honey

ENVIRONMENT

Homes by honey Residential Development (Iris) at Barnburgh Lane, Goldthorpe

Construction Environmental Management Plan (Framework)

Homes by honey

Sheffield Head Office
Floor 3,
Wards Exchange,
197 Ecclesall Road,
Sheffield,
S11 8HW

DOCUMENT ISSUE RECORD

Document Number:	IRIS_CEMP

Revision	Date of Issue	Status	Author:	Checked:	Approved:
P01		S01	AW	JP	

honey

Table of Contents

FIGURES

1. INTRODUCTION

1.0 Instruction

1.1 This document is a framework Construction Environmental Management Plan (CEMP), to support discharge of condition 7, 19 & 30 under the Outline planning permission (2023/0195) for the proposed residential development by homes by honey at Barnburgh Lane, Goldthorpe.

2.0 Objectives of the Plan

2.1 The purpose of this framework CEMP is to outline the overarching details and principles that will be applied to minimise and mitigate the environmental effects of the works associated with the extension. More specifically, the framework CEMP aims to:

- Ensure that relevant mitigation measures set out in other documents supporting the planning application are implemented during all construction works;
- Ensure that relevant legislation, government and industry standards, and construction industry codes of practice and best practice standards are implemented and adhered to;
- Provide a framework to assure Barnsley Council that measures can and will be put in place to avoid significant impacts and disruption from the construction works, and that the Contractor has a set of agreed principles upon which to base their own detailed CEMP prior to construction works commencing; and
- Provide a tool to ensure the successful management of the likely environmental effects as a result of the construction activities. It therefore sets out roles and responsibilities for the management of these controls and safety procedures.

2.2 This framework CEMP is a live document and subject to third party approvals, therefore it will be updated, expanded and modified as the project progresses to ensure that its content reflects the construction activities and programme.

2.3 For the duration of the construction works the Contractor appointed will commit to and adopt the CEMP and will endeavour to work within the framework set out.

