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GRAINGER PLC
TOWN PARK PHASE B
BEREWOOD, WATERLOOVILLE,
HAMPSHIRE

OUTLINE CEMP

NOVEMBER 2025



the journey is the reward

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OUTLINE CEMP

NOVEMBER 2025

Project Code:	**28028 - GTWvilleTPB2(CEMP).9**
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Issue Date:	**20th November 2025**
Status:	**FINAL REV 6**

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Grainger plc

Town Park Phase B

Berewood, Waterlooville, Hampshire

Outline CEMP

List of Contents

Sections

1 Introduction 1
2 Project Outline.....3
3 CEMP Objectives 7
4 Planning and Control of Construction Works 12
5 Public Right of Way Access Management 20
6 Work Activities, Potential Impacts and Mitigations Required.....24
7 Communication and Coordination 33

Figures

Figure 2.1 Berewood Site in Relation to Local Highway Network.....3
Figure 2.2: Location of Town Park Phase B 5
Figure 3.1 Plant Row SINC Location 9
Figure 5.1: Proposed Right of Way Diversion FP732.....20
Figure 5.2: FP732 Temporary Diversion During Town Park Works.....21
Figure 5.3: FP732 Permanent Diversion (Town Park Phase Only) 22

Tables

Table 4.1: CEMP Team and Responsibilities.....12
Table 4.1: CEMP Team and Responsibilities.....14
Table 4.2: Action Plan Responsibilities.....15
Table 4.3: Responsibilities for General Site Management 16
Table 6.1: Main activities, potential impacts and controls 24
Table 6.2: Mitigation Measures.....32
Table 7.1: Non Conformance Template.....34
Table 7.2: Example CEMP Audit Report.....36

Drawings

Proposed Surface Treatments – GTWVILLE_TP2/RD/40

Town Park Phase B Construction Routeing Plan - GTWVILLE_TP2/TP/01

Anticipated Site Access & Compound Large Tipper Access & Egress GTWVILLE_TP2/TP/02

Appendices

APPENDIX A: Grainger Key Performance Indicators
APPENDIX B: Environmental Risk Assessment
APPENDIX C: Dust Assessment Report and Management and Environmental Method Statements
APPENDIX D: Incident Response Plan
APPENDIX E: Construction Noise Monitoring Report

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 B 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.

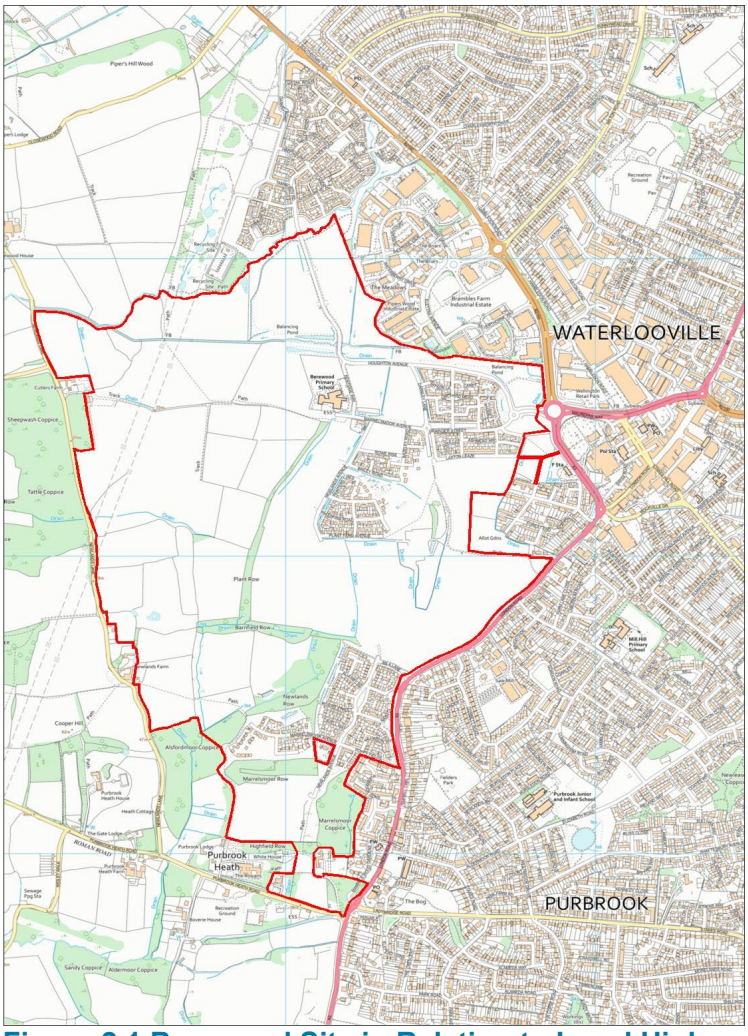


Figure 2.1 Berewood Site in Relation to Local Highway Network

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.

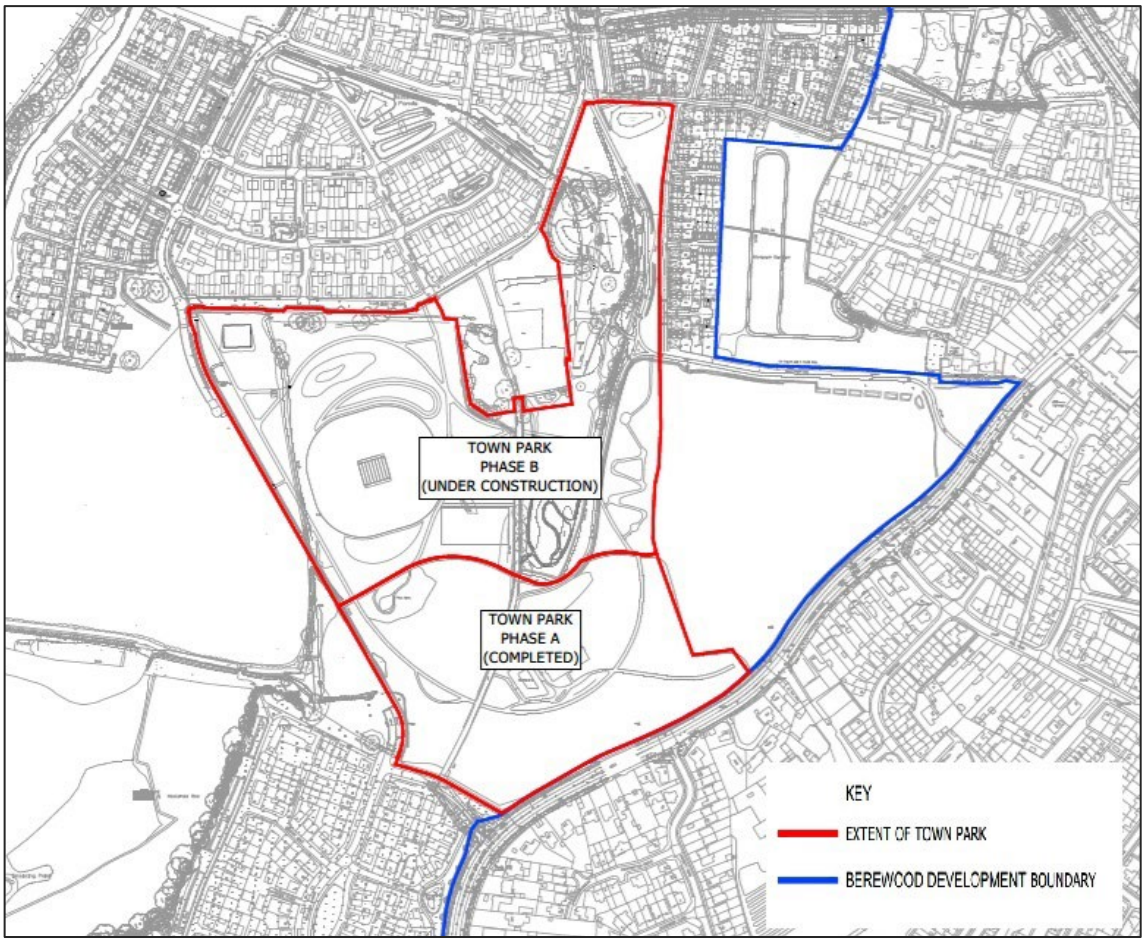
2.3 The Berewood Site Office has also been completed and adjacent works at 5a - Woodland Edge are in progress. Works to Phase 3b - Larkfields, adjacent to London Road have also begun.

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 B works. The location of these works is illustrated in **Figure 2.2**.



SOURE: 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 No piling is proposed as part of the construction methodology.

2.10 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.

2.11 Heras fencing and signage will be provided as necessary while the works progress, with access to phase A of the Town Park maintained at all times. The compound will be kept secure at all times.

