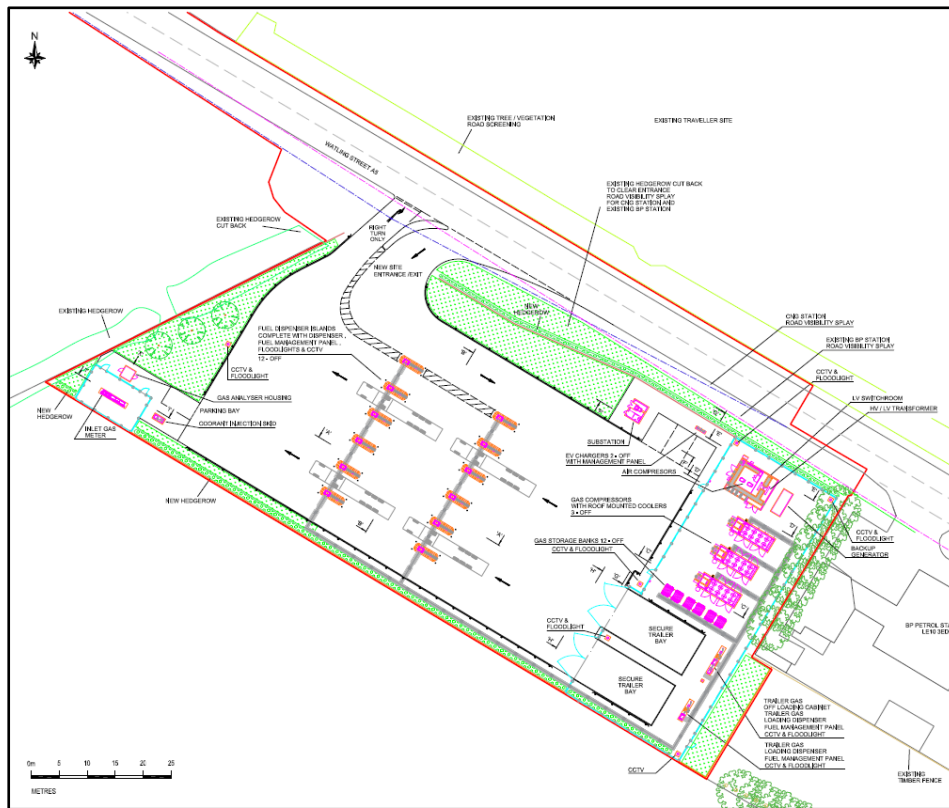


LAND SOUTH OF WATLING STREET, HINCKLEY

Construction Environment Management Plan



Prepared for:

Report Ref: BEK-23005-2-RevB

March 2024



Project Quality Assurance Information Sheet

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LAND SOUTH OF WATLING STREET, HINCKLEY

Construction Environment Management Plan

PROJECT NO: 23005

REPORT REF: BEK-23005-2 (Rev B)

DATE: March 2024

REVISION STATUS / HISTORY

Rev	Date	Issue / Comment	Prepared	Checked
A	31/10/23	Minor alterations	DE	MB
B	07/03/2024	Minor proposed layout changes	JM	MB

GENERAL REPORT LIMITATIONS

BEK Enviro Limited (BEK) has prepared this report for the sole use of the client, showing reasonable skill and care, for the intended purposes as stated in the agreement under which this work was completed. The report may not be relied upon by any other party without the express agreement of the client and BEK. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No responsibility can be accepted by BEK for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report are based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.

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Unless explicitly agreed otherwise, in writing, this report has been prepared under BEK's limited standard Terms and Conditions as included within our proposal to the Client.

The report needs to be considered in the light of the BEK proposal and associated limitations of scope. The report needs to be read in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the report.

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1. INTRODUCTION

1.1 Appointment

- 1.1.1 BEK Enviro (BEK) has been commissioned by CNG Fuels to prepare a Construction Environment Management Plan (CEMP) to the south of Watling Street, Hinckley (hereafter referred to as 'the site').

1.2 Proposed Development

- 1.2.1 This report has been prepared to support a planning application for the construction of a biomethane gas vehicle fuelling facility comprising 12 fuelling islands. Infrastructure including gas storage banks, compressors and backup generator are proposed to be located on the eastern boundary. The site will be predominantly hard surfaced, however, landscaping will be added on raised islands between the site and the A5 and on the northern boundary.

- 1.2.2 More specifically, this report has been prepared to satisfy HBBC Pollution Control's request for a Construction Environmental Management Plan to be submitted for agreement prior to commencement via the following proposed planning condition the site:

- 'a) Prior to commencement of development a Construction Environmental Management Plan shall be submitted to and agreed in writing by the LPA. The plan shall detail how, during the site preparation and construction phase of the development, the impact on existing and proposed residential premises and the environment shall be prevented or mitigated from dust, odour, noise, smoke, light and land contamination. The plan shall detail how such controls will be monitored. The plan will provide a procedure for the investigation of complaints.*
- b) The agreed details shall be implemented throughout the course of the development. Site preparation and construction shall be limited to the following hours; Monday - Friday 07:30 - 18:00, Saturday 08:00 - 13:00. No working on Sundays and Bank Holidays.'*

- 1.2.3 The site is located on the A5 approximately 2.6 km south-west of Hinckley and 760 m south-west of the A5/A47 junction. The site currently forms part of a wider greenfield plot currently comprising flat grassland that is understood to be used for grazing. The site will be accessed from Watling Street (A5) immediately north of the site.