- SITE AND DEVELOPMENT

3.0 Site Location

3.1 The site is located at Land off, Barnburgh Lane – Goldthorpe.

3.2 A site location diagram is provided in **Figure 2.1** for reference.

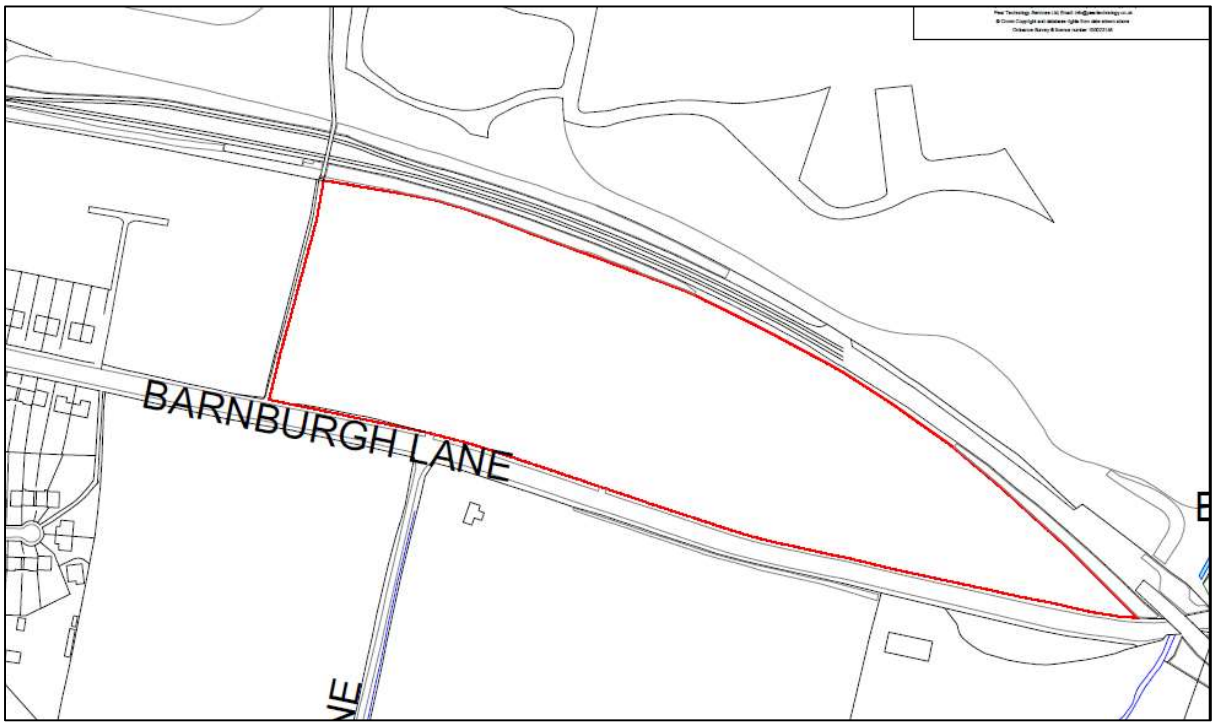


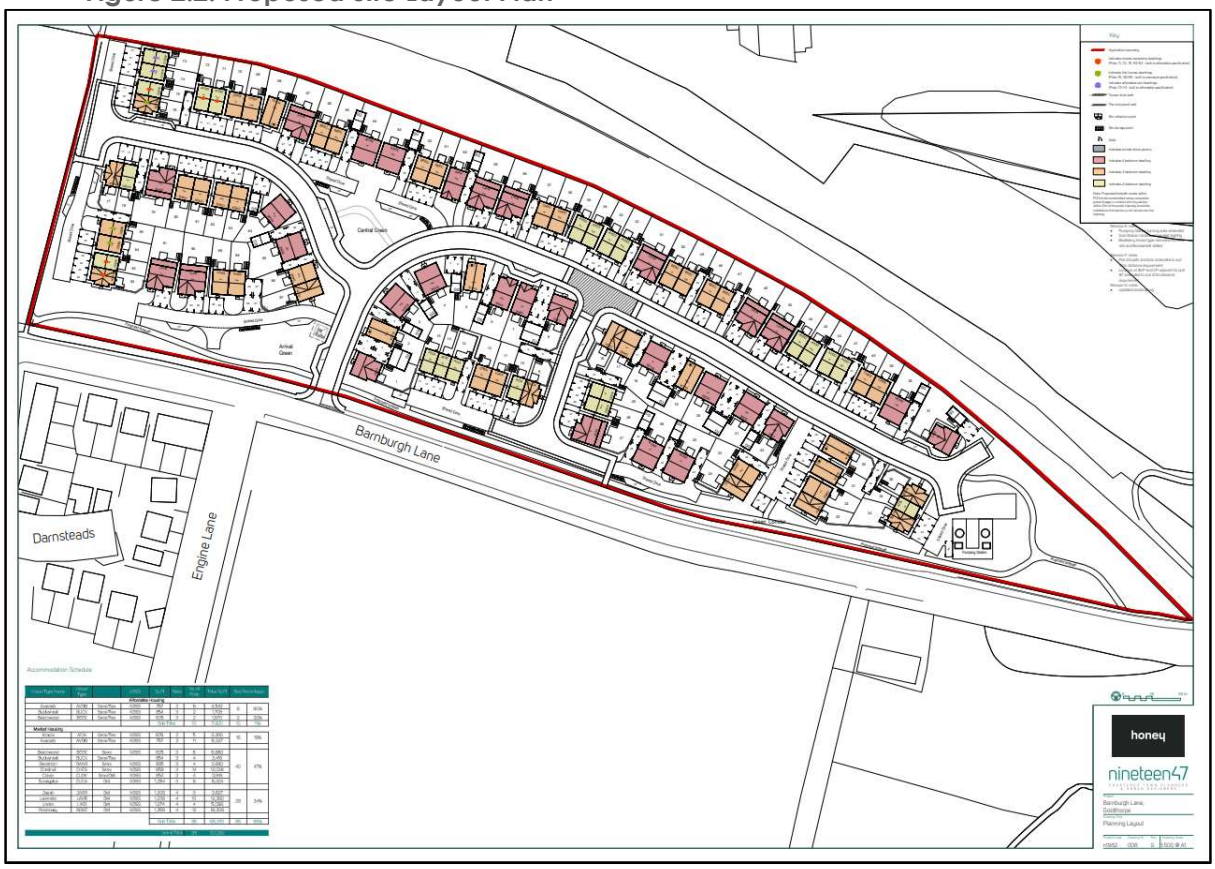
Figure 2.1: Site Location Plan

4.0 Proposed Development

4.1 The Proposed Development is a residential scheme of 95 houses with associated highways infrastructure.

4.2 **Figure 2.2** demonstrates the approved proposed site layout plan,

Figure 2.2: Proposed Site Layout Plan



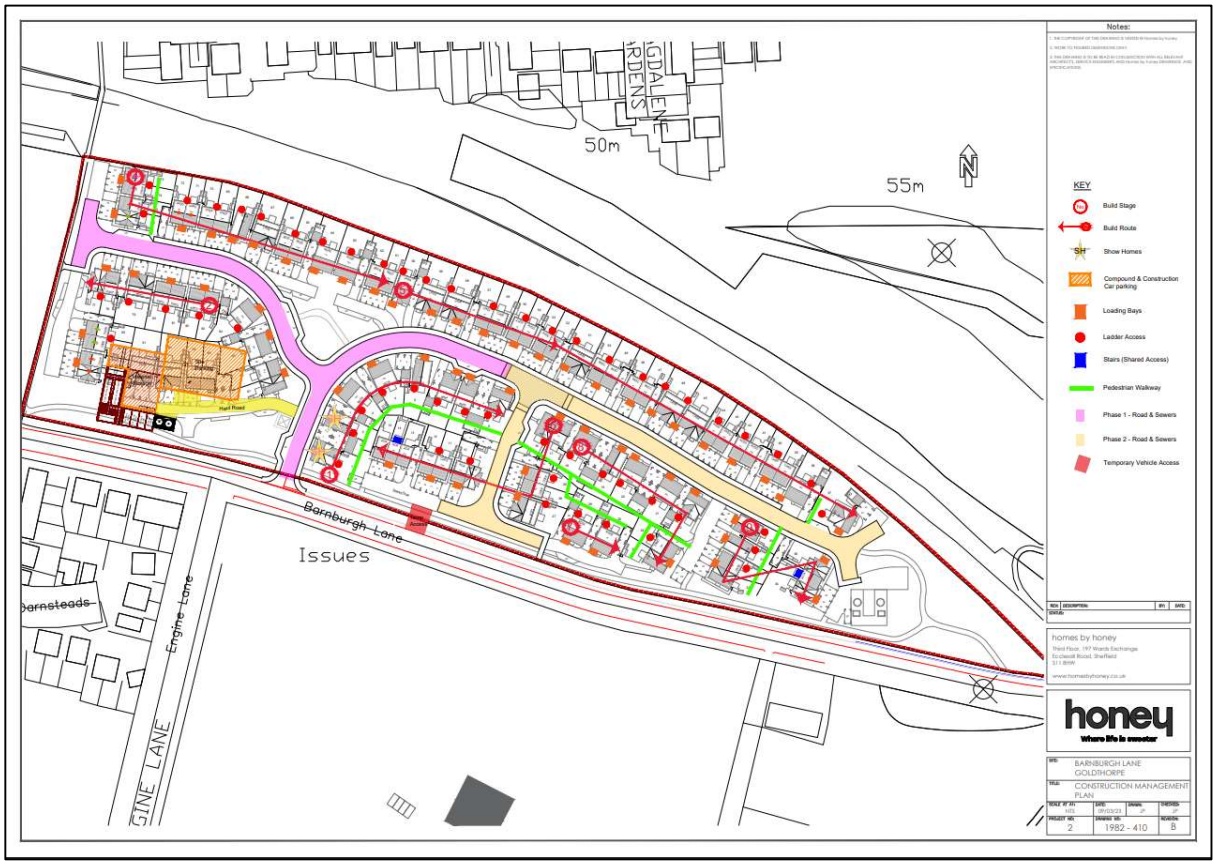
2. CONSTRUCTION PROGRAMME, ACTIVITIES AND WORKING HOURS

5.0 Construction Activities

5.1 Figure 2.3 indicates the approved proposed construction management plan associated with the development. Build route, material storage, operative parking, haul road and plot access are shown on the layout.

6.0

Figure 2.3: Construction Management Plan



Construction Plant and Equipment

6.1 An indicative list of large plant and equipment that are likely to be used at various stages of construction have been considered and the following are expected to be included:

- Tracked Excavator/ Backhoe;
- Trucks/Tipper Truck;
- Crusher;
- Screening Plant;
- Grader;
- Vibratory Compactor/Hammer;
- Roller;
- Concrete Pumps & Mixer;
- Compressors/Generators; and
- Mobile Floodlighting.

6.2 The Principal Contractor's Construction Compound layout and arrangement will comply with the commitments in this CEMP. In particular the following management controls will be adhered to:

- All working areas will be kept in a clean and tidy condition;
- Smoking areas at site offices, compounds and construction sites will be equipped with containers for smoking waste.
- All necessary measures will be taken to minimise the risk of fire;
- Workers will maintain a reasonable and appropriate standard of dress at all times and will not use foul language or display lewd or derogatory behaviour;
- Appropriate measures, such as use of enclosed containers, will be employed to store waste susceptible to spreading by wind or liable to cause litter;
- Fencing and other means of enclosure will be inspected daily, repaired and repainted as necessary;
- Adequate welfare facilities will be provided for all construction staff. All toilets will be serviced and kept clean;
- Good personal hygiene will be promoted by the contractors for the workforce, particularly when using site canteens or mess facilities;
