



**GRANGER PLC
PHASE 8 TEMPORARY ACCESS
BEREWOOD, WATERLOOVILLE,
HAMPSHIRE**

OUTLINE CEMP

MARCH 2019



the journey is the reward

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Prepared by:	Andrea Hughes
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Granger plc
Phase 8 Temporary Access
Berewood, Waterlooville, Hampshire
Outline CEMP

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1 Introduction

- 1.1 This Outline Construction Environmental Management Plan (CEMP) indicates the management framework required for the planning and implementation of the proposed site works, in accordance with environmental commitments identified within the Environmental Statement and any requirements of planning conditions or Section 106 legal agreements. Its purpose is to reduce the risk of adverse impacts resulting from construction on sensitive environmental resources, and to minimise disturbance to local residents and other sensitive receptors. The outline CEMP describes the checking, monitoring and audit processes that will be required to ensure works are being undertaken in accordance with these requirements, together with measures to ensure that appropriate corrective actions or mitigation measures are taken. The outline CEMP will form part of the overall Project Management and as such, activities described will be integrated with other Quality, Sustainability and Health and Safety management processes.
- 1.2 The provision of the access road is subject to a Reserved Matters Application and as such, Condition 11 of the Winchester City Council Decision applies. Therefore, this Outline CEMP will include for the specific RMA condition set out below.
- 1.3 Condition 11 states:
- “No development within a reserved matters area shall take place until a Construction Environmental Management Plan (CEMP) which should be in accordance with the ecological mitigation measures set out in Environmental Statement and the ecological mitigation plan submitted for that Reserved Matters Application, has been submitted for each particular reserved matters application, and approved by the Local Planning Authority, to include details of:
- i. construction traffic routes in the local area;
 - ii. parking and turning of operative, construction and visitor vehicles;
 - iii. loading and unloading of plant and materials;
 - iv. piling techniques;
 - v. storage of plant and materials;
 - vi. programme of works (including measures for traffic management);
 - vii. all deliveries and building works which should only be carried out between the hours of 0800 and 1800 hours Monday to Friday and 0800 and 1300 hours Saturday and no time on Sundays or recognised public holidays;
 - viii. provision of boundary hoarding and lighting including construction lighting;

- ix. protection of trees, hedgerows and other natural features to be retained including their management until such time as they are adopted;
- x. details of proposed means of dust suppression and noise mitigation;
- xi. measures to protect the listed building as necessary;
- xii. details of measures to be taken to prevent mud from vehicles leaving the site during construction;
- xiii. measures to prevent pollution of the watercourse during construction;
- xiv. the handling and management of construction waste;
- xv details of surface water runoff; and
- Xvi construction lighting.”

- 1.4 The specific responses to these requirements are contained within the relevant sections of the document and specifically within **Section 5**.

2 Project Outline

Overview

- 2.1 Berewood is located to the immediate west of Waterlooville and north of Portsmouth in Hampshire. The A3 forms the eastern boundary of the site and the northern boundary extends towards Hambledon Road. The western boundary is formed by woodland belts and hedgerows to the east of Newlands Lane. The main part of the site extends south to Purbrook Gardens, with the southern access part of the site extending further south to near Purbrook Heath Road. The built-up area of Waterlooville borders the eastern boundary of the site with the town centre immediately to the east. The Hambledon Road Local Centre is located to the north east and the Purbrook Local Centre to the south east. Brambles Business Park is located north west of Waterlooville Town bordering the site perimeter. The Berewood site and phasing is illustrated in **Figure 2.1** below.



Figure 2.1 Berewood Phasing Plan

- 2.2 Works have been ongoing at the Berewood site since 2008. In this time the main Development access off Maurepas Way has been constructed, enabling Phase 1 to be built out. A separate Design and Build contract has also been completed on the 'PRS' site in the northern section of Berewood, adjacent to the Brambles Business Centre. In addition, Berewood Primary School has been completed and works have begun at phase 9 and 10 to the rear of the school. The Berewood Site Office has also been completed.
- 2.3 Works to Phase 3 have also been accessed from this portion of the site and are largely completed.

- 2.4 A further access off London Road, in the southern portion of the site has also enabled Phase 2 to be built out and is complete. Phase 13a works off this access are also largely completed as are Phase A of the Town Park works. Infrastructure works have taken place for Phase 7, including access roads which have included the provision of access to a new Commercial Area via a new Segmental Arch Bridge, this has enabled a length of River Channel to be realigned and restored to provide riverside walks & habitats. The northern pumping station, rising main and multi-use greenway which runs almost the full extent of the site, north to south have also been completed. All infrastructure works have included for the provision of stabilised haul roads, extensive drainage & SUDS features, Streetlighting and associated landscaping and tree planting. All major services have been installed for developers to connect to.
- 2.5 The current work package relates to the provision of a works access for Phase 8.
- 2.6 All works to date have been undertaken with the use of a CEMP management tool in order to control and manage potential environmental impacts. It is Winchester City Council's requirement that all phases of the works are undertaken with the application of the same management principles.

Access Works

- 2.7 The works to be undertaken are illustrated within the contract drawings and specific contractor responsibilities will be the subject of other documents. Works on site may include for, but are not limited to:
- Provision of compound facilities;
 - Construction of access road;
 - Set up of protective heras fencing and signage where required;
 - Provision and maintenance of pollution control measures;
 - Establishment of temporary wheel wash facilities as required;
 - Provision of suitable surfacing
 - Laying of kerbs, temporary kerb blocks and footways as required;
 - Installation of ducts for utilities if required;
 - Topsoiling, grass seeding if required; and
 - Management of topsoil and subsoil in accordance with a soil management plan as required.