1.2.4 The following reports have been prepared to support the planning application for the site:

- Delta Simons - Ecological Impact Assessment – CNG Watling Street, Hinckley – Ref: 22-1826.01/87785.545091, dated June 2023
- Redmore Environmental - Air Quality Assessment – Watling Street, Hinckley – Ref: 6333r1, dated 4th May 2023
- Environmental Equipment Corporation Ltd - Noise Impact Assessment – CNG Hinckley – Ref: EEC/EC19348-4, dated 10 May 2023
- BEK - Site Investigation & Ground Assessment - Land South of Watling Street, Hinckley – Ref: BEK-23005-1 (Rev C), February 2023

1.2.5 These reports should be read in conjunction with this report.

1.3 Objective and Scope of Work

1.3.1 The objective and scope of the CEMP has been based on the information required by the local authority planning department, the various reports and assessment carried out for the site and our experience.

1.3.2 The CEMP will cover both the construction phase of the development and will set out the intended methods of effectively managing potential environmental impacts arising from the development of the site.

1.3.3 The main aims of the report will be to:

- Minimise the impact of the development on neighbouring residents
- Avoid or manage the risk of pollution
- Provide details of the dust, odour, noise, smoke, light and land contamination mitigation measures to be implemented at the site
- Outline the working hours which site must adhere to during the construction phase of the development

1.4 Limitations

1.4.1 The conclusions and recommendations presented in this report are the result of our professional interpretation of the information currently available. BEK reserves the right to amend the conclusions and recommendations if further information becomes available.

2. SITE DETAILS & CONTACTS

2.1 Site Location

2.1.1 The site is located on the A5 approximately 2.6 km south-west of Hinckley and 760 m south-west of the A5/A47 junction. The site currently forms part of a wider greenfield plot currently comprising flat grassland that is understood to be used for grazing. The site will be accessed from Watling Street (A5) immediately north of the site.

2.1.2 The National Grid Reference for the centre of the site is 440080, 292977. The site location is shown on Figure 1 below:

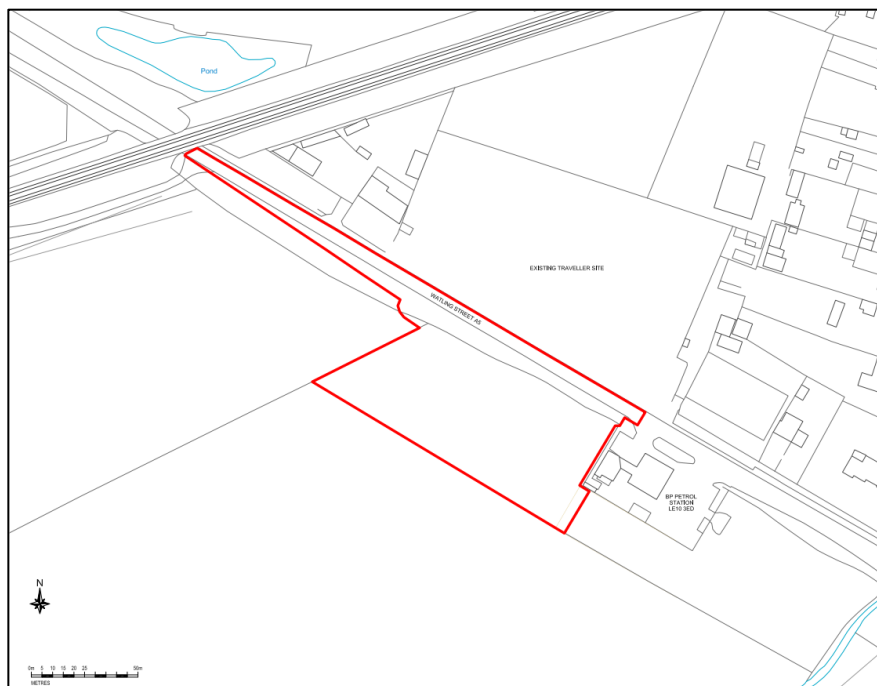


Figure 1: Site Location (Red) and Surrounding Area

2.2 Roles and Responsibilities

2.2.1 This section describes the environmental roles and responsibilities of key members of the project team and provides contact details for the relevant personnel. The Developer (CNG Fuels Limited) shall assign individuals to each of the roles and responsibilities outlined below:

Construction Director

- Take responsibility for the overall environmental management process and champion all areas of environmental management.
- Ensure that appropriate resources are in place to effectively implement the CEMP and deliver all legal requirements.

Site Manager

- Ensure that appropriate resources are in place to effectively implement the CEMP and ensure that all legal requirements are identified and met.
- Develop and review the CEMP throughout the construction process to ensure it remains relevant and effective in identifying and managing environmental risks.
- Monitor construction activities and performance to ensure compliance with the CEMP and that hazards are identified and appropriate control measures are being effective
- Ensure delivery of environmental training to personnel within the project team
- Act as a main point of contact between the regulatory authorities and the project on environmental issues.
- Ensure the accurate reporting of resource usage e.g. energy and water.
- Manage investigation and resolution of complaints in accordance with the Complaints Handling Protocol.
- Ensure correct procedures are followed in case of an environmental incident.