- Site accesses, accesses to site compounds and roads in the vicinity of site access points will be maintained and kept clean as required;
- Commitments relating to noise and vibration;
- Commitments relating to dust, odours and air pollution;
- Commitments relating to the handling, storage and disposal of materials; and
- Appropriate management and disposal of foul water and sewage.

7.0 Construction Site Transport and Pedestrian Access

7.1 The type and number of vehicles generated during the construction period will vary according to the different stages of construction programme, and the type and intensity of work being undertaken at the different stages. HGV movements will be restricted as far as reasonably possible so as to avoid peak traffic flow periods (i.e. from 0800 - 0900 and 1700 - 1800).

7.2 The Contractor will maintain an up-to-date log of all drivers that will include a written undertaking from them to adhere to use of the approved routes for construction traffic.

7.3 All construction traffic entering and leaving the site will be closely controlled and during delivery times, traffic marshals will be positioned at the construction access/egress to control entry and exit movements. Action will be taken to reduce the number of HGV movements as far as reasonably practical. This includes:

- Deliveries should be on a 'just-in-time' basis;
- Backloading' vehicle operation, where site delivery vehicles are utilised to remove waste materials from the site as part of the same trip; and
- Practical re-use of any aggregates on site and recycling of material.

8.0 Hours of Work

8.1 No machinery shall be operated on the site, no process or operations shall be carried out and no deliveries shall be taken at or despatched from the site except between the hours below.

- Monday – Friday: 0800 -1800
- Saturday: 0900 -1400

If work at other times is required, prior permission should be obtained from the local planning authority.

9.0 Other Aspects

Site Security and Safety

9.1 The site will be securely fenced along its perimeter, and its condition will be checked regularly. Only authorised personnel will be permitted on-site. All visitors will be required to enter through the main entrance gate to the site and report to the Construction Manager/Site Manager. All visitors will be required to sign in and out to ensure that site management are aware of the number of people on-site in the event of an emergency.

