Construction Environmental Management Plan (CEMP)

May 2025

Project Title:	**Focal Point**
Application No:	**DC/22/0518 (as amended by DC/24/1989 s73)**
Location of Development:	**Land Parcel at 507911 125837** **Newbridge Road, Billingshurst, West Sussex**
Project description:	Construction of a New Industrial Development comprising 9nr New Industrial Units in 2nr Separate Blocks including Offices at First Floor, associated External Works and Services Works: total 53,043sq ft GEA; all works to be completed in one Sectional Completion Phases.

Document Control

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1. INTRODUCTION & PURPOSE

This Construction Environmental Management Plan (CEMP) has been produced principally to satisfy the requirements of Condition 3 attached to Planning Decision Notice Ref: DC/22/0518, whereby: -

No development (including any ground clearance or site levelling) shall commence until a Construction Environment Management Plan (CEMP) has been submitted to, and approved in writing by, the Local Planning Authority. The approved CEMP shall be a single document covering the development of this part of the site and shall be strictly adhered to throughout the construction period. The CEMP shall provide for, but not be limited to:

i. An introduction consisting of construction phase environmental management plan, definitions and abbreviations and project description and location.

ii. A description of management responsibilities.

iii. A description of the construction programme which identifies activities likely to cause high levels of noise or dust.

iv. Site working hours and a named person for residents to contact.

v. Detailed Site logistics arrangements.

vi. Details regarding parking, deliveries, and storage.

vii. The anticipated number, frequency and types of vehicles used during construction.

viii. Details of construction traffic routing, including site access.

ix. Details of any construction-related floodlighting, including location, height, type, timing and direction of light sources and intensity of illumination.

x. Details regarding dust and noise (including vibration) mitigation measures to be deployed including identification of sensitive receptors and ongoing monitoring.

xi. Details of the hours of works and other measures to mitigate the impact of construction on the amenity of the area and safety of the highway network.

xii. Communication procedures with the local community regarding key construction issues - newsletters, fliers etc.

xiii. Locations and details of the erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate.

xiv. The provision of wheel washing facilities and other works required to mitigate the impact of construction upon the public highway (including the provision of temporary Traffic Regulation Orders).

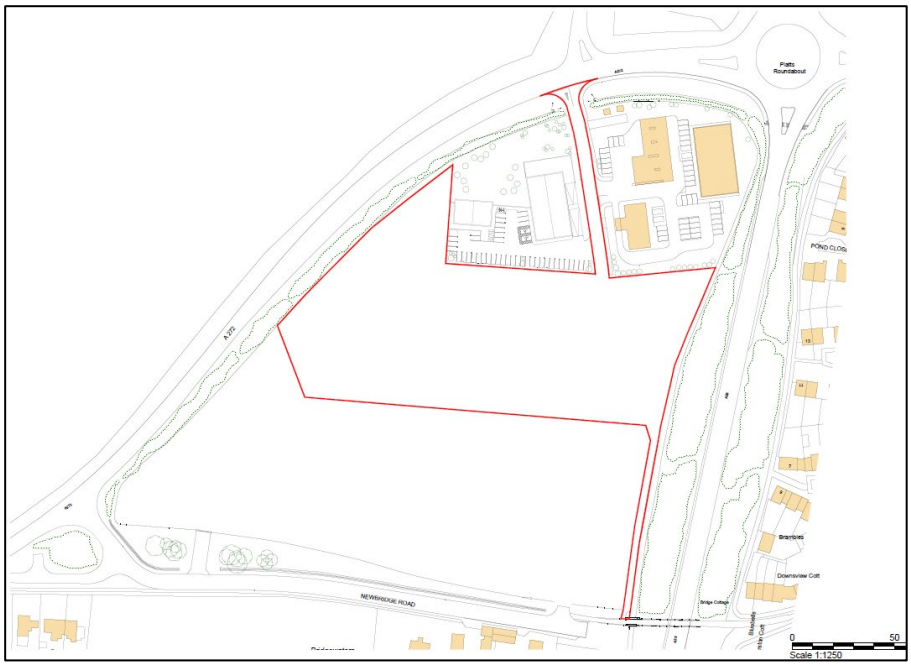
xv. Details of a scheme for the recycling/disposing of waste resulting from site clearance and construction works.

Reason: As this matter is fundamental in the interests of good site management, highway safety, and to protect the amenities of adjacent businesses and residents during construction works to accord with Policies 33 & 40 of the Horsham District Planning Framework (2015).

1.1. Brief Project Outline

1.1.1. The Proposed Development is located at:

Land Parcel at 507911 125837 Newbridge Road, Billingshurst, West Sussex





1.1.2. Construction of a New Industrial Development comprising 9nr New Industrial Units in 2nr Separate Blocks including Offices at First Floor, associated External Works and Services Works: total 53,043sq ft GEA; all works to be completed in one Sectional Completion Phases.

1.1.3. The Proposed Development requires the use of chemicals, equipment, tools, and concrete / hardstanding and requires washing down of tools, equipment and work surfaces that might contain contaminants. Suitable mitigation and protection measures will be implemented to ensure no impacts are associated with these tasks for construction.

1.2. Purpose of this Construction Environmental Management Plan (CEMP)

1.2.1. This CEMP considers the environmental management measures that will be implemented during the construction of the proposed development, as identified within technical assessments, this includes site mobilisation and pre-construction phases and demobilisation works.

1.2.2. The various components of the proposed development considered within this CEMP comprise:

- The installation of appropriate construction site fencing and/or hoarding prior to the commencement of any construction works.
- Ensuring that all pre-construction ecological and botanical surveys are undertaken as outlined within the ecological assessments.
- All activities which comprise the construction of the scheme, including.
    - Earthworks operations including topsoil removal, cut and fill operations and capping to the building, parking and roadway areas.
    - Installation of new surface water attenuation and drainage infrastructure.
    - Installation of foul water drainage infrastructure.
    - Installation of rainwater harvesting equipment, tanks and infrastructure.
    - Construction of foundations, structural steel, roofing and cladding, concrete internal floors and subsequent fitout.
    - Mechanical, electrical and plumbing equipment and installations.
    - Hard surface and landscaping to external areas including fencing and fixtures.
    - Required Arboricultural works including the protection and retention of existing trees, and planting of new replacement trees.
    - Proposed ecological and habitat protection measures during construction.
    - Management of any surplus materials from the site.

1.2.3. A Construction Management Plan will be prepared in accordance with CDM Regulations for the works and will clarify the traffic management and site welfare and logistics management and controls.

1.2.4. The purpose of this CEMP is to outline the approach to environmental management throughout the construction phase with the primary aim of reducing any adverse impacts on local sensitive receptors. This CEMP provides a basis from which the detailed and final CEMP will be developed by the Contractor – ownership and responsibility for the maintenance of this CEMP will fall to the appointed Principal Contractor.

1.2.5. The CEMP provides the framework for which commitments made in the environmental appraisal and supporting technical assessments and/or any planning obligations can be realised. It will also set environmental targets and reasonable standards against which the Contractor's performance in this regard can be measured during construction. KPIs will be carried out during the construction phase to measure performance.

1.2.6. Client targets will be –

The Contractor is required to maintain and apply an environmental policy or strategy. Where appropriate, we recommend that Contractors operate an environmental management system certified to ISO 14001 or similar widely recognised independently certified management system.

If requested by the Client, the Contractor is required to allow the Client or their nominated representative to carry out an environmental audit of their site operations to determine that it complies with the requirements below.

The aim is to minimise any adverse impacts that the works have on the environment. This shall be achieved through the design process, materials selection, construction techniques, and operational methods. The Contractor shall work in accordance with these principles.

The Contractor and his supply chain shall carry out and complete the works in compliance with the Employer's objectives for reducing, reusing and recovering waste materials. The waste objective is to reduce waste and use materials efficiently and specifically to support the Client's corporate objective to send zero waste to landfill by 2012.

For this project it is a requirement to achieve a waste recovery (diversion from landfill) target of 90% by weight for construction and fit out, and/or of 97% for demolition materials [delete as applicable]. Waste generated by the project will be diverted from landfill and either:

- Reused on site (in-situ or for new applications).
- Reused on other sites.
- Salvaged/reclaimed for reuse.
- Returned to the supplier via a 'take-back' scheme.
- Recovered from site by an approved waste management contractor and recycled.

A draft SWMP will be prepared during the mobilisation period and will be maintained on site from the first day of site possession by the Principal Contractor in accordance with the SWMP Regulations.

All plasterboard waste will be kept separate from other wastes and will be collected in dedicated wheelie bins in accordance with Environment Agency regulations. The waste is to be returned to the board provider through a take back scheme.

Water use is to be monitored monthly by the Contractor and reported. The Contractor will take reasonable measures to reduce water use.

The Contractor will monitor the use of energy on site (electricity and diesel use) monthly and report. The Contractor will take reasonable measures to reduce energy use.

All timber installed permanently in the project will be from certified sustainable sources. The following verification schemes are acceptable:

- FSC – Forestry Stewardship Council.
- PEFC - Programme for the Endorsement of Forest Certification schemes.

