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**DRAFT OUTLINE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN**

**WELLAND PEBBLE HALL FARM**

**REVISION: 02**

**ISSUED: APRIL 2014**

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## **1.0 INTRODUCTION**

This Construction Environmental Management Plan (CEMP) incorporates the Management Systems for the project works. It sets out the policies and environmental controls required to ensure that the environmental impacts are minimised. It highlights the key activity specific risks, detail control measures, and makes reference to all associated forms and registers where required. All items specifically required by the client in the CEMP are covered.

### **1.1 SCOPE**

The works comprise the construction of a Renewable Energy Generation Facility in addition to new landscaping works and associated infrastructure at Pebble Hall Farm, Theddingworth Road, Marston Trussell, Northamptonshire. Works are to include site clearance and excavation works.

Proposed Construction commencement date: TBC

Proposed Construction completion date: TBC

### **1.2 ISSUE AND REVISION**

An electronic version of this Plan, together with the Project Management Plan (PMP), will be issued and held by the Project Lead controller. This plan will be maintained and updated regularly by the Project Team with assistance from the HS&E Function. This will be in accordance with the implementation of the contract, or after any changes to regulations and / or corporate procedures.

This CEMP provides a framework to manage the environmental issues associated with the Project, to ensure compliance with relevant client Environmental Policy Statements, and contractual and legal obligations. It is a bespoke Plan designed to minimise our impact and ensure the best service through construction.

### **1.3 RESPONSIBILITIES**

The Project Lead approves and supports this CEMP as the principal document demonstrating a planned and systematic approach to implementing environmental policy through an effective environmental management system.

The project Lead is responsible for authorising and maintaining this document and ensuring it is implemented. The Project Manager is responsible in ensuring it complies with legal and contractual amendments and ensures that all project personnel are aware of the contents of this CEMP and understand their role in fulfilling the project's obligations. They are responsible for ensuring that the Client is informed of any amendments.

The Environmental Manager is responsible for ensuring it complies with all relevant environmental legal requirements and offering advice in best practice

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The Project Team will comply with the requirements of this plan.

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## 2.0 MANAGEMENT FRAMEWORK

### 2.1 EMPLOYER'S ENVIRONMENTAL POLICY

The project will comply with the BB CSUK Environment Policy and the Clients Environmental Policy. The project shall ensure that the policies and their requirements are made known to all relevant personnel. This will be undertaken through a number of methods including site inductions, method statements and risk assessment briefings and toolbox talks.

All subcontractors will be provided with a copy of the Environment Policy and HS&E Terms & Conditions for Sub Contractors that set out the minimum environmental requirements.

### 2.2 ENVIRONMENTAL RISK ASSESSMENT

An Environmental Risk Assessment identifying significant Aspects and Impacts identified for the construction phase will be produced and will form part of the project risk register. This will be developed at contract award.

The register shall be reviewed and revised on a monthly basis as or as required e.g. due to changes in the scope of work. Any new environmental aspects and their impacts will be updated accordingly.

The risk scoring system allows the impacts to be prioritised and the most significant identified. For each of the aspects the potential impact is scored for the situation where no mitigation measures are employed and again where mitigation measures are employed.

The register considers the likely environmental impacts from activities being carried out on the project with respect to:

|                   |                             |                     |              |
|-------------------|-----------------------------|---------------------|--------------|
| Air               | Flora – Trees and Hedgerows | Ground              | Material Use |
| Archaeology       | Energy Use                  | Indirect            | Waste        |
| Contaminated land | Finite Resource             | Noise and Vibration | Water        |
| Ecology - General | Fuel Storage                | Nuisance            | Wildlife     |

This considers those activities that are likely to arise because of both normal construction activities and emergency incidents or accidents.

### 2.3 LEGISLATION, REGULATION AND OTHER REQUIREMENTS

The Project will comply with all relevant legislation, regulations and client Standards and additionally, obtain and comply with all necessary consents to ensure legal construction works.

The Project Lead is responsible for ensuring that the project complies with all applicable environmental legislation, regulations and other requirements. The legislation register is maintained by the Environmental Function and is updated following any changes to applicable legislation. Any

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applicable changes will be evaluated and communicated to the relevant project personnel through Environmental Alerts, Newsletter, briefings or toolbox talks. The project specific procedures will also provide guidance to activity specific legislation.

