

**Former William Freeman Site, Wakefield Road,
Mapplewell, Barnsley, S75 6DN**

Countryside Properties UK Limited

Construction Environmental Management Plan

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Introduction

1.1 Overview

- 1.1.1 This Construction Environmental Management Plan (CEMP) has been prepared by Envance to support a planning application by Countryside Properties UK Limited (the “Applicant”) in relation to Former William Freeman Site, Wakefield Road, Mapplewell, Barnsley, S75 6DN (the “Site”) for the construction of 91 homes, structural planting and landscaping, surface water attenuation and associated infrastructure (the “Development”) in connection with outline planning permission 2017/1718 and reserved matters planning application 2021/1405.
- 1.1.2 This document has been prepared in accordance with Planning Condition 15 of the Decision Notice for Approval of Reserved Matters 2021/1405 (Dated 8th October 2024). The condition states that:

“No development (including construction, land raising and demolition if required) shall be carried out other than in accordance with a Construction Environment Management Plan (CEMP) that is first submitted to, and approved by, the local planning authority.”

1.2 Purpose and Approach

- 1.2.1 The purpose of this CEMP is to provide a framework that outlines how the Applicant and contractor appointed to the project will manage, and where practicable, minimise negative environmental effects during the construction of the Development. Construction is considered to include all site preparation, enabling works, materials delivery, materials and waste removal, construction activities and associated engineering works.
- 1.2.2 This CEMP identifies the minimum requirements with regard to the appropriate mitigation, monitoring, inspection and reporting mechanisms that need to be implemented throughout construction.
- 1.2.3 Adhering to this CEMP does not exempt the Contractor or any sub-contractors from meeting all applicable legislation and laws governing their construction activities.
- 1.2.4 All personnel involved in the Development are required to understand and implement the requirements of this CEMP.
- 1.2.5 Condition 15 of the Decision Notice for reserved matters planning application 2021/1405 requires a CEMP to be submitted to ‘reduce or remove adverse impacts on health and the quality of life, especially for people living and/or working nearby in accordance with Local Plan Policy POLL1’.
- 1.2.6 Policies from the Barnsley Local Plan 2019¹ relevant to this CEMP include:
- Poll1 Pollution Control and Protection – requires developments to demonstrate that they are not likely to result in an increase in air, surface water and ground water, noise, smell, dust vibration, light or other pollution which would affect or cause a nuisance to the environment or to people. Developers are expected to minimise the effects and provide mitigation measures of any possible pollution;
 - BIO1 Biodiversity and Geodiversity – development will be expected to conserve and

¹ Barnsley Metropolitan Borough Council, 2019, Local Plan.



enhance the biodiversity and geological features of the borough; and

- T4 New Development and Transport Safety – new development should be built to provide all transport users within and surrounding the development with safe, secure and convenient access and movement.

1.2.7 A contractor will be appointed that recognises the environmental impacts associated with the Development and will be committed to continually improving its environmental performance. The aims of this CEMP are summarised below:

- outline the programme for environmental management during construction;
- implement the monitoring and mitigation measures identified during construction;
- identify the relevant roles and responsibilities for developing, implanting, maintaining and monitoring environmental management;
- outline the procedures for communicating and reporting on environmental aspects of the Development throughout construction.
- to meet the requirements of all relevant environmental legislation, agreements, authorisations and commitments;
- to fulfil all environmental undertakings and obligations of the Contractor;
- to adopt working practices that will achieve good environmental practice onsite;
- to make sub-contractors and suppliers aware of the environmental constraints and opportunities of the Site and follow any necessary procedures in order to ensure good environmental practice;
- to mitigate the effects of the construction works on businesses, highway users and the general public; and
- to promote operative health and wellbeing during the works with suitable welfare facilities that take cognisance of future climate change risk factors.

1.3 Project Overview

Site Location

- 1.3.1 The Site is approximately 3.6 ha in extent and is located within the administrative area of Barnsley Metropolitan Borough Council. It is located approximately 13.2 km to the south of Wakefield and 4.2 km to the North of Barnsley town centre.
- 1.3.2 The Site comprises of brownfield land, formally occupied by a now demolished factory and a landfill site located to the rear of the factory. To the west the Site is bounded by Wakefield Road, providing access to the town of Wakefield. Residential developments are located to the north, east and west of the Site with commercial developments including the Lidl, Nursery, garage and restaurant located to the south.

The Development

- 1.3.3 The consented development comprises of:
- development of 91 dwellings;



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- structural planting and landscaping;
 - surface water attenuation; and
 - associated infrastructure.



2. Roles and Responsibilities

2.1.1 The roles and responsibilities managing environmental impacts during the construction of the Development include but are not limited to the following personnel.

2.2 Employer

2.2.1 As the employer, Countryside Properties UK Limited, is responsible for appointing competent parties and ensuring that adequate resources are made available to manage environmental risks during construction. They may appoint a representative to assist in monitoring and compliance with the CEMP. This representative may bring in temporary or permanent specialists to implement onsite monitoring.

2.3 Principal Contractor

2.3.1 The principal contractor would be appointed to manage the construction project as a whole, their responsibilities include:

- ensuring that the CEMP is developed & held onsite and that it is implemented and updated throughout all phases of the project;
- maintaining the CEMP and ensuring all contractors, visitors and client representatives understand and comply with the CEMP;
- ensuring that environmental issues identified within the pre-construction information and the pre-construction Site surveys and relevant information gathered from agencies, local councils etc. are addressed;
- develop and implement an Environmental Management System (EMS) which follows the principles of ISO14001;
- develop emergency protocols for environmental incidents and non-compliance; and
- develop a programme for inspections and monitoring.

2.4 Site Manager

2.4.1 The Site Manager will be responsible for overseeing the day-to-day management of activities and ensuring construction activities are undertaken in a safe and effective manner to the highest possible standard. They will ensure that all environmental legislation and best practice guidance is complied with and ensure all tasks are resourced and managed appropriately. Their responsibilities will include:

- ensuring all stored materials and chemicals are safe and secure;
- ensuring the Site is kept in a tidy and orderly condition, with waste managed according to specified procedure;
- emergency egress arrangements, so those leaving site in the event of a pollution or spillage incident may do so safely; and
- ensuring all those that work onsite have a Site Induction and relevant toolbox talks including briefing on ecological issues pertinent to the project and are aware of all ecological matters which arise onsite.



- 2.4.2 Site manager contact details will be displayed on the signage at the entrance to the Site, along with the head office contact details. The scheme will also be registered with Considerate Constructor, and the site-specific registration will also be displayed on the front signage.

2.5 Project Manager

- 2.5.1 The project manager will be responsible for ensuring the planning conditions and requirements are met and that the CEMP is followed. They will ensure that all environmental legislation and best practice guidance is complied with and ensure all tasks are resourced and managed appropriately. The project manager will deal with project budgeting, scheduling, and the overall performance of the Development.

2.6 Community Liaison Officer

- 2.6.1 The community liaison officer may be appointed by the contractor to act as the primary point of contact for all stakeholders during the construction period. They will ensure that regular and effective communication with nearby residents and other stakeholders, providing timely updates on amendments to construction activities, planned works, and any effects that may arise. The community liaison officer will facilitate engagement activities with stakeholders to address any queries and will be the primary point of contact for complaints.

2.7 Environmental Co-ordinator

- 2.7.1 The Environmental Co-ordinator will be responsible for all environmental activities relating to the Development and will report to the Contractor. Their duties will involve the following:
- manage onsite activities to avoid significant environmental effects;
 - act as the main point of contact on environmental issues between the project and both the regulatory authorities (Environment Agency and Barnsley Metropolitan Borough Council) and the local community;
 - liaise with the Ecological Manager and Ecological Clerk of Works (ECow) for the project;
 - ensure environmental legislation and best practice are complied with;
 - ensure environmental mitigation and monitoring set out in the CEMP are implemented;
 - oversee environmental monitoring and conduct inspections and audits;
 - develop and deliver the environmental training for Site personnel and contractors, including induction and toolbox talks;
 - assist with the development of procedures in response to environmental incidents;
 - management of the monitoring programme, including noise, ecology, landscape and visual, and dust including identifying the need to bring in specialists where needed; and
 - environmental incident monitoring and reporting.