Construction Supervisor

- Ensure compliance with the CEMP and associated documents on a day to day basis.
- Remain vigilant to spills and fully investigate and act on any environmental incidents and report findings to the Site Manager
- Conduct and document weekly environmental inspection and auditing.
- Maintain full records of the progress of environmental works
- Ensure that environmentally orientated briefings and “Toolbox Talks” are being delivered to the site workforce on a minimum fortnightly basis.
- Implement and maintain environmental controls on site including an auditable environment record filing system

Site Staff & Sub-Contractors

- Comply with direction given in the Site Induction and proactively approach environmental issues whilst on site.

- Be fully aware of the environmental procedures in place and if they have any questions they should be directed towards the Site Manager or Construction Supervisor
- Ensure all construction activities are carried out in line with procedures detailed in the CEMP.
- Report any environmental incident to the Site Manager
- Be fully aware of the environmental procedures in place and if they have any questions they should be directed towards the Site Manager or Construction Supervisor

Role	Name	Address	Contact Details
Contracts Manager	TBC	TBC	TBC
Site Manager	TBC	TBC	TBC
Community Liaison Manager	TBC	TBC	TBC

Table 1: Roles & Responsibilities

3. ECOLOGICAL RECEPTORS

3.0.1 The following section outlines the potential ecological and environmental receptors at the site which are considered within this Construction & Environmental Management Plan.

3.0.2 Delta-Simons produced an 'Ecological Impact Assessment – CNG Watling Street, Hinckley' (Ref: 22-1826.01/87785.545091, dated June 2023) as part of the planning application to determine the ecological baseline. This should be read in conjunction with this report.

3.1 Designated Sites & SSSI Impact Risk Zones

3.1.1 The results of the MAGIC data search and the LRERC and WBRC desk search indicate:

- No internationally designated statutory sites within 6 km of the site;
- No nationally designated statutory sites within 2 km of the site;
- No county designated statutory sites within 2 km of the site; and
- Twenty-nine non-statutory designated sites within 2 km of the site centre. These sites include 25 Local Wildlife Sites and four historic sites. Many are separated from the Site by the A5, Ashby Canal and existing urban development, or are designated trees such that they are not considered pertinent to this assessment. The closest LWS is Dismantled Railway LWS approximately 10 m west of the site.

3.1.2 The site falls within several SSSI Impact Risk Zones (IRZ) that require the Local Planning Authority (LPA) to consult with Natural England and assess planning applications for likely impacts on SSSIs for certain development types. The closest SSSI is Burbage Wood and Aston Firs SSSI 4 km to the north-east. However, the criteria listed under the IRZs are not relevant to the Proposed Development and as such are not considered further within this report.

3.2 Habitats

3.2.1 Habitats at the site are considered to be of no more than local value.

Poor Semi-Improved Grassland

3.2.2 The majority of the site comprises poor semi-improved grassland. Species observed include perennial ryegrass *Lolium perenne*, dandelion *Taraxacum* agg., white clover *Trifolium repens*, common nettle *Urtica dioica*, buttercup sp., thistle sp. and broad-leaved dock *Rumex obtusifolius*. Further grassland extends along the roadside verge which was dominated by perennial ryegrass and occasional dandelion, with frequent ruderals including nettle *Urtica dioica*.

Tall Ruderals

- 3.2.3 In the north-east of the site, a gap in the boundary hedgerow had become colonised by ruderal vegetation, dominated by nettles, with frequent bramble *Rubus fruticosus* agg. encroaching.

Intact Species-Poor Hedgerow

- 3.2.4 A wide hedgerow bordered the field to the north-east, whilst a field boundary hedgerow characterised the north-western site boundary. The hedgerows were species-poor, dominated by hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa*, and had not been recently managed. Neither hedgerow contained sufficient woody species or other features to be deemed 'Important' according to the Hedgerow Regulations, however, they do qualify as HPI's.

Line of Trees

- 3.2.5 A line of Leyland cypress *Cupressus × leylandii* trees characterised the south-western corner of the site. These were approximately 16 m in height and formed part of a longer tree line extending to the south.

Developed land: Sealed Surface

- 3.2.6 A section of the A5 is included within the site boundary.

3.3 Species

Amphibians

- 3.3.1 The data search did not reveal any records of amphibians pertinent to the site, or with connectivity to it. One EPS licence for GCN was identified from MAGIC approximately 1.3 km north-west from the Site in 2017. A review of aerial photographs and OS maps revealed one pond within 500 m of the site, located approximately 150 m on the opposite side of the A5 to the main area of the site. The main area of the site lacked suitable terrestrial habitats to support amphibians. Whilst the roadside verge on the southern aspect of the A5 offers limited terrestrial habitat it is isolated from the pond by the busy road. Furthermore, the pond is surrounded by optimal terrestrial habitat such that dispersal of amphibians away from the immediate area is considered unlikely. Amphibians are not considered to be a constraint at this site and are not considered further within this Report.

Reptiles

- 3.3.2 There were four records of grass snake *Natrix helvetica* found within 2 km of the site centre within the last 10 years, however, all are over 1 km from the site and have no connectivity to it.
- 3.3.3 The Site lacked suitable structural habitat and connectivity to other suitable habitat such that reptiles are considered likely absent from the Site. Reptiles are not considered to be a constraint at this Site and are not considered further in this Report.