The Contractor will maintain a summary of the type and volume of timbers delivered to site and details of the certification scheme the timber is accredited to. The Contractor will keep copies of evidence that the supplied timber is from sustainable sources (e.g. invoices, chain of custody notes)

It is required that all insulating materials used are zero ozone depletion type. Insulating materials with a global warming potential (GWP) of less than 5 are encouraged.

The Contractor will keep the site in a reasonable state of tidiness. The Contractor will clean and tidy any aspects of the site as requested by the Project Manager.

Materials will be stored to avoid damage. Fuels and chemicals will be stored on drip trays. Where large number of small containers of solvents, liquid adhesives, paints etc. are stored together, they will be stored on a drip tray with a capacity of 25% of their total volume. Single containers in excess of 200 litres will be stored in bunds with a capacity of 110% of the volume. All petrol and diesel fuelled plant will be fitted with integral bunds on fuel tanks or will be provided with a drip tray. Pipe cutting equipment using cutting fluids will be fitted with a drip tray.

1.2.7. Contractor targets will be -

1. Zero harm to the environment

This will be achieved through: Raising environmental awareness of staff during the contract, sound environmental practices and working methods in line with the CEMP, ongoing monitoring of working practices.

2. Zero spillages during the project

This will be achieved through: Provision of spill kits and drip trays in the works areas, static plant to be sited over drip trays, fuels to be decanted into plant and containers returned to compound, plant to be maintained in good order and be subject to daily recorded inspections.

3. Raise environmental awareness

This will be achieved through: All Contract personnel including sub-contractors shall undertake a mandatory site induction which shall include a general overview of environmental matters and how these will be managed. Induction topics will include:

- Incident reporting.
- Summary of the main environmental risks and awareness of potential for harm to the environment from any materials held on site.
- Handling of materials, waste management and segregation.
- Refuelling, spill response and pollution control – reporting procedure of risk to surface, groundwater or land contamination.
- Plant, equipment requirements and management of noise.

1.2.8. The objective of this CEMP is to:

- Allow transparent monitoring of environmental commitments made through the detailed design stage.
- Ensure that the development is compliant with current environmental legislation (refer to Section 2).
- Identify key staff and roles and responsibilities associated with the delivery of the project and environmental control and training requirements as necessary to communicate the commitments set out in the CEMP (refer to Section 3).
- Identify key construction activities and provide a programme of works (refer Section 4).
- Record environmental risks and identify how they will be managed during the construction period.
- Provide a review, monitoring and audit mechanism to determine effectiveness of, and compliance with, environmental control measures and how any necessary corrective action will take place (refer to Sections 6 and 7).

1.3. Environmental Objectives

1.3.1. As a minimum the environmental objectives shall include:

- Minimising noise disturbance;
- Controlling dust and dirt;
- Minimising waste and material consumption;
- Pollution prevention;
- Minimise impacts from construction traffic;
- Protection of ecological, heritage and human receptors; and
- Providing training and promoting environmental awareness on site.

1.4. Document Status

1.4.1. This document has been developed to avoid, minimise and mitigate against any construction effects on the environment and surrounding community. It is a 'live' document that will be reviewed and updated at regular intervals throughout the project life cycle.

1.4.2. Prior to the construction stage, the Outline CEMP will be reviewed and updated to include further detail.

1.4.3. The CEMP will also be updated should any of the following occur:

- modifications to the design of the Proposed Development;
- changes in external factors (for example, regulations or standards);

- requirements requested by environmental statutory bodies;
- unforeseen circumstances and changes during construction stage;
- failings in environmental performance identified by routine inspections;
- new findings such as protected species or habitats; and
- the discovery of previously unknown archaeological finds.

1.4.4. The CEMP should act as a continuous link and main reference document for environmental issues between the design, construction and the maintenance and operational stages of a project.

1.4.5. The following relevant documents should be read in conjunction with the CEMP

- Construction Phase Plan
- Construction Safety Traffic Management Plan and layouts
- Construction Programme
- Construction Risk and Method Statements
- Arboriculturist Impact Assessment & method statement
- Ecologist Reports
- Site Waste Management Plan

2. Relevant Legislation

2.1. Applicable Environmental Legislation

2.1.1. There are many Codes, Standards, Regulations and Acts of Parliament which cover environmental and related matters. These are referred to where applicable in this CEMP. Notwithstanding these references, compliance with this CEMP will not absolve the Contractor from compliance with all legislative requirements applicable at the time of the construction activities. Wherever this CEMP makes reference to Legislation, Standards or Codes it will be the Contractor's responsibility to ensure that the current versions are used at all times.

2.1.2. Relevant environmental legislation pertaining to the project is listed below. This is not a definitive list, and the Contractor is required to comply with any applicable or subsequent legislation for all phases of the project:

- Control of Pollution Act 1974
- Health and Safety at Work Act 2015
- Environmental Protection Act 1990
- Water Resources Act 1991
- Environmental Protection (Duty of Care) Regulations 1991
- Noise and Statutory Nuisance Act 1993

- Conservation (Natural Habitats &c) Regulations 1994
- Environment Act 2021
- Control of Pollution (Oil Storage) (England) Regulations 2001
- Control of Substances Hazardous to Health Regulations 2002
- Waste (England and Wales) Regulations 2011

2.2. Licences & Consents

2.2.1. It will be the responsibility of the Principal Contractor to ensure all necessary licences, consents and permits are in place within the relevant timescales. The Principal Contractor must be aware of and ensure compliance with the obligations of these licences, consents and permits and the environmental commitments relating to the project. The following is a list of the licences, which will be in place:

- Drainage Consents: Drainage consents are not required within present scope of the works (new surface water connections are being made to existing drainage, no works to existing outfall or requirement for extra outfalls) however if consents are required for a change in scope of the works within the scheme area, these will be obtained.
- Excavations that have filled with surface water runoff and/or rain cannot be dewatered to existing surface water receptors due to the proximity of the SPA and RAMSAR. Should any temporary dewatering of surface water/rainfall in excavations be required then water will be pumped from the excavation in which works are being carried out into adjacent excavations to allow furtherment of the work. The natural permeability of the soils should allow for the natural percolation of water through the ground. silt socks will be used on the ends of hoses to reduce suspended solids in the pump out.
- Surface water – there is existing surface water drainage system through the works area. The use of silt socks in existing gullies will allow control of any potential affect upon the condition of surface water as a result of the works i.e. increased turbidity.
- Wastewater – where the toilets within the compound cannot be connected to the existing wastewater system it will be pumped out and removed by a specialist provider. These specialist providers will hold a waste carriers license and provide copies of the consignment notes.
- Weather and existing water will be monitored during the works in case of concern over the risk of flooding. Where there are concerns over the risk of rising water levels plant and materials will be removed from the area of concern, until such time that the risk of flooding has receded. There would be no attempt to work in flooded area and ground water levels would be left to naturally recede.

3. ROLES, RESPONSIBILITIES AND TRAINING

3.1. Key Roles and Responsibilities

Management Roles & Responsibilities

3.1.1. The Director in charge of environmental management for the Principal Contractor and other directors will visit the site during the works.

3.1.2. The office-based management team will provide information and co-ordinate the planning of environmental management prior to commencement of works on site at which point that responsibility will be transferred to the site manager with the support of the office based management team as required.

Overall control of site environmental management will remain the responsibility of the Site Manager. **Job Title**	**Responsibilities**	**Person(s) Responsible**
Contracts Director	See Below	**Richard Holmes**
Contracts Manager	See Below	**Aaron Dodds**
Site Manager	See Below	**Steve Hunt**
Site Environmental management	See Below	**Steve Hunt**
Site Waste Champion	See Below	**Steve Hunt**

3.1.3. The Contracts Director will:

- Be familiar with the requirements of the Project CEMP and ensure their implementation by all Employees, Contractors and Suppliers.
- Ensure that all Project activities under their control are subject to risk assessments, by competent personnel, for each stage of the project development.
- Ensure that the appropriate engineering Environmental Basis of Design standards are developed and implemented.
- Assume a leadership role in critical incident investigations and ensure the Clients representative and statutory organisations are fully briefed on the report and outcomes.
- Ensure that any Procurement requirements comply with Statutory and UK Standards.
- Participate when required in scheduled site HSE Audits and inspections.
- The promotion of a Project culture where Environmental management has a status of equal importance to other business imperatives.
- Provide leadership for all HSE initiatives.

3.1.4. The Contracts Manager will:

- Be familiar with the requirements of the Project CEMP and ensure their implementation by all Employees, Contractors and Suppliers.
- Ensure that all Project activities under their control are subject to risk assessments, by competent personnel, for each stage of the project development.
- Ensure that the appropriate engineering Environmental Basis of Design standards are developed and implemented.

- Assume a leadership role in critical incident investigations and ensure the Client's representative and statutory organisations are fully briefed on the report and outcomes.
- Ensure that any Procurement requirements comply with Statutory and UK Standards.
- Participate when required in scheduled site HSE Audits and inspections.
- Promote a Project culture where Environmental management has a status of equal importance to other business imperatives.

