all of these trees are to be retained within the development. The woodland and hedgerows within the site were identified as providing good quality foraging habitat for bats and good connection to the wider landscape for commuting bats.

No waterbodies were identified on site, two ponds were identified within 500m of the site boundary, one 237m west, and one 479m north. Woodland, hedgerows, and a small area of tussocky grassland were identified as providing suitable habitat for terrestrial great crested newt with the majority of the grassland providing poor quality habitat. It should be noted that the ponds were not assessed for their suitability to support breeding great crested newt, and that while great crested newt may disperse over 500m from a breeding pond the majority of a population are usually found within the first 20m of suitable terrestrial habitat with occurrence dropping significantly beyond 100m.

Hedgerows, grass spoil, and a small area of tussocky grassland were identified as providing suitable habitat for widespread reptiles (slow-worm and grass snake). The majority of the grassland within the site provides poor quality habitat lacking the structural heterogeneity usually preferred by these animals, as such it is considered unlikely that the site supports a significant reptile population.

The woodland on site, and surrounding the site was confirmed as being suitable for hazel dormouse, as such it is considered very likely that dormice will still be present within these habitats and hedgerows are likely to provide a commuting corridor.

Due to the redaction of information relating to badgers their presence on site should be treated as unknown.

No Schedule 9 invasive species were recorded.

The PEA report identifies the following statutory designated sites within a 2km search radius:

- Belmont Meadows LNR adjacent to north-western boundary of the site, designated in 1993 the site comprises grassland.
- The River Wye SSSI & SAC located approximately 1.34km north.

The application site lies within the catchment of the River Wye SAC and lies within the hydrological catchment of the River Wye SAC, which comprises part of the River Wye Special Area of Conservation (SAC); a habitat recognised under the Habitats Regulations, (The Conservation of Habitats and Species Regulations 2017, as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019' (the 'Habitats Regulations')) as being of international importance for its aquatic flora and fauna.

The Wye is a large river representative of sub-type 2 of JNCC freshwater habitats water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation. It has a geologically mixed catchment, including shales and sandstones, and there is a clear transition between the upland reaches, with characteristic bryophyte-dominated vegetation, and the lower reaches, with extensive *Ranunculus* beds. There is a varied water-crowfoot *Ranunculus* flora; stream water-crowfoot *R. penicillatus* ssp. *pseudofluitans* is abundant, with other *Ranunculus* species – including the uncommon river water-crowfoot *R. fluitans* – found locally. Other species characteristic of sub-type 2 include flowering-rush *Butomus umbellatus*, lesser water-parsnip *Berula erecta* and curled pondweed *Potamogeton crispus*. There is an exceptional range of aquatic flora in the catchment including river jelly-lichen *Collema dichotum*. The river channel is largely unmodified and includes some excellent gorges, as well as significant areas of associated woodland.

The PEA report identifies 14 non-statutory designated sites within a 2km search radius made up of 13 SINC and 1 SWS. Those of note are:

- SINC 47 – Woodland South of Newton Farm. Located centrally within the site. A narrow woodland with oak standards with bramble and bluebells. The presence of bluebells indicates the woodland is of good age, however because of its small width a large amount of light is penetrating the wood enabling the bramble to grow excessively and if not reduced the other flora will be smothered.
- SINC 51 – Land West of Great Western Way South of Wye. Located north of the site. Plantation alongside the railway comprising native and exotic tree species.
- SINC 48 – Great Western Way. Located north of the site. Linear woodland developing trees and scrub with good cover from canopy to ground.
- SINC 54 – Active Railway South of Wye. Located adjacent to the eastern boundary. A Part of the Newport to Shrewsbury railway line, with areas of scrub.

- SINC 44 – Newton Farm Open Space. Located adjacent to the north-western boundary. Newly planted trees of various species surrounding some older trees, linking to the railway will provide important habitats in the future.

Summary of proposed works

A mixed use development to provide community hub with enhanced recreation facilities including a 3G pitch, car park and access roads, change of use of land from agricultural to allotments and productive gardens, new buildings to provide changing facilities, classrooms, equipment storage, polytunnels, cafe and kitchen.

No demolition is required.