2.8 Ecological Clerk of Works

2.8.1 The ECoW will manage the protection of valued onsite biodiversity assets. They will provide site-specific advice on how compliance with environmental legislation can be ensured and help to avoid unexpected costs and delays to construction. The ECoW will manage ecological operatives involved in mitigation activities. Their responsibilities include:

- ensuring work is carried out in accordance with legislation and consents, objectives, targets and the CEMP with regards to any ecological activities onsite;
- ensuring staff operate in accordance with agreed Risk Assessments and Method Statement (RAMS) and in accordance with the project induction and toolbox talk training with regards to environmental and ecological risk;
- ensuring work is carried out in accordance with legislation and consents, objectives, targets and the CEMP with regards to any ecological activities onsite;
- ensure the construction adheres to ecological regulations and wildlife laws; and
- ensure environmental and ecological issues are reported.

2.9 Safety, Health, Environment and Quality

2.9.1 The safety, health, environment and quality (SHEQ) personnel is responsible for ensuring that construction works are compliant with environmental legislation and environmental conditions associated with planning and licensing permissions. They will oversee that the Site operates with high health and safety and environmental standards, complete risk assessments and inspections, and ensure construction staff understand environmental and safety procedures.



3. Environmental Management Procedures

3.1 Training, Awareness, Competence and Communication

Training

- 3.1.1 The principal contractor will be responsible for ensuring that all personnel possess the appropriate level of environmental competence. Where necessary, they will identify specific training needs for the construction workforce and ensure these requirements are fulfilled.
- 3.1.2 A Site mandatory induction will be provided to all construction staff, and anyone attending Site prior to the commencement of construction activities and will cover the following at a minimum:
- introduction to the Environmental Co-ordinator;
 - description of the CEMP and consequences of non-compliance;
 - the requirements of due diligence and duty of care;
 - overview of conditions of consents, permits and licences;
 - requirements associated with community engagement and stakeholder consultation;
 - identification of environmental constraints and notable features within the Site including any ecological sensitivities and timing restrictions; and
 - procedures associated with incident notification and reporting including procedures for dealing with damage to the environment.
- 3.1.3 An Environmental Training and Awareness Programme will be established to provide a baseline level of environmental awareness and cover the key environmental considerations and objectives.
- 3.1.4 All induction and training will be recorded and will be made available to the Employers Representative and/or Environmental Co-ordinator. To ensure construction staff have an adequate knowledge of environmental issues, community relations and environmental control procedures, regular Site briefings and talks will be conducted.

Public Engagement and Information

- 3.1.5 Regular communication with neighbouring residents and any community groups shall be maintained throughout the duration of works to provide updates on the scheduled works and any changes that may occur as a result of unforeseen circumstances.
- 3.1.6 Display boards shall be prominently displayed at the Site. The boards shall detail the nature of the works being undertaken, a contact name, telephone number (including a telephone number to be used outside of working hours), and a postal address where enquires can be sent. The telephone number provided to local residents and businesses shall be maintained at all times whilst the development works are taking place in order to respond to any enquiries and complaints.
- 3.1.7 A complaints register shall be kept and shall include complaint's details, date and time of the complaint, causes of the complaint, action taken to resolve the complaint, date and time of



action taken to resolve the complaint and any reasons for unresolved complaints.

- 3.1.8 The Contractor will ensure that nearby residents are informed about unavoidable or unexpected disruption as a result of construction. This will be done in advance of the disruption where possible, in writing, through a letter drop.

Communication Procedures

- 3.1.9 The Contractor will communicate with relevant stakeholders such as Barnsley Metropolitan Borough Council and nearby residents at an appropriate level and frequency. The public will be informed of appropriate channels of engagement and points of contact with the team before the commencement of construction, this information will be displayed around the working areas. The Contractor may appoint a Community Liaison Officer for duration of the works to act as the point of contact for stakeholders.
- 3.1.10 The Project Manager will ensure that construction personnel are informed of any changes to environmental, health, or safety legislation. Internal communication will be used to report incidents and communicating environmental commitments to the correct personnel. Where environmental issues arise and require communication, the Environmental Co-ordinator will be informed.
- 3.1.11 An emergency contact list including key environmental representatives that need to be contacted in the event of an incident, will be made available to all construction staff and shall be displayed prominently onsite. A process will be established for the handling of all enquiries, including complaints, they will be recorded and logged and will include details of the response and action taken. This record will need to be maintained and be made available upon request for inspection from Council.
- 3.1.12 Regular meetings may be required throughout the construction period between the Contractor, Project Manager, Site Manager, Environmental Co-ordinator and environmental specialists to discuss and review environmental matters.

3.2 Monitoring, Inspections and Audits

- 3.2.1 Routine inspections will be conducted by the Environmental Co-ordinator to assess compliance with the CEMP, the outcomes of monitoring programmes, non-conformities and incidents, complaints and queries and environmental training undertaken. Inspections will be documented and recorded.
- 3.2.2 The Environmental Co-ordinator will complete an audit to assess conformance of the EMS. For non-conformities, the auditor will prepare a Corrective Actions Report to describe and record the findings of the non-conformance and an audit report.
- 3.2.3 Monitoring programmes will be developed, implemented and assessed in accordance with the CEMP, with results regularly reviewed by the Environmental Co-ordinator to identify issues and implement corrective actions.
- 3.2.4 External audits may be undertaken to allow an independent auditor to advise on compliance with applicable environmental regulatory requirements and the efficiency of the environmental management approaches used. External audits may be undertaken by a regulatory body to monitor compliance against legislative and regulatory requirements.



3.3 Incident response

Corrective Actions

- 3.3.1 Where non-conformance is identified corrective actions will be implemented to rectify the issue. An investigation would be undertaken to identify the cause, and appropriate remedial measures will be implemented as soon as practicable to prevent further exceedances. If required, the appropriate statutory authority and stakeholders will be notified. The CEMP will be updated to reflect any new measures introduced to the project.
- 3.3.2 As described in Section 3.2.2 Corrective Actions Report will be prepared, describing the cause and effect of the non-conformance and the recommended corrective action required.

Emergency Incidents

- 3.3.3 Emergency incidents are those occurrences that give rise to significant negative environmental effects. These may include:
- failure of any mitigation measure and/or environmental protection system;
 - any emission that does not comply with the requirements of the contract and relevant licences;
 - any circumstance with the potential for environmental pollution; or
 - any emergency that may give rise to environmental or ecological effects (e.g. significant spillages or fire outbreak).
- 3.3.4 During construction of the Development, all efforts will be made to prevent pollution incidents associated with spills. Where these events may occur, the emergency response procedure will be followed. The emergency response procedure is outlined in section 4.10 of this CEMP. The incident must then be reported, recorded and investigated in accordance with the procedures described above in 'Corrective Actions'.
- 3.3.5 Emergency incident response procedures and an Emergency Incident Response Plan will be used to govern the management of emergency incidents. The Emergency Incident Response Plan will contain emergency phone numbers and the method of notifying local authorities, statutory authorities and stakeholders. When preparing these response measures, the contractor will consult with the relevant authorities and stakeholders and if a sensitive receptor is impacted, the appropriate environmental specialists will be informed and consulted. All staff onsite will be familiar with the emergency arrangements.