9.2 Visitors will be required to undergo induction training, wear the necessary PPE (i.e. safety helmet, hi-visibility attire, safety footwear and will be accompanied by a representative on-site at all times).

9.3 All mobile plant/equipment will be parked safely and locked within a designated area to prevent tampering, and keys to all plant/equipment will be kept in a secured location.

Lighting

9.4 Lighting on construction sites is essential to health and safety, poor lighting can represent significant risks to staff members which can result in accident and injury. Therefore, as outlined within section 35 of the CDM Regulations (2015), the development site must be provided with suitable and sufficient lighting.

9.5 Site lighting will comply with the Institute of Lighting Professionals' 'Guidance Notes for the Reduction of Obtrusive Light', to be installed at the minimum luminosity necessary to enable the safety and security of the construction site. Where appropriate, lighting to site boundaries will be provided and illumination will be sufficient to provide a safe route for the passing public. In particular, precautions will be taken to avoid shadows cast by the site hoarding on surrounding footpaths, roads and amenity areas.

9.6 In determining any temporary construction lighting arrangements for the site, due consideration will be given by the Principal Contractor to residents and other sensitive receptors that may experience a nuisance by the light.

Vermin and Pest Control

9.7 The site is in an urban area, and therefore there is potential for rodents and pigeons to be present on-site. In order to minimise the potential for a pest problem, the following control measures will be implemented:

- Welfare facilities will be cleaned daily and maintained in a good condition. It is expected that the users behave appropriately towards the facilities;
- All food and drink is to be consumed within the mess rooms / canteens or off the construction site; and
- All food and drink will be disposed of in a lidded container and emptied on a weekly basis.

9.8 Any pest infestation of the construction site will be notified to the LPA as soon as is practicable.

3. RESPONSIBILITIES AND MANAGEMENT STRUCTURE

9.9 The Construction (Design and Management) Regulations 2015 (CDM Regulations) came into force in April 2015, replacing CDM 2007. As per the requirements of the CDM Regulations, the Client must appoint a Principal Designer and Principal Contractor prior to the commencement of works on site. Should the Client fail to appoint either a Principal Designer or Principal Contractor, the Client must carry out their duties in respect of the CDM Regulations.

9.10 The roles and responsibilities of the Client, Principal Designer and Principal Contractor, as required by the CDM Regulations, are outlined within this CEMP and will be confirmed in writing upon the appointment of the Principal Designer and Principal Contractor by the Client.

10.0 Management Structure

10.1 Responsibility for all environmental issues relating to the development of the site rests with the Client and the Principal Designer and Principal Contractor appointed for the development; individual responsibilities will be divulged throughout the management team relating to the coordination of inspection, monitoring or reporting. Such individual responsibilities are outlined below.

10.2 The Principal Contractor will have the central role in managing Safety, Heath, Environment and Quality (SHEQ) issues during construction activities. The Principal Contractor and all subcontractors will have to implement the environmental control measures set out within this CEMP.

10.3 All works are to be carried out to the highest standard in compliance with the CDM Regulations, current legislation and guidance, and Client requirements.

11.0 Individual Responsibilities

11.1 The duties of the Principal Designer, Construction Director, Construction Site Manager and other personnel are detailed below.

Principal Designer (can be the Client)

- Review and approve the CEMP;
- Submit any updates to CEMP to LPA for approval;
- Assign appropriate resources to construction activities; and
- Undertake regular site inspections (including compliance with environmental requirements).

Construction Director (can also be Principal Designer)

- Allocate appropriate project resources to deal with environmental issues;
- Ensure that the CEMP is effectively established and implemented throughout the project;
- Review and approve environmental action plans; and
- Designate representative responsible for environmental issues.

Construction Site Manager (part of Principal Contractor team)

- Understand the major environmental constraints and implications for the project;
- Ensure that the need for compliance with environmental issues is communicated to the rest of the project team and sub-contractors;
- Act on findings of internal and external audits;
- Ensure complaints are being addressed and responded to;
- Ensure appropriate pollution response provision is made;
- Report to Principal Designer/Project Manager on any environmental breaches;
- Comply with the CEMP; and
- Implement and maintain the operation of the CEMP.

Environmental Specialists

- Relevant specialists will be employed if necessary, during the project to undertake specialist monitoring, undertake surveys and advise the construction staff.

12.0 Collective Responsibilities

Project Management Team (Outlined above, including Works Manager, Sub-Agents, Quantity Surveyors, Site Engineers, Section Foremen) and Sub-contractors

- Comply with the CEMP;
- Maintain CEMP document control system;
- Implement the requirements of the CEMP and its supporting documents on site;
- Report immediately to Environmental Manager on any environmental incidents;

- Ensure site personnel are aware of their environmental obligations and have undergone site environmental awareness training;
- Implement the action necessary to resolve non-compliance issues; and
- All subcontractors should comply with the CEMP, its operational control and procedures.

All Personnel – to be communicated during induction

- Comply with all operational controls and working procedures implemented by this CEMP;
- Undergo environmental awareness training;
- Report to supervisor immediately on any environmental incidents; and
- Suggest potential modifications and improvements to CEMP.

