



**GRAINGER PLC
TOWN PARK PHASE 2
BEREWOOD, WATERLOOVILLE,
HAMPSHIRE**

OUTLINE CEMP

JUNE 2024



the journey is the reward

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HAMPSHIRE**

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Grainger plc
Berewood Earthworks
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 Town Park Phase 2 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 works is subject to the discharge of Condition 11 of the Winchester City Council Decision. 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 extent of the Berewood site is illustrated in **Figure 2.1** below.

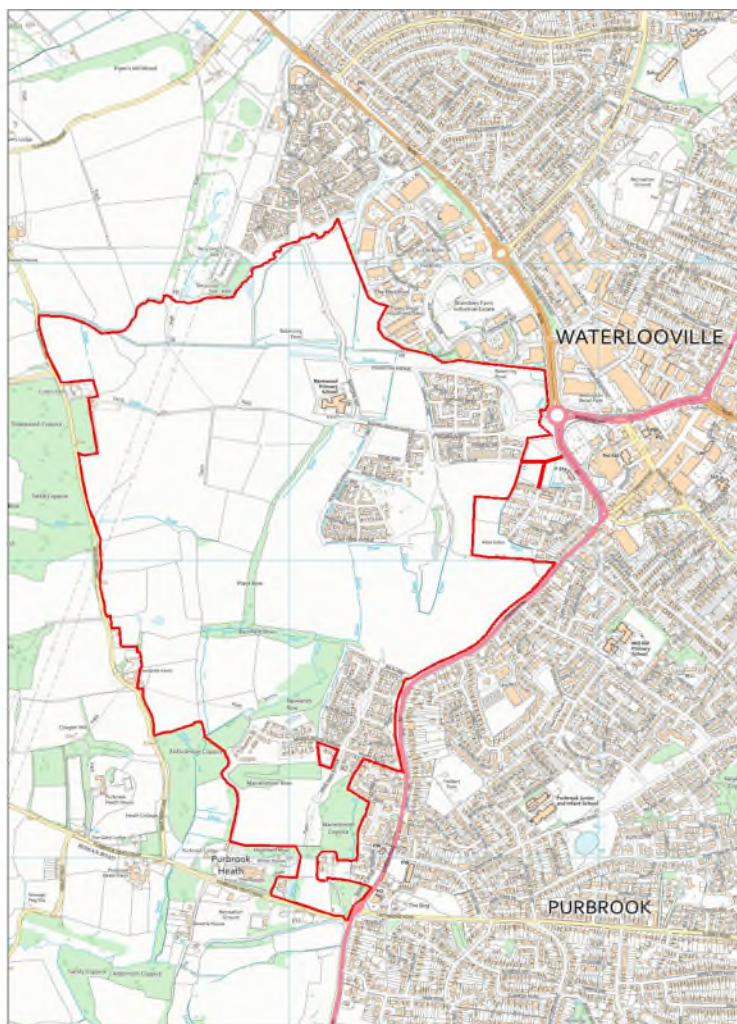
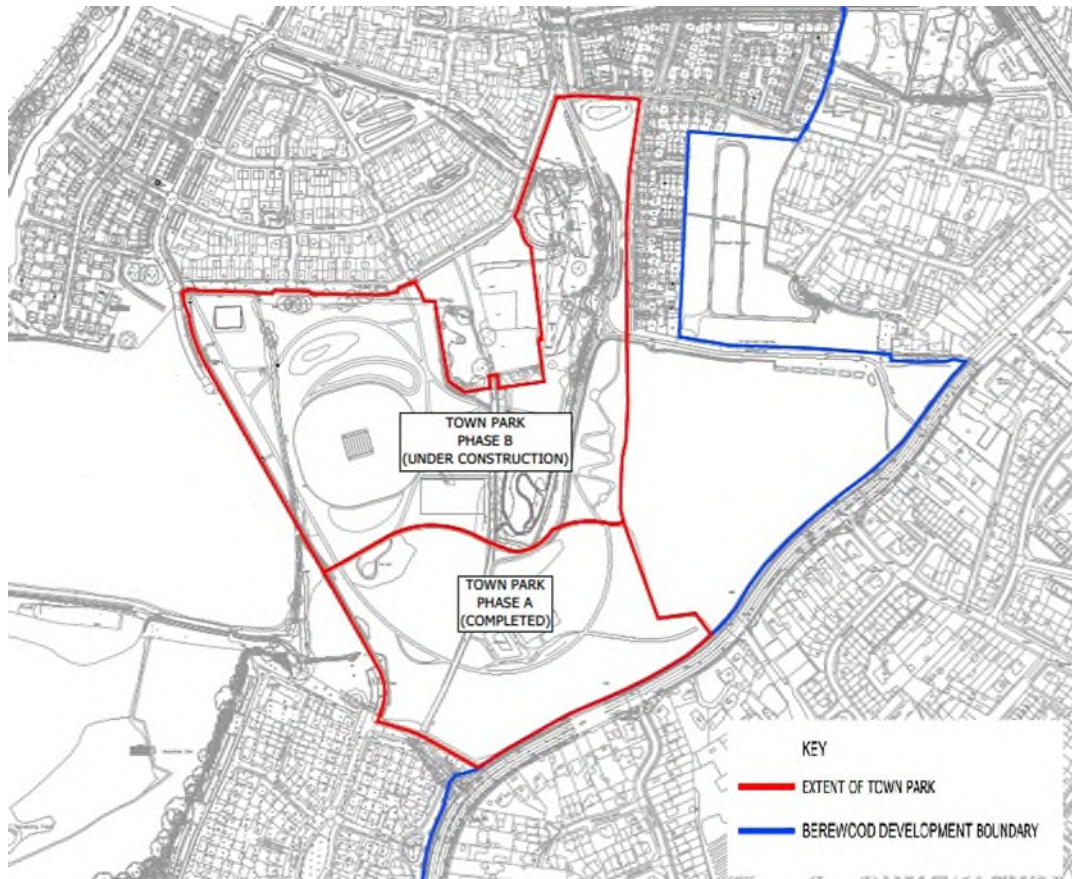