3.1.5. The Site Manager Will:

- Enforce the Company HSE Policy.
- Champion the Environment on site.
- Ensure that RAMS and appropriate types of hazard assessments are conducted for non-standard work.
- Ensure that relevant information contained within the CEMP is communicated to operatives and subcontractors upon induction.
- Assume a leadership role in critical incident investigations and ensure the clients representative and statutory organisations are fully briefed on the report and outcomes.
- Provide leadership and management support to HSE personnel for the project.
- Provide direction in the event of significant Contractor non-compliance with minimum Project HSE requirements.
- Be aware of Project legal and Contractual requirements, and for their compliance on the project.
- Deliver pertinent TBTs for the workforce appropriate to the present works and environmental risk.
- Carry out noise monitoring and make records of such. Respond to any noise actions required by the monitoring.
- Carry out and investigate environmental incidents.
- Monitor and respond as necessary the reports received from the noise monitoring.
- Ensure correct procedures are followed in the event of an environmental incident.
- Disseminate waste reduction and waste management procedures to all relevant personnel on site.
- Maintain waste register and ensure correct waste management procedures are being implemented.
- Implement and maintain environmental controls on site.
- Attend to any spills or environmental incident that may occur on site.

3.1.6. The Site Waste Champion (Site Manager) will:

- Maintain & regularly update the SWMP.
- Ensure all waste storage containers are clearly labelled & wastes are segregated correctly.
- Ensure best practice is followed on site.
- Ensure the correct documentation is held for waste contractors & WTN are correctly completed.
- Keep accurate records of types & quantities of waste leaving site.
- Be a point of contact for queries, questions & problems.
- Implement waste minimisation as an important part of company culture and co-ordinate reduction, reuse, and recycling initiatives between sub-contractors.

- Disseminate waste information for the site.
- Motivate and encourage minimisation of all types of waste including efficient use of water & electricity.

3.1.7. All Staff and Sub-contractors will:

- Work in strict accordance with the CEMP and any associated management plans.
- In the case of an incident or non-conformance where the environment has been put at risk, stop work, implement control procedures and report to the Site Environmental Manager.
- Pass any queries or correspondence on environmental issues to the Site Environmental Manager.
- Undertake the necessary training and comply with directions and requirements given in the Induction and Toolbox Talks.

4. TRAINING AND COMPETENCE

4.1. Induction

4.1.1. All project personnel including subcontractors shall undertake a mandatory site induction which shall include a general overview of environmental matters and how these will be managed. Indicative induction topics include:

- Incident reporting;
- Summary of the main environmental risks;
- Handling of soils, materials and waste management and segregation;
- Refuelling, spill response and pollution control;
- Plant, equipment requirements and management of noise;
- Dust Management;
- Ecological constraints;
- Drainage consents;
- Lighting;
- Contaminated land.

4.1.2. No staff shall start work on site until an induction has been completed. Visitors not undertaking direct works will undertake a shorter visitor induction and will be escorted on site at all times.

4.2. Toolbox Talks

4.2.1. The Principal Contractor will conduct toolbox talks throughout the project, to provide an opportunity for discussion and/ or information sharing. Contractor personnel and subcontractors will be encouraged to provide feedback on environmental initiatives, toolbox talk's areas of interest or concern. Toolbox topics can be found in section 10 of the site agent's pack, other TBTs will be produced from information contained within the CEMP.

4.2.2. The topics discussed will vary depending on the nature of the works being undertaken. The toolbox talk must always include a summary of the main environmental risks and mitigation required for the activity being undertaken. Topics will include:

- Cement and concrete
- Dust and air quality
- Emergency procedures
- Fuel and oil
- Material storage, handling and housekeeping
- Noise and vibration
- Pollution control
- Spill control
- Segregation and storage of waste
- Storage and use of fuels
- Waste management
- Particular environmental sensitivities of the site i.e. birds & trees

4.3. Training and Training Records

4.3.1. Records of all training carried out on the project including the inductions and toolbox talks will be maintained, retained and made available for viewing if required. Records of training will be maintained on Deltek within the training matrix and individuals training records. Inductions and toolbox talks will be maintained in the site folders.

5. KEY CONSTRUCTION ACTIVITIES AND PROGRAMME

5.1. Construction Phase Programme

5.1.1. A detailed Construction Phase Programme detailing the phasing and timings of all construction work shall be produced once contract has been awarded and Programme for Acceptance has been approved. All activities in the Construction Phase Programme shall take into account the requirements of the CEMP.

5.1.2. Construction phasing anticipated to be as follows:

Construction Start Date	06/10/2025
Construction Programme	34 weeks
Planned Completion Date	01/06/2026

This project is notifiable under the Construction (Design and Management) Regulations and the F10 notification will be displayed on the HSEQ information board located within the site welfare.

6. Environmental Controls

6.1. Introduction

6.1.1. The CEMP sets out the framework for governing and implementing the environmental controls required in relation to the construction works.

6.1.2. The following documents also form part of the CEMP and will be provided by the Principal Contractor:

- Stakeholder Communication Management Plan
- Emergency Response Plan – Contained within the Construction Phase Plan
- Construction Method Statement – Methodologies on construction will be developed as the works progress and will be held on site.

6.2. Environment Risks and Mitigation

6.2.1. The Principal Contractor shall seek to limit adverse environmental impacts through the identification of project specific risk, potential impacts and mitigation measures throughout the lifetime of the project. The significance of each aspect identified will be assessed by determining the severity and likelihood of each impact and recorded within a Risk Assessment in line with the Contractor's procedure.

6.2.2. From the works information we believe dewatering will not be required to complete our works with the deepest excavation being higher than the existing water table. We will control the run off of construction works by limiting the storage of materials in the working area and when encountered we will promptly call in sweepers to limit any surface run off in the surrounding area. We will also deploy spill kits and plant nappies during operations where required.

- In the event that excavations are flooded through adverse weather conditions there may be the requirement to pump water out to allow continuation of the works.

- Water would be pumped from the lowest point of an excavation run to allow all water to have travelled through the shingle pipe bedding (below installed drainage/in base of trench).

- Drainage pumps will be selected to efficiently pump out the excavation without drawing excessive material out of the excavation with the water.

- Silt bags will be installed in the discharge location and be fitted to the end of any pump hoses at point of discharge.

- The water may have to be pumped out of the excavations and discharged into existing surface water drainage chambers.

- The risk of flooding excavations will be reduced by not leaving excavations open overnight where possible.

- There may be opportunity to all excavations to naturally dewater with percolation through the ground before entry is required. The potential to allow this will depend upon current weather conditions and alternate available works.

6.3. Incident Response Planning

6.3.1. The Environment Agency pollution prevention guidance (PPG6) will be used as best practice and will be followed when considering mitigation controls for hazards identified in the RAMS process.

6.3.2. All environmental incidents and accidents will be recorded and reported to the Site Manager. Following a review of the incident, the Site Environmental Manager will instigate an appropriate change in procedures where necessary.

6.3.3. The appropriate equipment required to implement these procedures shall be made available by the Contractor(s) and stored within the Contractor(s)' compound.

6.4. Working Hours

6.4.1. Typically, the site working hours, and all deliveries, will be between the following times:

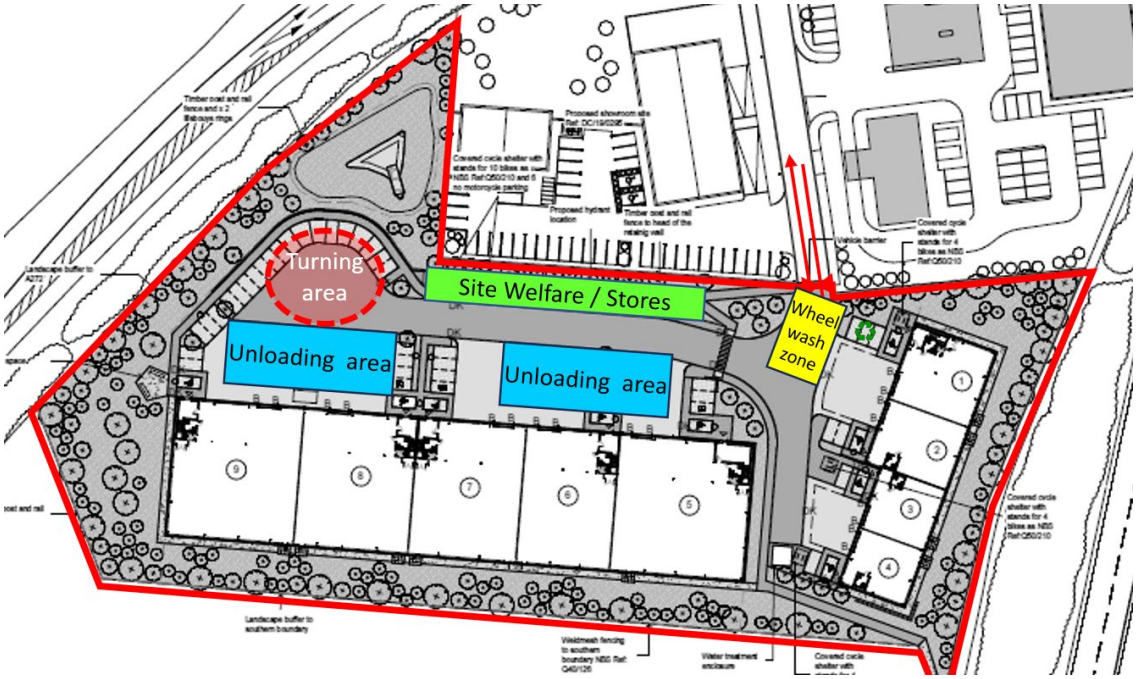
Monday to Friday:	07:30 - 18:00
Saturdays:	08:00 - 13:00
No working on Sundays or Bank Holidays	

6.4.2. Working outside of these hours is not currently anticipated, this will only be for a specific procedure or due to a safety, or similar, requirement. However, if peak hours working is restricted as part of the planning conditions, then these conditions will be met and the working hours changed to suit.