Other requirements and regulations from Local Authorities, Highways Agencies or other Statutory Bodies will be reviewed by the Project and applied where applicable.

All work carried out on the project will be conducted with due cognisance of client Standards, obligations and best practice.

## 2.4 ENVIRONMENTAL OBJECTIVES AND TARGETS

Project specific Objectives and Targets will be formulated. These reflect the issues and requirements of the project, together with the client and our corporate Objectives and Targets. The Key Performance Indicators (KPIs) detailed in form the basis of these environmental and sustainability targets.

Objectives and Targets are communicated through a variety of media on a regular basis, this includes, though is not limited to, monthly Project Review Meetings, supply chain progress meetings and regular reporting.

## 2.5 TRAINING, AWARENESS AND COMPETENCE

All personnel, whose work may cause a significant impact on the environment, will receive environmental training. Environmental training includes, but is not limited to:

| Training  | Participants  |
|---|---|
| Environment & sustainability element of company induction                           | All new starters  |
| Environment & sustainability element of site induction                              | All those working on site   |
| Site Safety Plus - Site Environmental Awareness Training Scheme (Seats)             | Delegated Duty Holders (Site Based)   |
| Sustainable Timber and Chain of Custody   | Delegated Duty Holders (Site Based) and those responsible for timber purchase where necessary |
| Ecology And Biodiversity  | Delegated Duty Holders (Site Based)   |
| CIWM Waste Management Certificate   | Delegated Duty Holders (Site Based)   |
| Pollution Prevention And Emergency Spill Response                                   | Delegated Duty Holders (Site Based)   |
| Toolbox Talks on spillage, noise prevention, and other issues relevant to the works | Workforce   |

The HR department will document the training provided and will maintain records of the quantity and type of training received so that progress against training targets can be measured. Where

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relevant, the competency of the attendees will be assessed at the end of the training via an examination.

Where additional training or briefings such as Toolbox Talks are conducted by a third party labour force they will be responsible for supplying evidence in the form of copies of certification and/or signed attendance sheets.

**2.6 INTERNAL COMMUNICATION**

Communication of environmental issues within the Project will be maintained through combined monthly project review meetings, chaired by the Project Manager.

The environmental section of the agenda for the monthly meetings will primarily address the future month's activities and will review events and actions arising from the previous month's activities. Other items on the monthly agenda will include:

- Progress with consents
- Progress with Work Package Plans
- Public consultation
- Reporting of monitoring results
- Actions arising from site inspections, incidents, complaints and audits
- Planned work and risks associated with this

Newsletters, bulletins, posters etc will be produced and displayed throughout site offices on a regular basis to raise awareness of current issues both within the Project team and throughout the local community.

It is recognised that benefits can be gained from close co-operation with the client, and other contractors in achieving best practice. Access shall be given to the client Representatives for carrying out audits and/or site inspections to monitor compliance with this CEMP.

The Project Director/Manager and their team will ensure that meetings and discussions are carried out in a spirit of openness and co-operation to determine lessons learnt from any incident and, wherever practicable, to take action to mitigate similar risks.

**2.7 EXTERNAL COMMUNICATION**

The project team will agree with the Client a process for public consultation. The agreed process will be documented either in a Community Liaison Procedure or this CEMP.

The procedure is required to clearly demonstrate to the Client the manner in which impacted residents, landowners, schools etc. will be informed of the consequences of work activities and how the Project will mitigate any impact.

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The project consultation and liaison arrangements will be maintained throughout the Contract period and will include but not be limited to:

- Consultation with the relevant statutory bodies (e.g. Local Authority, Environment Agency, Natural England) in conjunction with the Client
- Presentations to residents' representatives and any other interested parties regarding the future programme of works, (if required)
- Advance notification to those most affected by particular environmental effects will be discussed with the Client whose responsibility it is for letter drops to the local community. All necessary programming information will be passed to the Client in sufficient time for advance notification to be effective.

Where disturbance to local residents or businesses is likely, the Project, in conjunction with the Client, will inform occupiers in advance of the work.

The strategy for external communication will be agreed between the Project team and the client communications team on an individual occurrence /site basis. Close liaison between the teams ensures effective communication and close out of issues.