13.0 Environmental Policy Statement

13.1 An Environmental Policy Statement will be developed and maintained by the appointed Principal Contractor/Site Manager. They are required to publicise the statement to all site personnel and the general public.

13.2 The Principal Contractor shall recognise the environmental impacts associated with this development detailed in the CEMP and continually attempt to improve environmental performance. The aims of the statement are summarised below:

- To meet the requirements of all relevant environmental legislation, agreements, planning permissions, authorisations and commitments;
- To ensure that all environmental undertakings and obligations of the contractor are fulfilled;
- To adopt working practices that achieve good environmental practice on site;
- To ensure that subcontractors and suppliers are aware of the environmental constraints and opportunities of the site, and follow any necessary procedures in order to ensure good environmental practice;
- To identify staff and contractor responsibilities in achieving good environmental practice on site;
- To mitigate against the effect of the construction works on residents, highway users and the general public; and
- To assist in the development of the company environmental management system, not only for the requirements of this project but for future use.

13.3 All personnel shall be made aware of, understand and implement the requirements of this CEMP in all areas of environmental concern and in all construction phases.

4. COMMUNICATIONS STRATEGY AND EXTERNAL REPORTING

14.0 Statutory Authorities and Interested Parties

14.1 The Construction Site Manager in conjunction with the Client and with the support of the Environment Manager or any appointed specialists will be responsible for the liaison on environmental matters with statutory and non-statutory authorities.

14.2 Consultation should be established and maintained with a number of regulatory bodies with regard to the environmental aspects of this project these should at least include:

- Environmental Health Officer (SBC);
- Environment Agency (EA);
- Health and Safety Executive; and
- Emergency Services.

15.0 Local Community Engagement

15.1 The Principal Contractor should commit to providing community relations personnel, who will be the first line of response to resolve issues of concern or complaints.

15.2 Reasonable steps will be taken to engage with local residents during construction (such as through the use of newsletters, fliers, etc). Occupiers of neighbouring properties will be informed in advance of works taking place. Site boards outlining information on the project and forthcoming works will be erected along the boundary and at the entrance to the site. Site contact details and numbers will be displayed as appropriate, along with the complaints procedure.

16.0 Temporary Traffic Orders

16.1 Under Section 14 of the Road Traffic Regulation Act 1984, temporary traffic orders can be imposed to close roads or to restrict traffic and parking so that works can be carried out either on a road or near a road (such as on a building site or redevelopment site).

16.2 Should this be required at the site (for example to install a crane), the Principal Contractor apply to the LPA for a temporary order, including details of the date, duration and description of the works. The LPA is required by law to publish notices on their website, in the local newspaper and may attach notices to lamp columns or other street furniture in the roads concerned. They may also consult with residents and businesses in the roads affected.

17.0 Complaints Procedure

17.1 A formal complaints procedure will be developed. The Construction Site Manager will be responsible for receiving, recording and responding to external complaints.

17.2 The Construction Site Manager will have their telephone number displayed for quick response to complaints. The complaints will be logged, together with a record of the responses and action taken.

17.3 In the event of out of hours incidents, there will be a duty point of contact who will be responsible for answering and responding to any calls. This emergency number will be clearly displayed on the site hoarding.

17.4 The Construction Site Manager will display posters giving the contact details of both the registered site, company and individual to be contacted in the event of a complaint.

17.5 All complaints received by the named individual from any source regarding the site or company will be logged, recorded and categorised as one of the following: Noise, Dirt and Dust; Parking; Safety; Inconsiderate Behaviour; Road Conditions and Vehicle Movements; Environmental Concerns; Pedestrian Access Obstruction; Property Damage; Site Lighting; Working Hours; and Other. The Construction Site Manager will have designated staff trained to deal with any type of complaint.

17.6 If the complaint does not relate to an issue covered by the CEMP (e.g. planning issues), the complainant will be pointed in the appropriate direction.

17.7 When a complaint is received, the Construction Site Manager will be told what the complaint is about, and given the name and contact details of the complainant (with the complainant's permission). Advice might also be offered as to how they might deal with the complaint.

17.8 The Construction Site Manager will investigate and respond to the complaint and be kept as 'active' status until such a time as it is appropriately resolved.

17.9 Any complaints registered will be reported to the appropriate contact the LPA on a monthly basis, in accordance with the CEMP auditing procedure.

17.10 If the Construction Site Manager does not deal with a complaint in a satisfactory manner, the complaint will be passed to the Client's representative, who will refer the matter to the construction company's head office contact (as listed on the registration form). In the event that the response is still unsatisfactory, and the contact is not a director, then the complaint will be taken to company director level.

5. ENVIRONMENTAL CONTROL MEASURES

17.11 The following sections of the CEMP explain details of the measures which will be used to minimise any potential environmental effects of the construction works. These measures shall be implemented throughout the construction period. The CEMP is a 'live' document and will be revised as necessary to include any developing aspects of the construction works.

18.1 The minimisation and reduction of waste outputs during construction is a priority. The following core principles shall be maintained throughout the construction process:

- Regular toolbox briefing sessions;
- Adopting good on-site working practices;
- Reducing waste on site by recycling and by the efficient use of materials;
- Ensuring waste storage facilities are provided to an adequate level;
- Ensuring adequate security measures are in place; and
- Appropriate waste disposal routes.