6.5. Site Establishment and Construction Site Layout Plan

6.5.1. Site establishment will take place in an orderly manner and all amenities shall be installed before the main workforce move onto site. In planning the construction site layout, the Contractor's site compound, offices and materials and equipment stores will be located to minimise pollution and other forms of disturbance to surrounding neighbours, protected species and sensitive ecological sites.

6.5.2. Loading and unloading areas will be provided on-site along with storage areas, providing a site layout designed to always allow for all vehicles to leave the site on a forward gear in accordance with above space requirements. Additionally, parking for site operatives will be provided on site and will not be allowed on the public highway. Vehicles will be unloaded within the confines of the compound. Waste material will be contained within skips maintained within the compound area. Deliveries throughout peak traffic will be avoided and managed so that there is as little traffic disruption as possible.



6.5.3. This compound area will contain the following:

- site access during construction (including all entry and exit points);
- all material and equipment storage areas (including storage areas for hazardous substances such as fuel and cement);
- construction offices and other structures;
- security requirements (including temporary and permanent fencing and lighting) and accommodation for security staff;
- areas where material is to be stockpiled (including construction materials and topsoil);
- solid waste collection facilities;
- provision of welfare facilities for construction personnel.

6.5.4. The construction area shall be clearly demarcated on the site plan, and all other areas must be considered no-go areas for the construction personnel.

6.6. Housekeeping

6.6.1. The Principal Contractor will ensure that an efficient and achievable housekeeping policy is operated at all times. Housekeeping shall include but not be limited to:

- Fencing, screens and signage will be regularly inspected and will be repaired or replaced as required.
- Works areas will be kept in a tidy condition and rubbish regularly disposed of in the provided skips. Skips and bins will be removed regularly to avoid a build up of waste.
- All loading and unloading of vehicles will be undertaken off the public highway.
- Toilets, washing facilities and drying room will be provided for all staff.
- Drip trays will be used at all times. Spill kits will be readily available for effectively clearing any spillages. Spill kits will be maintained in the designated fuelling area.
- Fires will be prohibited at all times.
- Site gates are to remain closed and locked when there is no site activity.
- Any security cameras will be located and directed away from occupied residential property.

6.7. Construction Lighting

6.7.1. The Principal Contractor shall ensure that construction lighting does not affect the amenity of residents or create a statutory nuisance under the Environmental Protection Act 1990, as amended. Additionally, external temporary lighting shall be designed and installed to:

- Provide minimum light levels necessary and appropriate for safe working;
- Be generally limited to working hours with minimal intrusion onto adjacent properties and skyglow;
- Avoid disturbance to adjoining residents and occupiers;
- Avoid creating dazzle or distractions for drivers using adjacent highways;
- Minimise light spillage or pollution;
- Ensure that excess light does not fall on sensitive ecological habitats; and
- Energy efficient options for site facilities will be incorporated where possible, i.e. energy efficient light bulbs, automatic controls, etc.

6.8. Traffic

6.8.1. The main access route on and off site will be via the new Focal Point entrance road off the A272.

6.8.2. Access on and off the site will be controlled and programmed to minimise queuing of vehicles causing potential obstruction hazards at peak times.

6.8.3. Signage will be placed along the carriageway to direct construction delivery vehicles efficiently to the site entrance. Traffic control banksmen will be nominated to safely direct vehicles to and from the site delivery areas. Clear access will be maintained on site at all times, ensuring clear access for emergency vehicles.

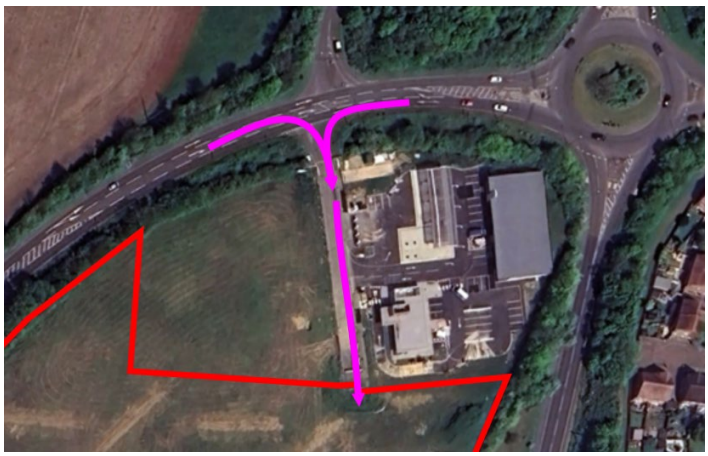
6.8.4. The loading and unloading of plant and vehicles will be carried in the materials / plant storage areas within the construction site area.

6.8.5. Efforts will be made prior to vehicles leaving the site to ensure vehicles will not deposit debris on the highway. Appropriate wheel washing facilities will be provided as required.

6.8.6. A traffic management plan will be included within the Construction Phase Plan (CPP) for the project.

6.8.7. The CTMP will be regularly reviewed and updated to take into account the changing pattern of existing traffic and construction traffic throughout the different phases of development.

6.8.8. The Traffic Management Plan will ensure that routes for pedestrians, cyclists and equestrians are maintained at all times. Segregated routes with suitable crossing points will be provided where required.



6.8.9. The below details the expected vehicle movements on site.

- Foundations – approximately 10 lorries a day for 4 days spread across a 20-day period. Estimated vehicles accessing site at this time 20 per day on those days when pours are being carried out, 15 outside of these times.

- Steel frame - approximately 10 articulated vehicles bringing steelwork to site, this over the course of a 25-day period. Maximum of 3 articulated vehicles in a day due to the required unloading. Estimated vehicles accessing site during this period - 20.

- Roof & façade cladding – approximately 10 articulated deliveries in total bringing cladding to site, this over a month-long period. Maximum of 2 articulated vehicles in a day due to required unloading via mobile crane and/or forklift. Estimated vehicles accessing site during this period - 20.

- Internal slab to building – 37 loads over course of 6 days. Estimated vehicles accessing site during this period - 20.

- External tarmac – 10 loads maximum over approximately 5 days. Estimated vehicles accessing site during this period - 27.

- Further materials required as part of the construction will be delivered to site on an as and when basis although it is not envisaged that this would be more than on average 3-8 deliveries a day. Deliveries will be planned to arrive at site outside of the peak hours at time of placing order. Due to the location of expected suppliers.

- Site work will likely commence at 08:00 and cease at around 17:00. Workforce vehicles will likely be arriving on site between 0645-0730 and leaving site at 1600-1700 and 1530-1615 Fridays. Peak workforce on the project would likely be around 50 persons on site. Average workforce on the site would be around 35 persons via around 20 vans.

- The peak numbers of delivery vehicles expected during the capping of the formation will be spaced throughout the working shift to allow the material to be spread and compacted between loads, it is expected that an expected 15 lorries would attend site between the working hours. There would be no peaking of the deliveries at any point, instead being a steady flow of vehicles through these hours.

- The peak numbers of concrete delivery vehicles expected during the placement of the internal floors slab will be spaced to allow the material to be pumped, spread and levelled, it is expected that around 19 lorries would attend site between the delivery hours. There would be no peaking of these deliveries at any point, instead being a steady flow of vehicles through these hours.

- Regarding the class of vehicles expected, a list of possible vehicle types is supplied below for both delivery of construction materials and equipment, and necessary during the different phases of the construction process:

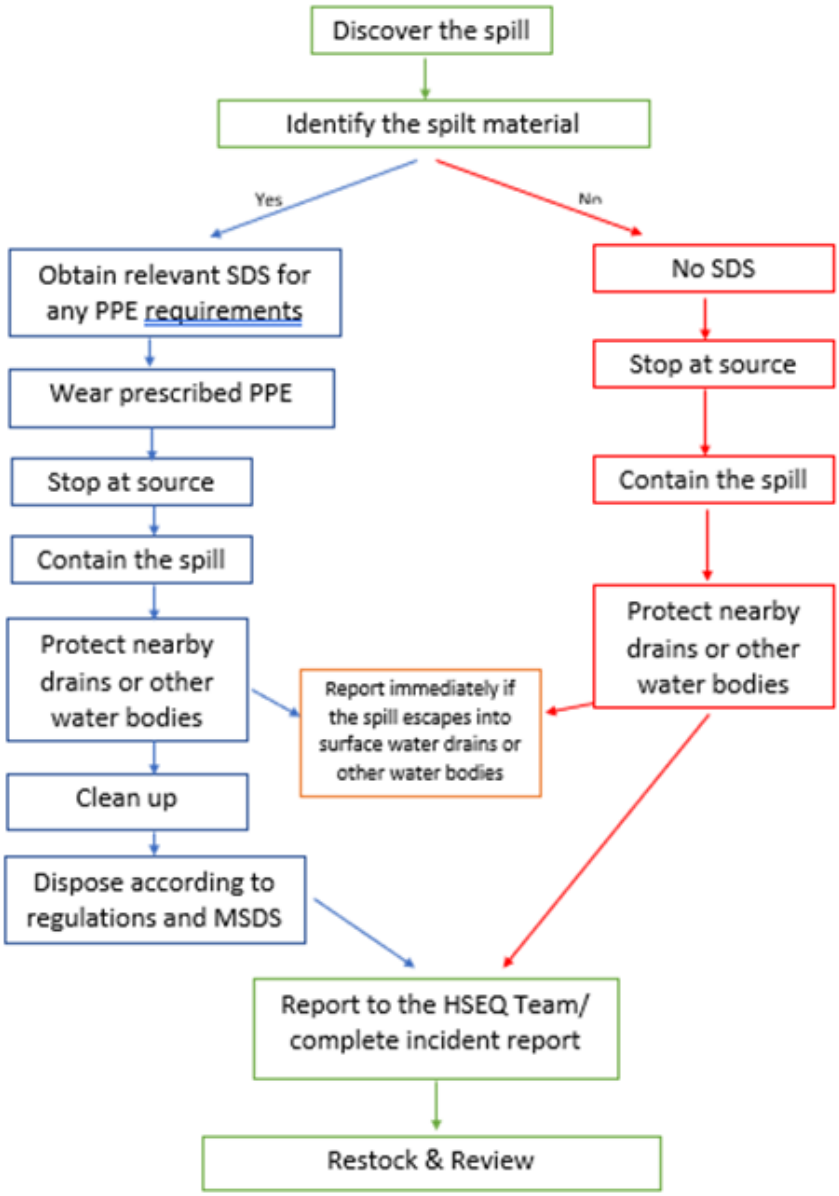
    - 20T Tipper Lorries
    - Low-loader and Articulated Lorries
    - Concrete Mixer Trucks
    - Concrete Pumping Trucks
    - Recycled Waste (Skip & Rolonof) Removal and Delivery Vehicle
    - Cranes, fixed or mobile

6.9. Spill Response

6.9.1. The project will carry out basic spill response training (Stop-Contain-Notify) for all personnel during the induction.

6.9.2. A spill response Emergency Crew will be established, who will be responsible for clearing up spills and reporting any environmental incident accordingly.

6.9.3. All spills or other environmental incidents will be recorded and investigates in accordance with the incident response procedure.



6.10. Air Quality

6.10.1. The following measures will be taken by the Principal Contractor as a means of reducing effects upon air quality -

The Contractor shall, as far as reasonably practicable, seek to control and limit emissions to the atmosphere in terms of gaseous and particulate pollutants from vehicles and plant used on the construction site, and dust from construction activities.

Mitigation measures shall include, but are not limited to the following:

- Locating machinery and dust causing activities away from receptors, as far as is possible;
- Fully enclose specific operations where there is a high potential for dust production and the site is active for an extensive period;
- Ensure all vehicles and plant switch off engines when stationary – no idling vehicles;
- Ensure all plant is correctly adjusted and checked as being in good working order before being allowed on site;
- Impose and signpost a maximum speed limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas;
- If applicable minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate;
- Where necessary use water-assisted dust sweepers on the access and local roads, to remove any material tracked out of the site;
- Undertake regular damping (using water) down during dust creating activities;
- Ensure vehicles and loads entering and leaving are covered to prevent escape of materials during transport;
- Implement a wheel washing system to ensure mud does not leave the site and get onto the public highway;
- Where present stockpiles and skips shall be covered.
- No bonfires or burning on site.
- On-road vehicles to comply with set emission standards.

6.10.2. Monitoring

- Visual inspections of activities, dust emissions (both on and off site) and control measures shall be carried out every day during dry conditions. Visual inspections will be carried out across the works area by the Site Manager and Foreman who will walk the works on a regular basis. There will be a consideration of the task and its likelihood of producing dust, present weather conditions. Where there is a risk that dust could be produced by the works then controls will be put in place such as damping down.
- Any complaints from residents will be investigated and appropriate measures put in place.
- If required by a change in the scope of the works, suitable air monitors will be installed at designated locations on the site boundary to monitor dust emissions.

6.11. Noise and Vibration

6.11.1. Construction Noise

During the construction phase, there will be a number of activities that have the potential to alter the noise levels in the local area on a short term, temporary basis. Typical noise generating activities likely to be carried out as part of the scheme include:

- Vegetation Clearance – removal of trees, which could involve use of chippers and chainsaws;
- Road building and associated pavement works, including use of excavators, rollers and provision of materials into the works area via tipper truck, use of tarmac placement plant; and
- Construction of the commercial unit's steel structure and cladding using mobiles cranes and MEWPS and the use of small tools for cutting and drilling.
- Associated drainage, earthworks, kerbing, lighting, footway/cycleway and signing works, including use of excavators, roller, and breaking out with hydraulic hammers.
- Concrete power floats finishing the warehouse slabs.

Activities within the construction programme likely to cause high levels of noise and dust are:

- Item 139 enabling works
- Item 143 earthwork and ground improvement
- Item 163 groundworks
- Item 213 structure & envelope
- Item 226 fitout and finishes
- Item 280 structure & envelope
- Item 294 fitout and finishes

The Principal Contractor will implement Best Practical Means (BPMs) to reduce noise and vibration from the construction works to as low as reasonably practicable without unduly hampering works.

6.11.2. The Contractor shall seek to avoid or reduce noise (including vibration) from construction activities as far as reasonably practical to minimise potential disturbance to local residents and sensitive receptors.

6.11.3. The Contractor will ensure that work activities on site are carried out in compliance with The Control of Noise Regulations 2005.

6.11.4. All operations and tasks will be assessed for the possible generation of noise. Where it is reasonably practicable noise sources will be eliminated or reduced to the lowest levels by best practice.

6.11.5. Due to the sensitive location of the site the following measures will be undertaken to prevent significant biodiversity effects and to minimise the disruption to the public:

- Monitor noise levels.

- Working hours to be adhered to at all times. Out of hours working to be carried out only for those activities where it cannot be avoided.
- Fit mufflers to plant where possible.
- Screen off areas, if necessary, with sound deadening material and acoustic screening.
- Plant and machinery to be hired that produce low levels of noise and vibration.
- Erect warning signage and screening.
- Move noisy operations away from public areas where possible & carry out noisy operations away from site where possible.
- Inform the public in advance of any planned works where noise levels may be high, or higher than normal outside of normal times.
- Careful selection of equipment, plant and construction techniques that are less noisy.
- Good maintenance work on equipment and plant.
- Works will be undertaken in accordance with industry best practice and legislative requirements for the control of site generated noise and vibration.
- All operations and tasks will be assessed for the possibility of noise and vibration and how this could affect the environment. This will consider airborne, structural, ground-borne vibration and the risk of nuisance to local community and potential damage nearby structures from using plant, equipment and tools.
- Wherever possible vibration will be reduced to the lowest level by the selection of plant, methodology and techniques involving less noise and vibration. To hire low vibration producing plant and machinery that has been fitted with resilient mounts.

Vibration

6.11.6. The Contractor will establish criteria, controls and working methods for construction vibration on site taking into account guidance in BS6472-1; BS 5228; ISO 4866; Mechanical vibration and shock, vibration of fixed structures. Guidelines for the measurement of vibrations and evaluation of their effects on structures and BS 7385-2, when assessing vibration control.

6.11.7. The contractors will endeavour to avoid any impact on sensitive equipment. The monitoring and compliance assurance process will be set out in the Contractors' noise and vibration measures.

6.12. Biodiversity

General

6.12.1. No statutory nature conservation designations pertain to the site.

6.12.2. Five internationally designated areas are located within 10km of the site and four nationally designated areas are located within 5km of the site, one of which, the Upper Arun Valley Site of Special Scientific Interest (SSSI) is located approximately 15m to the west of the site at its closest point. 2.2 No National Nature Reserves or Local Nature Reserves are located within 5km of the site.

Assessment of Construction Impact

6.12.3. The main activities that will happen throughout the site are normal to commercial development construction works, as follows:

- General site clearance - At any one time two lorries, chainsaw, chipper, dumper and excavator. These activities, with the exception of the chainsaw, do not result in excessive or sudden impact noise.

- Drainage and duct installation and alteration - Up to six gangs throughout the site, normally 25-50m apart - excavator, dumper, lorries delivering stone and removing surplus excavated material trench roller / whacker plate

- Groundworks including channels, kerbing etc and constructing roads and paving - Possibly three or four gangs 200/ 300m apart - Concrete delivery lorry - typically twice a day, excavator, roller, compressor, and breaker

- Construction of the new buildings including steel erecting and cladding using mobile cranes, MEWPS, forklifts and large delivery vehicles, small hand tools for cutting and drilling to cladding.

- Surfacing (Concrete and tarmac) - This would typically be a night-time operation with the road closed to traffic - full surfacing crew - short term possible a week of nights - the removing of the old surfacing with the road planer is an acknowledged noisier operation, although would be carried out in the early evening rather than late at night when the impact noise would be comparatively larger.

- Landscaping - no significant additional noise.