Typical third parties include, but are not limited to:

- Local Authority; Environmental Health , Environment and Planning Department, Highways Engineer
- English Heritage - BB CSUK recognise the absence of archaeology on this project
- Environment Agency
- Internal Drainage Board
- Canal & River Trust
- Natural England
- Statutory Utilities – Gas, Electric, Water, Telecoms
- Third party Landowners/Neighbours

The Project team will, in partnership with the client, consult with third parties where it is considered the works will cause any impact or where access or storage may be required. In addition, third parties may be contacted in order to gain permission to carry out certain protected species surveys that may be required. These are likely to be immediate neighbours to the worksites.

## 2.8 RECORDS

This document is the principal operating document for environmental management of the Project. The CEMP defines policies and arrangements for the main environmental issues. The other documents: environmental procedures, schedules, work package plans and records will all be developed from the CEMP and together form the Environmental Management System for the Project.

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All documents related to the CEMP will be established and maintained in registers within the Project Management Plan (PMP) as part of the Project records.

This information shall be included in the PMP.

**2.9 MANAGEMENT REVIEW**

The Project Manager will undertake a review of the project and include the following for input into the annual management review:

- Results of internal audits and evaluations of compliance with legal and other requirements
- Communication(s) from external interested parties, including complaints
- The extent to which objectives and targets have been met
- KPI data
- Status of corrective actions
- Follow-up actions from previous management reviews
- Changing circumstances, including developments in legal and other requirements related to the environmental aspects
- Recommendations for improvement

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### 3.0 SITE SPECIFIC CONTROLS

#### 3.1 EMISSIONS, MONITORING AND MEASUREMENT

The project recognises that a distinction needs to be made between the different types of monitoring. For the purposes of this Project, a clear distinction has been made between active and reactive monitoring as follows:

| Active                                     | Reactive                             |
|--|--------------------------------------|
| Site Management                            | Incident reporting                   |
| Boundary and watercourse inspection        | Complaint recoding and investigation |
| HS&E Inspection                            | Dust                                 |
| Environmental Duty Holders Site Inspection | Noise and vibration monitoring       |
| Senior Managers Tours                      | Water sampling where necessary)      |
| Internal audits                            |                                      |

#### Emissions

The emissions that the project produces will form a significant proportion of the potential for environmental impact during the works. The following table describes the type and level of these emissions from the site. Monitoring regimes and control measures are also detailed.

| Emissions                | Potential Receptor | Monitoring and control measures  | Level of emissions |
|--------------------------|--------------------|--|--------------------|
| Oil / fuel               | Land & Water       | Monitor the amount coming onto site to ensure it is kept to a minimum. Materials to be stored in line with the oil storage regulations. See details below.   | Low                |
| Paints                   | Land & Water       | Water based paints to be used and when not in use stored in a locked container.  | Low                |
| Other chemicals          | Land & Water       | Control of Substances Hazardous to Health (COSHH) assessment to be undertaken for all chemicals and control measures applied. Specific monitoring regimes to be implemented as required                            | Low                |
| Silt run off             | Land, water borne  | Measures to be put in place to prevent run off into the watercourse; filtration trench and silt settlement tank / pond.<br><br>Daily monitoring of River Welland   | Medium             |
| Dust                     | Land, Water Air    | Tarmac / concrete haul roads to be put in place early and site strip to be kept to a minimum. Damping down to take place as appropriate. Stream to be protected against silting. Dust to be monitored as required. | Low                |
| Wheel born mud and soils | Roads              | Road condition to be monitored on ongoing basis by site management. Tarmac / concrete haul roads to be put in place early. Wheel wash to be used during earthworks.  | Medium             |

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|                     |              |  |     |
|---------------------|--------------|--|-----|
|                     |              | Road brush to be used as required.   |     |
| Concrete wash water | Land & Water | Designated area to be established for the washing out of concrete  | Low |
| Plant & vehicles    | Air          | Maintenance regime in place and monitored for all plant and vehicles. All to be turned off when not in use | Low |

### 3.2 VERMIN AND PEST CONTROL

Welfare facilities (canteens, mess rooms, drying rooms, locker rooms, toilets, showers etc) will be provided by the project. These will be cleaned daily and maintained in a good condition. It is expected that the users behave properly towards the facilities provided. Anyone found to be abusing welfare facilities will be dismissed from the site.

Toilets will be located around the site. Anyone found urinating or defecating elsewhere will be dismissed from the site immediately.