Figure 2.1 Berewood Site in Relation to Local Highway Network

- 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 - Linnet Rise 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 are completed and nearing completion at Phases 9a b and 10a - Elm Green to the rear of the school. Works to the Western Link Road and associated SuDS behind this area are currently in progress.
- 2.3 The Berewood Site Office has also been completed and adjacent works at 5a - Woodland Edge are in progress. Works to Phase 3b - Larkfields, adjacent to London Road have also begun.
- 2.4 Works to Phase 3a – Berewood Green have also been accessed from this portion of the site and are completed.
- 2.5 Infrastructure works have taken place which include the provision of access to the Commercial Area via a Segmental Arch Bridge. This 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. In addition, works are in various stages of completion within the employment land at Proxima Park to the north of the River Wallington.
- 2.6 A further access off London Road, in the southern portion of the site has also enabled Phase 2 – Yew Gardens and 13a – Oak Vale to be completed. Phase A of the Town Park works are completed as are initial works to the cricket pitch.
- 2.7 This CEMP relates to the Town Park Phase 2 works. The location of these works is illustrated in **Figure 2.2**.



SOURCE: ADAPTED FROM MAYER BROWN DRAWING GTWVILLE_TP2/GA/03

Figure 2.2: Location of Town Park Phase B

Proposed Works

2.8 The works include for:

- Provision of compound facilities;
- Set up of protective heras fencing and signage as required;
- Provision and maintenance of pollution control measures;
- Establishment of wheel wash facilities close to compound exit;
- Management of topsoil and subsoil in accordance with a soil management plan as required.
- Provision of suitable surfacing, proposed multi-use sports area and kick about area;
- Site drainage and headwalls:
- Surface Treatments; and
- Associated Landscaping

2.9 The approved layout detailing the location of facilities and surface treatments is provided within drawing no: GTWville_TP2/RD/40 D in the drawing section of this report.

- 2.10 All works at Berewood to date have been undertaken with the use of a CEMP management tool in order to control and manage potential environmental impacts. It is Winchesters requirement that all phases of the works are undertaken with the application of the same management principles. The appointed contractor will therefore be required to produce their own Detailed CEMP, prior to commencement, stipulating how the requirements of the Outline will be implemented on site.

3 CEMP Objectives

3.1 The Outline CEMP will 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 Outline CEMP fits into the overall planning process of the project by complying with the conditions attached to the planning consent by Winchester City 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.