Works will include the following (in proposed order of works):

- Gowing Local Agricultural Works including:
  - Composting toilets
  - Siting of a temporary container
  - Planting of learning garden
  - Installation of rabbit fencing for agricultural protection
  - Installation of polytunnels
  - Creation of an agricultural access track
- Initial site infrastructure:
  - Site compound establishment
  - Delivery of plant and equipment
  - Utility connections
  - Drainage, electricity and lighting to 3G pitch
- Drainage connections and creation of an attenuation pond
- 3G pitch and associated works:
  - Base and drainage for proposed car park as 3G contractors compound
  - Creation of a haul road
  - Earthworks
  - 3G pitch installation
  - Fencing
  - Lighting of the 3G pitch
- Construction of 'The Southside' community building and associated works
- Growing local access:
  - Access track and utilities to growing local entrance
  - Creation of an opening through hawthorn hedge with appropriate ecological mitigation
  - Construction of a packing shed
- Final infrastructure:
  - Relocation and refurbishment of existing changing facilities and storage
  - Regrading of existing car park
  - Final grading of proposed car park
- Soft landscaping

- Finishing works including hand over and removal of plant, equipment, excess materials and waste

Aims and objectives

Scope of the CEMP

This CEMP has been produced to remove or reduce the ecological impacts of construction works for the proposed development with regards to protected species and habitats.

Through the implementation of appropriate mitigation measures, detrimental impacts and breaches of current relevant legislation will be avoided. Without these measures there is the risk of:

- Disturbing, injuring, or killing nesting birds (during the bird nesting season)
- Disturbing, injuring, or killing nesting hazel dormouse and fragmentation of habitats supporting the species
- Disturbing, injuring, or killing terrestrial great crested newt
- Injuring or killing widespread reptile species (slow-worm and grass snake)
- Disturbance of potential bat roosting features identified within trees, and disruption of potentially important foraging and commuting resources

The following elements are included within this CEMP:

- Objectives and targets.
- Legislative requirements regarding the site ecology, including:
    - Persons responsible for:
        - The compliance with legal consents relating to nature conservation.
        - Compliance with planning conditions relating to nature conservation.
- Control of works during construction, including:
    - Persons responsible for:
        - Installation of physical protection measures.
        - Implementation of sensitive working practices.
        - Regular inspection and maintenance of physical protection measures and monitoring of working practices.
- Implementation of appropriate mitigation strategies

Objectives

- To ensure no breach of wildlife legislation occurs on site for the duration of the proposed development.
- To protect notable and protected species from harm during the proposed construction works.
- To minimise damage to habitats on site and adjacent to the site that are protected or to be retained within the final development, during and post construction.

Water management and pollution prevention

The site is located in the Grafton area on the south-western edge of Hereford city. The nearest surface waters to the site include:

- A small unnamed tributary of the Newton Brook runs south to north, approximately 0.21km west of the site separated by hedgerow and broadleaved woodland.
- A small field pond located 0.28km west is separated by hedgerow, broadleaved woodland, and intensive arable agriculture.
- A small pond located 0.36km north-north-west on the northern edge of Belmont Heywood Country Park, adjacent to Sycamore Avenue is separated by the permanent grassland and broadleaved woodland of Belmont Heywood Country Park.
- The Withy Brook runs approximately 0.51km south separated by the railway line, rural residential, and a mix of intensive and extensive agriculture.
- The Newton Brook runs approximately 0.54km north-west separated by suburban residential and gardens, and a band of parkland containing broadleaved woodland.
- Belmont Pool located 0.59km north-west is separated by the permanent grassland and broadleaved woodland of Belmont Heywood Country Park.
- The River Wye SSSI & SAC runs approximately 0.13km north separated by suburban residential buildings and gardens.

The site is not currently serviced by mains sewer connection. A localised catchment watershed crest is located in the central part of the site, with the southwestern agricultural site ground falling away to the south. Surface water appears to run off to the unclassified road to the south, where an interception ditch directs runoff to a brick culvert passing below the railway line. This is then presumed to convey water to the Withy Brook catchment to the south east. The northern part of the site presently used for leisure, slopes down to the north eastern corner of the site towards a finger of open space running to the east of the Newton Farm residential estate. Here a ditch runs along the boundary with the adjacent former railway embankment and a culvert is believed to exist below the embankment at a localised hollow in the landscape. Therefore, much of the runoff from the northern part of the site will discharge to this culvert, which is believed to run to the Withy Brook catchment to the south east. Some surface water is also likely to run off into the public highways adjacent to the site at Vernon Williams Close and John Tarrant Close.

The proposed 'The Southside' community building will be serviced by a new connection to existing Welsh Water foul water sewer at the southern end of Vernon Williams Close, to be secured under a S106 connection agreement.

Proposed footpaths and access roads are to be gravel and permeable macadam over open graded HA type 3 with PVCu half slotted ridged pipe feeding surface water to a proposed attenuation basin with low-flow channels and hydro brake control chamber connecting to an existing Welsh Water surface water sewer at the southern end of John Tarrant Close, discharging at a rate below the existing calculated greenfield runoff rate, therefore, not impacting on the wider downstream catchment. The use of AC10 conventional macadam shall be restricted to high-traffic central aisles of proposed and existing car parks to provide a robust turning surface.