2.12 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 Conditions**[1] 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, a Dust Assessment Report and Management Plan, and individual 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

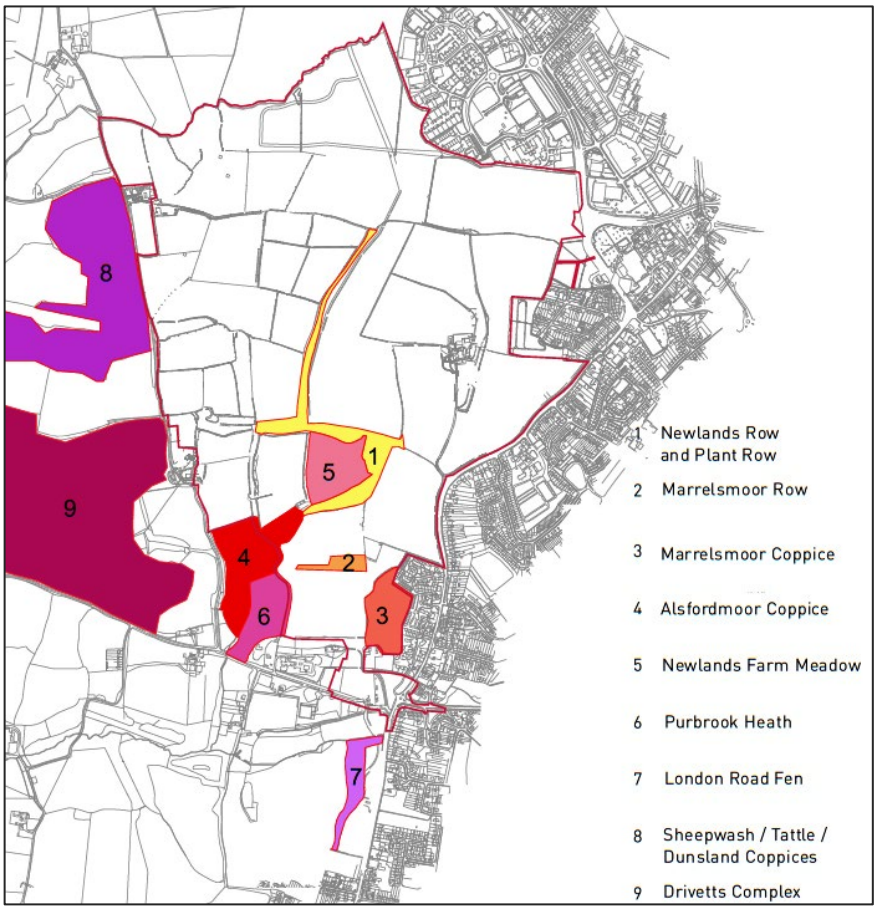
[1] LC Ecological Services (2024) Letter Report - Town Park Phase B Discharge of Conditions. LCES, Wareham.

formed the south-eastern boundary and separated the site from London Road. Habitats 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 using the PROW and 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 Dust Assessment Report & Management Plan and additional Method Statements provided within **Appendix C.** The management of runoff is also provided as a Method Statement 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 Celadon Consulting Ltd 07542029042 andrea@celadonconsultingltd.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 as set out in the Dust Management Plan 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**. A Dust Assessment Report & Management Plan is provided within **Appendix C**. Chapter four of the report includes a Dust Risk Assessment, with a dust emission magnitude for each activity type of the Phase B works identified as not applicable or 'small'. The risk of impact is concluded as negligible or low risk for dust soiling, human health and ecology.

4.11 Method statements associated with the removal of the initial risks identified beyond dust management are also 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.

4.12 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.

4.13 An incident response plan is also provided at **Appendix D**.

Work Programme

4.14 The works are anticipated to be undertaken within a 16-18 week timeframe. The compound and site establishment works will be formalised within the first week of the programme.

4.15 The full 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.

Site Operational Hours

4.16 All deliveries and building works will only be carried out between the hours of 08:00 and 18:00 Monday to Friday and 08:00 and 13:00 hours Saturday, in accordance with Condition 11. No work will be permitted (including deliveries) on Sundays or recognised public holidays.

4.17 The site opening hours are therefore:

- 08:00-18:00 Monday to Friday
- 08:00-13:00 Saturday

- Closed Sunday's and bank holidays

Construction Traffic Management and Compound Location

4.18 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.

4.19 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

4.20 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.

4.21 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.

Ongoing Noise Monitoring

4.22 Monthly Noise Monitoring of the construction activities associated with the Berewood development is ongoing. Monthly reports are provided, the most recent of which is provided at **Appendix E**.

4.23 Section two of the monthly reports identifies that monitoring occurs at locations along the active construction boundaries of the development site, taking into account the presence of existing sensitive receptors nearby. Monitoring locations to account for Town Park Phase B will be incorporated into the monitoring methodology as the works become live.

4.24 The Noise Monitoring surveys are undertaken in line with BS5228-12009+A1:2014 which provides recommendations for basic methods of noise control relating to construction sites, including sites where demolition, remediation, ground treatment or related civil engineering works are being carried out, and open sites, where work activities/operations generate significant noise levels, including industry-specific guidance.

4.25 In regard to specific noise monitoring locations for Town Park Phase B, boundaries will change in their vulnerabilities depending on the timing of works being undertaken. The noise monitoring locations will therefore be chosen on site by Grainger's Environmental Construction Manager to reflect this when the works begin.

Contamination

4.26 In accordance with Condition 9 of the application, development shall cease within the Town Park Phase B works area if, during any stage of the works, potential contamination is encountered which has not been previously identified within the area, unless otherwise agreed in writing with the local planning authority. Works shall not recommence before an assessment of the potential contamination has been undertaken and details of the findings along with details of any remedial action required (including timing provision for implementation) has been submitted to and approved in writing by the local planning authority. The development shall not be completed other than in accordance with the approved details.

5 Public Right of Way Access Management

5.1 Part of the proposed works includes the diversion of the Public Right of Way (PROW) known as Footpath Newlands 732.

5.2 **Figure 5.1** illustrates the existing routing of Footpath Newlands 732 in proximity of the Town Park (shown in solid black), and the proposed permanently diverted route (shown in dashed black). The new route will run alongside the made footpath within the Town Park.

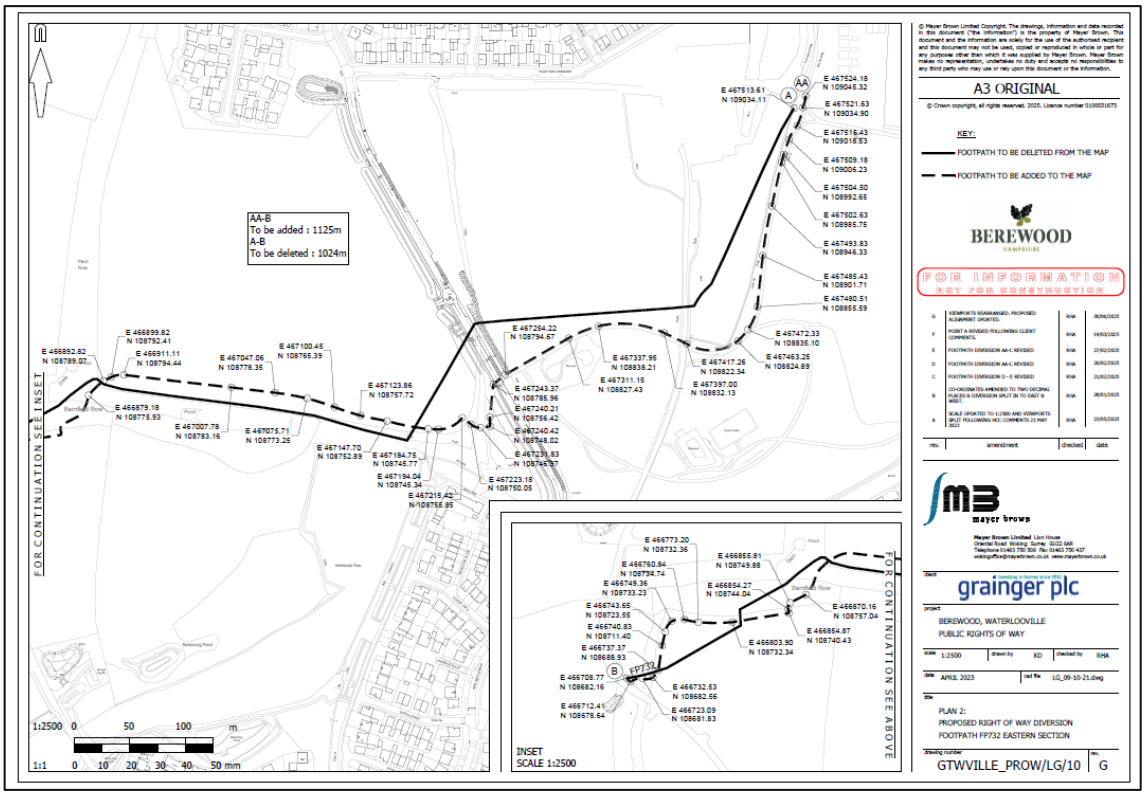


Figure 5.1: Proposed Right of Way Diversion FP732

5.3 The exact alignment of the permanently diverted route will be finalised as part of the S257 process.

5.4 During the Town Park Phase B works, access to Footpath Newlands 732 will be retained 24 hours a day, seven days a week. Alignment diversions will therefore be in place during different stages of the works.

5.5 The Berewood Pavilion, located within the Town Park Phase B extent, has had details approved under a separate application. Works on the Pavilion will therefore be completed before the Town Park Phase B works come forward. As such, pedestrians will

be permitted to walk through the Pavilion paths during necessary periods of diversion to the PROW alignment.

PROW Diversion while Permanent Diversion Route Created and Sports Area works Ongoing

5.6 Whilst the main path that follows the alignment of the permanently diverted FP732 as indicated on **Figure 5.1** is already present, works are required to provide a verge directly adjacent. During this time, access to the PROW will remain open 24/7, following a temporary diversion route illustrated on **Figure 5.2**.



Figure 5.2: FP732 Temporary Diversion During Town Park Works

5.7 As a section of the existing, legally recorded line of FP732 will be unavailable for use during this time, an application will be made for a temporary footpath closure to be recorded on the definitive map, as well as the temporary diversion routing.

5.8 Fencing will be provided adjacent to the PROW permanent diversion works. Fencing will also be provided either side of the Pavilion paths corridor while works are ongoing either side.

5.9 A banksman will support any crossings required over potential haul route/plant routes.

Permanent PROW Diversion Route

5.10 Once works to complete the permanent PROW diversion have been concluded within the Town Park, PROW users will be able to divert from the existing alignment onto the permanent alignment, while the other Town Park works remain ongoing. This routing is illustrated on **Figure 5.3**.