3.4 Good Housekeeping

- 3.4.1 A good housekeeping policy will be employed onsite at all times during construction of the Development. This will include, but is not limited to:
- cleanliness of welfare facilities and storage areas, and general maintenance of working areas;
 - a site layout map showing key areas including first aid posts, material storage, spill kits, material and waste storage, welfare facilities etc;
 - all plant, material and equipment required for construction work is maintained in



good order, and remains clean and tidy;

- keep construction compounds, access routes and designated parking areas free and clear of excess dirt, rubbish piles, scrap wood etc. at all times;
- each working area to install appropriate security, lighting, fencing and hoarding;
- excavated material generated during construction will be reused onsite as far as practicable and surplus materials and soil will be recovered or disposed of to a suitably authorised waste facility site;
- effective prevention of infestation from pests or vermin will be introduced. If infestation occurs, appropriate action to eliminate and prevent further occurrence must be undertaken;
- maintenance of wheel washing facilities and other contaminant measures must be undertaken where required at each working area;
- no discharge of Site runoff or water discharge without agreement of the relevant authorities;
- less intrusive noise alarms which meet safety requirements may be used to reduce the requirement of traditional alarms; and
- maintenance of entry/exit areas around working areas for pedestrians, cyclists and vehicles where practicable and to achieve inclusive access.

3.5 Hours of Working

- 3.5.1 General hours of working, construction deliveries and operation of plant or machinery will be as follows unless otherwise agreed with the Local Planning Authority (LPA): 08:00-18:00 h Monday-Friday 09:00-14:00 h Saturday
- 3.5.2 No Site work will be undertaken on Sundays or on Bank Holidays.
- 3.5.3 Working outside of the construction core working hours may be required in exceptional circumstances, this will be agreed to with Barnsley Metropolitan Borough Council in advance and consideration will be given to nearby sensitive receptors. In the case of emergency activities or activities which if not completed would be unsafe or harmful to workers, the public or local environment, Barnsley Metropolitan Borough Council will be informed of reasons and likely duration and timing.

3.6 Accommodation and Welfare Facilities

- 3.6.1 Accommodation and welfare facilities will be provided onsite to comply with Construction (Design and Management) Regulations 2015². This will minimise pedestrian traffic movement on and offsite by ensuring the majority of personnel remain on Site during working hours.
- 3.6.1 Temporary stand-alone self-contained welfare units will be used until longer-term accommodation can be set up before commencement of the main works.

² UK Government, 2015, Construction (Design and Management) Regulations.



3.7 Site Security

- 3.7.1 The Principal Contractor will be responsible for implementing any necessary security measures to maintain a safe and secure construction environment. The following measures may be used to prevent unauthorised access:
- install CCTV and alarm systems where required. CCTV/systems will not be directed into occupied residential properties;
 - installing durable fencing around the Site perimeter to prevent unauthorised access minimise safety risks, and protect materials, equipment, and personnel. Fencing should meet local regulatory standards and be sufficient to withstand weather conditions typical to the area;
 - provide adequate security guards and patrol if required;
 - when there is no Site activity, close and lock Site gates and set appropriate Site security provisions in motion;
 - consult with neighbouring properties and local crime prevention officers; and
 - prevent access to restricted areas and neighbouring properties by securing equipment onsite such as scaffolding and ladders.
- 3.7.2 Clear visible signage will be placed at all entry points along the fence line to indicate restricted access, safety requirements, and emergency contact information. Signs should direct visitors to designated entry points and clearly mark hazards or restricted zones within the Site to protect both workers and the public. Further security may include lighting at critical locations such as access points and surveillance cameras to monitor activity after work hours.
- 3.7.3 Hoarding or fencing will be placed around each working area prior to the commencement of construction at a height of c. 1.8 m. The hoarding/fencing will act as a barrier to those that have not received appropriate training or those unfamiliar with construction operations. It will also provide a buffer for noise and dust emissions and screening of visual impacts.
- 3.7.4 The Principal Contractor will review and amend security measures periodically in response to any changes in site layout, construction stages, or identified risks. This will help to ensure the integrity and safety of the construction Site throughout the project duration.

3.8 Health and Safety

- 3.8.1 The Principal Contractor will be required to ensure all relevant health and safety, fire safety and security requirements are in place prior to construction commencing in accordance with their legal obligations. All works will be undertaken in compliance with the Health and Safety at Work Act 1974, applicable Guidance Notes and Approved Codes of Practice, in addition to the specifications of Barnsley Metropolitan Borough Council.



4. Environmental Management

4.1 Traffic and Transport

- 4.1.1 A construction method statement will be submitted and approved by the LPA before construction commences pursuant to Condition 18 of the Decision Notice for outline planning application 2017/1718. This will include details of parking for Site personnel and visitors, construction access and loading and unloading of plant. The Contractor will ensure that any environmental effects of construction traffic are minimised where reasonably practicable by implementing measures set out in the Construction Method Statement.
- 4.1.2 A managed delivery strategy will be adopted which avoids where possible deliveries to Site in peak periods, the network AM peak hour occurring between 08:00 and 09:00 h and the PM peak hour occurring between 17:00 and 18:00 h. Where deliveries are required during peak periods, consent will be obtained from Barnsley Metropolitan Borough Council. HGV delivery hours will be limited wherever possible with no movements within the vicinity of the Site taking place during unsociable hours. Similarly, consideration will be given to the route and timing of vehicles associated with the removal of soils to minimise disturbance.
- 4.1.3 Deliveries will be booked 24 hours in advance and managed to regulate the flow of construction traffic and minimise any congestion. All loading and unloading shall take place in the designated area. No materials or skips shall be stored on the highway at any time.
- 4.1.4 Necessary arrangements will be put in place for offloading of materials prior to the arrival of deliveries such as booking crane time or ensuring suitable laydown areas. Where deliveries are offloaded by hand, edge protection will be put into place and materials will be moved to allocated storage areas immediately to prevent Site congestion. Details of loading and unloading of Plant and Materials shall be detailed in the construction method statement and agreed upon by the LPA prior to the start of construction.
- 4.1.5 The following will be implemented by the Contractor to ensure safe vehicle movements and to minimise environmental impact:
- deliveries will be managed to regulate the flow and quality of construction traffic and minimise any congestion or buildup outside of the Site boundary;
 - a maximum speed limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas will be imposed;
 - all Site staff including truck drivers will be required to abide by the normal rules of the road; and
 - no construction vehicles will be permitted to park outside the Site boundary.
- 4.1.6 The following will be implemented by the Contractor to minimise environmental impact:
- all trucks entering and exiting the Site will be covered with tarpaulin;
 - all trucks entering the Site will be restricted to suitable speed limits and will be directed to the relevant area by the Site Manager;
 - trucks required to wait onsite will switch off engines to avoid unnecessary fuel usage and noise;
 - the access/entrance to the Site will be kept clean and all trucks exiting the Site will be



required to pass through a wheel wash. A lance will be provided to clean down the bodies and sides of the truck prior to leaving Site;

- roads outside the Site will be visually inspected on a daily basis and power swept and washed as and when required;
- all Site staff including truck drivers will be required to abide by the normal rules of the road; and
- risks associated with the transport of soils that are potentially containing contaminants will be appropriately managed. Wherever possible, these materials if found will be reused onsite or removed if required using a licenced waste carrier.

4.1.7 Signs will be positioned at Site entrances and exits to manage traffic entering and leaving the Site and to warn pedestrians and road users of construction traffic. Signs will be placed throughout the Site detailing approved vehicle routing, speed limits, and areas of potential hazards such as dust and dirt.

4.2 Air Quality

4.2.1 Details of mitigation measures to reduce the impact of the Development on Air Quality will be agreed with the LPA prior to commencement of construction to comply with condition 4 of the Decision Notice of the outline planning application 2017/1718.

4.2.2 Air quality matters from construction will be controlled by applying measures taken from the Institute of Air Quality management (IAQM) guidance on the assessment of dust from demolition and construction. Table 4.1 outlines the appropriate measures implemented to minimise dust emissions.