3 CEMP Objectives

3.1 The CEMP will aim to ensure that:

- all environmental safeguards are carried out correctly
- site activities are well-managed
- adverse impacts on the environment are minimised
- the biodiversity of the site is conserved or enhanced
- all relevant legislation is complied with, and
- the project is monitored for environmental impact.

3.2 The CEMP fits into the overall planning process of the project by complying with the conditions attached to the planning consent by Winchester City Council and Havant Borough Council.

Considerate Constructors Scheme

3.3 In order to aid compliance with the above objectives, the site contractor must be registered with the 'Considerate Constructors Scheme' (CCS). Contractors which register with the scheme are required to demonstrate the implementation of a five point 'Code of Considerate Practice'. The categories within this code are set out below.

- **Appearance:** Constructors should ensure sites appear professional and well managed.
- **Respect for the Community:** Constructors should give utmost consideration to their impact on neighbours and the public.
- **Protect the Environment:** Constructors should protect and enhance the environment.
- **Secure Everyone's Safety:** Constructors should attain the highest levels of safety performance
- **Value their Workforce:** Constructors should provide a supportive and caring working environment.

Site Environmental Standards

3.4 Site environmental standards will be based upon the above code and will detail the minimum measures that should be achieved for general operations that fall outside the risk assessment/method statement procedure designed to cover the majority of construction activities. They will cover the following issues:

- storage of materials;
- management of waste;

- water pollution;
- noise and vibration;
- air quality; and
- ecology

3.5 The standards will be used as a briefing tool on site.

Legal Requirements

3.6 The CEMP will collate all legal requirements for the works and ensure that all are complied with during the construction phase of works. All legal requirements for the works will be agreed through consultation with the relevant Statutory Body.

3.7 The following legal requirements will be adhered to and this list will be added to as necessary throughout the development of the works.

NB Legislative list below under continuous review

Regulatory Instrument	Requirement
Environmental Protection Act (1990)	Introduces Integrated Pollution Control (IPC). Part III Statutory Nuisance Provisions (England & Wales) Section (79) relating to prevention of nuisance from industrial premises (including construction sites) relating to noise and air (smoke, fumes, gases, dust, steam, odour, smells, effluvia, smuts & deposits) Section 80 permits the local authority to serve an abatement notice on persons responsible for statutory nuisances. Section 61 requires that an application must be made to the local authority for consent to work if it is anticipated that a nuisance will be created.
Control of Pollution Act (1974)	Section (60) Working hours 08:00 to 18:00 Mon to Fri, 08:00 to 13:00 Sat. Nothing on a Sunday, bank and public holiday unless through agreement with the L.A. Section (61) The developer may apply in advance for consent as to the methods by which the works are to be carried out.
Control of Substances Hazardous to Health Regulations)1988	Requires employer to control all substances that are hazardous to health.
Control of Pollution (Amendment) Act (1989)	Registration of controlled waste carriers Control of illegal dumping of waste.
Control of Pollution (Oil Storage) (England) Regulations 2001	Applicable to any construction site storing more than 200 litres of oil above ground. Advises on the control and regulation of oil storage to prevent spills and leaks and to have adequate systems in place in the event of an emergency.
Pollution Prevention and Control Regulations 2000.	Enables regulations to be made to implement EC directive 96/61 on IPPC based of applications of BAT (Best Available Techniques)

Environment Act (1995)	Disposal of all “controlled waste”; including household, industrial and commercial waste as defined by the <i>Controlled Waste Regulations 1992</i> and the 2006 EU Framework Directive for hazardous or “special” waste.
Clean Air Act (1993)	Section 2. Prevention of Black Smoke emissions from industrial and trading premises
Ground Water Regulations (1998)	Prevention of groundwater pollution from industrial / construction activities.
Water Resources Act (1991)	Sections 85 and 88 make it an offence to ‘cause or knowingly permit’ pollution to enter a controlled watercourse unless this is permitted under other legislation. Section 161 of the <i>Water Resources Act 1991</i> empowers the agency to serve a ‘works notice’ on any person who has ‘caused or knowingly permitted’ a pollutant to enter controlled waters, including from contaminated land, requiring them to deal with the problem.
The Water Industry Act (1991)	Sections 77 and 78 require local authorities to keep themselves informed about the wholesomeness and sufficiency of both private and public water supplies. In the case of private supplies, they are required to serve notice requiring improvements. Section 80
The Salmon and Freshwater Fisheries Act (1975)	It is an offence to contaminate waters in a way which may poison or injure fish, spawn, fish food or spawning grounds.
The Groundwater Regulations (1998)	Powers to prevent and control the entry of listed substances to groundwater and require authorisation for disposal or tipping of substances.
Land Drainage Act (1991)	Under Section 66, no person without the previous consent of the Land Drainage Board may erect a building or structure nearby to a watercourse.
Hazardous Waste (England & Wales) Regulations (2005)	Regulation 16 requires that consignees should maintain full site records of all deposits of special waste; including a site plan marked with a grid, or with overlays on which deposits are shown.
Waste Management Licensing (England & Wales) (Amendment & Related Provisions) Regulations (2005)	Under the EPA, the deposit, keeping, treatment or disposal of controlled waste, in or on land, requires a waste management licence.
Control of Pesticides Regulations (1986) (as amended)	Section 26.4 requires consent of pesticides for their use under the conditions of the act. All pesticides must be products on the current list of Agricultural Chemicals Approval Scheme and all pesticide users shall comply with the conditions of approval relating to use clearly stated on the product label.
Town and Country Planning Act (1990) and Town and Country Planning (Trees) Regulations 1999	Part 8. Tree Preservation Orders (TPOs) can be made by the local planning authority to prohibit damage to or removal of trees without the local planning authority’s consent.
The Hedgerow Regulations 1997	Where permission is not already proved under planning permission, a hedgerow removal licence is required from the local authority if the hedgerow is older than 30 years old or satisfies at least one criteria listed in part 2 of schedule 1.
The Conservation of Habitats and Species Regulations (2017)	Controls the protection of ‘European Protected Species’ i.e. plants and animals listed in the