Drainage details of the proposed 3G pitch are not currently available, however, total expected surface water has been included within storm sewer design calculations for the proposed attenuation basin.

The risk of a pollution incident is considered low, however due to the nature of the work, mitigation measures will be carried out to further prevent pollution to all sensitive areas of the site and surrounding areas.

Safe storage of fuels, oils, chemicals and other hazardous materials (including cement)

- All materials will be delivered to, and stored in, a designated area of hard standing to be brought to the work area when needed
- Materials shall not be stored near to open drains
- Materials shall not be stored near to watercourses, soakaways or other sensitive areas
- Materials shall not be stored on bare ground, always use impermeable surfaces
- Materials shall not be stored anywhere there is a risk of flooding
- Materials shall be stored under cover to prevent rainwater carrying pollutants away (covering materials with tarpaulin or polythene is acceptable)
- Storage areas shall be bunded to prevent spills spreading
- Materials shall be stored in a safe place away from vehicles, to prevent collisions
- Storage containers shall be suitable for the materials stored, in good condition, and labelled clearly
- The mixing of concrete, cement, or grout will take place in a designated area of hardstanding and brought to the work area when needed
- Use water based or low solvent products, avoid the use of any products containing asbestos, lead, toluene, or chlorinated hydrocarbons

Waste storage

- Waste shall be stored in secure containers
- Waste materials shall be separated and where appropriate shall be stored in covered skips and containers to prevent wind blowing waste around the site, and to keep waste dry preventing rainwater picking up pollutants from the waste and contaminating water
- Waste shall be removed by registered waste carrier

Siltation prevention

- Any spoil produced shall be stored in designated areas protected by appropriate geotextile silt fencing
- Immediate action shall be taken if high levels of sediment are identified with could cause pollution
- Mitigation actions will be implemented immediately
- Pollution will be controlled at source whenever possible
- Site activity shall be halted if high levels of sediment are identified as being caused by site activities
- Environmental representatives shall be consulted if in doubt

- Straw bales, silt fencing, bunds and ditches shall be used to help control sediment immediately and / or measures already in place checked for efficacy
- The effectiveness of protection measures will be monitored daily and re-planned, as necessary, along with monthly audits to ensure efficacy
- Training will be given to site operatives outlining these mitigation measures

Washing and refuelling

- The refuelling of plant, machinery, and vehicles will take place in a designated area of hardstanding within the site compound
- Where possible biodegradable lubricants and biodegradable hydraulic oils shall be used. Biodegradable oils are less toxic than most synthetic oils but should still be stored and used to the same standards and prevented from entering the environment
- To reduce the risk of silt, oils, and other contaminants all plant, wheels of vehicles, machinery, and footwear leaving the site will be checked, washed, and dried in a designated area of hard standing before leaving the site
- Run-off from designated washing and refuelling areas should be collected in an impermeable sump. Settled solids should be removed regularly and disposed of appropriately, water should be recycled and reused where possible, contaminated water should be tinkered off site for authorised disposal

Containment of leaks and spills

- Spill kits shall be made available to deal with minor spills, leaks or overflows from containers and stores and site operatives shall be trained in their use
- Fuels, oils, and chemicals shall be maintained in secondary containments with 110% capacity
- Plant and machinery shall be maintained to reduce the risk of fluid loss
- Any overnight storage of plant, vehicles, and machinery will take place in a designated area of hard standing. Drip trays will be used as necessary

Following the pollution prevention measures set out above should greatly reduce the risk of a pollution incident. However any environmental incidents must be immediately reported by calling the Incident Hotline, incidents can include spillages (e.g. from oils and chemicals), contaminated surface water run-off, flooding, riverbed disturbance, damage to underground services, damage to habitats and poor waste disposal and storage. If in doubt report it.

24 hour incident Hotline for Scotland, Northern Ireland and England call:

0800 80 70 60

Key site contacts:

Site owner:_____	Tel:	_____
Site foreman:_____	Tel:	_____
Clean-up:_____	Tel:	_____
Herefordshire County Council	Tel:	03301 239 309
Natural England	Tel:	03000 603 900
Fire & Rescue Service	Tel:	03451 224 454
Welsh Water: Water emergencies	Tel:	08000 520 130
Welsh Water: Sewer emergencies	Tel:	08000 853 968
Health & Safety Executive	Tel:	03453 009 923
Hereford Hospital	Tel:	01432 355 444
Public Health	Tel:	03000 030 032
DEFRA CBRN Emergencies	Tel:	03001 000 316
National Chemicals Emergency Centre	Tel:	01235 753 654
Supplier:_____	Tel:	_____
Supplier:_____	Tel:	_____
Supplier:_____	Tel:	_____
Supplier:_____	Tel:	_____

Site chemicals, products, and waste inventory:

An up to date record of all substances and materials stored on the site, along with all safety data sheets and COSHH assessments and a plan indicating the storage location is to be appended to this document.