18.2 A template for a Site Waste Management Plan (SWMP) has been included as Appendix 2. Although SWMPs are no longer mandatory, they are an important tool to identify opportunities to follow the 'waste hierarchy', including the following:

- Reusing and recycling materials from site clearance either on this or other sites wherever possible;
- Toolbox talks briefing all site personnel, including sub-contractors, regarding the importance of minimising, separating and recycling waste during construction;
- Encourage the opportunities for recycling and minimise the amount of waste going to landfill;
- Clearly labelled skips shall be provided on site for the segregation of waste streams; aggregates, excavated materials, metals, wood, cardboard, polythene packaging waste, recycling and for general waste to be disposed of as landfill. Skips will be positioned in a secure location on site to prevent nuisance issues occurring;
- To minimise potential damage and wastage of materials deliveries will be taken on a 'just-in-time' basis;
- Fuels, oils and chemicals will be stored in appropriate containers. These will be within a secure bunded compound in accordance with good site practices and Environment Agency Guidelines;
- Construction materials will be stored securely to minimise the potential for theft and vandalism;
- Segregated waste for recycling shall be removed from the site by a licensed contractor to an appropriate recycling facility;
- Non-recyclable waste will be removed from site by a licensed waste contractor to an appropriate landfill facility ensuring adherence to the Environmental Protection (Duty of Care) Regulations 1991; and
- To minimise litter and pollution waste shall only be placed in approved locations.

18.3 As per Construction Industry Research and Information Association – Environmental Good Practice on Site (C741) 2015, care will be taken in the ordering, delivery, storage and handling of materials to avoid waste.

18.4 'Just-in-time' ordering will be used to avoid over-ordering. To minimise the waste created on site, required lengths will be ordered rather than standard lengths which will need cutting on site. To avoid deliveries at inappropriate times and the excessive storage of materials on site the Site Manager will see that the programme of works is updated regularly.

18.5 During delivery, care will be taken to avoid damage to any materials. All deliveries will be checked to ensure that they are to the correct specification and that there is the correct quantity. If this is found not to be the case the delivery will not be accepted. Deliveries will be directed to designated areas of the site to avoid creating waste and contaminants in sensitive areas and to avoid repetitive handling which will increase the risk of damage or spillage.

19.0 Noise & Vibration

19.1 'Best Practicable Means' will be employed on the site during construction to minimise any impacts. The following mitigation will be implemented to control and minimise noise impacts from activities:

- Careful selection of working methods and programme;
- Selection of quietest working equipment available (e.g. electric/battery powered equipment which is generally quieter than petrol/diesel powered equipment);
- Positioning equipment behind physical barriers, i.e. existing features, hoarding, etc., or provision of lined and sealed acoustic covers for equipment that could potentially cause a disturbance;
- Positioning of noise generating equipment, such as any blending plant, in areas which minimise noise as far as practicable;
- Directing noise emissions from plant, including exhausts or engines, away from sensitive locations;
- Ensuring that regularly maintained and appropriately silenced equipment is used;
- Shutting down equipment when not in use, i.e. maintain a 'no idling policy';
- Handling all materials in a manner which minimises noise (e.g. minimal 'drop heights');
- Switch all audible warning systems to the minimum setting required by the Health and Safety Executive, where safe to do so;
- Restricting hours of site operation in agreement with the LPA. If there is the requirement to undertake work outside of the agreed hours, further consultation should be undertaken with the LPA;
- Where processes could give rise to significant levels of noise, noise levels should be monitored regularly by a suitably qualified person. The methodology of any surveys should be agreed with the Local Authority. Section 61 Applications for prior consent for noisy activities should be made; and
- Employ best practices and follow guidance of BS 5228:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites (Part 1 Noise and Part 2 Vibration).

19.2 The following will be adhered to where practicable:

- The quietest available plant and/or machinery will be used, and must conform to relevant standards and directives on emissions;
- Equipment shall be maintained in good mechanical order and fitted with appropriate silencers, mufflers or covers where applicable;
- Stationary noise sources shall be sited as far away from noise sensitive locations as possible, and where necessary acoustic barriers or sound absorbing enclosures shall be used to shield them;
- Compressors must be "sound reduced" models fitted with properly lined and sealed acoustic covers that must be kept closed whenever the machines are in use;
- Equipment used for breaking concrete, brickwork or masonry should be those that use bending or bursting methods rather than percussive tools;
- Where percussive tools are unavoidable they will be fitted with mufflers or attenuators in accordance with the manufacturer's recommendations;
- Rotary drills and bursters actuated by hydraulic, chemical or electrical power will be used for excavating hard or extrusive material;
- Any piling shall be carried out by the method causing the minimum of noise and vibration. The use of conventional impact hammers will be avoided wherever possible;
- Any machinery which is in intermittent use should be shut down in intervening periods of non-use or where this is impractical, it shall be throttled back to a minimum;
- Employees shall be informed about the need to minimise noise and will be supervised to ensure compliance with the noise control measures adopted (subject to conditions). This will include guidance on shouting, raised voices and the use of amplified music (such as radios);
- Site screening/hording to be constructed using a material with a minimum surface density of 7 kg/m2 (i.e. 12 mm plywood). The screening/hording shall be solid in nature (i.e. have no gaps present) and extend to an adequate height where practicable such that there is no direct line of sight between noisy activities and sensitive receptors;
- Contractors shall consult local residents, in particular regarding noisy works and a responsible person will be appointed to deal with queries; and
- The effectiveness of all measures shall be monitored by the Contractor as part of a periodic audit programme and any improvements made accordingly.