Permits and Approvals

3.6 Where required, all consents, permissions and licences will be stored **within the Contractor's Detailed CEMP**. These will also be reviewed and updated where necessary, as works progress.

Environmentally Sensitive Receptors

3.7 The CEMP includes summary information taken from the **Letter Report - Town Park Phase B Discharge of Conditions¹** produced by **LC Ecological Services**, which includes for a collation of all previous surveys of the works area. It is required that any contractors must review this document in the preparation of any Construction Method Statements (CMS) required prior to works commencing. This document has 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 B** and **C** respectively.

3.8 It is noted in the letter and highlighted here that the cricket pitch and SuDS features have already been established and that the cricket pavilion and car parking area is under a separate application.

Flora

3.9 The Letter Report notes that previous surveys identified the land at Town Park as:

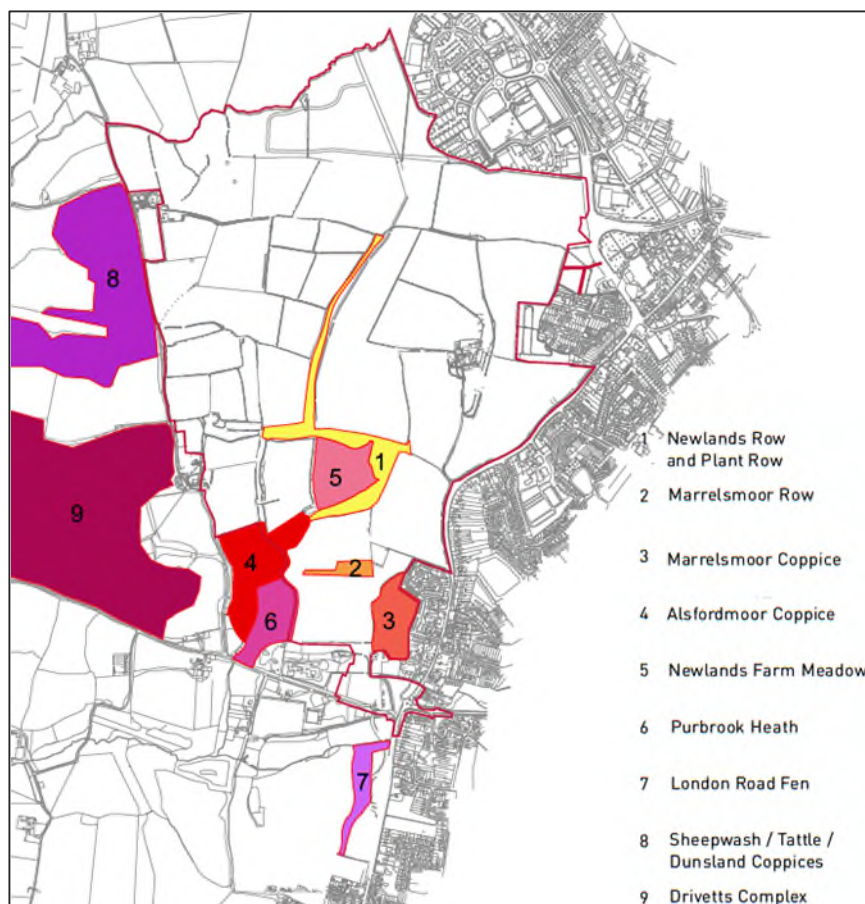
"...supporting arable land, amenity grassland semi-improved grassland, tall ruderal vegetation, hardstanding bare ground, hedgerows, scrub, native broad-leaved woodland, plantation woodland, scattered trees, dry ditches, wet ditches, a stream and a pond. Habitat in the east of the site was also assessed in 2022 and included semi-improved grassland, with an area of ephemeral vegetation, and a native hedgerow formed the south-eastern boundary and separated the site from London Road. Habitats

¹ LC Ecological Services (2024) Letter Report - Town Park Phase B Discharge of Conditions. LCES, Wareham.

south of Park Farm Crescent which primarily fall outside of the site boundary, were surveyed in 2023 and included a large area of hardstanding, surrounded by dense scrub and species-poor semi-improved grassland. Scattered trees were recorded, which form the boundary habitat to this site."