Pollution prevention equipment inventory:

A full record of equipment and materials held on site to deal with pollution incidents (spill kits, absorbents, drain mats / covers, pipe blockers, booms, pumps and over drums) is to be appended to this document along with a list of staff members trained in their use.

Noise

Development has the potential to create disturbance to local residents and wildlife through creation of noise by site activities including operating vehicles, plant machinery, and power tools. The sensitive receptors to the site comprise residential housing, recreational grounds between the A465 Belmont Road and A49 Ross Road. Noise disturbances generated during construction shall be temporary and unlikely to significantly impact upon the River Wye SAC.

Description	Sensitivity	Closest source of potential impact	Approximate distance to source
Vernon Williams Close – residential housing	High	Works / construction taking place at northern area of site, and site traffic arriving to / leaving site	

Waterfield Road – residential housing	High	Site traffic arriving to / leaving site	
Southolme Road – residential housing	High	Site traffic arriving to / leaving site	
Treago Grove – residential housing	High	Works / construction taking place at northern area of site, and site traffic arriving to / leaving site	26m
Bert Evans Close – residential housing	High	Works / construction taking place at northern area of site	30m
Belmont Haywood Country Park – recreation ground	High	Works / construction taking place at northern area of site	30m
John Tarrant Close – residential housing	High	Works / construction taking place at north-eastern area of site	40m
Grosmont Gove – residential housing	High	Works / construction taking place at northern area of site	40m
Brobury Close – residential housing	Medium	Works / construction taking place at northern area of site	90m
Blakemore Close – residential housing	Medium	Works / construction taking place at northern area of site	113m
Cradley Close – residential housing	Medium	Works / construction taking place at northern area of site	123m
Grafton Court Close – residential housing	Medium	Works / construction taking place at eastern area of site	138m
George Bew Close – residential housing	Medium	Works / construction taking place at northern area of site	140m
Eric Brown Close – residential housing	Medium	Works / construction taking place at northern area of site	152m
Grafton Lane – residential housing	Medium	Works / construction taking place at eastern area of site	160m
Cusop Close – residential housing	Medium	Works / construction taking place at northern area of site	175m
Brampton Road – residential housing	Low	Works / construction taking place at northern area of site	219m
Pixley Walk – residential housing	Low	Works / construction taking place at northern area of site	220m
Muir Close – residential housing	Low	Works / construction taking place at northern area of site	245m
Newton Farm Park – recreation ground	Very low	Works / construction taking place at northern area of site	365m

The Hereford Academy – secondary school	Very low	Works / construction taking place at eastern area of site	420m

Given the location of the site and the proximity of a range of sensitive receptors it is possible that a Section 61 Noise Consent will be a requirement for the works. It is understood that the activities outlined above have the potential to cause a nuisance or impact residential areas. As a result, the following mitigation measures will be carried out to prevent noise disturbance to sensitive receptors:

- A risk assessment will be produced to assess the risk of disturbance on local residents
- Unnecessary noise will be minimised using straw bales, ply board, and acoustic barriers or silencers as appropriate
- A site speed limit of 5mph will be set to reduce noise pollution
- Neighbours shall be informed of site activities likely to cause noise disturbance and provided with contact details for the site owner so they may be contacted directly should problems arise
- Any requests or complaints from neighbours or regulators shall be responded to promptly
- Noisy activities shall be restricted to working hours of Monday – Friday 07:00 – 19:00 hrs, Saturday 07:00 – 13:00 hrs, local authorities will be contacted with regards to out of hours work
- Where possible machinery and plant shall be fitted with noise control measures e.g. silencers, mufflers, and acoustic covers
- Plant and machinery shall be in good condition and well maintained to limit noise and vibration
- Rotating / impacting equipment shall be fitted with anti-vibration mountings where practical
- Deliveries will be planned to minimise traffic noise and emissions, including where practical consolidation of deliveries from different suppliers into one single vehicle movement
- Any monitoring requirements for noise will be completed, and the data submitted promptly
- Appropriate training and awareness will be undertaken with the workforce to reduce unnecessary noise. All necessary steps will be taken to prevent nuisance
- Discussions will take place with operators regarding necessary control measures if peak noise levels are reached

In the event that the site does receive a noise complaint, it is understood that the local authority has the power to stop the works if noise is causing a nuisance, as outlined in the Control of Pollution Act, Section 60.

Dust and fumes

Dust created by construction activities can cause irritation and breathing difficulties for site staff and neighbouring residents, and has potential to pollute the environment. Fumes from

plant, machinery, and site traffic has potential to reduce air quality and cause damage to human health. Mitigation measures will be carried out to prevent dust and air pollution.