20.0 Air Quality/Dust

20.1 Potential dust emissions from the site may be generated from activities associated with:

- Vehicle movements in/out of the site;
- Concrete break-out activities;
- Loading and tipping operations;
- Handling and movement of stockpiles;

- Wind blowing across stockpiled materials; and
- Crushing and screening of wastes.

20.2 To minimise potential generation of dust from the site which could impact the surrounding properties and the public, the preventative control measures outlined below are examples of what measures can be implemented:

- Construction site layout - this will be planned to locate machinery and dust-causing activities away from sensitive receptors, where reasonably practicable. Hoarding will be erected along the site boundary, where appropriate, to mitigate the spread of dust.
- Site management:
    i. Contractors will be instructed to use all reasonable means available to keep dust to a minimum;
    ii. Avoid dry sweeping of large areas;
    iii. Wind speed and direction must be considered when organising on site operations;
    iv. The use of damping down equipment must be employed where dust may be generated to control dust at source. Water runoff from dust suppression activities will be controlled;
    v. Materials with the potential to produce dust will be stored away from the site boundaries;
    vi. Bins and skips will either be located in an enclosed area or covered and sheeted;
    vii. Undertake daily on-site and off-site inspection to monitor dust, record inspection results;
    viii. Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner and record the measures taken;
    ix. Make the complaints log and/or daily logs available to the LPA, when asked;
    x. Dust site inspections must be increased in particularly hot and windy conditions; and
    xi. Record any exceptional incidents that cause dust and/or air emissions, both on- or off-site and action taken to resolve the situation in the log book.

- Site maintenance:
    i. As far as possible, plan site layout so that machinery and dust causing activities are located away from receptors;
    ii. As far as possible, fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period;
    iii. Avoid site runoff of water or mud;
    iv. Burning of any material is prohibited anywhere on-site;

v. Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site;

vi. Cover, seed or fence stockpiles to prevent wind erosion of materials; and

vii. All vehicles carrying loose or potentially dusty materials to and from the site will be covered.

- Construction:

viii. Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques, such as water sprays or local extraction;

ix. An adequate water supply should be provided on site for effective dust suppression, using non-potable water where possible and appropriate;

x. Use enclosed chutes and conveyors and covered skips; and

xi. Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable.

xii. Measures will also be implemented to limit emissions from construction plant and vehicles, which will include the following, as appropriate:

xiii. Operation of construction plant in accordance with the manufacturer's written recommendations;

xiv. Vehicles and plant will be switched off and secured when not in use;

xv. Construction vehicles to conform to the current EU emissions standards and,

xvi. Vehicle and construction plant exhausts to be directed away from the ground and positioned at a height to facilitate appropriate dispersal of exhaust emissions;

xvii. The enclosure, shielding or provision of filters on plant likely to generate excessive quantities of dust beyond the site boundaries;

xviii. Movement of construction traffic around the site will be kept to a reasonable minimum;

xix. Material deliveries and vehicle access to the site will be timed to avoid the need to queue outside the site prior to opening or whilst other deliveries are completed;

xx. Construction plant will be located away from site boundaries which are close to sensitive receptors, where reasonable and practicable;

xxi. Site access points will be designed to minimise queuing traffic adjacent to access points;

xxii. The use of diesel or petrol-powered generators will be reduced by using mains electricity or battery-powered equipment where reasonably practicable; and

xxiii. Vehicle, plant and equipment maintenance records will be kept on site and reviewed regularly.

21.0 Water Resources

21.1 Implementation of an appropriate temporary drainage system will be required in order to minimise the potential risk of increased sediment affecting the

surrounding areas during construction activities on-site. Construction activities may adversely affect the quality of surface water or ground water as a result of contaminated runoff from, or spillages on the construction site. The Principal Contractor will take precautions during works to protect the entire drainage system and nearby watercourses and groundwater from siltation or pollution.

21.2 Construction activities, including the storage and handling of materials on site will be in accordance with the (now-withdrawn) EA Pollution Prevention Guidance (PPG) documents, in particular:

- PPG 2: Above ground oil storage tanks;
- PPG 3: Use and design of oil separators in surface water drainage systems;
- PPG 4: Disposal of sewage where no mains drainage is available;
- PPG 6: Working at construction and demolition sites;
- PPG 7: Refuelling facilities; and
- PPG 26: Drums and intermediate bulk containers.

21.3 The following mitigation measures will be implemented to protect the water environment and surface water quality during all construction activities:

- All tanks will be adequately bunded to prevent spillages and drip trays will be used under stationary plant. bunds or drum pallets will be covered, where possible, to prevent the accumulation of rainwater;
- During refuelling activities, spill kits will be on hand to address any minor incidents during these activities;
- To minimise the risk of ground contamination all plant operators will be required to clean up any small fuel or oil spillage immediately;
- No silty water to be pumped directly into any watercourse but to be allowed to settle out (for example, in settlement lagoons) or filtered (for example, using straw bales to filter out coarse particles) prior to discharge, in accordance with permit conditions;
- Where settlement or filtering is not practicable or effective, alternative disposal options will be considered for example, discharge onto a grassed or vegetated area (with consent from the landowner and following EA consultation), and discharge to foul sewer (with consent from the local sewerage undertaker);
- Existing and new surface water drains will be kept clear of silt or weed build up;
- Roads and hard surfaces will be kept clean, to prevent a build-up of mud and sediment that could contaminate surface water; and
- Implementation of a monitoring schedule to ensure that measures taken to protect watercourses, boreholes and wells are effective.