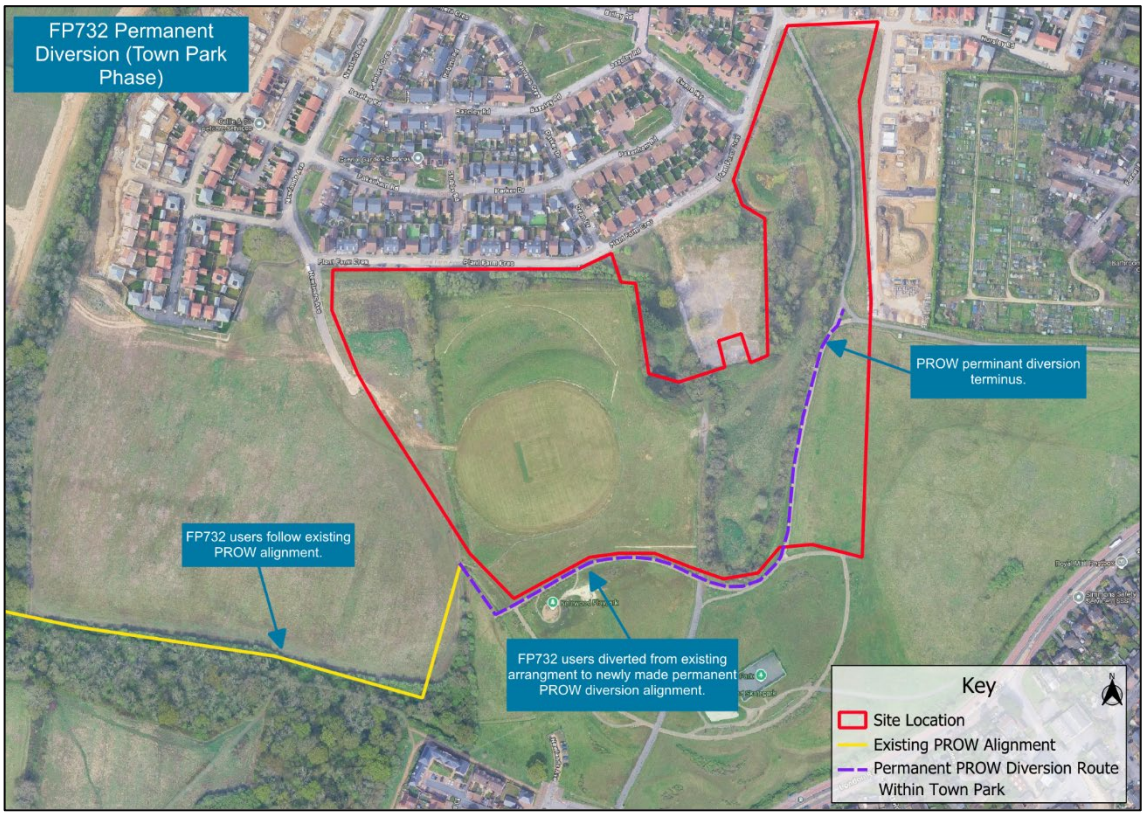


Figure 5.3: FP732 Permanent Diversion (Town Park Phase Only)

5.11 The recorded legal alignment of FP732 can transition directly from the temporary alignment to the new permanent route, without needing to reopen the section that was temporarily closed.

5.12 The permanent diversion alignment is outside of the Town Park Phase B works area and therefore additional fencing beyond any works boundary fencing will not be required.

5.13 For the remainder of the works required to provide the permanent PROW realignment west of the Town Park, users will be able to use the existing route from the west, dropping onto the finished route within the Town Park. Crossing points across the works will be provided and fenced as necessary.

5.14 At no point will the FP732 be closed to the public.

Diversion Procedures

5.15 An application for the permanent diversion of the PROW has been submitted (Ref: 25/01695/PTH) and liaison with the Ramblers and Hampshire Countryside has indicated their support.

5.16 An application will be made to HCC for the temporary diversion of sections of FP732 in line with **Figure 5.2**. This application will be made under section 257 of the Town and Country Planning Act (1990) and will include all details of the proposed alternative route and duration this temporary route is required.

5.17 An application will also be made to temporarily close the section of FP732 that can no longer be accessed while the temporary alignment is in place, prior to moving to the permanent alignment. This application will be made under the provisions of the Road Traffic Regulation Act 1984.

5.18 Notices and a map containing the diversion route will be displayed at each end of the diversion route and will be maintained there until the works are complete.

5.19 The notices will include contact details and complaints procedure details.

6 Work Activities, Potential Impacts and Mitigations Required

6.1 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.

6.2 Main activities, potential impacts and controls for the above phases are set out within the matrix in **Table 6.1** below.

Source Activity	Impact Pathways and Receptors			Actions & Responsibilities
	Nature Conservation	Air	Water	
Removal of topsoil Establishment of site compound units, setting up of fencing and access routes. Establishment and maintenance of existing drainage and pollution control measures including wheel wash facilities. Provision of drainage, surfacing and formal areas. Topsoiling, grass seeding where required.	Death or disturbance of in-situ sheltering or foraging fauna [2,3, 5,] Lighting impacts upon bats and other nocturnal species [4] Damage to adjacent trees and hedgerow[29] Loss or damage to topsoil and subsoils[30.] Negative impact on local SINC habitats.[6,,29, 31]	Creation of dust impacting on site and off site receptors and flora and fauna [1, 6, 7, 16, 17, 18] Noise impacts upon on site and off site receptors[1, 8, 9, 10, 11] Noise impacts upon on site fauna [1, 8, 9 , 10] Potential for migration of dust from active and storage areas impacting on site and off site receptors and flora and fauna [6,]	Pollution impacts via run off [12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26] Potential for the migration of liquids from storage areas impacting on site and off site flora and fauna [21, 22, 23, 24, 25, 26, 27, 28, 29, 31]	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

Table 6.1: Main activities, potential impacts and controls

6.3 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 6.2**. 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

	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.

	• 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 and boundary 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. The same controls will therefore apply to boundary lighting during the construction phase as those that apply to lighting within the works area.

5	Any spoil heaps to be regularly sprayed and cut with cuttings removed before any significant vegetation can establish
6	The Contractor will apply the recommendations relating to Dust Management included within Appendix D of the Dust Assessment Report & Management Plan, provided with Appendix C of this CEMP.
7	All vehicle drivers to be acquainted with agreed haulage routes selected to minimise any air quality impact arising from additional lorry movements.
8	All supervisors to be familiar with provisions of BS5228, & advised on noise minimisation.
9	Working hours are: Monday to Friday - 0800hrs to 18:00hrs Saturday - 08:00hrs to 13:00hsr. Sundays and Bank Holidays - No work on site is permitted
10	Silencers or mufflers as appropriate to be fitted to plant and machinery.
11	Letter drops to surrounding residential areas to warn of particularly noisy periods of works.
12	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.
13	Any existing surface water drains to be bunded to ensure that no surface water enters them.
14	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.
15	Where possible over-site hard standing to be retained & haul routes to be hard surfaced.
16	**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.**
17	Stockpiling to be in accordance with best practice as in the Environment Agency's PPG6 (now rescinded) and CIRIA guidance
18	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.
19	Fuels and chemicals to be stored in accordance with the Environment Agency's PPG6 (now rescinded) and CIRIA guidance
20	All tanks and containers to be labelled with nature of contents and total volume secured.
21	Fuel storage and delivery facilities to be on impermeable surface in a secondary containment system.
22	Provision of spill kits at all storage areas & provision of emergency response numbers.
23	Biodegradable hydraulic oil to be used for machinery/plant where possible and all relevant plant to be fitted with drip trays.
24	All deliveries to be supervised and levels of tanks checked before delivery.
25	Stockpiles to be sited so as not be subject to inundation during extreme rainfall events.
26	Contingency plan required for temporary covering of stockpiles during adverse weather conditions.
27	Sorted & screened material to be placed on a prepared clean granular surfacing.
28	Supervisors to be familiar with the provisions of the Environment Agency's PPG6 (now rescinded) and CIRIA Guidance re control of contaminated run off.

29	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.
30	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'
31	In agreement with the project ecologist, designated re-fuelling areas must be a minimum of 30m from the edge of the woodland and refuelling may only be undertaken by suitably trained operatives, and with the use of spill kits and fuel nappies.
32	Development shall cease within the Town Park Phase B works area if, during any stage of the works, potential contamination is encountered which has not been previously identified within the area, unless otherwise agreed in writing with the local planning authority. Works shall not recommence before an assessment of the potential contamination has been undertaken and details of

	the findings along with details of any remedial action required (including timing provision for implementation) has been submitted to and approved in writing by the local planning authority. The development shall not be completed other than in accordance with the approved details.

Table 6.2: Mitigation Measures

7 Communication and Coordination

Supervision of Construction Activities

7.1 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 the Contractors Detailed CEMP.

Environmental Inspection and Reporting

7.2 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 Contractors Construction Traffic Management Plan which will be saved within the Contractors Detailed CEMP.

Environmental Inspection and Reporting

7.3 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.

7.4 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.

7.5 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 within the Contractors Detailed CEMP.

Environmental Monitoring

7.6 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 the Contractors Detailed CEMP.