Table 4.1: Measures to minimise air quality impacts

Topic	Guidance
Site management	The Contractor will record all dust and air quality complaints including causes and take appropriate measures to reduce emissions in a timely manner. The complaints log shall be made available to the local authority when requested. Contact details for the company and person responsible for air quality pollutant emissions will be displayed. Any exceptional incidents that effect air quality emissions shall be recorded in the log book, including action taking to resolve the incident.
Monitoring	The Contractor will carry out daily Site inspections to monitor compliance with the IAQM guidance, record inspections results, and make an inspection log available to the local authority when requested. The contractor will increase the frequency of Site inspections by the person accountable for air quality and dust issues onsite when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions. Daily offsite inspections of nearby receptors shall be carried out and recorded in the inspection log, available to the local authority. The inspection will include dust soiling checks of surfaces 100 m from the Site including cars, windowsills and street furniture. Cleaning shall be provided if necessary.

Construction Environmental Management Plan

Former William Freeman Site, Wakefield Road, Mapplewell, Barnsley, S75 6DN



Topic	Guidance
	Air quality and dust monitoring stations will be set up as required and monitored by the principal contractor to record the dust concentrations during the works.
Preparing and maintaining the Site	Delivery activities, plant, stockpiled materials and/or any other activities liable to significant dust generation shall be located as far away as possible from the development Site boundaries and neighboring properties. Solid screens or barriers will be erected around dusty activities or the Site boundary that are at least as high as any stockpiles. The Contractor will fully enclose the Site or specific operations where there is a high potential for dust production, and the Site is active for an extensive period. Site fencing, barriers and scaffolding will be kept clean using wet methods. The Contractor will remove materials that have a potential to produce dust from Site as soon as possible, unless being re-used onsite. If they are being re-used onsite cover, seed, or fence stockpiles to prevent wind whipping. Stored materials liable to dust generation shall be dampened down, covered with tarpaulin, or otherwise contained as far as reasonably practical.
Operating vehicle/machinery and sustainable travel	All Plant machinery, and lorries will be kept in good working order and will be switched off when not in use to minimise fumes. Electric or battery powered equipment shall be used instead of diesel or petrol generators where possible. All plant and equipment shall be maintained in accordance with manufacturers recommendations to ensure emissions into the atmosphere are minimised. A maximum-speed-limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas will be enforced.
Operations	Cutting, grinding or sawing equipment will be used fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems. Water suppression shall be used in dry conditions to reduce dust emissions (e.g. mobile bowzers or fixed sprayers as appropriate). A water suppression contingency plan should be included detailing water supply to Site and what equipment will be kept available (e.g. number and size of bowzers, sprinklers, mist canons etc.). Drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment will be minimised and fine water sprays on such equipment will be used wherever appropriate. The Contractor will ensure equipment is readily available onsite to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods. Skips, chutes, and conveyors shall be covered and if necessary enclosed to ensure that dust does not escape. Areas where there is regular vehicular movement should have a consolidated surface which shall be kept in good repair. Stockpiles will be kept to a minimum to reduce 'wind whip' causing potentially hazardous material to be blown from the pile.



Topic	Guidance
	Plant will be appropriately loaded to prevent spillages. Public roads will be inspected and swept using road sweepers as required. Site run-off, water and mud will be avoided. An adequate water supply will be provided onsite for effective dust mitigation. Non-portable water shall be used where possible. Equipment shall be available onsite to clean and dry spillages as soon as reasonably practical after using wet methods.
Measures specific to Earthworks	Earthworks and exposed areas/soil stockpiles shall be revegetated as soon as practical to stabilise surfaces. Where revegetation is not possible, hessian, mulches or tackifiers will be used to cover topsoil. The cover shall be removed in small areas as required, not all at once. Spraying of exposed earthwork activities and site haul roads during dry weather.
Measures specific to construction	Scabbling (roughening of concrete surfaces) will be avoided where possible. The Contractor will ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place. Manual or mechanical alternatives shall be used during demolition to avoid explosive blasting. Cement and other fine powders shall be delivered in enclosed tanks and stored in silos with suitable emission control to prevent overfilling and material escape during delivery. For smaller supply, bags shall be sealed after use.
Measures specific to track out	Water-assisted dust sweeper(s) will be used on the access and local roads, to remove, as necessary, any material tracked out of the Site. This may require the sweeper being continuously in use. The Contractor will avoid dry sweeping of large areas. Onsite haul roads shall be inspected for integrity and shall be repaired as soon as practical. These inspections shall be recorded in a log book. Access gates shall be placed at least 10 m from receptors where practical. An adequate area of hard surfaced road shall be placed between the wheel wash facility and Site exit. All vehicles carrying dusty materials shall be securely covered.

4.2.3 Other appropriate control measures to mitigate dust emissions to be provided onsite, where required by the Contractor, will include:

- haul roads will, where practical to do so, be constructed of crushed hardcore products. The haul roads will be maintained for the duration of their use to minimise any build-up of loose spoil etc. and any soft spots;
- mobile water bowsters and sprayers will be available onsite as required to damp down unpaved haul roads and working areas in order to suppress construction related dusts;



- wagons that are to be used for the haulage of any contaminated material from the Site will be appropriately sealed or sheeted to prevent the release of fugitive dust;
- air quality and dust monitoring stations will be set up as required and monitored by the principal contractor to record the dust concentrations during the works; and
- with regards to any stockpiles onsite, the following control measures may be introduced:
 - plant will be appropriately loaded to prevent spillages;
 - appropriate signage shall be displayed so that Site workers/visitors are alerted to the potential hazards associated with the material to be stored onsite; and
 - roadways within the Site will be kept moist by spraying from a water bowser.

4.2.4 The use of non-road mobile machinery (NRMM) with a net power between 37kW and 560kW will be required to meet the standards set out below. These standards are applicable to both variable and constant speed engines and apply for both particulate matter (PM) and nitrogen oxide (NOx) emissions:

- NRMM used on any construction or demolition site within urban areas will be required to meet Stage IIIB of EU Directive 97/68/EC (as amended) as a minimum.
- NRMM used on any MEDIUM or MAJOR classified development will be required to meet Stage IV of EU Directive 97/68/EC (as amended) as a minimum.

4.2.5 The requirements may be met using the following techniques;

- reorganisation of NRMM fleet;
- replacing equipment (with new or second-hand equipment which meets the policy);
- retrofit abatement technologies; and
- re-engineering.

4.2.6 All eligible NRMM should meet the standards above unless it can be demonstrated that the machinery is not available or that a comprehensive retrofit to meet both PM and Noc emission standards is not feasible. At this stage, the types of NRMM used onsite are unknown and will be confirmed at a later date.

4.2.7 A wheel wash facility will be manned within 30 m of the Site entrance. It will be located on hard standing sufficiently sized to allow vehicles to carry out one full wheel revolution whilst within the wheel wash area, allowing the entire circumference of the tyre to be washed. The wheel wash will be fitted with rumble guards to dislodge any accumulated dust and mud.

4.2.8 Surface run off from washing areas can contain high levels of pollutants such as detergents, oil and fuel, suspended solids and antifreeze. Aggregates removed from the drain design, will be disposed of as contaminated waste in accordance with waste management regulations.

4.3 Noise and Vibration

4.3.1 Site works located in residential and other locations can create noise nuisance to neighbours and the general public, as well as posing an occupational risk. The presence of sensitive



receptors will be identified and the necessary control measures implemented. The Contractor should plan to minimise noise through the use of low vibration methods and silenced equipment machinery when breaking up hardstanding areas Site footprint.