- Activities that may cause dust to arise shall be planned for periods of appropriate weather conditions, if conditions are not favourable activities will be postponed till conditions improve
- A site speed limit of 5mph will be set to reduce dust and air pollution
- Where possible electrical equipment shall be used in place of internal combustion engines
- Plant, machinery, and vehicles shall be in good condition and maintained to minimise exhaust emissions and prevent black smoke
- Mobile or fixed plant shall be positioned away from site boundaries
- Deliveries will be planned to minimise traffic noise and emissions, including where practical consolidation of deliveries from different suppliers into one single vehicle movement
- Materials shall be stored in covered containers to prevent wind blowing dust around the site, or at appropriate distance from residential areas and watercourses / waterbodies
- Stockpiles will be graded and dampened to prevent windblown dust
- Weather conditions and prevailing wind direction shall be checked when planning activities that may cause dust to arise
- Cutting and grinding operations shall be shielded or wet cutting used to prevent dust
- Plant, machinery, and vehicles including delivery vehicles shall be switched off when not in use
- Where dust may occur roadways will be swept and dampened at regular intervals
- All dust and air quality complaints shall be recorded and acted upon swiftly
- Daily checks of the site boundary shall be undertaken during dusty activities and backed up with photographic evidence
- Site operatives shall receive appropriate training to reduce dust and other airborne pollution
- No fires / burning will be permitted on site

Any complaints shall be reported at the earliest opportunity and dealt with promptly to the satisfaction of all involved parties.

Vibration

Vibration has the potential to create a statutory nuisance which can disturb local residents and wildlife. In this case vibration is unlikely to negatively affect the sensitive receptors, however, the following mitigation measures shall be applied.

- The use of anti-vibration tools and machinery will be requires as specified in the Control of Vibration at Work Regulations 2005
- Any monitoring requirements for vibration will be completed and the data submitted promptly
- All necessary steps will be taken to prevent vibration nuisance

- Staff shall be given appropriate training to reduce unnecessary vibrations and discussions will take place with operators regarding the necessary control measures if peak vibration levels are reached

Lighting

The use of artificial light has potential to negatively impact on bat roosts present within the site, and sensitive habitats within and surrounding the site including hedgerow and woodland.

- Temporary lighting shall only be used where absolutely necessary
- Light fixtures shall be low powered and of a warm colour temperature <4200 kelvin
- Light fixtures shall be low level and directed downward, where necessary shielded with cowls or barn doors to direct light to the work area and prevent the spill of light onto sensitive habitats
- Lighting plans shall follow recommendations contained within Institute of Lighting Professionals Guidance Note 08/23 – Bats and artificial lighting at night

Traffic management

To ensure the smooth flow of delivery and collections, and minimise disturbance to sensitive receptors a traffic management plan shall be developed by the principal contractor that shall include the following measures:

- The route to be taken by HGV's and heavy plant accessing the site and holding positions for vehicles awaiting access to the site
- All contractor parking is to be on site, there shall be no parking of staff or deliveries on neighbouring streets
- Suppliers and sub-contractors will be instructed to arrange deliveries between the hours of 9:00 and 16
- Details of the type and location of signage to indicate site entrance, office, overhead lines, traffic routes, vehicle only areas, storage, car parking, pedestrian walkways , and on site hazards
- All vehicles will remain on existing and temporary hard standings whilst on site
- An appointed banksman must supervise all large deliveries and any operations involving the reversing of vehicles
- All vehicles will be checked before leaving site and will be washed in the designated washing area if required
- Any residual material will be swept and washed off roads, with details of road sweeping included
- Site traffic will be directed to avoid residential areas where practicable
- Pedestrian routes shall be segregated from vehicular traffic using fixed barriers, kept clear of tripping hazards, and provided with crossing points with a clear view
- Vehicle routes shall be designed to minimise reversing and avoid steep gradients and sharp bends
- A maximum site speed limit of 5mph shall be set

Materials and stockpilling

Material arisings will be stored on site during all stages of the works. The principal contractor will ensure that only a limited amount of material is stored at any one time. Control measures relating to the stockpiling and management of materials on site further to those outlined above include:

- An earth bund shall be created to delineate the permitter of the stockpile with a capacity to contain at least 110% of the contents of the largest container or 25% of the total in order to prevent fines running off onto the site
- COSHH raw material stores and COSHH waste stores shall be segregated
- A COSHH register document shall record materials stored and their handling requirements
- Stockpiled material will be moved to its final destination as soon as reasonably practicable
- Stockpiles will be at least 5m from trees, woodland and hedgerows, and materials shall never be pushed up around the base of trees
- Stockpiling of materials will be a maximum of 3-4m in height and have a maximum slope of 2:1
- Stockpiles will be graded and dampened to prevent windblown dust and reduce run-off
- To prevent anaerobic conditions stockpiles will be stored for a limited period of time, no more than a year
- If contamination is identified materials shall be quarantined and tested to determine if it can be reused on site
- Contaminated material shall be stored away from sensitive receptors, on an impermeable surface and covered as required

Cement, concrete, and grout

Cement, concrete, and grouts are highly alkaline and corrosive and can cause serious pollution to the ground and watercourses. Wildlife such as invertebrates and fish are sensitive to changes in pH levels, changes to pH levels are difficult to see and so pollution can occur for some time before the extent of damage to wildlife is noticed.