Control of non-conformance

7.7 Where the Clients Environmental Manager identified non conformance with the requirements of the Outline CEMP, this 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 the **Contractors Detailed CEMP.**

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

Table 7.1: Non Conformance Template

Internal Communications

7.8 Internal project communications will be via two processes:

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

Weekly Team Meetings

7.9 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 Outline and/or Detailed 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

7.10 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. Issues to be discussed may include:

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

7.11 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

7.12 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 Contractors Project 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 the **Contractors Detailed CEMP.**

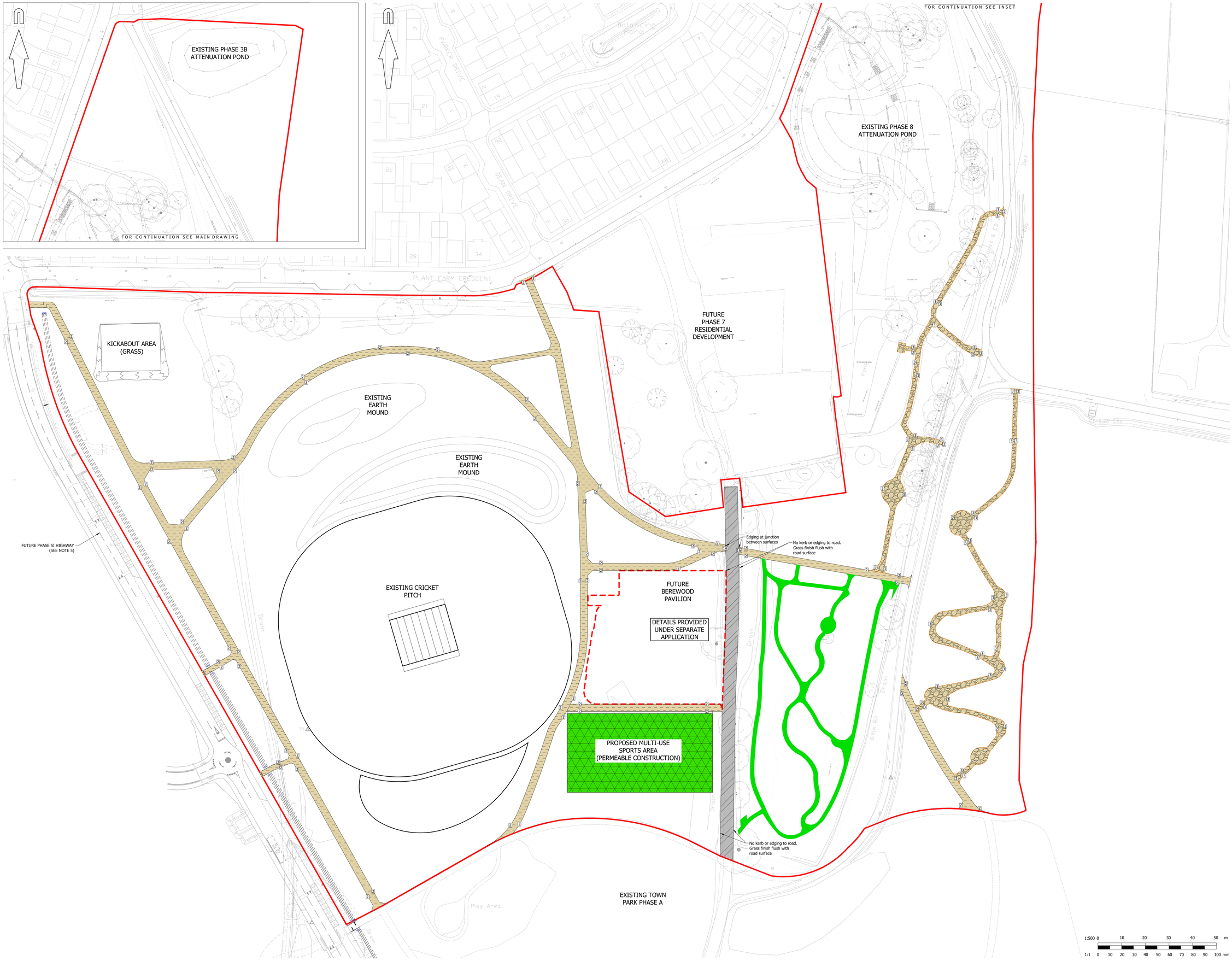
7.13 The reports will be required to include information on the following issues, where appropriate:

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 7.2: Example CEMP Audit Report

7.14 A Site Waste Management Plan will also be maintained by the contractor and stored within the Contractors detailed CEMP.

Drawings



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A0 ORIGINAL

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NOTES

1. SUBJECT TO APPROVAL BY HAMPSHIRE COUNTY COUNCIL.
2. REFER TO GTWVILLE_TP2/DR/01 FOR DRAINAGE DETAILS.
3. REFER TO GTWVILLE_TP/RD/40 FOR TOWN PARK PHASE A SURFACE TREATMENTS..
4. REFER TO APA DRAWING SERIES FOR LANDSCAPING AND AMENITY FEATURES.
5. PHASE 5 SECTION 38 WORKS ARE DUE TO COMMENCE CONSTRUCTION LATE 2024. AS SEPARATE SCHEME.

KEY: PAVEMENT TYPES

- PAVEMENT TYPE 1 — BITUMINOUS REINFORCED FOOTWAY CONSTRUCTION 20mm thick Black Open Graded Macadam
- PAVEMENT TYPE 2 — SELF BINDING GRAVEL 75mm Coxwell Gravel
- PAVEMENT TYPE 5 — COLOURED ASHPALT PEDESTRIAN PAVING 20mm thick 'Ultrcolour' Thin Surfacing System (Buff)
- MOWN PATH SEE NOTE 4.
- PERMEABLE ASPHALT PROPRIETARY SUPPLIER
- FUTURE PAVILION DEVELOPMENT BOUNDARY
- TOWN PARK DEVELOPMENT BOUNDARY

KEY: KERB TYPES

- 1A — HB2/BN PCC COUNTRYSIDE KERB FLUSH
- 2 — PCC EDGING
- 3 — TIMBER EDGING

1:500 0 10 20 30 40 50 m

1:1 0 10 20 30 40 50 60 70 80 90 100 mm

FOR APPROVAL
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
C	Boundary Updated	RHA	12/06/2024
C	Updated to reflect latest APA layout.	RHA	10/06/2024
B	Temporary pavilion access road added. Details revised to suit.	RHA	12/02/2021
A	Pavilion Details Removed.	RHA	20/10/2020

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client: grainger plc — investing in homes since 1912

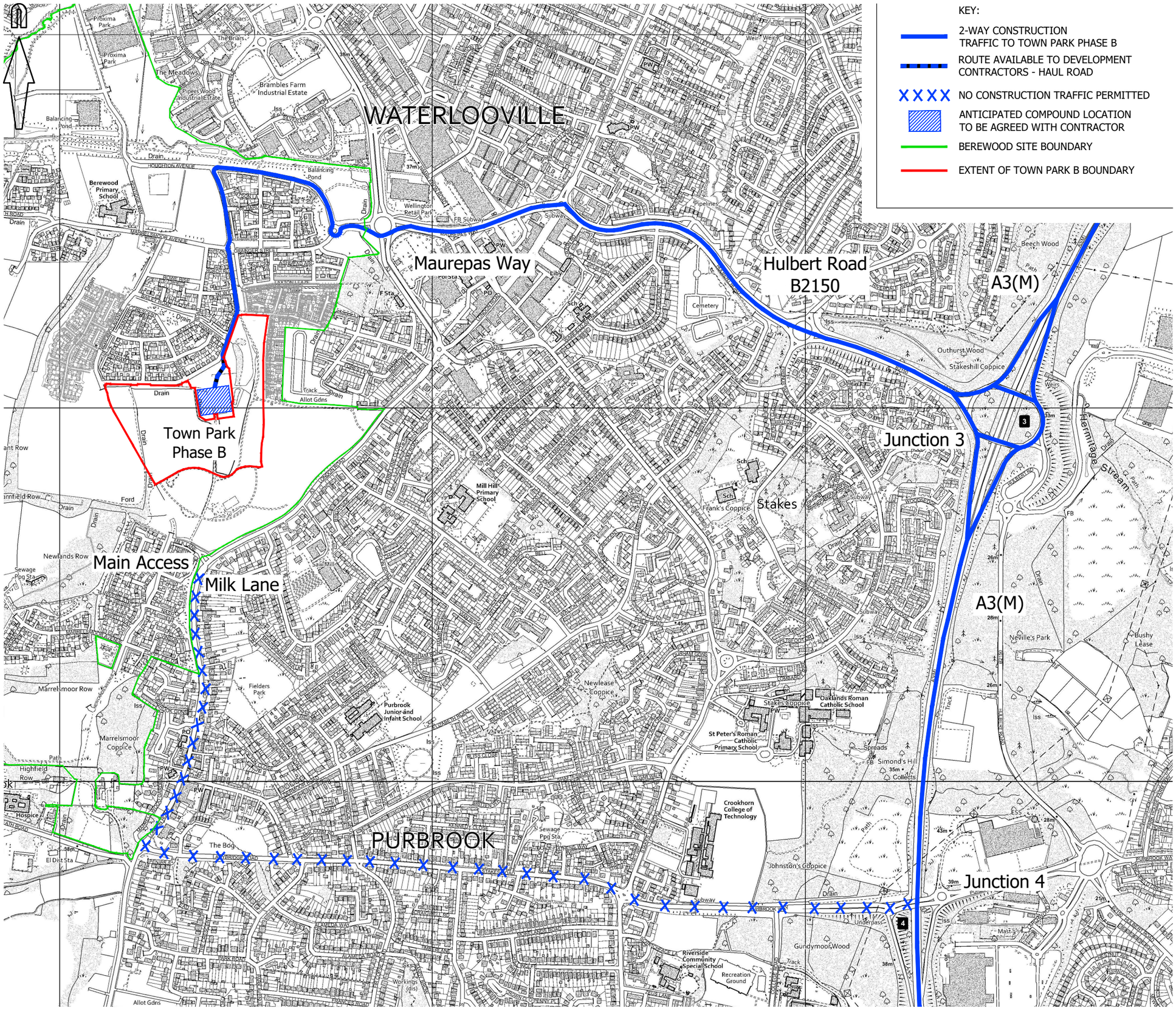
project: BEREWOOD, WATERLOOVILLE
TOWN PARK PHASE B

scale	drawn by	checked by
1:500	NT	RHA

date	cad file
OCTOBER 2020	RD_40.dwg

title: PROPOSED SURFACE TREATMENTS

drawing number	rev.
GTWVILLE_TP2/RD/40	D



KEY:

- 2-WAY CONSTRUCTION TRAFFIC TO TOWN PARK PHASE B
- ROUTE AVAILABLE TO DEVELOPMENT CONTRACTORS - HAUL ROAD
- XXXX NO CONSTRUCTION TRAFFIC PERMITTED
- ANTICIPATED COMPOUND LOCATION TO BE AGREED WITH CONTRACTOR
- BEREWOOD SITE BOUNDARY
- EXTENT OF TOWN PARK B BOUNDARY

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Notes:

1. Purbrook village is a traffic sensitive location and it is a planning obligation that no construction traffic passes through Purbrook village. As such, construction traffic through Purbrook village is forbidden under the contract.