All food and drink is to be consumed within the mess rooms / canteens or else off the construction site. Consumption of food outside of welfare facilities encourages the spread of vermin causing further potential occupational health risks, e.g. leptospirosis (Weil's disease).

All food and drink will be disposed of in a lidded container and emptied on a weekly basis.

As the site is in a rural area it is not expected that there will be a rodent problem. However, this will be monitored as the works progress. If required, rodent control measures will be put in place.

### 3.3 PREVENTION, CONTAINMENT AND CLEANING UP SPILLAGES

#### Liquid storage

Best practicable means will be employed to prevent polluting materials from entering the hydrological systems. This will include specific measures to prevent silt from escaping from excavations.

The water course around the North and West perimeter of the site is very close to the works. Pollution of this watercourse is a risk and measures will be taken to ensure that this does not occur.

All oils and fuels will be stored in compliance with the Control of Pollution (Oil Storage) Regulations 2001.

- Fuel shall be stored in dedicated bunded, impervious storage areas, away from drains and watercourses.
- Drums over 200 litres shall be stored on drip trays capable of holding 25% of the drum's maximum capacity.
- Fuel tanks shall be stored within a bund capable of holding 110% of their capacity. All pipes and gauges shall be within the wall of the bund.

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- Bowsers shall be double skinned and shall be stored in a bund capable of holding 110% of the volume of the bowser.
- Small mobile plant shall be placed on drip trays.
- Spill kits will be available at various points around the site and located next to bowsers and drums.

Consideration will be given to any required surface coatings which contain bitumen or related materials as being delivered in a hot and ready to lay format. This will avoid the bituminous materials being heated on site.

**Silt and run off**

The River Welland will be monitored to check for any changes in water quality. If any significant changes are identified, the cause will be investigated and clean up measures will be implemented.

**Solids**

Spillages of dry and dusty materials will be avoided by good housekeeping methods including storing under cover and on hard standing. Skips will be covered where there is a risk of material becoming airborne.

Wheels of site vehicles will be cleaned before they leave site. This will be supplemented by a road brush to clean roads as required; this will prevent tracking of mud and debris onto surrounding routes

**Dealing with spills**

Spill kits will be available at various points around the site and located next to bowsers and drums.

Should a spill occur the following will be implemented:

- Work will be stopped immediately
- All possible ignitions will be extinguished if the spilt material is flammable
- The spill will be contained using spill kits on land and booms on the stream
- The source will be identified and sealed as practical
- Granules / pads to will be used to mop up as much spill as possible
- The project lead will be informed of the spill
- If the spill enters the stream the environment & sustainability manager must be contacted immediately who will contact the Environment Agency and British Waterways.
- Braemar Howell Spill Contractors will be contacted if the need arises or the spill breaches a watercourse
- The granular material and pads and any containment items will be treated as hazardous waste and disposed of accordingly

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An incident report form will be produced and sent to the HS&E department within 24 hours of the incident occurring. If the incident is significant a full investigation will be carried out by the HS&E Advisor and the Regional Environmental Advisor

A 24-hour spill response service will be provided by Braemar Howells.

08700 73 77 66 73 (24hrs)

**3.4 FIRE CONTROL****General**

The project will ensure that operations are carried out in compliance with the Regulatory Reform (Fire Safety) Order 2005 “Joint Code of Practice on the Protection from Fire on Construction Sites and Buildings Undergoing Renovation”.

A full fire management will be produced in conjunction with the nominated Responsible Person and relevant parties as appropriate. This will be based on the requirements set out in the “Code of Practice on Fire Prevention on Construction Sites”. This document will identify duty holders, defines responsibilities and establishes procedures on fire prevention.

There are basic rules that apply to all of our construction sites which aid in the prevention and control of fires

A Site Fire Safety Coordinator will be appointed to ensure adherence to the Site Fire Safety Plan. In addition, they will coordinate the issues below:

- General Housekeeping
- fire extinguishers fire detection and alarms
- Hot Work Permit regime
- Fire escapes and communications (evacuation plans and procedures for calling the fire brigade)
- Fire brigade access, facilities and coordination
- Fire drills and training
- Effective security measures to minimise the risk of arson
- materials storage and waste control regime

An initial fire risk assessment of each area will be undertaken and updated as the risks change. In addition, weekly inspections of all areas will be carried out and the findings recorded on a weekly inspection report.