- Care shall be taken when storing, making, mixing, or using cement, concrete, or grout
- All cement bags shall be sealed after use and stored appropriately to prevent leaks or dust
- Empty cement bags shall be legally disposed off-site, never burnt or buried
- Quick setting compounds shall be used whenever possible
- Mixing and washing shall be carried out on an impermeable surface at least 10 meters from open drains, watercourses or soakaways
- Wash waters shall be stored to settle out and reused for mixing and washing to minimise the risk of pollution and reduce water use

- Waste water that has been in contact with cement is alkaline and should be sent off-site to a certified waste disposal facility for treatment and / or disposal in accordance with the Duty of Care for Waste
- Excess cement products shall be allowed to harden and used for general fill on site as required. If not possible it shall be disposed of off-site using a registered waste carrier
- Excess pre-mixed concrete shall be sent back to the batching plant or stored in a suitable designated are to allow the concrete to cure without polluting the ground or watercourses

Waste management

Poor waste management is a common cause of pollution at construction and demolition sites. There is a legal responsibility (Duty of care) to ensure that waste produced is stored, transported, treated, reprocessed, and disposed of safely without harming the environment.

- Where practical waste materials shall be separated to allow re-use and recycling of materials
- Hazardous wastes shall not be mixed and shall be separated from non-hazardous waste
- Waste shall be stored safely and securely on site e.g. prevent windblown materials such as plastics leaving the site through the use of covered skips and bind
- Liquid wastes shall be prevented from leaching from bins or skips, this includes dry wastes that may become wet through exposure to rain
- Waste contractors shall be certified waste carriers and waste transfer notes / consignment notes shall be acquired for each load of waste removed from the site to ensure that those removing waste meet the duty of care requirements
- Wate transfer notes and consignment notes shall be kept for 2-3 years

Biodiversity

Nesting birds

The site has been identified as supporting a range of common and widespread birds with hedgerows and woodland providing suitable habitat for nesting birds. Under the Wildlife and Countryside Act 1981, as amended (section 1), it is an offence to remove, damage or destroy the nest of any wild bird while that nest is in use or being built. Planning consent for a development does not provide a defence against prosecution under this act. Trees, shrubs, hedgerows, scrub, and climbing plants are likely to contain nesting birds between 1st March and 31st August inclusive.

A small area of hedgerow shall be removed to create an access track to Growing Local.

- No removal of trees, hedgerow, scrub or other habitats that may be used by breeding birds shall take place between 1st March and 31st August inclusive, unless a competent ecologist has undertaken a careful, detailed check of vegetation and buildings for active birds' nests immediately before the area is cleared and provided

written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site.

Bats

Twenty trees were identified as having potential to support roosting bats, all of these trees are to be retained within the development and appropriate buffer zones installed as per the recommendations contained within the arboricultural impact assessment.

The woodland and hedgerows within the site were identified as providing good quality foraging habitat for bats and good connection to the wider landscape for commuting bats. All trees, woodland, and hedgerow are to be retained within the development and appropriate buffer zones installed as per the recommendations contained within the arboricultural impact assessment.

The development will include the installation of new light fittings that will increase adjacent levels of artificial light pollution and could deter bats from foraging and commuting opportunities provided by woodland and hedgerows within and adjacent to the site. To ensure the retention of foraging and commuting resources, lighting plans for the development including flood-lighting of the proposed 3G pitch shall follow recommendations contained within Institute of Lighting Professionals Guidance Note 08/23 – Bats and artificial lighting at night

Reptiles and amphibians including great crested newt

Woodland, hedgerows, and a small area of tussocky grassland were identified as providing suitable habitat for widespread reptiles, and terrestrial amphibians including great crested newt with the majority of the grassland providing poor quality habitat.

It should be noted that the ponds were not assessed for their suitability to support breeding great crested newt, and that while great crested newt may disperse over 500m from a breeding pond the majority of a population are usually found within the first 20m of suitable terrestrial habitat with occurrence dropping significantly beyond 100m, as such it is considered highly unlikely that great crested newt will be found on site and the risk of an offence will be committed. As a precaution a suitable buffer shall be created from hedgerows, and woodland as per the recommendations contained within the arboricultural impact assessment.