Birds

- 3.3.4 There were no records of notable birds of relevance to the Site returned by the records centre within 2 km of the Site centre and within the last 10 years. Habitats featured on the Site suitable for nesting birds, include: the line of coniferous trees at the south-east boundary and the hedgerows on and immediately adjacent to the site. Bird species recorded at the time of the survey included: wood pigeon *Columba palumbus* (listed on the Amber List of Birds of Conservation Concern (BoCC) Stanbury et al. 2021), robin *Erithacus rubecula* and great tit *Parus major*. It should be noted that this is not a comprehensive inventory of the bird species which may be present at the Site.
- 3.3.5 The geographic value of birds is considered to be local.

Bats

- 3.3.6 The data search identified numerous records of bats within 2 km of the site centre within the last 10 years. Many of which were recorded to be associated with Ashby Canal or an area of woodland more than 500 m from the Site.
- 3.3.7 No EPS licences for bats were identified from MAGIC within 2 km of the site. The habitats on Site offer suitable bat foraging habitat, particularly associated with the boundary trees and hedgerow. Current light levels are anticipated to be limited to spill from the adjacent road. None of the trees on Site were considered to support roosting potential. The geographic value of bats is considered to be local.

Badgers

- 3.3.8 The data search identified seven records of badger within 2 km of the site centre within the last 10 years, the location of which has not been included in this Report due to welfare issues, however, none are associated with the Site itself or the immediate surrounding area.

3.3.9 The site did not support any evidence to indicate that badgers were using or inhabiting it. There were no sett entrances, latrines, snuffle holes, or badger dung found on-Site. The grassland may offer limited opportunities for foraging, with connectivity to other suitable habitat in the local area.

3.3.10 The geographic value of badger is considered to be local

Other Protected or Otherwise Notable Species

3.3.11 The data search returned 34 records of west European hedgehogs *Erinaceus europaeus* within 2 km of the Site centre within the last 10 years. The closest and most recent record is 1.03 km north-west of the site. The hedgerows on and immediately adjacent to the site offer opportunities for hedgehogs, although habitat suitability and connectivity in the wider landscape is limited. The geographic value of hedgehog is considered to be local.

3.3.12 The site itself does not offer any opportunities for otter *Lutra lutra*, however, Sketchley Brook is situated approximately 130 m south-east of the site and may offer opportunities for this species. If present, there is a low risk of individuals venturing across the site. The geographic value of otter is considered to be local.

Invasive Non-Native Species

3.3.13 No invasive non-native species were recorded on-site, such that they are not considered further within this report.

4. TRAINING & COMMUNICATION

Training

- 4.1 All site personnel with environmental responsibilities shall be suitably trained and qualified. If additional specific training requirements are needed, it is the responsibility of the site management to ensure these needs are met at the earliest possible opportunity.
- 4.2 As a minimum, all staff would receive an environmental briefing as part of their site induction. The induction given to all site personnel shall include a general overview of site specific environmental issues, as well as details of how these issues shall be managed.
- 4.3 The toolbox talk should also detail key health and safety information on dealing with pollution incidents; the exact details of which will be determined by the site manager.
- 4.4 Supervisors will support information provided at induction through completing briefings and 'toolbox talks' prior to specific activities commencing. Additional environmental briefings shall be given to all site personnel at a period of no less than fortnightly.
- 4.5 Where possible, staff will car share when travelling to site to reduce the number of vehicle movements associated with the construction and minimise environmental impacts.

Communication & Consultation

- 4.6 Communication during the construction phase will be vital to co-ordinate activities on site, to inform the general public of the scale of works and to liaise with statutory bodies.
- 4.7 On-site communication will be conducted through two main practices: formal environmental meetings and informal communication. The former will be regular meetings chaired by the site manager and attended by all relevant personnel.
- 4.8 The purpose of these meetings will be to continuously review the environmental management plan and to co-ordinate any short-term activities which pose environmental risk. Minutes will be taken at each meeting and recurring issues will be brought up at each meeting.
- 4.9 Informal communication will occur daily and will inform all staff of recent issues and any environmental risks associated with ongoing construction works.

- 4.10 Public communication will serve to inform local residents and businesses of new or future operations which may have an effect on the public and their surroundings.
- 4.11 Proposals to mitigate any disruptive construction should be communicated effectively to the public in order to maintain good relations. It will be the responsibility of the site manager to communicate with the public through letter drops and community liaison meetings. Contact details of personnel carrying out the development will also be provided to the public should any issues arise.
- 4.12 Communication with statutory bodies will be required in order to achieve consent and/or licenses to carry out works. It will be the responsibility of CNG Fuels Limited and their appointed contractors to ensure that any licenses are in place prior to work commencing.

5. ENVIRONMENTAL MANAGEMENT PLAN & HEALTH AND SAFETY

5.1 Environmental Considerations and Potential Impacts

- 5.1.1 There are several potential environmental issues associated with the site preparation & construction works of the new development.
- 5.1.2 The National Planning Policy Framework (NPPF) requires a duty to ‘ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source.’ Furthermore, best practice pollution prevention measures are also provided which are in general accordance with EA guidance.
- 5.1.3 The following environmental issues have been identified through the assessment of the planning permission and BEK’s experience. They are cognoscente of the NPPF and are listed in the following table along with receptors sensitive to the issues and environmental considerations and impacts.
- 5.1.4 The principal receptors at the site include: the dismantled railway local wildlife site 10 m west of the site (potentially impacted upon by dust), construction workers, residents in surrounding properties and the general public.