All areas will be kept clean and tidy and stored materials will be properly coordinated and controlled.

**Waste Management and Storage of Materials**

|             |                                  |               |                        |                |
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During construction works the building will be kept free from the build up of combustible materials. Pedestrian routes through the building will be kept clear of stored materials. Offending contractors will be issued with Clean up and obstruction notices.

**Storage of Materials**

We will operate a 'just in time' delivery system with all deliveries needing to be booked in one week prior to the week of the delivery. These will insure that that there will be minimal storage within the building.

**Fire Station Points**

Fire Station Points will be located throughout the building at key strategic positions for example Stairwells, main corridors and open / communal areas

Each Fire Station will consist of

- Water extinguisher
- Powder extinguisher
- You Are Here plan
- Alarm sounder / Rotary bell

The Fire Station Points will be checked daily by appointed persons and weekly by the site fire safety coordinator.

Evacuation signage is installed and maintained by the Fire Wardens as the build process progresses

**Fire Drills & Training**

The evacuation sounders will be tested once a week. Periodic tool box talks will be issued to contractor's managers in order that their personnel are aware of the evacuation procedure. Signed acceptances of these briefings will be returned to the project.

**Risk of fire water run off**

In the case of a fire being attended by the Fire service, significant volumes of water, foam and burnt matter may be washed onto the ground. There is a risk that this may run off into drainage and the watercourse.

In this case, the site management will monitor fire water runoff and ensure that contaminants are prevented from entering water systems by use of booms, bunds and sluice gate.

**3.5 TREATMENT OF EFFLUENTS**

Any connections or discharges to drains and/or controlled waters will not be undertaken without approval and, where required, the necessary consent being issued.

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In order to protect drainage systems, they will be drawn up on the Site Plan showing the nature and course of the drainage on site. Surface water drainage will be marked BLUE and foul water drainage will be marked RED. Measures will also be taken to prevent silting of such waters and pollution spill kits made available on site in case of emergency or accidental spillage.

Discharges will only be made to drains and sewers with appropriate consents providers and regulators.

**3.6 NUISANCE TO NEIGHBOURS AND POLLUTION TO THE LOCAL ENVIRONMENT**

The site will be registered to the Considerate Constructor Scheme and managed in accordance with their guidelines

The Environmental Risk Assessment will highlight the potential environment impacts will be and how they will be effectively mitigated.

All complaints will be forwarded to the community liaison officer to address. Once these have been dealt will they will be recorded and the details passed onto the HSEQ team for record.

**3.7 TRAFFIC AND TRANSPORTATION**

Traffic both on and off site will be managed in order to minimise the impact to site operations and the local community. Full Traffic Management Plans will be developed in conjunction with the Client and the Council

On site, the following would be implemented:

- Switching off vehicle engines when not required
- Parking provided on site
- Use of a form of wheel washing processes as appropriate
- Preparation of access routes
- Preparation of hard-standing
- Scheduling of deliveries
- Site speed limits on access roads
- Removing mud from public roads carried on by construction vehicles; by use of road sweeper

Works should avoid tracking / spillage of mud; soil etc by construction vehicles onto public roads. Where this does occur, measures are to be taken to clear up excessive spillage/tracking.

The Site traffic plan will form part of the PMP.

**3.8 DUST, NOISE AND ODOURS**

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There is the potential for fugitive dust emissions to arise during the construction phase of the REGF development, and Welland Waste Management will develop a Construction Management Plan, with appropriate dust control procedures to ensure that construction dust does not pose a nuisance threat to nearby residential properties. This construction management plan will be agreed with Northamptonshire CC before the commencement of construction.

Construction dust may be generated as a consequence of ground excavation works in preparation of the foundations for the proposed REGF development, and if the weather is dry during the construction period, then dust may be generated by the movement of vehicles on the site, remediation works, site clearance, cut and fill operations and grading works.

The potential for unacceptable impacts resulting from the deposition of construction dust is primarily dependent on the duration of exposure (i.e. construction duration) and separation distance from the source to receptor. It is common practice (in mineral planning for example) to use a distance of between 100 to 200m from major sources as the radius within which there is the potential for significant air quality impacts from deposition of dust.