4.3.2 If increases in noise are considered excessive, control measures will be adopted. Where possible noisy operations must be programmed for times when the least perceived nuisance will occur. Where construction noise emissions create an impact to local population, consideration will be given to mitigating the effect of noise, including:

- Best Practice Means (BPM), as defined in the Control of Pollution Act 1974, will be adopted throughout the construction phase;
- if necessary, working methods will be altered in order to ensure that the level of noise generated from the works are within published tolerable limits;
- the location of any plant will consider the location of neighbouring properties and other noise sensitive receptors and will be located away from these areas, where possible;
- plant and machinery capable of generating significant noise and vibration levels will be operated in a manner to restrict its duration;
- static plant and machinery shall be sited as far away as possible from inhabited buildings or other noise sensitive locations;
- all compressors shall be 'noise reduced' models that are fitted with properly lined and sealed acoustic covers which shall be kept closed whenever the machines are in use. All ancillary pneumatic percussion tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers;
- wherever possible mains electricity or battery powered equipment shall be used instead of diesel or petrol powered generators;
- all generators used onsite should not be audible at or beyond the Site boundary outside of approved working hours;
- no stereos or similar amplified devices shall be audible at the Site boundary;
- the handling of materials shall be conducted in such a manner that minimises noise;
- mobile plant will be turned off when not in use;
- all machinery will be fitted with effective silencers, be subject to regular preventative maintenance and will be serviced at the required intervals. No items of plant will be operated with engine covers raised or defects;
- where earth bunding, solid Site hoardings and the like are to be built and may act as a noise barrier, they should be constructed as early as possible in the construction programme; and
- the quietest possible plant that can practicably be obtained will be used for each construction task. Percussive plant should be avoided where alternative non-percussive plant is available for a given task. Construction tasks that would generate the highest noise levels to be programmed to avoid sensitive times.

4.3.3 Working hours have been outlined in Section 3.5 of this document. If any works are to be



conducted outside of this time period, then they will be assessed, the Site Manager will be notified, and any noise reduction methods will be implemented as necessary.

- 4.3.4 Standard construction plant/equipment will be used during all phases of the construction process. All plant items will be properly maintained and operated in accordance with the manufacturers' recommendations, so that excessive noise is minimised. Plant known to emit noise strongly in one direction should, where possible, will be orientated so that the noise is directed away from noise sensitive areas. Stationary plant such as compressors and generators will be positioned away from sensitive locations within the confines of the operational use of the equipment.
- 4.3.5 To establish the noise emission levels during the works, a programme of noise monitoring will be carried out for the first week of each phase of works to determine the noise levels received at the closest receptors. The principal objectives of the monitoring will be to identify if additional control measures are required. All measured noise levels will be recorded and retained onsite for the duration of the construction programme.

4.4 Landscape and Visual

- 4.4.1 A search of the Barnsley Metropolitan Borough Council interactive map (8th May 2026) identified that there are no Tree Preservation Orders (TPO) or conservation areas within or in proximity to the Site. Before undertaking any work to any of the trees, it would be advisable to check whether either of these planning controls are in operation; if they are, it would be necessary to obtain consent (or in the case of a Conservation Area provide six weeks' notice of intent) before undertaking any such work.
- 4.4.2 The retained trees will be protected from unnecessary damage during the construction process. Tree protection on development sites is of paramount importance if they are to be retained successfully. The inevitable stress caused by development near existing trees can, if provision for adequate protection is not made, be a strain that can severely damage the trees or even result in their death.
- 4.4.3 Measures set out in the Arboricultural Method Statement, 2026, to be submitted pursuant to Condition 7 of the Decision Notice for outline planning application 2017/1718, to avoid or reduce stress on existing trees shall be followed. The measures outlined in the Statement include:
- a Site meeting between the Site manager and an arboricultural consultant shall be undertaken prior to any construction works. This meeting shall cover the programme of work, tree protective measures, locations of storage areas, and agreement of any changes to the method statement;
 - tree works set out in the Arboricultural Method Statement shall be undertaken by a qualified and insured tree surgeon;
 - a hard copy of the Arboricultural Method Statement shall be kept in the Site office and all Site personnel shall be made aware of the constraints and protection measures in place for retained trees;
 - before construction begins, protective fencing shall be erected as laid out in the Tree Protection Plan. Fencing shall meet the specifications set out in the Arboricultural method Statement and comply with standards BS 5837:2012 Trees in Relation to



Construction – recommendations³;

- notices shall be placed on fencing prohibiting entry;
- materials likely to cause damage to trees such as oil, bitumen, cement or other materials shall not be stacked or discharged within the protected areas or within 10 m of trees. No materials shall be discharged within the protected areas;
- concrete mixing and washing shall not take place within 10 m of retained trees;
- fires shall not be lit beneath foliage or in a position where flames could extend to within 5 m of foliage. Large fires shall be placed at least 20 m from retained trees;
- retained trees are prohibited from being used as anchorage for equipment, notice boards or telephone cables; and
- large plant such as cranes shall be used with care in the vicinity of retained trees.

4.4.4 Regular Site monitoring and audits shall be undertaken and recorded to ensure correct measures are implemented. These records shall be made available to the LPA. Site monitoring should include visits from an appointed arboricultural consultant to confirm correct installation of fencing, oversee sensitive works, and sign off before fencing is removed.

4.4.5 The following measures shall be implemented, to avoid or reduce visual impacts during construction:

- construction-site lighting would as far as practicable be low level and/or confined to essential locations;
- construction to be undertaken during typical daylight hours (8:00-18:00h Monday – Friday and 09:00-14:00h Saturday with no work on Sundays or Bank Holidays) including the HGV deliveries to Site and movements of vehicles onsite;
- all ground disturbances would be confined as far as practicable and working widths during construction operations would be restricted resulting in a minimal loss of forestry and landscape fabric;
- Site fencing shall be erected to screen construction activities; and
- excavated material onsite can be formed into temporary bunds to help screen the construction activities.

4.5 Ecology

4.5.1 Protection and enhancement of biodiversity and ecology is a legal requirement. A Preliminary Ecological Appraisal (PEA) was completed in 2018 and accompanied the outline planning application 2017/1718. Specific controls have been recommended for the surveying and monitoring of protected species.

Protected Sites

4.5.2 No designated Sites were identified within the Site boundary or within the area surrounding

³ British Standards Institution, 2012, BS 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations.



the Site that were deemed to be impacted on by construction activities.

- 4.5.3 The Staincross Cutting Regionally Importance Geological of Geomorphological Site (RIGS) is located along the dismantled railway cutting on the Southeast Site boundary. All lighting shall face away from the dismantled railway corridor, and low wattage bulbs shall be used. Artificial lighting is discussed further in section 4.13.

Habitats

- 4.5.4 A number of trees along the northern and eastern sides of the Site shall be retained. As per the guidance within the Arboricultural Method Statement, these trees will be protected during the development of the site with fencing erected around the root protection zone to prevent accidental damage to any of the trees. These methods are outlined in section 4.4 of this report.
- 4.5.5 Landscape planting shall include a numerous native shrub and tree species such as native fruit and berry bearing species. Full details of plants to be used onsite are set out in the Landscaping Plan submitted alongside the planning application.

Species

- 4.5.6 Prior to the commencement of construction, a suitably experienced ECoW should be appointed to undertake the following as a minimum. It should be appreciated that wildlife is mobile and this CEMP is written based on the most recent ecological data. Table 4.2 sets out the recommendations to avoid, mitigate or compensate impacts to ecology.

Table 4.2: Ecology requirements during construction

Ecology Receptor	Constraints Identified	Timings	Mitigation requirements during construction
Birds	Vegetation onsite provides opportunities for nesting birds.	Prior to vegetation removal	Vegetation clearance during the main breeding season can be damaging to active bird nests, so should ideally take place in the months October-February. Where clearance within the breeding season is unavoidable, an ECoW must undertake a nesting bird check within 48 hours prior to works. If active nests are found, the ECoW shall set a buffer around the nest depending on factors such as the species of bird, nesting stage and Site conditions. Works shall be prohibited within this buffer until the ECoW determines that the nest is inactive. A report will be written up clearly showing the nest locations and buffer zones. This will be presented to the developer and personnel on site who will be instructed not to carry out any works of any nature within the buffer zones. The active nests will be monitored until the ecologist confirms that the young have fledged and gives the go ahead for the area to be cleared.