Issue	Sources
Noise	Increased road noise levels from vehicles i.e HGV’s Increased noise levels from plant during demolition and construction Loud radios and offensive language
Vibration	Increased vibration levels from vehicles. Increased vibration levels from plant during piling and general construction works.
Air Quality	Exhaust emissions (such as NO ₂) from plant and equipment Exhaust emissions (such as NO ₂) from construction vehicle movements
Emissions to Air (Dust)	Wind Blown dust from site clearance/earthworks Dust derived from compressed mud deposited on the public highway by construction vehicles
Land Contamination (associated with use of fuels, oils, chemicals, concrete and cement)	Discovery of unexpected asbestos and contaminants Creation of preferential pathways and mobilisation of contamination Ground contamination as a result of Spillages Pollution to land, air water
Odour	Use of vehicles Use of plant (fixed and mobile) Use of volatile substances such as solvents and fuels Dust from dry conditions and stockpiled materials
Light	Temporary lighting
Security	Deliberate/Inadvertent Entry to the Site Theft/Vandalism

Table 2: Summary of Environmental Issues and Potential Impacts

5.2 General Mitigation Measures – Construction Phase

5.2.1 In order to minimise the disturbance caused by the potential environmental issues highlighted in Table 2, a list of general mitigations for each issue have been put forward for use.

5.2.3 However, it should be noted that the further site specific assessment for each of the environmental issues identified will be undertaken to ensure that the potential risks are fully understood and appropriate mitigation measures employed.

5.3 Noise and Vibration

5.3.1 A review of the Environmental Equipment Corporation Ltd Noise Impact Assessment indicates that it is considered that noise does not pose a material constraint to planning permission for the development of the site being granted. Notwithstanding, the following list of mitigations should be used to control, mitigate and remove excessive noise during the construction phase of the site:

- Any compressors or pneumatic tools brought onsite should be silenced with mufflers or sound reduced models fitted with acoustic enclosures.
- Deliveries should be programmed to arrive during daytime hours only.
- Care will be taken when unloading vehicles to minimise noise and delivery vehicles will be prohibited from waiting within the site with their engines running
- All machinery shall be adequately maintained and operated according to manufacturer's instruction in such a manner as to avoid causing excessive noise.
- All machinery shall be sited so that the noise impact at nearby noise sensitive properties is minimised.
- Sound reducing barriers shall be erected as necessary to shield particularly noisy activities.
- Project working hours shall be limited to 07:30 to 18:00 Monday to Friday and 8.00 to 13.00 on Saturday; no workings on Sundays or Bank Holidays. Particularly noisy activities should be carried out during daylight hours.
- Should there be a requirement to monitor noise levels, particularly when changes in process' are required or in response to complaints, the monitoring shall be carried out in accordance with the guidance set out in Annex E of BS5228:2014 Part 1 and Part 2.

5.3.2 Vibration monitors will be held on site to carry out monitoring in the event of any complaints from nearby residents.

5.4 Air Quality

5.4.1 Under the Environmental Protection Act 1995 local authorities are required to review air quality in their areas. Where air quality objectives are not likely to be achieved, local authorities must designate air quality management area (AQMA).

5.4.2 Below is a list of mitigations that can be used to control, mitigate and remove excessive dust during the construction phase of the site:

- All vehicles and plant machinery must have engines turned off when they are not in use
- Catalytic Converters should be fitted on all traffic associated with the construction work
- Limiting the speed of site vehicles to 20 mph (not including dump trucks)
- Notify Project Manager if work activities are contributing to poor air quality

5.5 Waste, Recycling Arrangements, Storage of Materials & Plant

5.5.1 Waste generated by site activity will be segregated by type into separate skips in a secure dedicated area for recycling (where applicable). Skips will be provided for metal and wood to segregate materials at source. Skips and waste will be stored at least 10 metres from the site boundary.

5.5.2 The site manager will arrange appointment with a Waste Management Contractor, who will be responsible for the removal of all waste from the site. The waste management contractor will be authorised to handle and transport wastes.

5.5.3 Waste transfer notes will be completed by the site agent and kept on record.

5.5.4 Waste will be collected as and when required and any transport of wastes from site will be securely covered.

5.5.6 Any hazardous waste will be monitored and tracked to record compliance

5.5.7 All materials will be stored within the secure dedicated site compound. Any hazardous materials will be kept in locked steel containers. Flammable / explosive materials stored in locked cages away from buildings

5.5.8 All materials will be stored away from access routes & site boundary.

5.5.9 Any plant left on site overnight to be locked and immobilised in a designated area where spills are least likely to impact on any potential receptor

5.5.10 Prior to storage overnight and upon first use following overnight storage, all plant and equipment shall be checked daily to ensure they are free from fuel leaks.

5.6 Dust & Odours

5.6.1 The Redmore Environmental Air Quality Assessment provided a list of site specific dust mitigation measures for incorporation into a site CEMP.