	European Habitats directive. All works to be undertaken in accordance with these regulations.
Natural Environmental and Rural Communities Act 2006	Controls the protection of native species and environments. All works to be undertaken in accordance with these regulations.
The Protection of Badgers Act (1992)	It is an offence to disturb, interfere with, damage or destroy a sett, to obstruct access to an entrance, or to wilfully injure, entrap or ill-treat a badger.
Wildlife and Countryside Act (1981) (as amended)	Controls the spread of invasive species and provides regulatory protection to species of birds, wild creatures and plants as listed within the Act. It is an offence (with the exception of Schedule 2 birds) to intentionally kill injure or take any wild bird or their eggs or nests.

Table 3.1: Legislative Requirements

Permits and Approvals

- 3.8 Where required, all consents, permissions and licences will be stored in **Appendix D**. These will also be reviewed and updated where necessary, as works progress.

Environmentally Sensitive Receptors

- 3.9 The CEMP includes summary information taken from the Lindsay Carrington Ecological Appraisal¹ and Briefing Note² for the sites. It is required that any contractors must review these documents in the preparation of any Construction Method Statements (CMS) required prior to works commencing. These documents have been reviewed in the production of an initial Environmental Risk Assessment and subsequent Method Statements and shall also be reviewed by the contractor. All mitigations must be in place, prior to the commencement of any works. The initial Risk Assessment and Method Statements are contained within **Appendices G** and **F** respectively.

Flora

- 3.10 Phase 8 and the access to it, is located on grassland of low ecological value, although, works will take place in proximity to a recently planted, species-rich hedgerow adjacent to London Road. No hedgerows will be lost as part of these works, however hedgerows will require protections to be in place prior to works. Consultation with project arboriculturalists will be required to establish appropriate protections and compound distances prior to works commencing.

¹ Jones, L (2018) *Ecological Appraisal and Phase 2 Surveys Area 3B and 8 Newlands Lane, Waterlooville, Hampshire PO7 5SH*. Lindsay Carrington Ecological Services, Wareham.

² Jones, L (2018) RE: *Briefing note in regards to temporary construction access off London Road*. Lindsay Carrington Ecological Services, Wareham.

Fauna

- 3.11 The site has been assessed for the presence of, or potential for:
- Badgers,
 - Great Crested Newts;
 - Bats;
 - Reptiles;
 - Dormice; and
 - Breeding Birds
- 3.12 Surveys have concluded that there is no evidence of the presence Great Crested Newts either on or adjacent to the site and therefore, no specific mitigations are required for their protection.
- 3.13 There is evidence that a number of other fauna do utilise the site or the areas around it. These fauna and a summary of the required mitigations taken from the Lindsay Carrington Ecological Appraisal are discussed below. The mitigations discussed are also set out within the CMS within **Appendix F**

Badgers

- 3.14 Whilst there is no evidence of badgers on the site, there is suitable foraging habitat for badgers across Berewood and previous surveys have identified badger setts in the vicinity. The site provides potential foraging habitat and recommendations are provided within **Table 5.2**.

Bats

- 3.15 Tree lines and hedgerows around Berewood have been identified as having foraging potential for bats. Therefore, it is recommended that there is minimal use of construction lighting. Recommendations for any lighti require are provided in **Table 5.2** and **Appendix A**.

Reptiles

- 3.16 The site is currently short sward and assessed as unsuitable for reptiles. However, common reptiles are present elsewhere at Berewood and the site must be managed to ensure that suitable habitat does not form during the construction phase. Therefore, the habitat within the works area will be made unsuitable using the mitigations provided in **Table 5.2**.
- maintaining the sward at ground level;

- clearing all clearance arisings from the site immediately;
- removing any spoil piles, log piles or tree root systems; and
- maintaining materials off the ground through the use of skips or pallets.

Dormice

- 3.17 The briefing note concludes that whilst the adjacent hedgerows does contain species favoured by dormice, it is not considered suitable for their presence due to the immaturity of the hedges and the lack of cover provided.

Top Soil

- 3.18 Where topsoil is required to be removed as part of the works, this will be undertaken and stored in accordance with the appropriate Construction Code of Practice³.

Archaeology

- 3.19 An archaeological Written Scheme of Investigation (WSI) should be maintained to monitor the works, including top soil stripping and excavation and to record any archaeological finds. The Contractor will adhere to the requirements of the WSI.