The nearest receptors where local residents may be exposed to emissions from the proposed development are 0.8km to the north-east of the site at Hothorpe Hall. Accordingly, if significant quantities of dust were to be generated as a result of on-site construction work, then deposition rates at Hothorpe Hall are likely to be low, and unlikely to constitute a reasonable cause for nuisance complaints. Irrespective of this, Welland Waste Management and its civils contractors will apply the principles of the industry best practice to ensure that the potential for fugitive dust emissions is minimised, and is not a cause for nuisance complaints from neighbouring properties.

To prevent unacceptable impact from dust re-suspended by construction vehicles, mitigation measures could be employed if necessary (on the road network, for example). These would be selected with regard to best practice guidance[2], and may include as appropriate: damping down dusty surfaces; controlling the speed of mobile plant crossing un-surfaced areas; mechanical road sweeper on public road; covering HGVs carrying dusty materials. The residual impact at the nearest residential properties is expected to be negligible. These procedures will be written into the construction management plan.

Should any activity associated with the construction phase of the REGF cause or appear likely to cause visible dust to be carried towards any sensitive boundary, particularly at nearby residential properties, the activity giving rise to the emissions will be modified or suspended until the conditions giving rise to the emissions have been resolved. Similar procedures already apply to windblown litter that may arise on site. These practices are already undertaken at the site and there have been no dust complaints from existing operations.

The following specific mitigation measures may be appropriate for the control of fugitive dust emissions during the construction of the REGF:

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- In order to prevent dust nuisance to adjoining premises during dry weather, there should be adequate screening and damping down during all restoration works, clearance works and other site preparations;
- Haulage routes to and from the development site should be watered as necessary to minimise dust nuisance, and should be stabilised/compacted to reduce off-site transfer of soil and other materials;
- Paved roads near to exits should be kept clean and vehicles transporting dusty materials onto and off site should be covered;
- All vehicles leaving the site should be inspected and cleaned as necessary, and suitable wheel wash equipment should be provided at site entrances and exits;
- Storage locations for potentially dusty materials must be located away from the site boundary;
- As far as possible, site vehicles should have vertically mounted exhausts to avoid re-entrainment of surface dust;
- All site traffic should keep to designated haul routes to reduce the break down and subsequent entrainment of fine material into the atmosphere.

Accordingly, fugitive dust emissions during the construction phase of the REGF are expected to be minimal.

Where works are likely to cause noise and vibration nuisance, the site will consult with the local authority and where submit a Section 61 application to the Client under the Control of Pollution Act 1974, however given the location of the site this is deemed to be unlikely to be needed.

### **3.9 AIR POLLUTION**

Air pollution, arising from odour, fumes and smoke, may arise from the following activities:

- Use of heavy plant and machinery
- Road vehicles, particularly HGVs

Pollution to air will be managed in order to reduce impacts to a minimum, and to eliminate where practicable. Management will be achieved through:

- No fires permitted on site
- All fuels, oils and other Volatile Organic Compounds (VOC's) will be stored in secure, sealed, labelled containers
- Consideration will be made to using prefabricated materials where possible so that localised air pollution is minimised
- Vehicles and plant will be switched off when not in use
- Ensure vehicles and plant are not over loaded to prevent labouring
- Modern, well-maintained plant and equipment is used
- Mains electricity supply will be used in preference to generators where practicable

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All work will be carried out in accordance with relevant Legislation and statutorily issued guidance.

**3.10 ARCHAEOLOGY AND BUILT HERITAGE**

The Environmental Statement makes no reference to any known Archaeology. However if in the unlikely event that any archaeological remains are found during the course of the works, the Project Lead shall cease works and contact the County Local Archaeologist as soon as practicable to ascertain how work will continue.

**3.11 ECOLOGY**

No known protected species, sites or invasive or injurious species have been identified as being affected by the works. However the watercourse is an established habitat which will be investigated further.

There are no Tree Protection Orders on site. However, there are hedgerows which are cited for removal. In line with Hedgerow Regulations 1997, the hedgerow must be surveyed to determine that it is a hedge which is not classed as "important".

Only when the Council have confirmed that this is not classed as an "important" hedge will it hedge be removed. Hedgerow removal will take place outside of the nesting season in order to prevent disturbance to nesting birds. If it is required to be removed during the nesting season then an ecologist will be engaged under a watching brief to ensure that the hedgerow is clear for removal.

Any disturbance or unexpected discovery of protected or invasive species will be reported in line with the Emergency Response Plan and in compliance with the Client procedures. In all cases, works must stop until guidance is given by the HS&E department.