21.4 Other effluents may be produced that need to be properly managed and controlled in order to prevent contamination of surface water. The contractor will ensure that:

- Washing of vehicles and equipment will be carried out at purpose-built wash stations where the water is contained for controlled disposal;

- Foul effluent will be contained; and
- The foul effluent container will be subject to daily inspection and a maintenance. The effluent will be removed by tanker and disposed of at a licensed facility.

22.0 Ecology and Natural Heritage

22.1 The following control measures could be implemented during construction in order to minimise the impact on ecological receptors around the site:

- Install measures to prevent accidental damage to the retained trees near the site entrance (such as from damage to trunk or branches, or compaction of soil around the root system);
- Locations for storage of building rubble, equipment or any other materials associated with the proposed works will be agreed with an ecologist prior to works commencing;
- Any works to vegetation (including the removal of existing trees) should be undertaken outside of the breeding bird season (March to August inclusive). If this is not possible, the vegetation should first be checked by a suitably experienced ecologist to look for bird nests. Any active nests would need to be left undisturbed until the chicks had fledged (usually 6-8 weeks);
- Should the site be left dormant for more than two weeks during the construction phases and during the bird breeding season (February to mid-August), a suitably qualified ecologist will check for the presence of nesting birds before work continues. If any active nests are found, construction will cease, and an appropriate buffer zone will be established. This will comprise an area that will be left intact until it has been confirmed by a suitably qualified ecologist that the young have fledged and the nest is no longer in use; and
- All relevant best practice construction measures (e.g. in relation to dust suppression, noise reduction, waste management, contamination of water courses) will be adhered to for the duration of demolition works.

23.0 Highways and Transportation

23.1 Some details are provided earlier in this CEMP, however, other measures than could be adopted to reduce traffic and transportation effects include:

- The sheeting of loads will ensure that any material which is removed from site is secure;
- Fire and emergency access routes will be kept free from obstruction at all times;
- Access and egress routes on the site will be observed at all times;
- Footpaths and roads will always be kept clear of obstructions, including parked cars;
- Footpaths and roads will be protected and maintained in a condition suitable for vehicular and pedestrian traffic;
- Materials will not be stored on or near roadways, paths or other areas where they may constitute a hazard;

- Should it be required, banksmen will be employed to assist in traffic movements on and off the site;
- In the event of an emergency, a nominated person will meet the emergency services at the entrance to the site and guide them to the emergency;
- Traffic will enter and leave the site in forward gear;
- Safety is critical, so contractors will be encouraged to register with the FORS system. Contractors' vehicles should include side-bars, bind spot mirrors and detection equipment;
- Vehicles not fitted with an audible reversing alarm/flashing beacon will have a banksman present when reversing or carrying out difficult manoeuvres on site;
- Banksmen will always wear high visibility clothing;
- A designated parking area will be established, and personnel will be made aware of its location;
- Delivery vehicle movements will be controlled on site and will follow the site rules;
- Safety signs will be clearly posted to make personnel on site aware of traffic hazards;
- The use of mobile phones whilst driving or operating plant is prohibited;
- Drivers must obey the site traffic management system including speed restrictions;
- Pedestrian accesses which leads onto any traffic route will be sufficiently separated to enable pedestrians to see approaching plant and vehicles;
- Adequate separation between vehicles and pedestrians will be established to ensure safety or, where not reasonably practicable, other means of protecting pedestrians and effective arrangements for warning; and
- Every traffic route, where necessary for reasons of health or safety, will be clearly indicated by suitable signs regularly checked and properly maintained.

23.2 To minimise mud and detritus being deposited onto the roads around the site a road sweeper will be instructed every other day or when required to ensure road standards are maintained.

6. AUDITING, MONITORING AND REVIEW

24.0 Incident Reporting and Corrective Actions

24.1 All incidents including actual or potential (near miss) for injury, or damage to equipment, property or the environment will be reported to the Project Manager or Construction Site Manger as soon as practicable after the occurrence. Regardless of how minor the incident appears, it should be reported. An "Incident Investigation Report" will be completed within 18 hours of the incident. Prompt reporting will allow an immediate investigation to take place and prevent similar situations occurring.

24.2 The reporting of hazards is the responsibility of all staff and if a hazard or a safety problem is identified, it will be brought to the attention of the Construction Site Manager immediately who will investigate and rectify the situation as soon as practicable.

CEMP Review

1.69 The Client, Principal Designer and Principal Contractor will ensure that controls outlined in this CEMP are properly implemented and regularly monitored to ensure their effectiveness. Changes to the controls will be instigated if they are not achieving their objectives. The CEMP shall be revised and refined in consultation with the LPA, as required, to ensure it remains consistent with environmental regulatory requirements and conditions of planning approval.