Local Hydrology

- 3.20 The main drainage channels in close proximity to the works, are those associated with London Road. It will be important to ensure that all attenuated run-off from the site is contained and treated whilst ensuring that any infiltration is prevented. The Contractor will ensure this requirement is observed during the construction phase.
- 3.21 Prior to works commencing on site, the Contractor's Environmental Manager shall develop an Incident Response Plan (IRP). This shall identify all on-site risks and suitable responses and be disseminated to all appropriate staff. The CIRIA Environmental Good Practice on site guide suggests elements to be included within an effective plan and these are set out within **Table 5.2**:

Site Operatives

- 3.22 Site operative will be protected from construction impacts by the adherence to on-site health and safety protocols and the use of all necessary Personal Protective Equipment

³ Department for Food and Rural Affairs (2009) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Defra, London.

Humans

- 3.23 The human receptors anticipated to be affected by the works are those situated adjacent to the works on London Road. These receptors have the potential to be adversely affected by dust and/or noise and will be protected from the impacts of unacceptable levels of noise, dust and issues such as mud on the highway by the strict application of identified mitigation measures as set out within the CMS within **Appendix F**.

4 Planning and Control of Construction Works

CEMP Team

- 4.1 In order to enable efficient working practices on site, a CEMP team member will be identified, with specific responsibilities delegated to each member. The team members required and their responsibilities are set out below.

Title	Contact Details	Responsibilities
Client's Project Manager – (PM)	Lisa Turley Grainger Project Manager 01252 351 964 lturley@grainagerplc.co.uk	The Client's Project Manager (PM) will act with responsibility for managing the Project within the agreed environmental constraints in conjunction with all other necessary management processes.
Client's Environmental Manager – (EM)	Andrea Hughes Mayer Brown Ltd 07974198231 ahughes@mayerbrown.co.uk	The Client's Environmental Manager (EM) will report to the Project Manager and will be responsible for monitoring the performance of the project against statutory requirements and the agreed environmental standards.
Client's Environmental Specialists – (ES)	Jeff Picksley Holbury Consultancy Services 07788638938 Jeff.picksley@holburycs.co.uk	The Client's Environmental specialists will be available to provide advice as required
Contractor's Site Manager – (CSM)	TBC	The Site Manager will ensure that all environmental policies addressed in the CEMP are adhered to by contractors and sub-contractors throughout the construction phase.
Contractors Appropriate Person (CAP)	TBC	The Contractor's Appropriate Person will take on tasks as delegated by CSM and for which they will receive appropriate training.
Contractor's Site Waste Manager – (CSWM)	TBC	The Site Waste Manager will be responsible for overall waste management issues arising from the project.
Contractor's Sustainability Manager – (CSuM)	TBC	The Sustainability Manager will be responsible for implementing all sustainability measures identified in the ES and arising from the project.
Contractors Environmental Manager – (CEM)	TBC	The Contractors Environmental Manager will be responsible for overall Environmental issues arising from the project
Contractor's Overall Project Consultant – (CPC)	TBC	The Overall Project Consultant will be responsible for liaising with the CEMP Team and specialist consultants to

		ensure that the project is carried out to the required environmental standards.
Contractor's External Relations Officer – (CEO)	TBC	The external relations officer will be responsible for providing a point of contact for third parties and will be kept informed of all issues which may be of interest or concern.
Site Foreman – (CFR)	TBC	The foreman will be required to implement and monitor all environmental and health and safety measures as instructed by the site manager.
Subcontractor(s)	TBA	The contractor will be required to monitor the environmental and health and safety performance of all subcontractors to ensure compliance with the CEMP.
Client's Appropriate Personnel – (AP)	Nigel Baker Mayer Brown Ltd 07747008072 nbaker@mayerbrown.co.uk	All personnel will be required to have undertaken the health and safety and environmental induction course.
Environmental Health Officer – (EHO)	EHO Admin Gemma Crowfoot Winchester City Council 01962 840222 ext 2172 gcrowfoot@winchester.gov.uk	A representative from the Local Authority's Environmental Health Department will be invited to attend CEMP Team meetings to ensure that the project is addressing all environmental issues raised during the project planning stage
Implementation Officer – (IO)	Chris Hughes (interim) Winchester City Council 01962848375 chughes@winchester.gov.uk	A representative from the Local Authority's Planning Services Department will be invited to attend CEMP Team meetings to ensure that the project is addressing all planning issues raised during the project planning stage
Flood and Water Manager - (FWM)	Clare Mills Hampshire County Council Clare.mills@hants.gov.uk 01962846727	A representative from the County Council will be invited to attend CEMP Team meetings to ensure that the project is addressing all issues raised during the project planning stage
Environment Agency Biodiversity Officer (BO)	George Woodward Environment Agency 01962 764938	A representative from the Environment Agency will be invited to attend CEMP Team meetings to ensure that all issues of concern to the Environment Agency are being addressed.

Table 4.1: CEMP Team and Responsibilities

Resource Management Plans

- 4.2 Grainger plc has a number of Key Performance Indicators that are to be monitored as part of the works. These are listed in **Appendix A** and include water and diesel usage.
- 4.3 Water and diesel consumption should be continuously monitored on site and will be recorded within the Resource Management Plans (**Appendix E**) of the CEMP on at least a fortnightly basis.