BEREWOOD
HAMPSHIRE

FOR APPROVAL
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
A	Backgound Xrefs reloaded.	RHA	12/05/24

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client: grainger plc (Investing in homes since 1912)

project: BEREWOOD, WATERLOOVILLE
TOWN PARK PHASE B

scale	1:10000	drawn by	NT	checked by	AH

date	DECEMBER 2018	cad file	TP_01.dwg

title: TOWN PARK PHASE B
CONSTRUCTION ROUTEING PLAN

drawing number: GTWVILLE_TP2/TP/01 rev. A

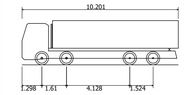
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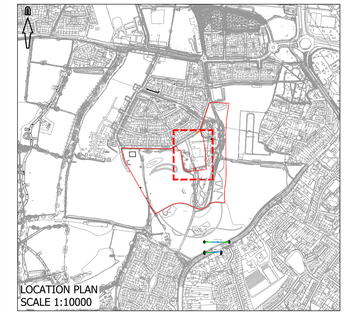
KEY

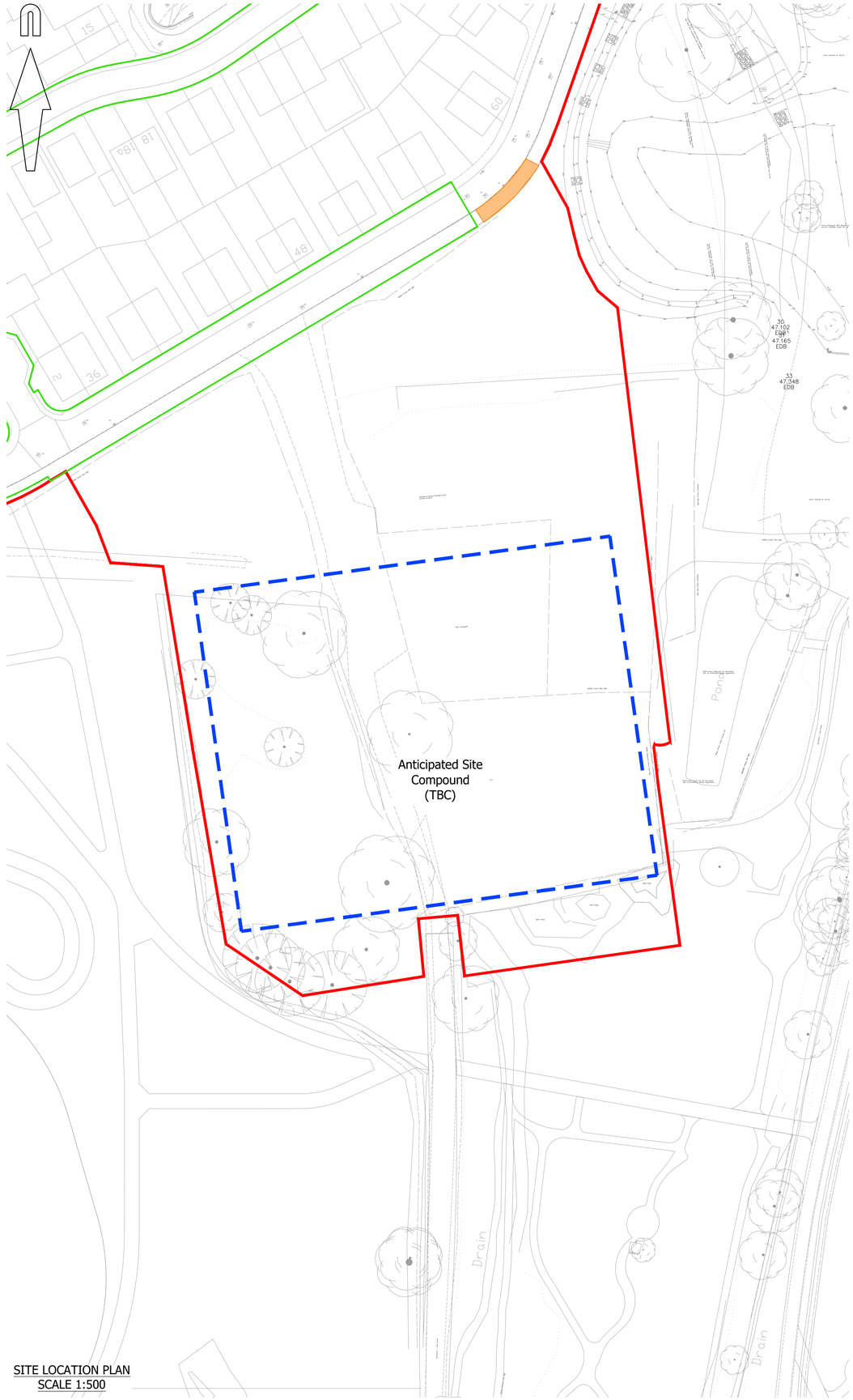
- TOWN PARK PHASE B SITE BOUNDARY
- ANTICIPATED COMPOUND EXTENTS (TO BE ARRANGED WITH CONTRACTOR)
- PHASE 3 RESIDENTIAL S38 APPLICATION
- FOOTWAY REINFORCEMENT