Trees and Hedgerow

- 3.10 No trees are intended to be removed from the site as part of these works. However, all trees in the vicinity of the works will be protected in accordance with the Arboriculture Impact Assessment.
- 3.11 It should however be noted that the site is in close proximity to five locally designated Site of Importance for Nature Conservation (SINC). The distribution of these SINC across Berewood is illustrated in **Figure 3.1** below.



SOURCE:BIODIVERSITY BY DESIGN, NEWLANDS ENVIRONMENTAL STATEMENT 2010

Figure 3.1 Plant Row SINC Location

- 3.12 No SINC will be directly impacted by the Town Park works, however the mitigations set out within **Section 5** will ensure that no indirect impacts may occur.

- 3.13 Some areas of hedgerow will be removed as part of the works to create pedestrian pathways. Remaining hedgerows will be protected during construction works by the provisions set out within **Section 5**.

Fauna

- 3.14 The site has been assessed for the presence of, or potential for:

- Badgers,
- Hazel Dormice
- Great Crested Newts;
- Reptiles;
- Bats; and
- Breeding Birds;

Badgers

- 3.15 Main badger setts have been recorded in the wider Berewood area and two active, outlier setts were recorded on site in 2018 along with numerous latrines recorded along the western boundary. Evidence of foraging was recorded in the eastern range of the site in June 2022. Further evidence of foraging activity was recorded in the boundary edges close to Park Farm Crescent in December 2022. Therefore, it is highly likely that the application site is used by both foraging and commuting badgers. Therefore, mitigations will be required.

Hazel Dormice

- 3.16 The Letter Report notes that whilst the scrub and woodland within the application boundary provides suitable habitat for dormice, targeted surveys undertaken in July 2023 produced a negative result. Therefore, it has been concluded that it is highly unlikely for the hazel dormouse to be present.

Great Crested Newts

- 3.17 Great Crested Newts (GCN) are noted to be present in the wider Berewood site. However the main breeding pond is located over 500m away and separated from the application site by a herptile fence. Environmental DNA surveys within the SuDS pond on site have been returned negative. Therefore GCN are not considered to be present in this phase of the development.

Reptiles

- 3.18 Reptile surveys have been ongoing on site since 2018. These have identified reptile use of the site and several reptile translocation exercises have taken place. Most recent

surveys in May and September 2023 have identified eight adult slow worms and so it is considered highly likely that reptiles are still using the site. Therefore, mitigations will be required.

Bats

- 3.19 Previous surveys including those undertaken in 2023, identified a number of bat species using the area of the application site. Therefore mitigations in relation to construction lighting will be required.

Nesting Birds

- 3.20 There will be some loss of nesting habitat as a result of these works and there is a potential for noise and visual disturbance to impact upon species nesting close to working areas. Suitable mitigations will be required.
- 3.21 A list of suitable ecological mitigations is taken from the Letter Report, and these have been incorporated into mitigation **Tables 5.1** and **5.2** within **Section 5** and appendices as necessary.

Site Operatives

- 3.22 Site operatives 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

Humans

- 3.23 The human receptors anticipated to be affected by the works are:
- Residents of Phase 3B, Larkfield, off Kent Road;
 - Residents off Milk Lane;
 - Residents off Plant Farm Crescent;
 - Transient visitors to Town Park Phase A;
 - Transient visitors around the site boundaries.
- 3.24 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 Method Statements within **Appendix C**.

4 Planning and Control of Construction Works

CEMP Team

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

Table 4.1: CEMP Team and Responsibilities

- 4.2 Grainger plc has a number of Key Performance Indicators that should 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 with records retained for review.

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 the contractors Detailed CEMP. It should be noted that where action plans / method statements evolve through e-mail discourse, they will be stored in this form.