Action Plans/Method Statements

- 4.4 Where required, an Action Plan or Method Statements will be prepared by the contractor and environmental specialist to identify and sequence mitigation activities that are needed in order to complete a required site works process. They will identify reference documentation, the approval required to complete that activity and the verification documentation to be produced as evidence of satisfactory completion of the works.
- 4.5 Action Plans and Statements will include a review of the environmental risks and commitments, so that appropriate control measures can be developed and included within the construction process
- 4.6 The Plan or Statement will also identify where “cessation of works” will be required when necessary. These will be put in place when continuation of a subsequent activity is prohibited unless the former activity has been signed-off. The Plan or Statement will be broken down into appropriate categories depending on the phase of works to be carried out.
- 4.7 Where required, Action Plans and Method Statements will be identified for general site management and to deal with activities under specific types of works e.g. hedge removal, earth works.
- 4.8 Where required, all method statements will be submitted to the enforcement agencies (Environment Agency, Natural England, and Local Authority Pollution Control Department), as appropriate.
- 4.9 Any Action Plans/ Method Statements created will be saved within **Appendix F** of the CEMP. It should be noted that where action plans / method statements evolve through e-mail discourse, they will be stored in this form.

CEMP Action Plan Responsibilities Statement of responsibilities The contract as a minimum requires that the Contractor document and nominate persons (in a management position) with responsibility for the following		
Activity	Details	Responsible Person
Acquisition of appropriate licences and permits	Where activities require that e.g. CES (Contractor's Ecological Specialists) are required on site or that permits need to be obtained for relevant authorities	CEM - (Contractor's Environmental Manager) Reporting to: CSM – Contractors Site Manager
Dust and noise producing activities.	Where dust and noise producing activities are taking place the appropriate mitigations will be put in place and monitored on a daily basis.	CAP: (Contractors Appropriate Person) Reporting to CEM
Run off producing activities	Where run off from the site has the potential to enter watercourses, mitigations should be in place to ensure this does not occur. Where consents to discharge are required these should be obtained.	CAP Reporting to CEM CEM: Reporting to CSM
Waste Producing Activities	Where activities have cause to generate waste materials including spoil and top soil, this must be managed on site in accordance with requirements and where necessary, disposed of appropriately	CSWM (Contractors Site Waste Manager) Reporting to CEM CEM: Reporting to CSM

Table 4.2: Action Plan Responsibilities

General Site Management	Responsible Person
Implement a soil and water management plan for the site	CSWM
Install appropriate silt fences and other sediment control structures where required	CEM
Regularly check and clean silt from behind silt fences and barriers	CEM/CAP
Ensure sediment control measures are in place before starting clearing and excavation activities	CEM/CSM
Stockpile materials only in designated areas behind sediment fences	CSWM
Limit vehicle entry points and stabilise vehicle access ways	CSM
Minimise disturbance to areas designated for conservation	CSM
Implement a construction site waste management plan (SWMP)	CSWM
Order only required quantities of materials	CSM
Separate recyclable from non-recyclable waste	CSWM
Ensure correct waste materials are used by site personnel	CSWM
Minimise chemicals stored on-site	CEM/CSM
Ensure personnel are aware of emergency phone numbers in case of environmental incident (Fire Brigade, Environment Agency and	CSM

Pollution Control, Winchester City Council and Havant Borough Council)	
Keep Material Safety Data Sheets (MSDSs) on site at all times	CSM
Ensure that there are clearly marked booms or absorbent materials on-site in case of a spill	CSM
If a spill occurs, stop at source, contain it, clean up in accordance with MSDSs and notify the relevant authorities.	CEM/CSM
Damp down dusty areas as required	CSM/CAP
Minimise water use for cleaning	CSM
Sweep roads free of dirt each day	CSM/CAP
Maintain fence at site boundary	CSM/CAP
Fence off no go areas to minimise disturbance	CSM
Minimise vegetation clearance	CSM
Ensure that there is no burning of waste on-site	CSM
Instruct trucks to use the routes identified for minimal impacts on residents	CSM
Avoid parking site vehicles where they will unduly impact local use of the street	CSM
Do not place waste containers, skip bins or building materials on road or footpath – store all materials within the work site	CSM /CSWM
Limit hours of operations to suit Local Authorities requirements listed in consent agreements	CSM
Use noise suppressors on machinery	CSM
Do not use loud radios where neighbours can be disturbed	CSM
Take appropriate care when using construction equipment in the proximity of buildings	CSM
Advise neighbouring premises of commencement date for works at least one week prior to starting, including hours of work	CSM
Protect trees during construction	CEM
Avoid harming protected species, e.g., reptiles, breeding birds	CEM

Table 4.3: Responsibilities for General Site Management

Environmental Risk Assessments

- 4.10 An initial Environmental Risk Assessment has been completed in accordance with the requirements of the CEMP and this is included within **Appendix G**. Method statements associated with the removal of the initial risks identified are included within **Appendix F**. Further risk assessments and method statements will be undertaken where required as works progress. The results of risk assessments and their residual risks will only be considered acceptable if:
- the severity of the outcome is reduced to the lowest practical level;
 - the number of risk exposures are minimised;
 - all reasonably practical mitigating measures have been undertaken; and
 - the residual risk rating is reduced to a minimum.
- 4.11 The findings of the risk assessment and in particular the necessary controls will be explained to all operatives before the commencement of the relevant tasks using an agreed instruction format.

Work Programme

- 4.12 The work programme will be completed by the Contractor's Project Manager (CPM) in order to facilitate the regular monitoring of on-site activities in relation the requirements of the CEMP and this includes measures for traffic management. This will be used to identify the need for environmental risk assessments, work method statements, training and mitigation. The programmes will be saved in **Appendix H** of the CEMP.