The following table should be considered as a guide to the potential noise output of various plant

***Table 1** – Plant noise levels, 10m from source*

Plant Description	BS5228 Reference	Sound level at 10m
Angle Grinder	Table C4 No. 93	80
Asphalt Paver	Table C5 No. 33	75
Circular Saw	Table C4 No. 72	79
Compressor	Table C5 No. 5	75
Concrete Pump & Concrete mixer truck discharging	Table C4 No. 28	79
Concrete Saw	Table C4 No. 71	85
Delivery Lorry	Table C2 No. 35	80
Diesel Generator	Table C4 No. 84	74
Dozer	Table C5 No. 12	77
Dumpers	Table C4 No. 9	77
Excavator	Table C5 No. 34	82
Percussion Drill	Table C4 No. 69	85
Pneumatic Breaker	Table D2 No.2	81
Poker Vibrator	Table C4 No. 33	78
Road Planer	Table C5 No. 7	82
Roller Compactor	Table C5 No. 29	76
Telescopic Handler	Table C4 No. 54	79
Tower Crane	Table C4 No. 49	77
Tracked Excavator	Table C5 No. 18	80
Tracked Excavator fitted with Breaker	Table D2 No. 5	91
Tracked Mobile Crane	Table C4 No. 52	75
Vibratory Roller (22t)	Table C5 No. 28	77
Water Pump	Table C2 No. 45	65
Welder	Table C3 No. 31	73
Wheeled Loader	Table C2 No. 26	79

6.12.4. Below table shows expected reduction of noise by distance from source.

***Table 2** – Noise reduction with distance*

Plant	No.	Noise level @ 10m	Noise level @ 20m	Noise level @ 50m	Noise level @ 100m	Noise level @ 200m
Delivery lorry	1	78.5	72.5	64.5	58.5	52.5
Road planer	1	80.5	74.5	66.5	60.5	54.5
Tracked excavator	1	78.5	78.5	72.5	64.5	52.5
Dozer (spreading fill)	1	75.0	69.0	61.0	55.0	49.0
Dumper	2	78.0	72.0	63.0	58.0	52.0
Vibratory roller (2t)	1	75.0	69.0	61.0	55.0	49.0
Asphalt paver	1	73.0	67.0	59.0	53.0	47.0
Diesel generator	1	74.0	68.0	60.0	54.0	48.0

6.12.5. The orange cells in Table 2 indicate the activities where noise levels are likely to result in impacts to SPA birds, as guided by the matrix in Figure 1 (i.e. >70dB(A)).

6.12.6. The above tables can be used to help determine the frequency of the noise monitoring being carried out. The distance from the receptor and the type of activity being carried out will be assessed on a daily basis.

Disturbance through visual stimuli

6.12.7. Fence site hoarding would be erected around the site boundary between the SPA / Ramsar site and the construction site. This will be erected outside the winter period to avoid noise and visual disturbance during its installation.

6.12.8. Internal access routes for site personnel will be carefully designated and signposted to ensure that personnel do not cause inadvertent visual disturbance of areas outside the site hoarding. Access routes to the works areas will be communicated at the point of induction.

6.12.9. The Contractor shall also manage impacts from construction to ensure that appropriate measures are adopted to avoid or minimise impacts on protected species and habitats including:

- Protected and notable species (e.g. bats, breeding birds, otters, badgers, reptiles and invertebrates);
- Eradication and management of invasive and non-native species; and
- Other habitats and features of ecological importance (e.g. retained hedgerows/trees).

6.12.10. Appropriate measures will be adopted to protect the ecology and arboriculture present on site. These will include, but are not limited to the following general measures:

- Noise levels will be monitored remotely during the construction phase, a high-level alarm set at 70dB will be utilised and the Site Manager made aware once this is exceeded so the works can be checked to ascertain if the contractor is responsible.
- All staff will be made aware of the ecological and arboricultural sensitivities of the site as part of their site inductions. Sensitive ecological receptors, their characteristics and mitigation requirements will be outlined and included in toolbox talks.
- Implement site safety issues, including storage of potentially dangerous materials in designated locations.
- Any major excavations that need to be left uncovered overnight will have their slopes battered to a safe angle or fenced.
- All works in the vicinity of trees or hedgerows to be retained will be undertaken to BS5837:2012 guidelines.
- Silt socks will be installed in drains where there is risk of run off contaminated with silt entering existing stormwater drains.
- Stripped topsoil in the site compound will be covered with teram to reduce erosion of the materials and transfer of silty run off into existing receptors.

- A sweeper attachment will be added to the telehandler to clean the roadway within the compound.
- All fuels will be stored in bunded tanks on site.
- Where persistent noise-generating machinery such as generators are to be more permanently located within the compound, these will be located as far from the sensitive receptor as practicable, and a suitable acoustic enclosure such as specified in BS5228 Noise and vibration control on construction and open sites constructed around it where noise levels could encroach on those levels liable to disturb overwintering birds. Weekly inspections by the Site Manager and the HSEQ team, and Environmental Site Manager.

Protected habitats & species

6.12.11. Standard mitigation measures, including a variety of good environmental site practices, shall be undertaken during Scheme during the site preparation, earthworks and construction phase to minimise the risk of site runoff transmitting contaminants and sediment into surface water bodies via the surface water drainage system – see controls in 6.12.2.

6.12.12. All wild birds and their nesting sites are protected under the Wildlife and Countryside Act 1981 (as amended). Established trees and hedgerows are present in and around the Site. This vegetation is suitable for supporting a range of more common breeding bird species during the Spring and Summer (typically March to August, inclusive).

6.12.13. In order to avoid impacts to nesting birds, clearance of taller vegetation (scrub and trees) will take place between September and February (inclusive) unless this is unavoidable.

6.12.14. If this is not possible, clearance during the bird nesting season can only proceed after a thorough and careful check by an experienced ecologist for active nests. If active nests are found, the works in that area must stop with a clearly marked exclusion zone of at least 5m established around the occupied nest. This exclusion zone will remain in place until the chicks have fledged or no longer are dependent on the nest.

6.13. Arboriculture

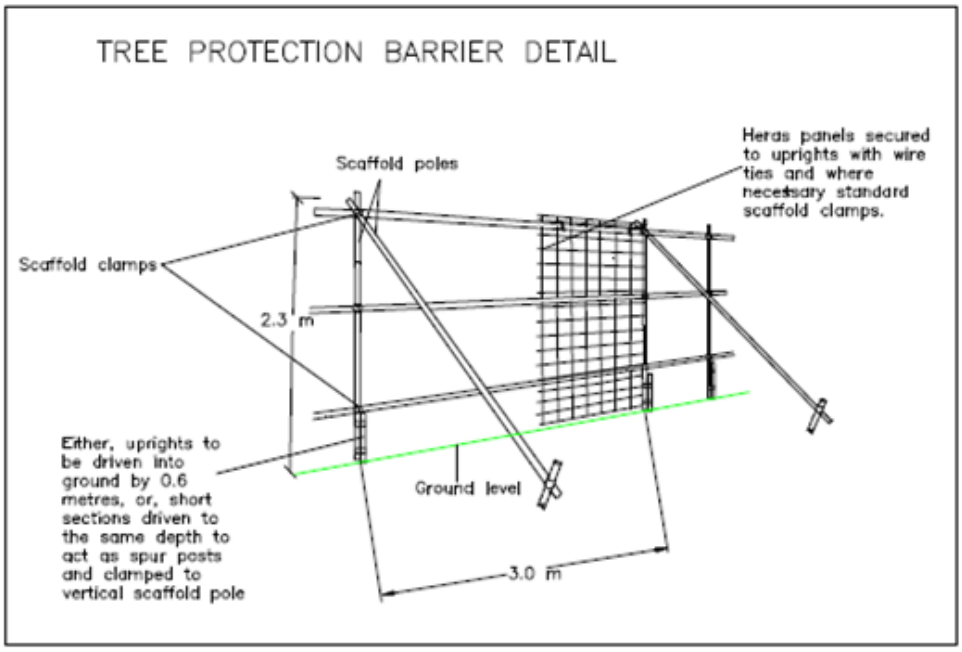
6.13.1. During construction the following measures shall be in place to ensure the protection of retained Arboricultural features:

- Arboricultural supervision required during initial excavation; Arboricultural Method Statement (AMS) to be implemented and followed at all times.
- Tree works to comply with BS3998.
- All works shall comply with the Landscaping Plan, Tree Retention/Removals Plan and Tree Protection Plan (TPP) produced for the Proposed Scheme.

6.13.2. For the prevention of harm, it is very important that robust tree protection measures are put in place after agreed tree removal and prior to any other work starting on site. Fencing is to be specified in the AMS and shown on the TPP. Protective fencing must be of a braced design that must stay in place throughout construction.

6.13.3. Tree protection is to be maintained for the duration of the works and nothing shall be placed within the fencing and no construction access whatsoever will be permitted in the construction exclusion zones formed by the tree protection barriers.

6.13.4. Fencing designs are to be as per the British Standard and the condition monitored on an ongoing basis –



6.13.5. Signage is to be displayed on the fencing as below –





6.13.6. The barriers will have an A3 size and laminated informative/warning notice attached on the construction site side, at approximately 1.6 metres above ground level, and at no more than 6 metre intervals.