Issue	Control Measure
Communications	• Develop and implement a stakeholder communications plan that includes community engagement before work commences on site • Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager • Display the head or regional office contact information • Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the LA
Site Management	• Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken • Make the complaints log available to the LA upon request • Record any exceptional incidents that cause dust and/or air emissions, either on- or off- site, and the action taken to resolve the situation in the log book
Monitoring	• Undertake daily on-site and off-site inspection to monitor dust, record inspection results, and make the log available to the LA upon request • Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the LA upon request • Increase the frequency of site inspections when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions
Site Preparation	• Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible • Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site • Fully enclose site or specific operations where there is a high potential for dust production and they are active for an extensive period • Avoid site runoff of water or mud • Keep site fencing, barriers and scaffolding clean using wet methods

	• Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used • Cover, seed or fence stockpiles to prevent wind whipping
Operating vehicle/machinery and sustainable travel	• Ensure all vehicles switch off engines when stationary - no idling vehicles • Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable • Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials
Operations	• Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques • Ensure an adequate water supply on the site for effective dust suppression, using non-potable water where possible and appropriate • Use enclosed chutes and conveyors and covered skips • Minimise drop heights and use fine water sprays wherever appropriate • Ensure equipment is available to clean any dry spillages, and clean up spillages as soon as reasonably practicable using wet cleaning methods
Waste management	• Avoid bonfires and burning of waste materials
Earthworks	• Revegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as possible • Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover topsoil, as soon as practicable
Construction	• Avoid scabbling (roughening of concrete surfaces), if possible • Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out • Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos
Trackout	• Use water-assisted dust sweeper on access and local roads, if required • Avoid dry sweeping of large areas • Ensure vehicles entering and leaving site are covered to prevent escape of materials • Implement a wheel washing system, if required

Table 3: Summary of Dust Control Measures required on Site (extracted from the Redmore Environmental Air Quality Assessment Report)

5.7 Ground Contamination

- 5.7.1 The use of standard PPE will help prevent ground workers being affected by ground contamination. In addition standard health & safety precautions should be adopted (ie no eating, smoking on site).
- 5.7.2 Should visual or olfactory evidence of contamination be encountered in the ground then works should cease and specialist advice sought.

5.8 Fuel, Oil and chemicals (including herbicides and pesticides)

- 5.8.1 No fuels, oils or chemicals (including herbicide and pesticide) (FOCs) will be stored or used within 10 m of the site boundary. The main contractor will ensure that signage will be erected at the site to state that the storage or use of these substances are prohibited.
- 5.8.2 Any storage of oil or chemicals (where >200 litres is stored) will be in line with the following measures and compliant with the Control of Pollution (Oil Storage) (England) Regulations 2001:
- The site logbook will contain a list of all contaminants that will be used on site
 - All storage containers will be locked and secure
 - Storage will be on an impervious base within a secondary containment system such as a bund, or a drip tray as minimum. The base and bund walls will be impermeable to the material stored and able to contain at least 110% of the volume stored
 - The storage areas will be sited behind or at flood bund level and away from potential areas for water course contamination (such as within 10 m of a watercourse or 50 m of a well, borehole or spring), to minimise the risk of a spill entering the water environment
 - Spill kits with sand, earth or commercial products that are approved for stored materials, will be located at the site office, the refuelling area and adjacent to the works
 - Staff will be trained on the location and use of these kits
 - Inspection of fuel and chemical containers will be carried out regularly and removal of any damaged leaking or empty drums from site should be done immediately. Drums will be removed via a registered waste disposal contractor
 - All site staff will be trained in the location and use of spill equipment
- 5.8.3 To reduce the risk of fuel spillage and pollution, any refuelling of plant or vehicles will take place in a designated area, on an impermeable base away from drains or watercourses. Furthermore, the following measures will be adopted when refuelling:

- Use of a bunded bowser
- Supervision of all refuelling and bulk deliveries
- Inspection of the available capacity in the tank before refuelling
- Delivery valves will not be jammed open and should be protected from vandalism and unauthorised interference
- Hoses and valves will be inspected regularly for signs of wear and tear
- Valves will be turned after refuelling and locked when not in use
- Drip trays will be positioned under pumps to catch minor spills

5.8.4 Biodegradable chainsaw chain bar lubricant will be used in all chainsaws required on site for vegetation removal and biodegradable hydraulic oil used in all machine plant.

5.8.5 Any sealant, coatings, adhesives and glazings will be stored safely within a locked container. Any products used will be water based or low solvent products. Products containing lead as a drying agent will not be used.