Ecology Receptor	Constraints Identified	Timings	Mitigation requirements during construction
		During Construction	If nesting birds are encountered during construction, contractors should stop work immediately and contact an ecologist for advice and the production of a suitable revised method statement. RAMS from contractors will be scrutinised and authorised by the Environmental Advisor before work commences to ensure the requirements above are understood, factored into working methods, and adhered to.
		Prior to construction completion	Ten bird boxes shall be placed in the trees along the northern and eastern sides of the Site. Exact locations shall be agreed with the ECoW. The bird boxes will be Vivara Pro Seville Woodstone nest boxes, five with a 32 mm hole and five with a 28 mm hole to provide nesting opportunities for a variety of bird species. Integrated bird boxes shall be installed on 100% of the dwellings. Habibat Swift boxes should be used as they provide habitat for a range of species.
Bats (foraging/ commuting)	Suitable foraging and commuting habitat present onsite.	During construction	RAMS from contractors will be scrutinised and authorised before work commences to ensure the requirements above are understood, factored into working methods, and adhered to. Lighting in the vicinity of any retained foraging habitat for bats shall observe Lighting in the UK Guidance Note 8 Bats and Artificial Light. Details of lighting are discussed further in section 4.13 of this CEMP. A number of existing trees along the northern and eastern Site boundaries shall be retained and protected during development to prevent fragmentation of bat commuting routes.
		Prior to construction completion	Lighting within the Site shall be down lighting and face away from Site boundaries with no light spilling beyond the Site. Lighting columns shall be fitted with baffles to the rear to ensure minimal light spill onto the surrounding habitats.
Bats (roosting)	No records onsite	Prior to construction	Bats only require small cavities for roosting and very small roost entry gaps and bat roost may become established at any time. Bats have multiple roost sites and almost any structure/tree with suitable crevices has the potential to be utilised opportunistically by an individual bat.

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Ecology Receptor	Constraints Identified	Timings	Mitigation requirements during construction
			Prior to felling all trees should be re-surveyed by an appointed ecologist as a precaution. Felling should cease immediately if a bat is found or suspected and a licensed bat ecologist consulted for advice.
		Prior to construction completion	Integrated bat boxes shall be installed on 100% of the new houses on houses near to the northern and eastern Site boundaries in areas where bats forage and commute. Boxes shall be placed as high as possible from the ground and will not be located over doors and windows. The boxes will be placed in different positions on sunny aspects to provide a range of warm conditions. These will be the Habibat 001 Bat Box with Bespoke Facing to match the walls of the houses.
Amphibians	Amphibians recorded onsite	Prior to construction	All Site personnel shall be briefed on the possible presence of amphibians. Areas of suitable habitat shall be checked before clearance. If amphibian species are discovered during their active period (March to October inclusive) they should be allowed to move away on their own or, if in danger, they shall be relocated to an area of dense vegetation. If common amphibians are discovered onsite outside of this period, an ecologist shall be contacted for advice.
		During Construction	Any trenches or excavations left open overnight shall be fitted with ramps or escape routes to prevent entrapment. All open excavations shall be checked by a suitably experienced person each morning before work commences. Waste shall be removed immediately to prevent soil compaction and/or creating refugia. Where waste is stored onsite it shall be stored on artificial surfaces and removal undertaken carefully by hand. Materials and chemicals shall be stored securely. In the unlikely event GCN is encountered onsite, works shall be ceased immediately, and an ecologist shall be contacted for advice.
Reptiles	No records of reptiles onsite. Suitable habitat is	Prior to construction	All personnel must be briefed on the potential reptiles present onsite. Two reptile refugia shall be placed onsite. Suitable locations shall be agreed with the ECoW. Reptile refugia will comprise layered

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Ecology Receptor	Constraints Identified	Timings	Mitigation requirements during construction
	provided in onsite rubble piles.		mounds (approx. 3–5m diameter, 0.5–1m height) of graded brash, logs, and rubble capped with spoil/turf, sited on south-facing aspects at least 5m from the working area and adjacent to retained foraging/commuting habitat. Construction will be checked by the ECoW prior to any capture works, with refugia left undisturbed for the duration of construction and protected by exclusion fencing where adjacent to the site boundary.
		During construction	In the event a reptile is encountered, it must be left to move away safely on its own accord. If large numbers of reptiles (5+) are found an ecologist shall be contacted for advice. A toolbox talk has been included at the end of this report to assist with this briefing.
Badgers	No records onsite	Prior to construction	Prior to any works commencing, a pre-commencement badger survey should be undertaken by the appointed ECoW or specialist.
Protection of other fauna (e.g. small mammals)	Low risk of encountering other fauna.	Prior to construction	Tool-box talk to be delivered by appointed ECoW to demonstrate how to identify reptiles/other fauna and what to do in the event they are discovered. Suitable shelter and foraging habitats are present on the Site. Low numbers of common reptiles may be present and there is potential for individuals to be injured or killed by the development. Directional clearance of Site vegetation during the clearance phase of the development will be carried out during the reptile active period (March to October inclusive), in suitable weather conditions (temperatures between 9°C and 18°C). RAMS from contractors will be scrutinised and authorised by the Environmental Advisor before work commences to ensure the requirements above are understood, factored into working methods, and adhered to. Three hedgehog refugia such as the Woodstone Hedgehog House, shall be situated throughout the Site. Suitable locations shall be agreed with the ECoW.
		During construction	The Site should be kept free of debris piles (for example brash or other arising from vegetation clearance) in which animals could seek refuge. All materials and equipment should be stored



Ecology Receptor	Constraints Identified	Timings	Mitigation requirements during construction
			in a way that discourages animals to seek refuge under or in them (for example, store securely packaged materials on a pallet on bare ground). Where this does occur, the vegetation, brash and log piles should be hand searched by ECoW prior to removal from Site. Trenches and excavations should have a gently sloping ramp placed in them (for example a scaffolding board) to allow any animals that fall in to escape. Deeper excavations should be securely covered when not attended. Pipes over 200mm in diameter should be capped at night to prevent entry by animals. In the event that site personnel identify any species within the development site at any stage of the development, works in that area of the site will cease and the site manager will be informed. Where necessary the site manager will contact the ecologist to seek additional advice. Works will not re-commence until authorised by the ecologist. A precautionary working method will be implemented during construction which will include a number of measures. Grassland must be maintained at a short sward (5 cm). All chemicals must be securely stored per COSHH. With the mitigation outlined above no significant adverse residual effects are envisaged. Should reptiles or other common fauna be found work in the area shall cease and the appointed ECoW should be contacted for further advice. Works shall not continue until authorised by the ECoW.
		Prior to construction completion	Hedgehog highways shall be installed within boundary fencing and shall be signposted to prevent residents from blocking the holes.

4.6 Archaeology

4.6.1 Construction activities have the potential to impact previously unidentified archaeological remains. In the unlikely event archaeological remains are found after construction work has begun, the contractor will:

- stop work in the area immediately;
- erect fencing to protect the area; and
- inform the project lead.



4.7 Drainage and Hydrology

4.7.1 The following measures will be applied to ensure drainage and hydrological effects are mitigated during the construction phase:

- construction Site sewage will be tankered to treatment facilities offsite;
- water consumption onsite will be monitored so that water consumption can be managed;
- throughout construction activities, the foul water generated by Site operations will be collected in tanks below the Contractors Accommodation and disposed of via portable tanker. a programme for groundwater monitoring during construction will be defined so that the need for any dewatering can be employed where necessary and in accordance with established guidance; and
- a phased approach will be implemented for the construction works with mitigation measures for the operational stage, such as the drainage system will be constructed as a priority to ensure that water is adequately treated prior to leaving the Site.

4.7.2 Construction-site drainage will be designed and implemented in accordance with best practice and the following key principles:

- phasing of construction operations and organisation of the Site will be considered to minimise areas of exposed sediments within the development at all times;
- provision of a drainage system that provides facilities to trap sediments before it can be moved into run off or washed from the Site;
- facilities to remove trapped sediments from site run off prior to discharging into surface waters shall be incorporated; and
- all soil stockpiles will be placed in bunds or within geotextile fencing, to reduce the transfer of sediment from the stockpiles into the watercourse.