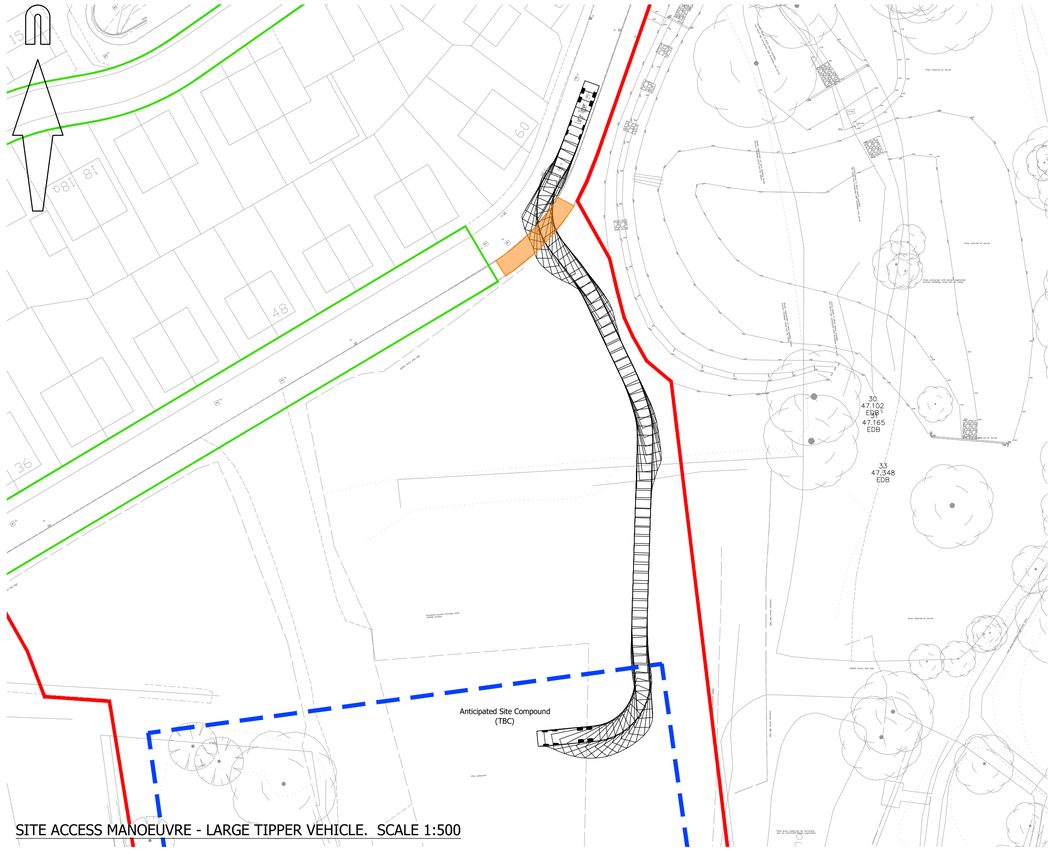


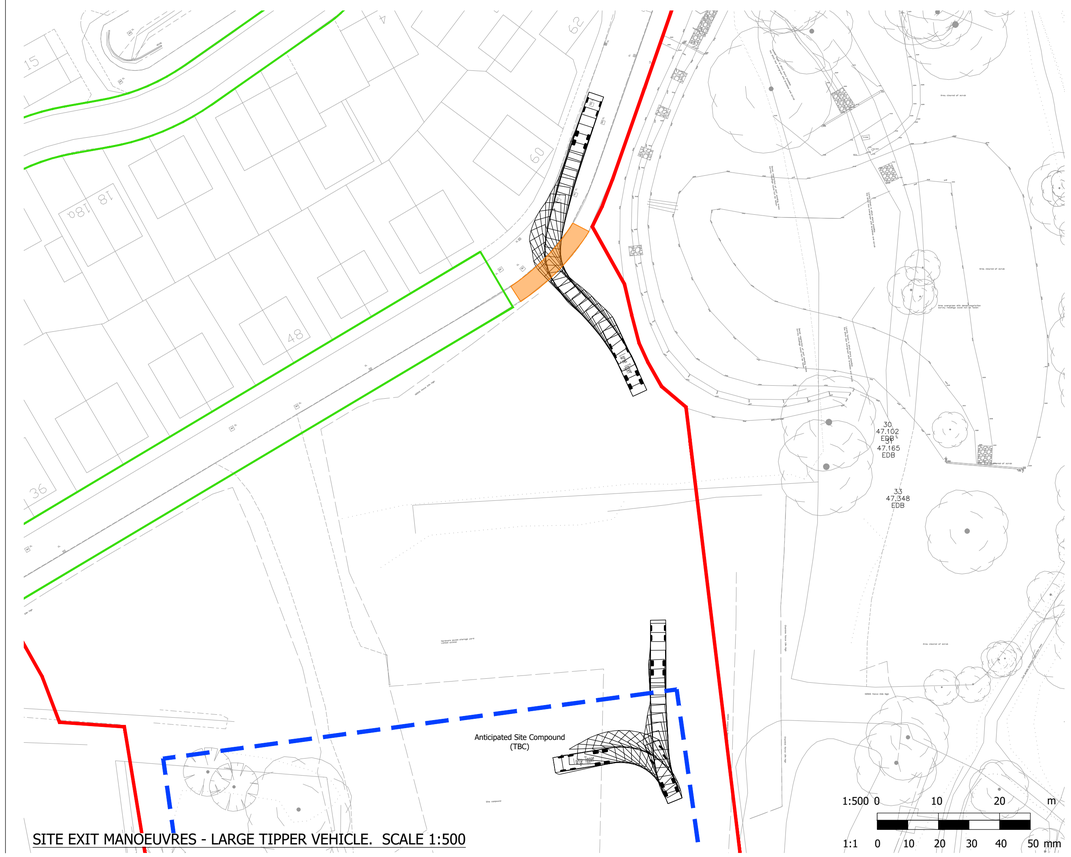
Large Tipper

Overall Length	10.201m
Overall Width	2.495m
Overall Body Height	2.890m
Min Body Ground Clearance	0.341m
Track Width	2.471m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.550m









BEREWOOD
HAMPSHIRE

FOR APPROVAL
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
B	Entrance arrangements revised.	RHA	13/06/2024
A	Tracking updated to suit access limits.	RHA	04/06/2024

mayer brown

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client
Investing in homes since 1912
grainger plc

project
BEREWOOD, WATERLOOVILLE
TOWN PARK PHASE B

scale	drawn by	checked by
1:500	NT	AH

date	cad file
DECEMBER 2018	TP_02.dwg

title
ANTICIPATED SITE ACCESS & COMPOUND
LARGE TIPPER VEHICLE ACCESS & EGRESS

drawing number
GTWVILLE_TP2/TP/02

rev.
B

APPENDIX A: Grainger Key Performance Indicators

1. GRAINGER KEY PERFORMANCE INDICATORS

1.1 Grainger have indicated the following Key Performance Indicators which they wish to be examined as part of the enabling works:

- Percentage of construction waste by destination (recycled, landfilled, reused).
- Proportion of recycled materials in new developments.
- Water consumption at construction sites (litres)
- Litres of diesel used on development sites
- Percentage of major sites registered with Considerate Constructors Scheme. (Benchmark: Achieve registration at all major sites).
- Considerate Constructors Scheme score of registered sites. (Benchmark: Aspire to 32)

1.2 The percentage of construction waste by destination and the proportion of recycled materials used will be recorded within the Contractors Detailed CEMP on at least a fortnightly basis.

1.3 Water and diesel consumption will be continuously monitored on site and will be recorded within the Contractors Detailed CEMP on at least a fortnightly basis.

1.4 The site will be registered with the Considerate Constructors Scheme and will be assessed by an independent CCS examiner.

APPENDIX B: Environmental Risk Assessment

Environmental Risk Assessment Form

Completed by:
Rebecca Kingston – Town Park Phase B Construction Environmental Management Plan Author
Based upon the findings of the mitigation matrix (Table 6.1 and 6.2 of Town Park Phase B CEMP)

Hazards	
1. Death or disturbance of in-situ sheltering fauna including breeding birds; 2. Lighting impacts upon bats and other nocturnal species and adjacent residents; 3. Creation of dust impacting on-site and off-site personnel and flora and fauna; 4. Noise impacts upon on-site and off-site personnel and site fauna; and 5. Pollution impacts to adjacent drains and streams, on-site off-site flora and fauna; local residents via run off and/or migration of liquids from storage areas; and 6. Damage to adjacent trees, woodlands and or SINC 7. Loss or damage to topsoils and subsoils	
Those at risk	Reptiles, badgers, bats and breeding birds, off site SINC, trees and hedgerows. Adjacent residents, on site-personnel. Off site adjacent walkers.

Current control measures

1. Adherence to mitigations 2, 3 and 5 within CEMP Table 6.2 – see Method Statement no. 1;
2. Adherence to mitigation 4 within CEMP Table 6.2 – see Method Statement no. 2;
3. Adherence to mitigations 1, 6, 7, 17, 17 and 18 within CEMP Table 6.2 – see Dust Assessment Report and Management Plam
4. Adherence to mitigations 1, 8, 9 and 10 within CEMP Table 6.2 – see Method Statement no. 3
5. Adherence to mitigations 12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 31 within CEMP Table 6.2 – see Method Statement no. 4
6. Adherence to mitigation 29 and 31 in CEMP Table 6.2 and requirement for consultation with project arboriculturalists to establish appropriate protections and compound distances prior to works commencing.
7. Adherence to mitigation 30 in CEMP Table 6.2

In addition.

- Weekly review of programme by Contractors Site Manager /Environmental Manager to identify any amendments required to existing mitigations;
- Regular environmental tool-box talks to site operatives;
- Weekly inspections by Contractors Environmental Manager or Appointed Person to ensure all mitigations are in place and active.

With these controls the risk is (highlight)	Unacceptable	Further controls required	Adequately controlled

Further control measures required

List further action needed to adequately control risks
None required

Date	**13/06/24**	**20/11/2025**			
Initial	**AH**	**RK**			

Use a new box each time this assessment is reviewed

APPENDIX C: Dust Assessment Report and Management and Environmental Method Statements

Celadon Consulting Ltd

Grainger plc

Berewood

Town Park Phase B

Dust Assessment Report & Management Plan

Andrea Hughes BSc MSc CEnv FIEnvSc MIAQM

November 2025

CONTENTS

1 INTRODUCTION 1
2 PROPOSED WORKS 2
3 SCREENING THE NEED FOR A DETAILED ASSESSMENT 3
4 CONSTRUCTION DUST RISK ASSESSMENT 5
DUST EMISSION MAGNITUDE 5
SENSITIVITY OF THE AREA 6
RISK OF IMPACT 8
5 DUST MANAGEMENT PLAN 9
COMMUNICATIONS 9
MONITORING 12
MITIGATION MEASURES 12

APPENDIX A
TECHNICAL COMPENTENCY OF ASSESSOR
APPENDIX B
IAQM REFERENCE TABLES - SITE SENSITIVITY
APPENDIX C
IAQM REFERENCE TABLES - DUST RISK
APPENDIX D
IAQM REFERENCE TABLES – MITIGATION MEASURES

1 INTRODUCTION

1.1. This Dust Assessment Report (DAR) and Dust Management Plan (DMP) has been prepared, on behalf of Grainger plc, in support of the planning application for the provision of the works at Town Park Phase B at Berewood, Waterlooville in Hampshire. It is required that this is read in conjunction with the Mayer Brown Construction Environmental Management Plan (CEMP) to which it is linked.

1.2. The following DAR and DMP has been provided based upon the guidance contained within the Institute of Air Quality Managers (IAQM) 'Guidance on the assessment of dust from demolition and construction'[1] and is set out in line with the recommendation of this document.

1.3. All information required for the completion of the DAR&DMP has been sought from the project team with sources given where available.

1.4. **Section 2** provides details of the proposed works and locations relative to the sensitive receptors.

1.5. **Section 3** provides a Screening Exercise to ascertain the need for a Detailed Construction Dust Risk Assessment (CDRA).

1.6. **Section 4** contains the CDRA which quantifies the dust risk to local receptors as a result of the Dust Emission Magnitude and Sensitivity of the Area.

1.7. **Section 5** contains the resultant Dust Management Plan. A contractor for the works has not been identified at this time but will be obliged to conform with this Dust Management Plan and the wider Outline CEMP.

[1] Institute of Air Quality Managers (2024) Guidance on the assessment of dust from demolition and construction. January 2024 (Version 2.2). IAQM, London.

2 PROPOSED WORKS

2.1. The Town Park Phase B works comprise the provision of:

- Self-binding gravel paths;
- Culverting beneath paths where required;
- A 500m^2 grassed kickabout area (north-west);
- Multi-use sports area (south);
- Provision of play equipment (by the Adventure exploratory trail near Phase 8)
- Coloured footway construction 3m wide – to capture the delivery of footpaths near Phase 7/Plant Farm Crescent area to the north
- The “Bituminous Carriageway construction” – to capture the stretch of road by the cricket pavilion; and
- Site-wide landscaping to include topsoiling, planting and seeding.

2.2. The Town Park Phase B landforms, earth mounds, cricket pitch and attenuation ponds, are already in place. The future pavilion development and Phase 5 section 38 works will come forward at a later date as separate works.

3 SCREENING THE NEED FOR A DETAILED ASSESSMENT

3.1. Stage 1 of the IAQM CDRA methodology is to screen the need for a Detailed Assessment. The process of this screening is set out below and applied with the aid of **Figure 2.1.** Responses relevant to Town Park Phase B are provided in **bold**.