There are no national designated conservation sites within 2km of the Site. The closest site is Coombe Hill Hollow which is 2km from the Site. The construction site is sufficiently remote from the Coombe Hill Site therefore construction works will have no impact on this area.

We recognise the presence of Damside Spinney, Gravel Pit Spinney and Long Spinney (amongst others) and note as above that the location of the construction site in relation to these areas which mean that there will be no construction impact on the trees.

**3.12 LANDSCAPE AND VISUAL**

The Project will take measures to control the visual impact of the works, where reasonably practicable. However given the remote location of the site there will be little impact on landscape and visual during the construction works.

Where lighting is needed overnight for security purposes, this will be low level lighting, directed away from sensitive areas such as the River, where directed light could impact on any bat flight paths.

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Standard temporary boundary fences will be used instead of Heras fencing. These reduce visual intrusion, assist in noise attenuation and ensure public safety (including uninvited intruder entrance to the site). Site information and contact details will be displayed in compliance with the Clients requirements, any damage or graffiti will be rectified as soon as reasonably practicable. The boundary fence will be maintained to an acceptable standard.

Temporary accommodation facilities will be white. However these will be reviewed with the Client and could be changed if required.

Where reasonably practicable, new permanent structures will be positioned to reduce the impact to the local areas, or will be finished in a manner in keeping with the surrounding area.

The Project will endeavour to prevent significant environmental impacts beyond the boundaries of the work sites.

All reasonably practicable measures to control the visual impact of the works and to preserve and reinstate any damage to landscape will be taken, including:

- Considerate positioning of new structures
- Selection of most appropriate materials and sympathetic construction practices
- Avoidance of unnecessary tree and vegetation removal
- Additional planting and landscaping
- Good housekeeping arrangements, keeping all sites in a tidy manner and prevent release of litter and mud accumulation on public roads
- Use of hoardings or seeded bunding where appropriate
- Restrictions on lighting to prevent intrusion
- On site temporary parking

On completion, all construction materials will be removed and the sites left in a tidy manner, to the satisfaction of the Client

**3.13 FLOOD RISK AND DRAINAGE**

The Environment Agency's flood plain map is shown below. It shows that the majority of the site falls within Flood Zone 1 which are described as having a 'low' probability of flooding as defined in Table 1 in the NPPF technical guidance. However, the primary access serving the site crosses the River Welland via a bridge which falls within Zone 3. The area of the Zone 3 is narrow, reflecting the gradient of the land either side of the River and only covers a very small section of the access road.

At present the majority of the site drains to a water recycling pond with only one existing building known to drain to the River Welland. The proposed development will result in a significant increase in impermeable area draining to the River Welland. This will need to be drained and the surface water managed to ensure that the increased rate of run-off does not increase the risk of flooding to the development or adjacent properties.

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During construction works however, there are anticipated to be no impacts and therefore no mitigation measures are necessary.

**3.14 WASTE**

The project will nominate a suitably qualified project team member to hold the delegated duty of Waste Manager. They will ensure that waste registers are kept up to date and ensure including any changes to methods of handling wastes and amendments to destination recycling or landfill sites are legal and audited. Copies of waste transfer notes shall be collated for the duration of the works and shall be stored within the Site Waste Management Plan, at a suitable location, for the statutory required period.

All waste will be handled and disposed of in line with current "Duty of Care" Regulations. It is the responsibility of all persons on site to dispose of waste in the correct receptacles and to report any waste being stored incorrectly or escaping from the site area.

Whilst the Site Waste Management Plan Regulations have been repealed it is company policy that all of our projects produce a Waste Management Plan which will describe how waste shall be managed on site and identifies:

- The wastes, and their category, that will be generated by the project
- Opportunities for reuse and / or recycling
- Proposed methods of storage, segregation, handling and transportation of waste
- Means of disposal including licensing requirements of carriers and destination sites
- Recording of all waste movements from the site
- Reporting and monitoring process

Opportunities to minimise waste through the design process (where applicable) will be considered and actions taken where identified and cost effective.

**Waste Minimisation**

It is the Project's policy to minimise the amount of waste generated and sent to landfill.

Waste elimination (through design) and minimisation shall be an integral part of the process. All waste streams by EWC will be assessed against the waste hierarchy to determine the most effective waste management option.