4.7.3 Any earth moving and construction activity that takes place in close proximity to a watercourse will include measures for water control. These will include cut-off ditches, settling ponds and restricting activity in certain areas by temporary fencing and other delineations.

4.7.4 The Contractor will dispose of any water which may come into contact with contaminated materials in accordance with the Water Resources Act (1991) and to the satisfaction of the Environment Agency or Barnsley Metropolitan Borough Council as appropriate.

4.8 Water Quality

4.8.1 The Contractor is required to implement the following measures in relation to water quality during construction:

- provide measures where necessary to ensure that water, whether groundwater, from precipitation or any other source, does not accumulate in excavations or on sub-grades;
- adequate drainage sumps will be installed during works and cut off trenches/dewatering measures will be used as required to manage surface water run-



off, to prevent any water from entering watercourses, either directly as surface water run-off, or indirectly via the surface water drainage systems;

- obtain all licences or consents required to discharge water from the Site and operate under the terms of those licences or consents;
- any free phase hydrocarbons encountered during excavations will be removed from the surface of the groundwater and treated or disposed of according to current legislation;
- if materials escape, the Contractor is to undertake (at their cost) appropriate remedial action as soon as possible; and
- surface Water generated by construction activities shall be managed by 'silt busters' following collection in temporary lagoons and/or underground tanks, thereafter, discharged to the offsite water body at a discharge rate not exceeding 54.9 litres per second. Potable water will be limited to the Site cabins and any wheel wash/specified wash down areas which will be collected and pumped to the surface water system following sedimentary treatment.

4.9 Ground Conditions

4.9.1 The following measures will be applied to ensure effects on ground conditions are mitigated during the construction phase:

- control measures will be provided to manage both spillages (such as oil, fuel, cement, chemicals etc.) and soil erosion/generation of suspended solids. These measures are likely to include the following: bunded storage; designated wheel washing areas; settling basins; screening stockpiles of materials; and dampening exposed soils as appropriate (as outlined above);
- a programme for the identification of compressible and unstable ground will be identified alongside the remedial measures required to address any identified issues. These are likely to include temporary works and/or ground improvement such as shoring of excavations, the design of haul road, piling mats and crane platforms;
- a contingency plan for pollution emergencies will also be developed by the Contractor prior to the commencement of the works and regularly updated during construction. This contingency plan will identify the actions to be taken in the event of a pollution incident which requires the following to be addressed:
 - containment measures
 - emergency discharge routes
 - list of appropriate equipment and clean-up materials;
 - maintenance schedule for equipment;
 - details of trained staff, location and provision for 24-hour cover;
 - details of staff responsibilities;
 - notification procedures to inform the EPA or Environmental Department of the LPA;
 - audit and review schedule;



- telephone numbers of statutory water consultees; and
 - list of specialist pollution clean-up companies and their telephone numbers.
 - any accidental contamination of the ground or surface water will be cleaned-up in accordance with the appropriate Environment Agency guidelines and removed offsite by the appropriate licensed waste contractor;
 - surplus material, rubbish etc. will not be allowed to accumulate onsite or over-spill to the surrounding environment; and
 - in the event that any unexpected contamination is encountered during construction, this CEMP will be updated to include a protocol for managing this.
- 4.9.2 In addition to the above measures, all liquids and solids of a potentially hazardous nature (e.g. diesel fuels, oils, solvents etc) will be stored in accordance with guidelines laid down by the Environment Agency. Storage of hydrocarbons and chemicals will be strategically located away from surface water sources in appropriately designated areas and bunded locations and with strict procedures to manage the operation of such facilities. Such materials will be stored within secure compound areas with access gained by competent authorised personnel only.
- 4.9.3 The Control of Pollution (Oil Storage) Regulations 2001 indicate what is required for the storage of oil in the UK with further information provided in the Environment Agency's Pollution Prevention Guideline 02 – Above Ground Oil Storage Tanks. Leakage of oils and chemicals can be avoided through regular checks and maintenance of storage and other facilities; and plant should be provided with drip trays to prevent direct effects to groundwater and indirect effects to surface waters. Drip trays should be checked and emptied regularly using appropriately licensed waste operators.
- 4.9.4 In summary, the construction best practice methods outlined below in Table 4.3 will be followed:

Table 4.3: Summary Construction Best Practice for Ground Conditions

Ordering	Delivery	Storage	Handling
Over ordering (order “just-on-time”); Ordering standard lengths rather than lengths required (e.g. Plasterboard); and Ordering for delivering at the wrong time (update programme regularly).	Damage during unloading; Delivery to inappropriate areas of the Site; Accepting incorrect deliveries, specification or quantity; and Poorly secured loads.	Damage to materials from incorrect storage; and Loss, theft or vandalism through secure storage and onsite security.	Damage or spillage through incorrect or repetitive handling; and Poorly secured loads.

4.10 Contamination

- 4.10.1 It is recommended that ground workers wear appropriate PPE including gloves and adhere to strict hygiene regimes including hand washing prior to eating and smoking. Care will be taken to identify any previously undiscovered contamination. If contamination is encountered a



qualified consultant will be informed.

- 4.10.2 Due to the presence of the landfill onsite any soils that require removal should be considered hazardous. Contamination levels of the soils should be recorded, and they should be disposed of at a relevant licenced facility.
- 4.10.3 Where the existence of hazardous materials or contaminants is suspected, a physical survey of the Site will be carried out to confirm or determine the extent of the material. Where tests are required to prove toxicity or otherwise, the sampling requirements will be determined by consultation with the Client/Engineer and with reference to the contract documents.
- 4.10.4 The Contractor's safety manager is to be contracted and advice on the procedures for the sampling, monitoring and safe disposal of hazardous substances (examples of such substances are asbestos, dumped toxins, contaminated landfill and lead painted steelwork).
- 4.10.5 Toxic or contaminated waste will be tipped only on sites with a current authorised license and only following the notification of the Local Waste Disposal Authority. The Contractor will conform to all local authority conditions concerning the handling and disposal of such wastes. Where the consignments note system is used, the Council shall be informed at least three working days in advance of the proposed movement of waste. The local emergency services will also be informed, well in advance of the proposed movement of waste. The local emergency services will also be informed, well in advance, of the proposed route for transporting waste from Site to the point of disposal.
- 4.10.6 If contamination not previously identified is found to be present at the Site, the LPA will be informed immediately and construction shall be halted until otherwise agreed with the LPA. A report detailing contamination and how it can be remediated shall be submitted and agreed by the LPA. Remediation shall be detailed and verified as an amendment to the remediation statement and conducted accordingly.
- 4.10.7 A Remediation Strategy and/or an Asbestos Detailed Quantitative Risk Assessment may be required in line with Land Contamination Risk Management (LCRM) if asbestos impacted soils are to be retained/re-used within the Development.

4.11 Storage of Materials

- 4.11.1 Chemicals and hazardous materials such as fuels and lubricants are to be stored onsite during the construction phase of the project. These include but are not limited to:
- Fuels;
 - Oils;
 - Lubricants;
 - Paint and coatings;
 - Adhesives and resins;
 - Solvents;
 - Compressed gases; and/or
 - Cements and binders.
- 4.11.2 Measures will be developed, implemented, maintained and monitored in order to comply



with the Water Resources Act (1991) section 85 and associated regulations.

4.11.3 The Pollution Prevention Guidelines (PPGs) are based on relevant legislation and reflect good practice; however, a number have been withdrawn. The Site Manager will produce a Pollution Management Plan (PMP) that meets the requirement of the PPGs and Government's current advice. The PMP should address the following:

- Pollution prevention planning.
- Drainage.
- Excavations.
- Materials storage and stockpiles.
- Oil storage, use and re-fuelling.
- Nuisance (including noise, vibration, dust, mud on the public highway, odour, smoke/fumes and light spill).
- Cement, concrete and grout.
- Land contamination and invasive species.
- Chemicals and hazardous substances.
- Waste management.
- Incident response.