3.2. An assessment will normally be required where there is:

- a 'human receptor' within:
    - 250m of the boundary of the site and/or
    - 50m of the route(s) used by construction vehicles on the public highway, up to 250m from the site entrance

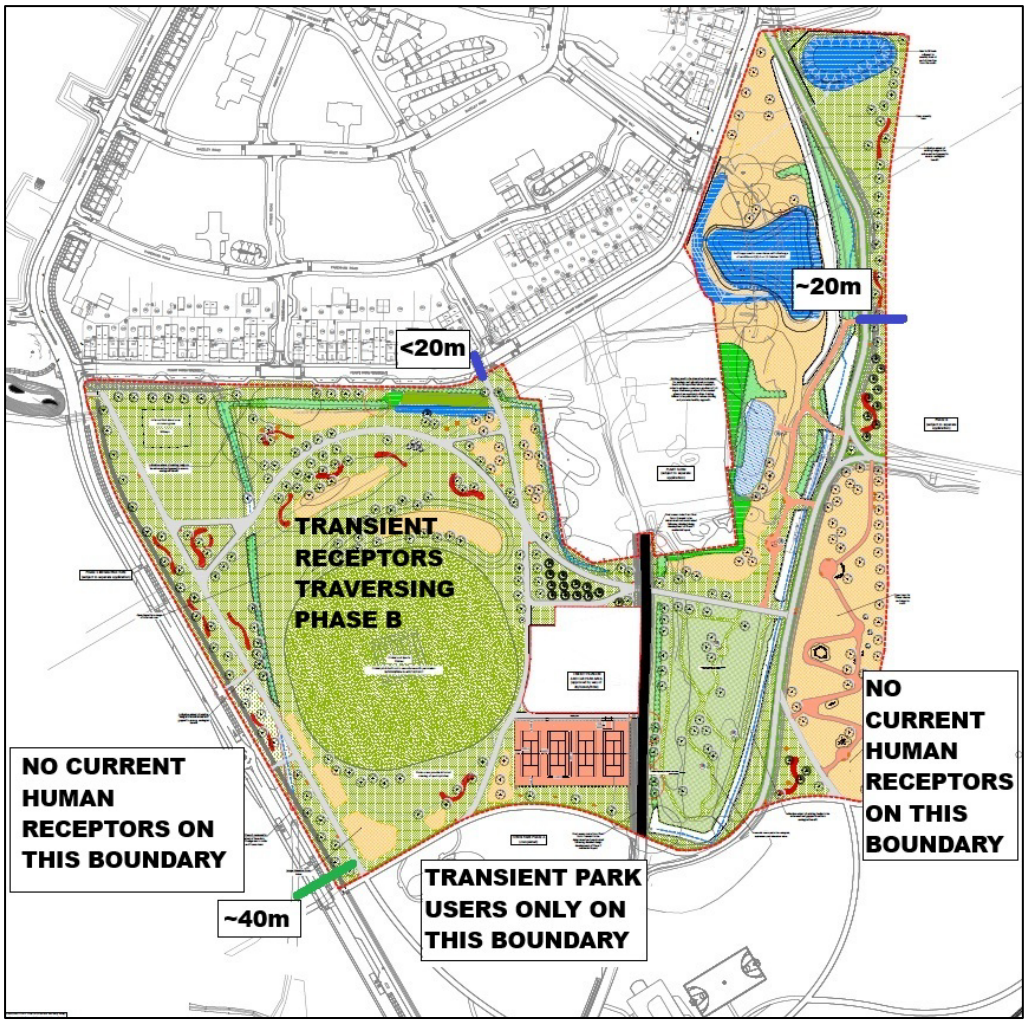
      Figure 2.1 demonstrates that there are existing receptors within 250m of the boundary of the site but that works relate to the installation of small areas of paving, culverting, landscaping etc and the provision of play/games areas. Some of these are seen to be within 20m of human receptors. Any transient receptors within the Phase B area will be diverted from work areas prior to these becoming live.

      The construction access route to the site (as noted within the CEMP) is also observed to be within 20m of human receptors.

- An 'ecological' receptor within:
    - 50m of the boundary of the site; and/or
    - 50m of the route(s) used by construction vehicles on the public highway up to 250m from the site entrance(s)

      Figure 2.1 (in conjunction with Figure 3.1 of the CEMP) demonstrates that the Newlands Row/Barnfield Row Site of Importance for Nature Conservation (SINC) is located within approximately 40m of the south-west corner of the Town Park pavement works.

      The construction access route to the site is not noted to be within 50m of ecological receptors, up to 250m from the site.



[SOURCE: Adapted from Allen Pyke Associates drawing 2715-TP-LA-02]

Figure 2.1 Town Park Phase B Screening Distances

3.3. Given the proximity of human and ecological receptors to the works/ boundary of the site, it has not been possible to screen potential impacts out at this stage of the assessment. Therefore, a Detailed Assessment has been undertaken. This is provided in the following section.

4 CONSTRUCTION DUST RISK ASSESSMENT

DUST EMISSION MAGNITUDE

4.1. Stage 2a of the CDRA process is to establish the Dust Emission Magnitude (DEM). This is based upon the scale of the anticipated works for Demolition, Earthworks, Construction and Trackout. No demolition is required as part of the Town Park Phase B works and so this has been screened out of this CDRA. Earthworks associated with the works are considered to be de minimis but are included for completion. The scale of works as defined by IAQM is set out below with those areas relevant to the scale of the Town Park Phase B works highlighted.

Earthworks

Large: Total site area >110,000 m2, potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size), >10 heavy earth moving vehicles active at any one time, formation of bunds >6 m in height;

Medium: Total site area 18,000 m2 – 110,000 m2, moderately dusty soil type (e.g. silt), 5-10 heavy earth moving vehicles active at any one time, formation of bunds 3m - 6m in height

Small: Total building volume <12,000 m^3, construction material with low potential for dust release (e.g. metal cladding or timber), demolition activities <6 m above

Construction

Large: Total building volume >75,000 m3, on site concrete batching, sandblasting;

Medium: Total building volume 12,000 m3 – 75,000 m3, potentially dusty construction material (e.g. concrete), on site concrete batching; and

Small: Total building volume <12,000 m3, construction material with low potential for dust release (e.g. metal cladding or timber).

Trackout

Large**:** >50 HDV (>3.5t) outward movements in any one day, potentially dusty surface material (e.g. high clay content), unpaved road length >100 m

Medium**:** 20-50 HDV (>3.5t) outward movements**10** in any one day, moderately dusty surface material (e.g. high clay content), unpaved road length 50 m – 100 m; and

Small**:** <20 HDV (>3.5t) outward movements in any one day, surface material with low potential for dust release, unpaved road length <50 m.

4.2. Dust emission magnitude for the Town Park Phase B works is set out in **Table 4.1** below.

Activity	Dust Emission Magnitude
Demolition	N/A
Earthworks	Small
Construction	Small
Trackout	Small

Table 4.1 Dust Emission Magnitude

SENSITIVITY OF THE AREA

4.3. Stage 2b of the CDRA is to assess the sensitivity of the area based upon criteria such as:

- the specific sensitivities of receptors in the area;
- the proximity and number of those receptors;
- the local estimated background concentration of particulate matter (PM10); and
- site-specific factors, such as whether there are natural shelters, such as trees, to reduce the risk of wind-blown

4.4. The IAQM guidance cites a number of factors which affect both the assessment of the number of receptors and their sensitivities. These are not repeated here, however the specific features of the local setting include:

- Town Park Phase B is a large open environment at the highest point of the wider Berewood site and experiences high wind flows;
- Significant vegetation screening exists along the northern and eastern boundaries.

- No schools or sensitive site uses are located within 350 m of the site.
- Residents are aware that the area is part of a multi-phased, long-term, multi-use construction project and are kept aware of progress and works via a newsletter and website[2]
- There is a possibility of concurrent dust generating activity at nearby locations depending on construction programmes.

4.5. The sensitivity of the area has been concluded from the site specific details above, personal knowledge of the site and a review of Tables 2, 3 and 4 of the IAQM Guidance on Dust Risk. These tables are reproduced in **Appendix B** for reference.

4.6. **Table 4.2** below concludes on the overall sensitivity of the site.

Potential Impact	Sensitivity of Surrounding Area			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	N/A	Low	Low	Low
Human Health	N/A	Low	Low	Low
Ecology	N/A	Low	Low	Negligible

Table 4.2 Dust Emission Magnitude

4.7. These findiings include for the following site specific details::

- Works will take place within 20-50m of residential receptors and there are approximately 10 dwellings in this zone. There are also around 20 dwellings, including flats, located adjacent to the construction route within 250 m of the site. Therefore, it is assumed that around 50 receptors could potentially be affected by dust soiling.
- The UK-air-DEFRA background maps for 2021, 2023 and 2025 estimate the PM10 concentrations at the closest 1km square to the Town Park location as having an average of 12.2µg/m^3.
- Only the extreme western tip of the Newlands Row/Barnfield Row SINC is within 40m of the site boundary and no sensitive ecology is within 250m of the trackout route.

[2] https://berewoodhampshire.co.uk/news-events/

RISK OF IMPACT

4.8. Step 2c of the IAQM CDRA process requires the combination of the anticipated Dust Emission Magnitude with the Sensitivity of the Area for each of the relevant aspects identified (Earthworks, Construction and Trackout) to determine the Risk of Dust Impact. The IAQM tables associated with assessment of each aspect is included within **Appendix C** for reference.

4.9. **Table 4.3** below concludes on the overall dust risk associated with the works for each potential impact and dust sources.

Potential Impact	Risk			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	N/A	Low Risk	Low Risk	Low Risk
Human Health	N/A	Low Risk	Low Risk	Low Risk
Ecology	N/A	Low Risk	Low Risk	Negligible

Table 4.3 Summary of Dust Risk

5 DUST MANAGEMENT PLAN

5.1. Dust mitigation measures associated with the identified level of dust risk are set out within the mitigations tables provided within the IAQM Guidance. The IAQM mitigation tables have been reproduced for reference within **Appendix D**. Mitigations which the assessment concludes are not required or are not relevant to the site or the works have been greyed out.

5.2. The following comprises the Dust Management Plan with reference to the requirements of the IAQM CDRA and the existing environmental management processes at Berewood..

COMMUNICATIONS

5.3. The Construction Environmental Management Team at Berewood, including the roles required by contractors, and their relative responsibilities are set out in **Table 5.1** below.

Title	Contact Details	Responsibilities
Client's Senior Project Manager (SPM)	Chris Williams Grainger plc 07990379610 CWilliams@graingerplc.co.uk	The Client's Senior Project Director will act with responsibility for managing the Project within the agreed environmental constraints including dust management and in conjunction with all other necessary management processes.
Client's Project Manager (PM)	Jonathan Kennett Grainger plc jkennett@graingerplc.co.uk 07483107495	The Client's Project Director will answer to the SPM and act with responsibility for managing the Project within the agreed environmental constraints including dust management and in conjunction with all other necessary management processes.