A small amount of hedgerow will need to be removed to create an access track to Growing Local and some rough grassland shall require clearance.

- Before any work starts, the supervising ecologist will check the works area and adjoining ground for particularly sensitive habitats that must be avoided, and those features agreed for retention. Protective fencing or a suitably marked cordon sanitaire using defence tape, as appropriate, is to be installed (beyond the rhizosphere of retained trees / hedges / shrubs).

- Before any habitat disturbance starts, and then during all operations, the supervising ecologist will carry out a walkover survey for reptiles, and fingertip search for great crested newt, and carefully and safely capture, any vulnerable fauna, moving them to the pre-determined receptor area with the minimum of stress in a suitable container.
- All materials within the working area that may provide shelter for wildlife should be dismantled carefully, by hand and animals allowed to escape or moved to safety. All debris should be checked carefully before being discarded.
- Sensitive and phased vegetation clearance should be undertaken to make habitats less suitable for reptiles and newts within areas which are soon to be cleared / soil stripped. Best practice is to do this in phases: first cut any scrub and other tall vegetation to a height of c.250mm with all arisings removed; 48 hours later cut remaining vegetation to a height of c.150mm. The second phase should be undertaken in a directional manner, moving towards suitable areas of retained habitat, with arisings removed from the site. Soil strip can progress 48 hours after the second phase of vegetation clearance, again working towards retained habitat areas.
- Once soil strip has been undertaken it is advisable to maintain the area as bare earth to minimise the likelihood of reptiles and newts re-colonising.
- Site working should avoid creation of temporary waterbodies which may be attractive to newts. For this purpose, excavations should be backfilled as soon as possible following creation, or fitted with ramps to allow a means of escape (for example a wooden plank set at an angle no steeper than 45 degrees). A check for the presence of wildlife is advisable before excavations are infilled.
- When works halt for any period, such as over-night, weekends, etc. a further search of the area will be carried out by the supervising ecologist before works recommence.

To ensure continued ecological connectivity of the hedgerow a culvert of large diameter HDPE pipe shall be installed beneath the access track to provide safe passage beneath the track for amphibians and small mammals. Any brash created from the removal of hedgerow shall be used to create habitat piles within woodland.

Hazel dormouse

The woodland on and surrounding the site have been identified as supporting hazel dormouse, hedgerows have been assessed as offering marginal habitat for nesting but likely form a commuting link.

As a precaution a suitable buffer shall be created from hedgerows, and woodland as per the recommendations contained within the arboricultural impact assessment, any incursions within the protection zone shall be under the direct supervision of the project ecologist.

A small area of hedgerow will require clearance to create an access track to Growing Local, these works have potential to disturb nesting dormice but fall below the threshold and sufficient adjoining habitat will remain.

Hedgerow removal shall be phased to make the habitat unsuitable for dormice and encourage dormice to leave the affected area:

- Cutting down of trees and shrubs to make the habitat unsuitable will be carried out from November to March when dormice are hibernating on the ground, or in late September to early October when they are active but without dependant young.
- It will be important to wait until dormice have emerged from hibernation in May before ground works can commence, unless a suitably experienced and licenced ecologist has undertaken a careful, detailed fingertip search for nests immediately before the area is cleared and provided written confirmation that no dormice will be harmed and/or that there are appropriate measures in place to protect nesting dormouse interest on site.

To ensure the new access track does not result in habitat fragmentation only the minimum required vegetation shall be removed, a culvert of large diameter HDPE pipe shall be installed beneath the access track to provide safe passage beneath the track for small mammals, and a dormouse bridge shall be suspended between trees to provide continuity of the canopy.

Badger

Due to the redaction of information in the PEA relating to badgers their presence on site should be treated as unknown.

- No groundworks shall take place near to areas of woodland until a suitably experienced ecologist has undertaken a carful detailed check of the woodland and provided written confirmation that no badger setts will be harmed and/or that there are appropriate measures in place to protect setts
- As a precaution to prevent the accidental trapping of wildlife including badger, any excavations left overnight shall be backfilled, covered, or fitted with ramped means of escape

Induction, training, and toolbox talks

Prior to work commencing on site, all personnel will undergo site induction. The principal contractor will communicate environmental objectives, requirements, and responsibilities ensuring site personnel understand their environmental obligations. The site induction shall cover relevant part of the following to a sufficient level of detail:

- Environmental site rules
- This CEMP
- Emergency spill procedures including spill kit locations and use
- Waste management
- Energy management
- Biodiversity protection and enhancement

The principal contractor shall be responsible for identifying and providing specific training to all personnel involved in work activities that could result in an adverse impact on the environment. Where appropriate the training will include the following topics as a minimum:

- The importance of adhering to the contents of this CEMP and the potential consequence of straying from specified method statements.
- Company environmental policy
- General environmental awareness
- Cultural heritage and archaeology
- Waste management
- Surface water pollution and control
- Ecology / European Protected Species
- Spills and emergency response
- Dust management
- Noise management

Toolbox talks will also be delivered on specific topics relevant to the works and mitigation measures. The principal contractor will establish a regime of toolbox talks such that every employee receives a health, safety & environmental briefing as appropriate. Sub-contractor supervisors are responsible for conducting these briefings and their implementation will be monitored by the principal contractor on site. Records will be kept of toolbox talks carried out and who attended them, such records will be kept for the duration of the project.