Title	Contact Details	Responsibilities
Client's Senior Project Manager (PM)	Chris Williams 07990379610 CWilliams@grainagerplc.co.uk	The Client's Senior Project Manager will act with responsibility for managing the Project within the agreed environmental constraints and in conjunction with all other necessary management processes.
Client's Construction Project Manager (CPM)	James Rood 07904793379 James.rood@LFPLtd.com	The Client's Construction Project Manager oversee the Contractors and will act as a facilitator on environmental concerns between the PM and the Contractor.
Client's Environmental Manager (EM)	Andrea Hughes Mayer Brown Ltd 07974198231 ahughes@mayerbrown.co.uk	The Client's Environmental Manager will liaise with the PM, CPM, ES and Contractor and will be responsible for monitoring the performance of the project against 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
Contractors Project Manager (CPM)	TBC	The Contractors Project Manager act with responsibility for managing the Project within the agreed environmental constraints and in conjunction with all other necessary management processes.
Contractor's Site Manager (CSM)	TBC	The Contractors Site Manager will feed back to the Contractors Project Manager and will ensure that all environmental policies addressed in the CEMP are adhered to by operatives and sub-contractors throughout the construction phase.
Contractor's Environmental Manager (CEM)	TBC	The Contractors Environmental Manager will be responsible for overall Environmental issues arising from the project

Contractor's External Relations Officer – (CERO)	TBC	The Contractors 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.
Subcontractor(s)	A list of subcontractors will be provided and stored within the Contractors detailed CEMP.	The Contractor will be required to monitor the environmental and health and safety performance of all subcontractors to ensure compliance with the CEMP.
Environmental Health Officer – (EHO)	EHO Admin Gemma Crowfoot Winchester City Council 01962 8400222 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 01962 848375 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

CEMP Action Plan Responsibilities Statement of responsibilities The Contractor will 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 permits or licences are required on site or that permits need to be obtained from relevant authorities	Contractor's Environmental Manager Reporting to: 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.	Contractor's Environmental Manager or Appropriate Person Reporting to: Contractors Site Manager
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.	Contractor's Environmental Manager or Appropriate Person Reporting to: Contractors Site Manager
Waste Producing Activities	Where activities have cause to generate waste materials including spoil and topsoil, this must be managed on site in accordance with requirements and where necessary, disposed of appropriately	Contractors Site Waste Manager Reporting to: Contractors Site Manager

Table 4.2: Action Plan Responsibilities

General Site Management	Responsible Person(s)
Implement a soil and water management plan for the site	CSWM &CEM
Install appropriate silt fences and other sediment control structures where required	CEM
Regularly check and clean silt from behind silt fences and barriers	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	CSM & CEM
Limit vehicle entry points and stabilise vehicle access ways	CSM
Minimise disturbance to areas designated for conservation	CSM &CEM
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 Pollution Control and Winchester City Council)	CSM
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	CEM/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 those agreed	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 B**. Method statements associated with the removal of the initial risks identified are included within **Appendix C**. 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 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 stored within the Contractors Detailed CEMP.

Construction Traffic Management and Compound Location

- 4.13 The management of construction traffic is described in the Town Park Phase B Construction Traffic Management Plan (CTMP). All CTMP and Delivery Plans will be stored within the Contractors Detailed CEMP. A Construction Routing Plan depicting compound location, and a swept path analysis for a typical construction vehicle are appended within drawing section of this plan.
- 4.14 Once the contractor is appointed, a 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 - Given the relatively short build period (approximately it is anticipated that a self-contained welfare unit will be sufficient for the duration of the works

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 the Contractors Detailed 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 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.
- 5.2 Main activities, potential impacts and controls for the above phases are set out within the matrix in **Table 5.1** below.

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.	Damage to adjacent trees and hedgerow ³⁶	Noise impacts upon on site fauna ^{1, 14, 15, 16,}		
Provision of drainage, surfacing and formal areas.	Loss or damage to topsoil and subsoils ^{37.}	Potential for migration of dust from active and storage areas impacting on site and off site receptors and flora and fauna ^{6, 7, 10,}		
Topsoiling, grass seeding where required.	Negative impact on local SINC habitats, ^{6,7,8,9,10,11, 12,36, 38}			

- 5.3 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.

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 the contractors Construction Traffic Routeing Plan
2	The following measures are set out within Method Statement 1 of Appendix C For the protection of Reptiles Habitat manipulation is planned to encourage reptiles to move into the central area of the site. This area is surrounded by existing hedgerows and will be mown to manage the ruderal weeds and promote the establishment of native species. • Clearance works should be carried out in the active reptile season (spring to early autumn) and the habitat within the works area will be made unsuitable by strimming the habitat. This will be carried out in temperatures above 10°C when reptiles are more mobile. The cutting of the habitat will be carried out in a two strim cycle where vegetation exceeds 15cm. The first cut will be made to 15cm. If vegetation is below 15cm or after the first strim cycle the next strim cycle will be to ground level. This cutting will take place in one direction towards the suitable habitat that is being retained in order to give any reptiles a chance to leave the area. • All arisings from the cutting and clearance will be immediately removed from the works area to prevent any reptiles sheltering within it. • The habitat within the works area will then be maintained at a short sward height to discourage reptiles from entering the works area.