Construction Traffic Management and Delivery Plan

- 4.13 A Construction Traffic Routing Plan indicating the route to the Phase 8 access is provided in the drawing section of this report. The appointed contractor must provide a Construction Traffic Management Plan and Delivery Plan for distribution to all operatives and delivery companies. This must contain the requirement that all construction traffic will access the Berewood site via the A3, Hulbert Road (B2150) and London Road only. It will be directed away from Hambledon Road and Purbrook Village. All contractor provided Construction Traffic Management Plans and Delivery Plans will be stored in **Appendix I**.

Site Compound Layout

- 4.14 In indicative compound location is provided within the drawings section of this report. This drawing also indicates that a large tipper can access and egress this location. Once the contractor is appointed, the detailed compound layout will be required to demonstrate the following:
- Appropriate areas for the parking and turning of operative, construction and visitor vehicles is provided;
 - The compound is safe and secure;
 - Areas are provided for the safe loading and unloading and storage of plant and materials;
 - Areas are provided for the storage of waste in clearly signed and appropriate sized containers;
 - Suitable welfare is provided to include:
 - Canteen;
 - Drying room;
 - Toilets; and
 - Office

Training, Awareness and Competence

- 4.15 The raising of environmental awareness is viewed as a crucial element in the appreciation and implementation of the CEMP. In order to make sure the environmental

control measures are effective, all staff will be provided with the following training before starting work on site.

- a site induction;
- emergency response training;
- familiarisation with site environmental controls; and
- specific environmental training for relevant employees e.g. installing erosion and sedimentation controls, daily checks to maintain controls, cleaning up spills.

- 4.16 Training for all personnel will be completed before commencement of the associated construction activities and a record of this will be kept within **Appendix J** of the CEMP along with a copy of the induction material. Line managers and supervisors will ensure that all personnel engaged in activities that may have an impact on the environment are competent to carry out their duties or, where necessary, arrange for suitable training to be undertaken.

5 Work Activities, Potential Impacts and Mitigations Required

- 5.1 For the purpose of assessing potential impacts, the works have been set out in **Section 2**.
- 5.2 Prior to construction, the Contractors site management team and the Clients Environmental Manager will review the planned phases of works alongside the potentially affected receptors for potential impacts. i.e. the potential for the creation of a source, receptor pathway impact model will be assessed. Where potential impacts are identified, the mitigation required to prevent these will be identified along with the associated team responsibilities.
- 5.3 Main activities, potential impacts and controls for the above phases are set out within the matrix in **Table 5.1** below. Further detailed mitigations are contained within the Lindsay Carrington Ecological Appraisal which is summarised in **Section 3**.

Source Activity	Impact Pathways and Receptors			Actions & Responsibilities
	Nature Conservation	Air	Water	
Removal of topsoil	Death or disturbance of in-situ sheltering or foraging fauna ^{2,3, 5}	Creation of dust impacting on site and off site receptors and flora and fauna ^{1, 6, 7, 8, 9, 10, 11, 12, 13, 22, 23, 24, 25}	Pollution impacts via run off ^{18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35}	Clients Environmental Specialists (ES) to obtain any appropriate licences and ensure Contractors undertake appropriate action prior to disturbing activities. All activities to be recorded by EM AP to ensure appropriate dust and noise control mitigations in place and report to EM on weekly basis. Where appropriate CEM will advise Contractors External Relations Officer) CERO to contact public. CSM/CAP to file weekly report with EM
Establishment of site compound units, setting up of fencing and access routes.	Lighting impacts upon bats and other nocturnal species ⁴	Noise impacts upon on site and off site receptors ^{1, 13, 14, 15, 16, 17}	Potential for the migration of liquids from storage areas impacting on site and off site flora and fauna ^{28, 29, 30, 31, 32, 33, 34, 35}	
Establishment and maintenance of existing drainage and pollution control measures including wheel wash facilities.		Noise impacts upon on site fauna ^{1, 14, 15, 16}		
Laying of kerbs and trenches.		Potential for migration of dust from active and storage areas impacting on site and off site receptors and flora and fauna ^{6, 7, 10}		
Top soiling, grass seeding where required.				

N.B. Subscript numbers refer to mitigation measures as set out in Table 5.2

Table 5.1: Impacts Identification and Mitigation Matrix

5.4 Where the above activities are identified as potentially creating a source-receptor-pathway impact model, these activities will be associated with mitigation measures such as those below in **Table 5.2**. When applied, the mitigation will break these links and prevent incidents of pollution, nuisance and non-conformance. The following mitigation should be read in conjunction with **Appendix A** – Appropriate Site Management Practices and **Appendix B** – Summary of Mitigation Measures from the ES.

5.5 NB: These will be updated with any conditions arising from the Reserved Matters Application

Number	Mitigation Measure
1	Appropriate space to be provided for parking and turning of operative, construction and visitor vehicles. Appropriate construction routeing to be set out for construction traffic within a Construction Traffic Routeing Plan
2	Reptile fatalities will be avoided within the working area through vegetative management including : • maintaining the sward at ground level; • clearing all clearance arisings from the site immediately; • removing any spoil piles, log piles or tree root systems; and • maintaining materials off the ground through the use of skips or pallets. For the protection of birds: • Clearance works should be conducted in the winter to avoid nesting birds. If conducted during the breeding season (March to September) an ecologist will be present to search for any active nests. If an active nest is discovered a five metre buffer will be established and clearance will not continue until the young have fledged. For the protection of badgers:

	• Install fencing in areas where it is important to exclude badgers for safety reasons e.g. fuel storage areas; • Locate any topsoil / material piles well away from identified badger activity and check on a daily basis for badger activity; • Temporarily fence any piles of material that are to be on site for a significant period of time to prevent badgers from accessing the fresh soil; • Minimise night-working to avoid disturbance to badgers, and cease works in proximity to active setts at least two hours before sunset; • Where possible excavations should not be left open overnight. However, if excavations are left open at night, then an earth / wooden ramps must be installed to allow any animals that fall in to escape. Work areas would be checked daily to ensure no animals are trapped; • Cap any pipes over-night on site to avoid animals becoming trapped
3	If necessary, ploughing of ground to take place prior to nesting season to discourage ground nesting birds and vegetation shall be kept short thereafter until works are completed
4	Where construction site lighting is required, lights will be fitted with cowls and directed away from adjacent trees and hedgerows.
5	Any spoil heaps to be regularly sprayed and cut with cuttings removed before any significant vegetation can establish
6	Vehicles carrying dusty materials to be suitably covered. See Appendix 1 Section 3
7	Site roads to be swept and sprayed with water to prevent dust nuisance.
8	Activities that have the potential to generate dust to be sited in such a way to minimise dust nuisance to sensitive receptors.
9	Activities found to be generating dust in conditions where dust being spread may affect the public to be stopped, rescheduled or mitigated.
10	All supervisors to be familiar with the provisions of IAQM 'Guidance on the Assessment of Dust from Demolition and Construction'

11	All plant to be fitted with diesel particulate filters.
12	Site vehicles to be preferentially sought to have vertical exhausts to limit surface dust re-suspension.
13	All vehicle drivers to be acquainted with agreed haulage routes selected to minimise any air quality impact arising from additional lorry movements.
14	All supervisors to be familiar with provisions of BS5228, & advised on noise minimisation.
15	Noise levels to be set at the site boundary of properties off Grainger Street using the method described within Annex E of BS5228. These will apply during work hours. These are: Monday to Friday - 0800hrs to 18:00hrs Saturday - 08:00hrs to 13:00hrs. Sundays and Bank Holidays - No work on site is permitted Noise levels will be monitored in accordance with the prescribed noise protocol and records will be kept for review. All monitoring will be undertaken by appropriately trained staff using an integrating Type 1 monitor which will be laboratory calibrated on a yearly basis. Any non-conformance will be registered and reported to Winchester.
16	Silencers or mufflers as appropriate to be fitted to plant and machinery.
17	Letter drops to surrounding residential areas to warn of particularly noisy periods of works.
18	Systems of temporary drainage must be installed to ensure that no polluted surface runoff enters the filed drains. Any surface water collected to be directed via treatment before discharge.
19	Any existing surface water drains to be bunded to ensure that no surface water enters them.
20	Where any pesticide use is required, refer to the strict requirements for notification of relevant bodies, secure storage, transportation, use and competences required, as set out in the Landscape Maintenance and Management Plan.
21	Where possible over-site hard standing to be retained & haul routes to be hard surfaced.
22	All vehicles leaving the site where necessary to be subjected to wheel washing.
23	All materials and spoil to be stored on site to be sheeted or damped down as appropriate in dry weather to reduce dust.
24	Stockpiling to be in accordance with best practice as in the Environment Agency's PPG6 (now rescinded) and CIRIA guidance
25	Stockpiles of materials not suitable for on-site re-use to be removed as soon as is practicable in accordance with applicable waste management legislation.
26	Fuels and chemicals to be stored in accordance with the Environment Agency's PPG6 (now rescinded) and CIRIA guidance

27	All tanks and containers to be labelled with nature of contents and total volume secured.
28	Fuel storage and delivery facilities to be on impermeable surface in a secondary containment system.
29	Provision of spill kits at all storage areas & provision of emergency response numbers.
30	Biodegradable hydraulic oil to be used for machinery/plant where possible and all relevant plant to be fitted with drip trays.
31	All deliveries to be supervised and levels of tanks checked before delivery.
32	Stockpiles to be sited so as not be subject to inundation during extreme rainfall events.
33	Contingency plan required for temporary covering of stockpiles during adverse weather conditions.
34	Sorted & screened material to be placed on a prepared clean granular surfacing.
35	Supervisors to be familiar with the provisions of the Environment Agency's PPG6 (now rescinded) and CIRIA Guidance re control of contaminated run off.

Table 5.2: Mitigation Measures

6 Communication and Coordination

Supervision of Construction Activities

- 6.1 All construction and installation activities, including those carried out by subcontractors and suppliers will be supervised or regularly checked through the completion of site inspections, by the Contractor's Environmental Manager, to ensure that requirements identified in risk assessments or method statements have been implemented. The frequency and extent of this supervision will vary according to the degree of competence displayed by the workforce and the level of risk to the environment. Records of Sub Contractors will be saved within **Appendix K** – Record of Sub-contractors.

Environmental Inspection and Reporting

- 6.2 Client appointed representatives or 'Appropriate Personnel' will carry out regular inspections of the construction area, to verify that housekeeping or supporting controls are being implemented effectively. These inspections will use the site environmental standards (see **Section 3**) as the minimum standards that should be achieved, with necessary actions being recorded and raised at progress meetings. They will also be required to implement and undertake monitoring and review of the Construction Traffic Routing Plans which will be saved in **Appendix I**. Records of inspections can be saved in **Appendix L**.