Requests for specific training and toolbox talks can be made to the environmental manager.

References

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- Landscape Design and Access Statement, and drawing numbers PLA0089DD001R00, PLA0089DD100R00, PLA0089DD200R00, PLA0089DD300R00, PLA0089DD301R00. PLAN Design Landscape Architects Ltd.
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- Fire Safety Strategy. Hydrock. June 2024.
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- Flood Risk Assessment. Berrys. September 2022.
- BS 5228:2009 Code of practice for noise and vibration control on construction and open sites, BSI British Standards
- British Standard 6187: 2000 – Code of Practice for Demolition
- Planning Advice Note 8: Construction environmental management plans (CEMP), Development & Planning Authority
- Guidance for Pollution Prevention, Understanding your environmental responsibilities – good environmental practices: GPP 1 V1.2 June 2021, Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency (NIEA) and Natural Resources Wales (NRW)
- Guidance for Pollution Prevention, Treatment and disposal of wastewater where there is no connection to the public foul sewer: GPP 4 V1.2 June 2021, Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency (NIEA) and Natural Resources Wales (NRW)
- Guidance for Pollution Prevention, Works and maintenance in or near water: GPP 5 V1.2 February 2018, Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency (NIEA) and Natural Resources Wales (NRW)
- Guidance for Pollution Prevention, Working at construction and demolition sites: GPP 6 V1 April 2023, Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency (NIEA) and Natural Resources Wales (NRW)
- Guidance for Pollution Prevention, Pollution incident response planning: GPP 21 V1.1 June 2021, Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency (NIEA) and Natural Resources Wales (NRW)
- Guidance for Pollution Prevention, Dealing with spills: GPP 22 V1 October 2018, Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency (NIEA) and Natural Resources Wales (NRW)

Quality Assurance

ATW Ecology was founded during the Covid-19 pandemic. Specialists in terrestrial and freshwater ecology, our in-house staff work closely with a team of sub-contractors, associates, and assistants, each chosen for their expertise and experience in their chosen field to deliver a wide range of ecological and environmental services with projects ranging from house-holder planning applications to commercial developments and local infrastructure schemes.

ATW Ecology Ltd. is registered in England, number 14937736. Registered office: 173 Brookfarm Drive, Malvern, Worcestershire, WR14 3SL.

***Andrew Tillson-Willis** MRSB MCIEEM MIFM Mem.RES — Director & Principal consultant*

Andrew is an experienced ecologist, herpetologist, and entomologist with nineteen years' experience as a zoological consultant and eight years as a freelance ecological surveyor before joining full time ecological consultancy six years ago. He holds Natural England survey licences for great crested newt (personal licence), bats (level 2 class licence), and white-clawed crayfish (class licence), a Natural Resources Wales survey licence for great crested newt, is registered under the Construction Skills Certification Scheme (CSCS), is a registered member of the Royal Society of Biology, and Institute of Fisheries Management, a full member of the Chartered Institute of Ecology and Environmental Management, and Royal Entomological Society. In his spare time Andrew is co-ordinator and recorder for the Worcestershire Reptile & Amphibian Group, long-standing committee member of the Herefordshire Amphibian & Reptile Team, committee member of Worcestershire Mammal Group, steering member of the Malvern Hills Crayfish Group, and an active member of the Worcestershire Bat Group, and Herefordshire Mammal & Bat Group.

NB. Whilst all due and reasonable care is taken in the preparation of reports we accept no responsibility whatsoever for any consequences of the release of this report to third parties. Clients are reminded that all work carried out is subject to our Terms of Trading which may be viewed at any time on our web site at www.tillson-willis.co.uk or can be provided on request. Please again be aware that site surveys inevitably miss species not apparent on the date of visit(s) by reason of seasonality, mobility, habits or chance. Results are indicative and given in good faith but they are not a guarantee of presence or absence of any particular taxa.

Please note that this report is a baseline ecological site audit of factors and features that may be significant for regulatory compliance and biodiversity policies relating to change of use or other disturbance. Such reports may not, on their own, contain sufficient information for a planning application and may require further more detailed study to assure compliance.

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