	- Any spoil piles, log piles or tree root systems that need to be removed should be dismantled or excavated carefully during weather greater than 10°C during the time when reptiles are active, March to October, to avoid disturbing any hibernating reptiles. - Materials and any arisings, such as rubble from demolition, will be kept off the ground through the use of skips or pallets. - The proposed new trees on site will be planted with the use of a small machine. The works are localised and to ensure reptiles are not harmed, habitat manipulation will be used in advance of the tree planting works. The tree planting will provide shelter for reptiles. - Any reptiles encountered during the works will be relocated into the central area. For the protection of Birds: - The clearance of any suitable nesting habitat should where possible be undertaken outside of the bird nesting season, which is considered to extend from the 1st March to the 31st August; - If this is not possible, clearance must be done under the supervision of an ecologist to ensure that nesting birds are not harmed. - Where nesting birds are encountered, clearance and/or demolition must be postponed until nestlings have fledged. For the protection of Bats - An update tree inspection will be conducted on previously surveyed trees prior to works to ensure their condition has not altered. - This should be conducted by a qualified ecologist to search for evidence of bats and to determine the suitability of the roosting opportunities present. Tree
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	climbing surveys may need to be conducted, if potential roost features are recorded on the trees. - Should bats or evidence of bats be identified during these pre-work inspections no further works on the tree will be undertaken until the necessary European Protected Species (EPS) licence has been obtained. The ecologist will advise on any buffer zones that need to be established to protect the bat roost. Where possible, trees identified as supporting PRF-M (potential roost feature which could support multiple bats including maternity roosts), will be retained if safe to do so. For the protection of Badgers: Exclusion If the setts are directly impacted by the development the following procedure will be required: - Exclusion will be conducted under licence using one-way gates between July and November. - Once the gates have been installed they will be visited once every 3 days, by a suitably qualified ecologist, for a period of 21 days to ensure badgers have not dug their way back in. - The gates will be left in situ for the duration of the exclusion exercise, and once the badgers are deemed to have left the sett they will then be dug up under the supervision of a suitably qualified ecologist. The following construction mitigation measures are also recommended due to the proximity of the working area to active setts: - 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.
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	• 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; • 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, the following measures will be applied: • Directing lighting to only where it is needed away from the hedgerows and trees. • Selection and design of the lighting systems and by using accessories such as cowls or hoods to minimise light spill and direct light only to where it is needed. • Using light sources that emit minimal ultra-violet light, peak higher than 550nm and be of a warm/neutral colour <2,700 kelvin. • LED luminaires should be used where possible. • All security lighting will be on a timer and only triggered at waist height.
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.

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	Working hours are: Monday to Friday - 0800hrs to 18:00hrs Saturday - 08:00hrs to 13:00hrs. Sundays and Bank Holidays - No work on site is permitted
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 to be subjected to wheel washing where necessary. Wheel washers will be located as close to the site exit as possible, to minimise the spread of debris on the highway. The Contractor will maintain access to a road sweeper so that if mud egress on to the highway occurs, the Contractor will ensure this is removed as soon as practically possible.
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.
36	Trees and woodland will be protected in accordance with the British Standards Institute (2012) Trees in Relation of Design, Demolition and Construction - Recommendations BS5837:2012 It is recommended retained habitats (mature trees and hedgerows within 10m of the red line) are protected through the erection of Heras fencing prior to works commencing. The Contractor will be required to provide a 'No Dig' Method Statement within their own detailed CEMP for the construction of the route through the Plant Row SINC, which will define: • how the working corridor within Plant Row will be marked out; and • the protective measures employed to safeguard the surrounding ancient woodland.
37	Where topsoil is required to be removed as part of the works, this will be undertaken and stored in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and Appendix K of the Institute of Environmental Management & Assessment Guide 'A New Perspective on Land and Soil in Environmental Impact Assessment'