Environmental Inspection and Reporting

- 6.3 The Contractor's Environmental Manager will carry out regular inspections of the project's environmental performance, based upon site visits and reports from the Clients Appropriate Personnel.
- 6.4 These inspections will be used to confirm that:
- construction works are progressing in accordance with the agreed environmental method statements;
 - agreed protection or mitigation measures are in place, prior to or during the implementation of construction activities; and
 - all mitigation measures in place are appropriately maintained.
- 6.5 Inspections will be carried out at a frequency of no greater than monthly intervals, but could be held more regularly depending on the nature of the construction activity. An assessment of the environmental performance will be made and discussed at progress meetings and inspections will be recorded in **Appendix M**–Record of Inspections by EM.

Environmental Monitoring

- 6.6 Monitoring of noise, vibration, dust and water quality will be carried out in accordance with the specialist environmental procedures and environmental commitments made where required. The Environmental Manager will maintain a register of all formal environmental monitoring within **Appendix N** – Record of Environmental Monitoring.

Control of non-conformance

- 6.7 Non-conforming processes will initiate a Non-Conformance Report, which will identify the nature of the problem, the proposed corrective action, action taken to prevent recurrence of the problem and verification that the agreed actions have been carried out. Records of Non-conformance will be saved within **Appendix O**.

Non Conformance Report
Date:
Issue raised by:
Potential Impact:
Relevant personnel informed: (details)
Corrective action applied: (details)
Supervisor Signature:
Site Manager's Signature:

Table 6.1: Non Conformance Template

Internal Communications

6.8 Internal project communications will be via two processes:

- weekly team meetings; and
- fortnightly progress meetings – to be agreed.

Weekly Team Meetings

6.9 Weekly meetings will be held by the Contractors team to review performance and co-ordinate short-term planning of forthcoming activities. Close review of the CEMP or prior discussion with the Client's Environmental Manager should feed into these meetings to ensure that all planned activities are proceeding in accordance with the permits, conditions, action plans and method statements therein.

Progress Meetings

6.10 Environmental issues will be discussed at progress meetings, attended by the Contractor's Environmental Manager, relevant sub-contractors environmental representatives and when necessary, environment specialists and representatives from Statutory Consultees. The Client's Environmental Manager will report on inspections made and any non-conformances noted as well as discussing the implications of any proposed activities. Minutes of these meetings will be saved within **Appendix P**. Issues to be discussed may include:

- planned actions required to mitigate forthcoming risks;
- disseminate best practice; and
- communications with the public

6.11 Where appropriate, a Project Community Liaison Plan will be established to provide a framework for managing communications with local residents and interested parties.

Audit and Review of Performance

Internal Project Audits

6.12 The Contractor will be required to demonstrate that an appropriate method of auditing the CEMP processes via an internal or external auditing procedure is taking place. Provision of evidence that the agreed auditing procedure has taken place will be a requirement of regular reporting to the Client's Environmental Manager from the Client's 'Appropriate Person' (AP) and meetings between the Contract Manager and the Client's Project Manager. The Contractor's Environmental Manager will be required to provide a report at each progress meeting and a record of these will be saved within **Appendix Q** – Contractor's Progress Report.

6.13 The reports will be required to include information on the following issues, where appropriate:

Audit Report	Yes	NO
1. Is all resource management being recorded?		
2. Are any amendments required to the current Construction Traffic Routing Plan?		
3. Is any action planning required to accommodate upcoming works?		
4. What is the current status of the site tree protection?		
5. Have there been any recorded finds or UXB/OXB incidents?		
6. Is the Construction SWMP up to date?		
7. Are any further permits or approvals required?		
8. Has any environmental monitoring taken place? E.g. noise.		
9. Is any update required to the current sub-contractor list?		
10. Have any environmental tool box talks taken place?		
11. Have all new staff been inducted?		
12. Have there been any incidents of Non Conformance?		
13. Have there been any (verbal or written) complaints from nearby residents, Local Authority or the Environment Agency in relation to site activities such as noise, dust, traffic, dirt trucked on roads, or storm water pollution? If yes detail complaints and response to them.		

14. Have there been any incidents on site such as spills, chemicals or fuel? If yes describe what happened and what action has been taken.		
15. Are there any other environmentally related issues to be reported?		

Table 6.2: Example CEMP Audit Report

- 6.14 A Site Waste Management Plan will also be maintained by the contractor with copies provided to the EM at progress meetings. These will be stored in **Appendix R** - Site Waste Management.

DRAWINGS

**APPENDIX A: Grainger Key Performance Indicators and Appropriate Site
Management Techniques**

APPENDIX B: Summary of Mitigation Measures from the Environmental Statement

APPENDIX C: Conditions

APPENDIX D: Permits and Approvals [to be inserted prior to works]

APPENDIX E: Resource Management Plans [to be inserted during works]

**APPENDIX F: Environmental Method Statements/Action and Management
Plans**

APPENDIX G: Environmental Risk Assessment

APPENDIX H: Work Programme [to be inserted during works]

**APPENDIX I: Construction Traffic Management Plan and Delivery Plan [CTMP
to be inserted prior to works]**

APPENDIX J: Record of Training /Inductions
[to be inserted during works]

APPENDIX K: Record of Sub Contractors
[to be inserted during works]

APPENDIX L: Record of Inspections
[to be inserted during works]

APPENDIX M: Record of Inspections by EM
[to be inserted during works]

APPENDIX N: Record of Environmental Reporting
[to be inserted during works]

APPENDIX O: Record of Non Conformance
[to be inserted during works]

APPENDIX P: Minutes of Meetings
[to be inserted during works]

APPENDIX Q: Contractors Progress Reports
[to be inserted during works]

APPENDIX R: Site Waste Management
[to be inserted during works]