5.9 Concrete & Cement

5.9.1 The release of concrete and cement can result in serious pollution to watercourses. Any mixing or washing areas will therefore be constructed and operated following the criteria below. All washing and mixing areas will:

- Be sited 10 m from the site boundary, any watercourse or surface water drain to minimise the risk of run off entering a watercourse
- Have settlement and re-circulation systems for water reuse, to minimise the risk of pollution and reduce water usage
- Have a contained area (lined skip) for washing out and cleaning of concrete ready mix lorries
- Collect all wash waters and, where necessary, discharge to the foul sewer (permission to will gained from the local sewerage undertaker for this), or contain wash water for authorised disposal off site

5.10 Security

5.10.1 The site and contents will be secured safely against theft and vandalism and will include:

- Fitting lockable valves and trigger guns on pipework from storage containers
- Installing anti siphon valves in pipework between containers and pumps
- Installing armoured hoses
- Storing tanks, drums and mobile bowzers in a locked container or compound when not in use
- Installing lockable fencing around the site

5.11 Site Parking, Loading of Plant and Delivery Arrangements

- 5.11.1 Contractors & Site Visitors will park on site adjacent to the compound.
- 5.11.2 All delivery companies will be informed of the delivery arrangements and will be required to contact site before delivering materials.
- 5.11.3 All materials will be unloaded strictly within the dedicated unload area – a variety of plant will be used for mechanical unloading, tele handler fork lift truck – site vehicle, mobile crane – for trussed and steels, HiAb crane for some blocks / bricks
- 5.11.4 There will be a vision splay on the entrance / exit and the site gates will be set back from the road allowing all vehicles to drive off Watling Street to reduce traffic obstructions (if possible).
- 5.11.5 Vehicles may only enter / leave site by driving forward – a vehicle turn around area will be established by the unload area. A banksman at the gates will control this.
- 5.11.6 There will be two way traffic on the haul road. All sub-contractors vehicles must use the haul road and site parking

5.12 Hours of Working

- 5.12.1 For safety, social and ecological reasons site preparation and construction shall be limited to the following hours; Monday - Friday 07:30 - 18:00, Saturday 08:00 - 13:00 with no working on Sundays and Bank Holidays.

5.13 Incident Procedure & Reporting

- 5.13.1 In the event of any incidents including spillages (oils and chemicals), contaminated run-off, flooding, riverbed disturbance, damage to underground services, damage to habitats or poor waste disposal and storage, the procedure will be as follows:
- Staff must contact and inform the site manager, and use the appropriate spill kit.
 - The site agent will be responsible for immediately contacting the Environment Agency on 0800 80 70 60 and recording the incident within the site log book.

5.14 Soil Resource Management

- 5.14.1 Given that the soils at the site are all considered suitable for use and that topsoil has been encountered across much of the site during previous site investigations carried out by BEK, it is not considered that topsoil will require importation to the development.

5.14.2 As such, BEK recommends that in the interest of sustainability soils are re-used at the site.

5.14.3 Movement of all soils should be carried out under appropriate exemptions or compliance with DoW:CoP.

5.15 Ecological Enhancements to Protect Ecological Receptors – Construction & Operational Phase

Habitats

5.15.1 The Development Proposals will result in the loss of the on-site grassland, however, this is considered to be of limited ecological value since it lacks floral diversity due to the grazing management regime. The proposed landscape scheme incorporates a flowering lawn mix which aims to promote floral diversity and provide ecological benefits whilst being appropriate to the location and use of the Site.

5.15.2 The proposed development will also result in the loss of conifer trees at the south-east corner. These are to be partially compensated by the inclusion of native trees in the west of the site.

5.15.3 In the absence of protection during construction there is the potential for negative effects upon any retained habitats (e.g. adjacent trees and hedgerows) due to physical harm from site clearance/construction works such as damage from machinery. For example, any construction works within proximity to the retained trees have the potential to cause damage to the structure, roots and health of the trees.

Construction Phase Mitigations - retained habitats must be adequately protected during the construction phase of works in accordance with BS 5837 (2012) and the Arboricultural report prepared for the Site.

Operational Phase Mitigation - an appropriate landscape management plan will be followed to promote the long-term biodiversity value of any retained habitats and those proposed habitats.

Birds

5.15.4 The construction phase will result in the loss of trees at the south-east of the site and hedgerow to the north-east to facilitate access/visibility splays. There is, therefore, potential for direct adverse effects on nesting birds that are permanent in nature as a result of such clearance.

- 5.15.5 In addition, construction works being carried out within proximity to nesting birds may affect them indirectly, depending on the works being carried out, and the species of bird affected. Noise and vibration disturbance effects may result in birds being repeatedly flushed off nests, causing disruption to feeding activity, or even abandonment of nests. This is considered to be a temporary impact.
- 5.15.6 Further to the potential direct effects on birds whilst they are actively nesting, the removal of suitable vegetation will result in the direct loss of available bird nesting habitat, as well as a loss of foraging opportunities. However, the proposed landscape scheme is considered to compensate and provide alternative provision for bird species at the site.

Construction Phase Mitigations - Where practicable, vegetation clearance at the site will be undertaken outside of the main nesting bird season (i.e. clearance carried out between September and February inclusive). Conflict with the development can be avoided by managing the land to discourage nesting birds up to the works commencing. If these works cannot be restricted to within this period, an Ecological Watching Brief will be maintained during the main bird breeding season to ensure that no nesting birds are adversely affected. This will entail checking all suitable habitat for nesting birds due to be removed, and a buffer of at least 10 m beyond that area, by a suitably qualified ecologist prior to the commencement of works. If, during the Ecological Watching Brief, birds are found to be within the area due to be cleared or the buffer zone, measures to prevent any disturbance to breeding birds, including the cessation of tree and vegetation clearance, or construction works in areas close to breeding sites until the birds have completed breeding, will be put in place until the chicks have fledged.

Operational Phase Mitigation - A LEMP will be in place in order to ensure newly planted habitats are managed to maximise foraging opportunities for birds, and to prevent destruction or damage to nests in-use.