4.11.4 All contractors will be familiar with and apply the relevant best practice listed in the PMP. It is recommended that copies are available in the Site office.

4.11.5 Government Guidance on preventing pollution should be used by the Site Manager and Environmental Advisor.

4.11.6 PPG 6: Construction and Demolition-sites, Section 4 Materials storage, stockpiles & exposed ground:

- Prevent stockpiles on exposed ground from generating pollution as water run-off or dust;
- Locate stockpiles away from watercourses and on level ground to prevent any run-off from entering drains, ditches or watercourses; and
- Contaminated material must be stockpiled on an impermeable surface, in a bunded area, at least 10m from a watercourse.

4.11.7 PPG 6: Construction and Demolition-sites, Section 9 Chemicals and hazardous substances:

- Store all chemicals and hazardous substances away from watercourses and drains in a contained, bunded area on an impermeable surface;
- Store all chemicals and hazardous substances away from areas where there is risk of damage from impact or collision e.g. Site traffic;
- Ensure all chemicals and hazardous substances are labelled, containers are sealed when not in use and inspected regularly and fit for purpose;
- Dispose of any damaged/old containers in line with the duty of care requirements;



these may be considered hazardous waste;

- Train staff in use of spill kits/emergency procedure;
- Ensure there is a designated 'responsible person' onsite at all times; and
- Lock storage facilities when not in use.

4.11.8 To ensure the proper storage and handling of fuel:

- Tanks, drums or other containers must be strong enough for the weight of oil, fuel and other materials. They must be in good condition and leak-proof, as well as properly supported (both the container and all vulnerable pipework);
- Fuel must be bunded to contain 110% of the contents, and the bunds must be impermeable to leaks;
- Drip trays or bunding to catch oil drips and spills from any vulnerable points, particularly at the filling and delivery points must be present.
- Stored fuels must be checked regularly for leaks and damage.
- Permit-only authorised and competent persons are permitted to re-fuel plant/vehicles (use of low-toxicity, biodegradable hydraulic fluids where feasible). Authorised key-holders will be nominated.
- Fuel delivery orders must be carried out only by the Site Manager.
- All deliveries must be under the control of a competent person.
- Any drips or spills (even minor) must be contained quickly and removed (using an absorbent material, e.g. sand).
- Materials used to soak up spills will be "Special Waste" in significant quantities.
- Major spillages must be notified to the EA immediately – EA Hotline No. 0800-80 70 60. It is important to NOT wait; the EA can help contain or control the effects.

4.11.9 The Site Manager will induct all plant operatives into the procedures for delivery and/or re-fuelling and instruct that all drips and spills must be contained, cleared up and notified immediately.

4.11.10 Emergency Contacts List will be displayed, which includes the Environmental Agency Hotline number, on the Site notice board.

4.11.11 A spill kit will be present in the storage area, and suitable signage displayed. The following will be observed in the event of a spillage:

- STOP WORK immediately;
- Inform Site Manager immediately;
- If spillage is flammable, extinguish all possible sources of ignition;
- Identify the source of the spill and remedy;
- Contain the spillage – on land use earth/sand to construct a bund around the spill to stop it spreading. Use booms to contain oil spills that have already entered a water course;



- Wear appropriate PPE;
- Protect sensitive areas (e.g. watercourses or surface water drains – use drain covers or construct a bund;
- Clean up the spill. Use absorbent granules/pads to mop up spills. Large pools of oil or spills which cannot be absorbed should be removed by gulper;
- Dispose of all contaminated materials (soil/absorbent materials) correctly, those containing substances such as oil, diesel or paint will be classed as hazardous waste; and
- Ensure any contaminated water is taken to an appropriately licensed disposal site.

4.12 Resource and Waste Management

4.12.1 Minimising and reducing waste during the construction stage is a key priority and the following core principles will be maintained throughout the construction process:

- toolbox briefing sessions;
- adopting good onsite working practices;
- reducing wastage onsite;
- providing adequate waste storage facilities;
- providing adequate security measures; and
- appropriate waste disposal routes.

4.12.2 The Contractor is required to prepare, implement and maintain a Site Waste Management Plan (SWMP) throughout construction that addresses the following as a minimum:

- wastes arising including procedures for minimisation/reuse/recycling;
- estimated cost of waste management;
- roles including training and responsibilities for construction and demolition waste;
- procedures for education of workforce and plan dissemination programme;
- record keeping procedures;
- waste collectors, recycling and disposal sites including copies of relevant permits or licences; and
- waste auditing protocols.

4.12.3 The Contractor is required to implement the following in relation to resource and waste management during construction:

- all construction personnel including sub-contractors will be briefed through toolbox talks regarding the importance of minimising, segregating and recycling wastes during the construction process;
- guidance will be provided on the segregation of certain waste streams such as aggregates, excavated materials, metal, wood, cardboard and polythene packaging waste;



- deliveries will be on a 'just-in-time' basis to minimise potential damage and wastage of materials;
- clearly labelled waste skips will be provided at the Site for the segregation of waste streams for recycling and for general waste to be disposed of to landfill. The skips will be stored in a secure location onsite to prevent waste nuisance issues arising;
- fuels, oils and chemicals will be stored in appropriate containers within secure bunded compound constructed of an impermeable hard standing and in accordance with good Site practices and Environment Agency guidelines (Pollution Prevention Guidance Note 6 'Working at Construction and Demolition-sites');
- construction materials will be stored in a secure compound to prevent the potential for vandalism and theft of material;
- segregated waste for recycling will be removed from Site by a licensed contractor to an appropriate Materials Recycling Facility (MRF);
- wastes that cannot be recycled will be removed from the Site by a licensed waste contractor to an appropriate licensed landfill facility ensuring adherence to the Environmental Protection (Duty of Care) Regulations;
- waste will only be placed in the approved locations to minimise litter and pollution;
- metal, timber, glass and other recyclable material will be segregated during construction works and removed offsite to a permitted/licensed facility for recycling. Waste stream colour coding, and photographs of wastes to be placed in each container as required, will be used to facilitate segregation. Where waste generation cannot be avoided this will maximise the quantity and quality of waste delivered for recycling and facilitate its movement up the waste hierarchy away from landfill disposal and reduce its environmental impact;
- waste auditing: the Contractor will record the quantity in tonnes and types of waste and materials leaving Site during the construction phase; and
- possibilities for re-use of clean non-hazardous excavation material as fill on the Site or in landscaping works will be considered following appropriate testing to ensure material is suitable for its proposed end use. Where excavation material may not be re-used within the proposed works the Contractor will endeavour to send material for recovery or recycling so far as is reasonably practicable.

4.13 Artificial Lighting

4.13.1 The impact of obtrusive artificial lighting shall be minimised during construction. The following measures must be considered:

- flood lighting, security lights, and any other obtrusive external lighting shall be sensitively located so as to avoid nuisance to neighbouring properties and should only provide the necessary luminance for the relevant task;
- the direction and angle of any external lighting will not cause light spill, glare, or nuisance to neighbouring properties or highway users. Where practicable the use of shields or covers will be used to minimise the level of obtrusive light beyond the Site boundary;



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- any light sensors fitted will be adjusted as such to ensure that they are only activated from activity onsite;
 - as far as practicable, lighting shall be low level and/or confined to essential locations;
 - the use of localised lighting will be used wherever possible to avoid excessive illumination of inactive areas; and
 - the use of external lighting overnight will be minimised consistent with safe access, egress, and security of the Site.

4.13.2 Any lighting during the construction stage will be temporary in nature and will only be used during working hours. Generally, generator mounted tower flood lights will be used as and when required for vehicular access to the Site, pedestrian/worker circulation and any contractor compounds.