6.13.7. All tree protection will be inspected weekly by the Site Manager.

6.13.8. The site compound will be established outside of any trees RPA or crown spreads.

6.13.9. Consideration will be given to the storage and mixing or refuelling of any chemicals that can be injurious to trees/plants. Special consideration is required where a tree construction exclusion zone (CEZ) is downhill from a proposed area to store or mix chemicals. Spillages could leach downhill through soil impacted trees within the CEZ; alternate mixing areas must be sourced, or, mixing bunds shall be used with capacity to store 10% over that being mixed.

6.13.10. Tree protection fencing must not be dismantled or moved until the end of all construction activities unless agreed with by the project arboriculturist. Any protection measures specified must be put in place (such as ground protection where protection fencing is moved).

6.13.11. No new service or utility runs are expected within RPAs or close to RPAs within soft landscaped areas. Trenching, both mechanically or hand dug, are not permitted within RPAs of retained trees due to the risk of damaging roots and changing soil hydrology in a way that may adversely impact trees. Apparatus shall be routed outside of RPAs. Where this is not possible, apparatus shall be kept together in common ducts using trenchless insertion methods (as per Table 3 of BS5837:2012 P.28 Para. 7.7).

6.13.12. Should additionally space for working areas be required, protective fencing must not be moved without prior approval from the project arboriculturist with a technical update stating how trees are to be protected.

6.13.13. No trenching is to be carried out within or near to trees and their RPAs unless hand dig or vacuum excavation.

Contingency plans -

6.13.14. Only in exceptional circumstances should ingress occur into the tree protection areas. In the following circumstances, the recommended actions are:

6.13.15. Chemical Spillage. A COSHH data sheet should be available for all chemicals bought onto site. For any spillage that occurs where chemicals may run into root protection area (above or below ground) a spill kit should be available to deal with immediate spills or for oil-based chemicals. For water-soluble chemicals thorough irrigation of the area using water must take place as soon as possible after the spill has occurred and continue for an appropriate time thereafter. The project arboriculturist must then be informed to assess any further action that may be required.

6.13.16. Collision. A suitably qualified arborist must be called to assess the damage and their recommendations following a collision. If the tree has been uprooted or thrown by the collision, the area must be made safe and the project arboriculturist must then be informed to assess any further action that may be required.

6.13.17. Emergency access within RPAs. This is only allowed in exceptional circumstances and should be kept to a minimum in terms of footfall, vehicle or plant movements. Remediation work may be required to de-compact the soil within the RPAs after the emergency has passed.

6.14. Townscape and Visual Amenity

6.14.1. During construction, standard best practice mitigation measures will be adopted to ensure that the existing landscape resources on site are protected and that any potential landscape character and visual impacts are reduced to acceptable levels.

6.14.2. General measures to be implemented during construction to minimise landscape and visual impacts include the following:

- Selective and sensitive location of the contractors' compound(s), security fencing and temporary storage of materials and plant;
- Removal, handling, storage and transplanting of any vegetation which is to be reused, relocated or transplanted;
- Use of designated routes to, from and around site for construction vehicles;
- Regular removal of construction related waste from the immediate environment;
- All boundary fences will be maintained in a neat and tidy condition;
- Secure storage will be provided for materials at risk from displacement by wind;
- Installation of appropriate signage to keep the paths open and protected during construction;
- Tidy site management including minimisation of the visual clutter, signage and temporary storage areas. maximising the retention and protection of existing tree and vegetation where possible and in accordance with the parameter plans;
- Use of well-maintained fencing and hoardings to prevent unwanted access to the construction site, to provide noise attenuation, screening, and site security where required;
- Designing construction lighting to avoid unnecessary intrusion onto the adjacent sensitive ecological habitats and other land uses.

6.15. Cultural heritage

Archaeology

6.15.1. There is a low potential to uncover finds during the works due to the previous activities on the site.

6.15.2. If any archaeological remains are uncovered during excavations, these will be preserved in situ and adequately protected from deterioration until further advice has been sought from the County Archaeologist. All operatives are to remain vigilant during excavation and to stop work and report any potential finds.

6.16. Soils, Wastes & Materials Management

Materials Management

6.16.1. A SWMP will be produced by the Principal Contractor on this site and will be regularly updated by the appointed Waste Representative or Environmental Manager. The SWMP will set the framework for the management of wastes generated during construction. It will document the decisions taken to minimise waste and set objectives and targets for the main waste types. It is likely to identify the following:

- Responsibilities of individuals within the construction team for waste management;
- Types of waste and the quantities likely to be generated;
- Measures to be adopted during construction to minimise waste generated;
- Opportunities for recycling and/or reuse;
- Proposed Waste Carriers together with details of their Waste Carrier Licences;
- Proposed treatment and disposal sites together with details of their Environmental Permits;
- Proposed method for recording Waste Transfer Notes and maintaining the Waste Log
- Identification of any Hazardous Waste Streams shall be investigated and risked assessed to identify the material / ground condition and be disposed of separately under the specific method statement including recording Hazardous Waste Consignment Notes.

6.16.2. As Principal Contractor, we will undertake material resource management to minimise waste creation. All waste will be managed according to the Waste Hierarchy:



6.16.3. SWMP will be used in post construction analysis, assimilated into companywide waste management system and assessed against targets.

6.16.4. Top soil stripped from the compound set up will be stockpiled for reuse during reinstatement of the compound following decamp of the site.

6.16.5. Materials excavated from the works, suitable for reuse will be stockpiled within the site until required.

Reuse of materials

6.16.6. With respect to re-use of materials on site the Contractor shall adhere to the following procedures to ensure compliance with the CL:AIRE Code of Practice.

- If applicable, additional sampling and analysis will be necessary to ensure that soils to be reused are suitable for reuse in accordance with an agreed testing regime;
- The Contractor will maximise the use of existing materials and ensure different types of soils and aggregates are carefully stockpiled;
- No stockpiling will be undertaken within 30m of the river;
- Methods of stockpiling to be in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites
- Site won material will be sorted and categorised at the point of excavation;
- If soils from the scheme are to be used in the landscaping or exposed at the surface, then laboratory chemical testing will be required to confirm their suitability; and
- Site won material intended for on-site re use must not be taken off site or temporarily stored off site.
- Reuse of material will be in accordance with the specification.

Management of wastes for offsite disposal

6.16.7. With respect to wastes produced on site these will be managed in accordance with the site-specific site waste management measures and materials management as follows:

- Wastes produced on site will be managed in accordance with the Duty of Care under the Environmental Protection Act 1990;
- Waste will be minimised, reused or recycled wherever possible;
- Different coloured skips (or sufficiently clear labelling) will be used to ensure that construction workers are clear about where to put each type of waste stream;
- Suitable landfills will be identified as early as possible for those soils that are known to require disposal. Its the Contractor responsibility to ensure the landfill is licenced to accept the waste;
- Material that will be surplus to requirements/ contaminated/ unsuitable for re-use will be appropriately classified and disposed off-site in accordance with waste management regulations;

- All soils to be removed from site are to be tested and characterised in accordance with Waste Acceptance Criteria (WAC);
- Ensure that, if hazardous waste is identified the site is registered with the Environment Agency;
- Ensure that any contaminated soil is pre-treated and disposed of at a facility appropriately licensed to receive the waste as classified;
- Accurate records will be held of all waste classification, transfer, as well as a disposal log including information such as: Date, Waste Classification, Carrier's Registration Number, Transfer Note Number and Ultimate Destination;
- Submit full copies of those records for inclusion in validation/closure reports;
- Maintaining those records for potential future regulatory inspection;
- All waste will be managed according to the Waste Hierarchy
- Materials produced through the activities that are to be removed from site will either be removed directly from the works area or temporarily stockpiled in designated areas on site until arrangements are made for bulk disposal to reduce traffic impact.

Imported materials

6.16.8. With respect to materials imported on to the site, should these be required, these must be managed in accordance with the following:

- Any material imported on the site must be suitable for the intended use and must be accompanied by supporting documentation;
- A procurement system will be used to manage and ensure materials are ordered as required and optimised to reduce oversupply and damage on site; and
- The use of hazardous materials will be minimised.

Contaminated/hazardous material/spillages

6.16.9. The principal human health pathways are likely to be inhalation and ingestion of dust, inhalation of VOCs (if present) and direct dermal contact with dust and soils. The contractor's control measures will cover all the potential contaminant linkages identified and will contain measures to reduce impacts during the construction phase, such as controls on off-site dust migration, procedures to avoid impacts to controlled waters and detailed risk assessments and appropriate PPE.

6.16.10. Any unexpected contamination will be dealt with in conjunction with the Environmental Incident Action Plan. All environmental incidents will be reported and recorded and a full investigation will be completed where appropriate. Corrective action will be taken. Records will be kept for all environmental occurrences including:

- Potential Hazards;
- Near Misses;
- Incidents; and

- Complaints.

6.16.11. The works will be managed in accordance with the following procedures:

- Staff will be informed of their responsibilities and any controls relating to potentially contaminated materials or hazardous materials via toolbox talks.
- Appropriate PPE will be provided to prevent dermal contact and inhalation. Contaminated PPE will be cleansed before being taken off site or appropriated disposed of;
- Designation of clean and dirty works areas to prevent cross contamination and provision of welfare facilities to assist in maintaining good hygiene levels;
- Where possible contaminated land should be remediated and reused on site, or, if found to pose no risk to identified receptors (e.g. groundwater and human health) should be left undisturbed; and
- If groundwater is encountered during construction and appears to be impacted with contamination, (i.e. odours, sheens, free phase, fuel, oils, discolouration), works in the vicinity should be halted and advice sought from a Contaminated Land specialist.