Bats

- 5.15.7 The construction phase of works has the potential to result in temporary increased lighting and noise. However, it is anticipated that during the main active bat season (April-October, inclusive), construction works will generally cease or be winding down before dusk when bats emerge and will not begin before dawn when bats return to roosts. Therefore, generally artificial lighting will not be required, and as such there are not anticipated to be any negative effects upon bat populations. In certain circumstances, however, in late autumn or early spring when daylight hours are limited but weather conditions may be suitable for bats to be active, there may be a brief overlap between bat activity and on-site construction works. During this period, lighting may be required to enable the construction works to progress and this, along with any associated noise, may temporarily alter bats' foraging and commuting activity across an area of the Site.

5.15.8 However, the combined effects of lighting and noise from construction works during these occasional circumstances would only be a temporary deterrent to foraging and commuting bats in a concentrated area, and not across the wider site and this is not anticipated to have any adverse impact upon bats. Therefore, when also considering the overall suitability of the site, lighting and noise during the construction phase of the Proposed Development is considered to represent a negligible effect, which is of neutral significance.

5.15.9 The majority of boundary hedgerows are to be retained and protected or replaced and will continue to provide suitable foraging and commuting habitat across the site and into the wider landscape for bats. Furthermore, hedgerow planting on the western boundary is anticipated to create an additional potential corridor for foraging and commuting bats. The Proposed Development and associated lighting scheme will increase light levels on-site, however, this has been designed to minimise unnecessary light spill onto the vegetated boundaries as far as possible. Increased lighting and anthropogenic activity may deter bats from using both on-site habitat and those bounding the Site, however, given the extent of opportunities within the surrounding area and low quality habitats currently present on-Site, this is considered to have a minor adverse effect that is not significant.

Construction/Operational Phase Mitigations - Given the anticipated effects, no further mitigation measures are required.

Badgers, Hedgehog and Otter

5.15.10 Whilst no evidence of these species was recorded during the survey, individuals may disperse across the site from adjacent habitats and, therefore, there is the direct risk of harm during vegetation clearance and should they fall into pits or trenches left open overnight during the works. Should any become trapped they may be at greater risk of predation, starvation and susceptibility to extreme weather conditions. Clearance of the hedgerow has the potential to harm any hedgehog that may be present. In the absence of mitigation this could result in a minor adverse effect that is non-significant.

5.15.11 Increased vehicle use of the Site following the development may result in increased risk of road casualties for hedgehogs, should they access the Site, however, when considering the setting of the Site and surrounding land uses, this is considered to have a minor adverse effect that is non-significant.

Construction Phase Mitigations - During the construction phase of works, no open pits or trenches will be left uncovered or alternatively without a mammal escape ramp overnight, and pipework will be capped overnight to prevent mammals accessing them and becoming trapped.

Clearance of the hedgerow and shrubs should be undertaken with an awareness for the potential presence of hedgehog. Clearance should be undertaken during the active season (May-September, inclusive), and any individuals found moved carefully with gloved hands to an area of suitable habitat away from the working area. With mitigation in place any effect is considered to be neutral and, therefore, non-significant.

5.16 Consequences of Inadequate Environmental Management

5.16.1 Below is a brief list of consequences which can arise if best practice and general mitigations are not applied to each of the aforementioned environmental issues.

Environmental Issue	Consequences
Site Activities	Loss of hedgerows Loss of priority habitat Significant impact on local ecology
Noise and Odours	Disturbance of local residents Complaints from local residents Delays to site works Disturbance of wildlife particularly at breeding times
Dust, Air Quality and Land Contamination	Human health Risk (at high concentrations of pollutants) Compensation Claims Damage to water courses Damage to surrounding Flora and Fauna in areas surrounding site
Vibration	Structural Damage Claims in respect to repairs Delay or attenuation of works

Table 4: Summary of Consequence for Inadequate Environmental Management

5.17 Operational Control, Auditing and Corrective Actions

5.17.1 In order to avoid the possible consequences which arise from poor environmental management: operation controls, auditing and corrective action should play a key part in the Construction Environmental Management Plan.

Operational Control

5.17.2 All activities on site shall be reviewed against the requirements of the CEMP via an integrated risk assessment and method statement protocol.

5.17.3 Regular review of the environmental risks associated with the construction process and their respective control measures shall be carried out by all relevant construction teams by referring to on-site method statements.

5.17.4 Mitigation or protection measures that are agreed with statutory authorities shall be implemented prior to the undertaking of any potentially polluting activities and form a basis of 'toolbox talks'

5.17.5 All Method Statements shall be approved by the project manager/relevant specialist.

Checking and corrective action

5.17.6 Construction teams using a field inspection sheet shall carry out day to day monitoring of construction activities.

5.17.7 A further, weekly inspection shall be completed by an appointed site manager against an agreed set of standards.

5.17.8 All inspections will be collated into a monthly review of environmental performance by the project manager.

5.17.9 Regular audits shall be completed to ensure the project is compliant with the CEMP, contractual requirements and relevant legislation.

5.18 Health & Safety

5.18.1 All training of site construction workers should include a health and safety briefing to outline best practice with regards to wearing personal protective equipment (PPE) and how to minimise the risk of accidents.