6.16.12. The following control measures are also proposed in relation to the storage of hazardous materials:

- Minimise chemical storage on site;
- A dedicated, bunded area shall be provided for refuelling this will not be within 30m of a watercourse;
- Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The bund capacity shall give 110% of the total volume for single and hydraulically linked tanks. If there is multiple tankage, the bund capacity shall be 110% of the largest tank or 25% of the total capacity of all tanks, whichever is the greatest. All filling points, vents, gauges and sight glasses and overflow piles shall be located within the bund. There shall be no outlet connecting the bund to any drain, sewer or watercourse or discharging onto the ground. Associated pipework shall be located above ground where possible and protected from accidental damage.
- All fuel lubricating oil and/or other liquid chemicals stored on the site shall be located as far as reasonably possible and, in any case, NOT LESS THAN 30.0m from any watercourse and such stores shall be sited on impervious bases and surrounded by an effective impervious bund capable of containing the full contents of the store plus 10% and with a sealed drainage system with no discharge to any watercourse or groundwater. All such stores shall be kept locked or otherwise secured when not in use and all containers therein must bear clear labels giving full descriptions of the contents. A stock of absorbent material suitable for use on the contents of the store MUST be maintained on the Site.
- Appropriate spill kits will be available in areas where chemicals are used, stored and transported;

6.17. Road Drainage and Water (Flood Risk)

Prevention of Pollution of Controlled Waters

6.17.1. The Principal Contractor will implement working methods to protect surface water and groundwater resources from pollution and other adverse impacts including changes to water levels, flows and quality. Mitigation measures will include, but not be limited to:

- Mud on vehicles will be controlled at entry and exits to the site using wheel washes and / or road sweepers, where necessary.
- Debris and other material will be prevented from entering surface water receptors.
- Fuel will be stored and used in accordance with the Control of Substances Hazardous to Health Regulations 2002, and the Control of Pollution (Oil Storage) (England) Regulations 2001.
- Fuel and other potentially polluting chemicals will be stored in a secure impermeable and bunded area (minimum capacity 110%).
- Refuelling of plant will take place only in a designated area at the site compound at least 20m from watercourses.
- Any plant / machinery / vehicles will be regularly inspected and maintained to ensure they are in good working order and clean for use. This maintenance is to take place off site if possible or only at designated areas in the site compound.
- All fixed plant used on site will be self-bunded as a preference.
- Mobile plant will be in good working order, kept clean and fitted with drip trays where appropriate.
- An Emergency Response Plan will be prepared. Spill kits and oil absorbent material will be carried by mobile plant and located at vulnerable locations on the site. Construction workers will receive spill response training.
- The site will be secure to prevent vandalism that could lead to a pollution incident.
- Surface water drains on roads, other watercourse crossings will be identified and where there is a risk that silt laden runoff could enter them they will be protected (e.g. covers or sand bags).

Drainage

6.17.2. We believe dewatering will not be required as the scope of works has limited excavation depth which does not breach the water table. It is our intention to limit / control surface water run off by limiting the heaping of materials in the working area and deploying road sweepers where runoff is encountered. The only drainage consents which may be required would be in adverse weather conditions. We may need to pump out water from of our excavations. However we would endeavour to avoid this by not leaving open excavations and pumping into plant such as dumpers and disposing in designated lined wash out areas in our site compound.

6.17.3. Construction of the new scheme drainage will be undertaken early on in the construction programme so these drains can help to control construction run-off. The drainage design ties into the existing surface water drainage arrangements.

6.17.4. Site foul water will be discharged into the existing foul water network.

Flooding

6.17.5. Construction activities will be undertaken having regard to the requirements to avoid any significant increase of flood risk.

6.17.6. Appropriate measures will be implemented to protect workers and prevent damage to equipment or the works during potential flood events.

6.17.7. Where there is a perceived risk of flooding due to EA flood warnings, weather conditions, then the site manager will remove plant and materials from areas likely to be affected.

6.17.8. The Construction compound will be located on ground above the 1 in 100 flood level with allowance for climate change.

7. COMMUNICATION AND MONITORING

7.1. Environmental Review Meetings

7.1.1. Regular review meetings attended by the Overseeing Organisation, Site Manager and HSEQ advisor shall be held by the construction team to review performance in relation to the CEMP and co-ordinate short-term planning of forthcoming activities if necessary. Environmental management representatives shall use these meetings to report on the findings of their inspections together with any systematic or recurring issues. Actions from these meetings shall be recorded via minutes and reviewed by the Contract Manager. All actions raised will be documented on the action tracking register and subject to monthly audit by the HSEQ team and senior manager HSEQ tour report.

7.1.2. The Project Environmental Review shall consider;

- Past performance from inspections, audit reports and monitoring data.
- Plan actions required to mitigate forthcoming risks.
- Disseminate best practice.

7.2. Communication

The Principal Contractor will actively promote best practice environmental management in the workplace through the use of newsletters, posters, campaigns, presentations and other communication initiatives.

The Principal Contractor will conduct stand-alone toolbox talks, to provide an opportunity for discussion and/ or information sharing. Personnel and subcontractors will be encouraged to provide feedback on environmental initiatives, toolbox talks areas of interest or concern.

The Principal Contractor will develop and incorporate additional site-specific toolbox topics e.g. washout management as required.

Any awareness initiatives will be made available on notice boards or other relevant areas.

7.3. Monitoring, Inspections, Audits

7.3.1. The Principal Contractor will undertake weekly environmental site inspections. Any actions resulting from the inspection will be recorded and closed-out in a timely manner. The Principal Contractor will also undertake regular environmental compliance audits. Indicative topics of these audits include:

- Ensuring that the CEMP is adhered to and that relevant documentation is being completed;
- Ensuring that progress towards environmental objectives and targets are monitored;
- Ensuring that legislation and / or other requirements are complied with. The Audit Report will make recommendations for improvement and identify the appropriate personnel and timescales for completing the actions.

7.3.2. Daily site management of dust control measures should be undertaken, with visual inspections of activities and control measures carried out every day during dry conditions. The frequency of site inspections will increase when activities with a high potential to produce dust or excessive noise are being carried out and during prolonged dry or windy conditions.

7.3.3. Visual inspections should include recording of activities, controls, weather and ground conditions, and observations of surface dust deposits at and beyond the site boundary in the vicinity of receptors.

7.4. Environmental Incident Reporting

7.4.1. The Principal Contractor will develop procedures for responding to environmental incident and the Site Environmental Manager will be responsible for ensuring site staff members have been fully briefed on how to respond to emergency environmental incidents as part of the induction process.

7.4.2. All incidents and accidents shall be recorded on an Environmental Incidents Register to be made available to the Project Manager and the Client Environmental Manager. This shall detail

- The date the environmental incident occurred;
- description of the environmental incident situation;
- impact of the environmental incidents;
- description of the elements of the environment subject to impacts caused by environmental incidents (receptors);
- actions to be implemented in response to environmental incident;
- responsibility for undertaking actions; and
- time frame for implementing actions.

7.4.3. All incidents will be subject to a full investigation resulting in a report detailing the remedial measures taken and the root cause analysis to prevent recurrence. The Contractor's Environmental Manager/Agent shall instigate an appropriate change in procedures where necessary.

7.4.4. All incidents occurring within the construction site must be immediately reported to the Client Environmental Manager and the Project Manager in order for them to notify the appropriate parties as required, including the Environment Agency, and other relevant local authorities. The Contractor is responsible for notifying the nominated clean-up contractor.

7.5. Environmental Alerts

7.5.1. Environmental alerts shall be distributed by the Contractor, as required, to keep staff informed of environmental issues.

7.6. Site Documentation

7.6.1. All documents relating to construction environmental management shall be kept on site and be available for monitoring and auditing purposes.

7.6.2. These documents shall include:

- The CEMP and any supporting documents;
- Emergency Contact numbers;
- Access negotiations (if necessary), physical access plan and location of construction compounds;
- Complaints register;
- Site daily diary;
- Records of any remediation / rehabilitation activities, if necessary;
- Reports to the Project Manager;
- Register of all environmental incidents and actions taken;
- Any written communication with the Environmental authorities or consultees;
- Waste transfer notes;
- Hazardous waste consignment notes;
- Records of all hazardous materials used on site;
- Monitoring data (e.g. dust, noise);
- Consents and licences obtained;
- Records/reports of surveys and inspections;
- Environmental risk assessments;
- Method statements;
- Environmental training records (inductions, etc.); and
- Training records.

7.7. Community liaison

7.7.1. The Principal Contractor will undertake letter drops to neighbouring properties / businesses advising of the works proposed and will also provide a contact telephone number for the site manager, so that should there be any issues or concerns to neighbouring properties / businesses contact can be made to rectify any potential problems.

Contact Number:

- Site Manager: Steve Hunt – 07384 469172
- Contracts Manager: Aaron Dodds - 07771 536151