Client's Community Development Manager (CDM)	Lea Hampton Grainger plc 07484097842 lhampton@graingerplc.co.uk	The Client's Community Development Manager acts as a point of contact for residents and other 3rd parties with regards to environmental concerns including dust. The CDM will liaise with the CPM, CEM and PM to highlight concerns.
Client's Construction Project Manager (CPM)	James Rood Lawrence Foote and Partners 07904793379 james.rood@LFPLtd.com	The Client's Construction Project Manager oversee the Contractor and will act as a facilitator between the CDM, CEM, PD and the Contractor to resolve environmental concerns including dusts.
Client's Construction Environmental Manager (CEM)	Andrea Hughes Celadon Consulting Ltd 07542029042 andrea@celadonconsultingltd.co.uk	The Client's Environmental Manager will liaise with the PD, CPM and Contractor and will be responsible for monitoring the performance of the project against the agreed environmental standards including those in relation to dust management.
Contractors Site Manager (SM)	TBC	The Contractors Site Manager will act with responsibility for managing the Project within the agreed environmental constraints including the application of the Dust Management Plan and in conjunction with all other necessary

		site management processes. The SM will be required to respond, as required to requests placed by the CDM, CEM and CPM
Contractors Environmental Manager (EM)		The Contractors Environmental Manager will be responsible for applying requirements of the Dust Management Plan under instruction from the SM and will undertake any necessary monitoring providing feedback to the SM as regards any complaints or further mitigations, monitoring or work adaptations required.

Figure 5.1 Berewood CEMP Team and Responsibilities

5.4. It is required that Contractors will display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager. It is required that head or regional office contact information is also displayed.

5.5. The Contractors Environmental Manager will be required to log all dust and air quality complaints, or exceptional dust incidents, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. The log will be available to the local authority on request.

5.6. The Client's Construction Project manager will hold regular construction Design and Management Meetings with all Contractors at the Berewood site and it is required that the Contractors Site Manager and Environmental Manager will attend these.

MONITORING

5.7. The Contractors Environmental Manager will undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100 m of site boundary, with cleaning to be provided if necessary.

5.8. It is required when activities with a high potential to produce dust are being carried out and/ or during prolonged dry or windy conditions, the frequency of site inspections by the Contractors Environmental Manager will be increased. Inspections will also be carried out on a monthly basis by the Client's Environmental Manager. Where inspections indicate that dust is problematic, further levels of dust monitoring may be required.

MITIGATION MEASURES

5.9. The CDRA process has identified a number of mitigations required to control potential dust impacts on site. Those specific to the site are listed within the IAQM Mitigations Table within **Appendix D** (greyed measures are not applicable). The Contractor will be required to apply those mitigations listed which are set out under the following headings:

- Preparing and maintaining the site
- Operating vehicle/machinery and sustainable travel
- Operations
- Waste management
- Measures Specific to Earthworks, Construction and Trackout

5.10. In addition to the above, the following will be implemented in accordance with the CEMP:

Training, Awareness and Competence

5.11. The raising of environmental awareness is viewed as a crucial element in the appreciation and implementation of any environmental management plan. In order to ensure the dust control measures are effective, all staff will be provided with appropriate training prior to starting work on site. This will include:

- a site induction;
- emergency response training;
- familiarisation with site environmental controls; and
- specific environmental training for relevant employees.

5.12. The site supervisor 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.

Environmental Inspection and Reporting

5.13. The Contractor's Environmental Manager will carry out regular inspections of the construction area, to verify that housekeeping or supporting controls are being implemented effectively. These inspections will be used to confirm that:

- agreed protection or mitigation measures are in place, prior to or during the implementation of construction activities;
- construction works are progressing in accordance with the agreed environmental protections; and
- all mitigation measures in place are appropriately maintained.

5.14. Inspections will be carried out at a frequency of no greater than fortnightly intervals, but could be held more regularly depending on the nature of the construction activity. Any necessary actions will be raised and recorded at progress meetings.

Control of non-conformance

5.15. 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.

External Review

5.16. The Contractors Detailed CEMP and all associated supporting documents and records will be maintained by the Contractor's Environmental Manager for third party review if requested.

APPENDIX A

TECHNICAL COMPENTENCY OF THE ASSESSOR

The Assessor is Director of Celadon Consulting Ltd Andrea Hughes.

Andrea has experience spanning 25+ years in Environmental Assessment including Air Quality Assessment, 20+ years in Environmental Management and 15+ years in On-site Environmental Auditing. She holds numerous accreditations and memberships including:

Member of Institute of Air Quality Managers

Fellow of Institution of Environmental Science

Member of The Society for the Environment

Chartered Environmentalist

Technical Member of British Society of Soil Science

Construction Skills Certification Scheme (CSCS) Professionally Qualified Person

Construction Industry Research and Information (CIRIA) Association Trained

APPENDIX B

IAQM REFERENCE TABLES – SITE SENSITIVITY

Table 2: Sensitivity of the Area to Dust Soiling Effects on People and Property [a b]

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)[c]			
		<20	<50	<100	<250
High	>100	High	High	Medium	Low
	10-100	High	Medium	Low	Low
	1-10	Medium	Low	Low	Low
Medium	>1	Medium	Low	Low	Low
Low	>1	Low	Low	Low	Low

[a] The sensitivity of the area should be derived for each of the four activities: demolition, construction, earthworks and trackout. See **STEP 2B**, **Box 6** and **Box 9**.

[b] Estimate the total number of receptors within the stated distance. Only the highest level of area sensitivity from the table needs to be considered. For example, if there are 7 high sensitivity receptors <20 m of the source and 95 high sensitivity receptors between 20 and 50 m, then the total of number of receptors <50 m is 102. The sensitivity of the area in this case would be high.

[c] For trackout, the distances should be measured from the side of the roads used by construction traffic. The impact declines with distance from the site, and it is only necessary to consider trackout impacts up to 50 m from the edge of the road.

Table 3: Sensitivity of the Area to Human Health Impacts [a b]

Receptor Sensitivity	Annual Mean PM_{10} concentration[c]	Number of Receptors	Distance from the Source (m)[c]			
			<20	<50	<100	<250
High	>32 $\mu g/m^3$ (>18 $\mu g/m^3$ in Scotland)	>100	High	High	High	Medium
		10-100	High	High	Medium	Low
		1-10	High	Medium	Low	Low
	28-32 $\mu g/m^3$ (16-18 $\mu g/m^3$ in Scotland)	>100	High	High	Medium	Low
		10-100	High	Medium	Low	Low
		1-10	High	Medium	Low	Low
	24-28 $\mu g/m^3$ (14-16 $\mu g/m^3$ in Scotland)	>100	High	Medium	Low	Low
		10-100	High	Medium	Low	Low
		1-10	Medium	Low	Low	Low
	<24 $\mu g/m^3$ (<14 $\mu g/m^3$ in Scotland)	>100	Medium	Low	Low	Low
		10-100	Low	Low	Low	Low
		1-10	Low	Low	Low	Low
Medium	>32 $\mu g/m^3$ (>18 $\mu g/m^3$ in Scotland)	>10	High	Medium	Low	Low
		1-10	Medium	Low	Low	Low
	28-32 $\mu g/m^3$ (16-18 $\mu g/m^3$ in Scotland)	>10	Medium	Low	Low	Low
		1-10	Low	Low	Low	Low
	24-28 $\mu g/m^3$ (14-16 $\mu g/m^3$ in Scotland)	>10	Low	Low	Low	Low
		1-10	Low	Low	Low	Low
	<24 $\mu g/m^3$ (<14 $\mu g/m^3$ in Scotland)	>10	Low	Low	Low	Low
		1-10	Low	Low	Low	Low
Low	-	≥1	Low	Low	Low	Low

[a] The sensitivity of the area should be derived for each of the four activities: demolition, construction, earthworks and trackout. See STEP 2B, Box 7 and Box 9.

[b] Estimate the total within the stated distance (e.g. the total within 250 m and not the number between 100 and 250 m), noting that only the highest level of area sensitivity from the table needs to be considered. For example, if there are 7 high sensitivity receptors <20 m of the source and 95 high sensitivity receptors between 20 and 50 m, then the total of number of receptors <50 m is 102. If the annual mean PM_{10} concentration is 29 $\mu g/m^3$, the sensitivity of the area would be high.

[c] Most straightforwardly taken from the national background maps, but should also take account of local sources. The values are based on 32 $\mu g/m^3$ being the annual mean concentration at which an exceedence of the 24-hour objective is likely in England, Walesand Northern Ireland. In Scotland there is an annual mean objective of 18 $\mu g/m^3$

[d] In the case of high sensitivity receptors with high occupancy (such as schools or hospitals) approximate the number of people likely to be present. In the case of residential dwellings, just include the number of properties.

[e] For trackout, the distances should be measured from the side of the roads used by construction traffic. The impact declines with distance from the site, and it is only necessary to consider trackout impacts up to 50 m from the edge of the road.

Table 4: Sensitivity of the Area to Ecological Impacts [a b]

Receptor Sensitivity	Distance from the Source (m)[c]	
	<20	<50
High	High	Medium
Medium	Medium	Low
Low	Low	Low

[a] The sensitivity of the area should be derived for each of the four activities: demolition, construction, earthworks and trackout and for each designated site. See STEP 2B, Box 8 and Box 9.
[b] Only the highest level of area sensitivity from the table needs to be considered.
[c] For trackout, the distances should be measured from the side of the roads used by construction traffic. The impact declines with distance from the site.

APPENDIX C

IAQM REFERENCE TABLES – DUST RISK

Table 7: Risk of Dust Impacts - Earthworks

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table 8: Risk of Dust Impacts - Construction

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table 9: Risk of Dust Impacts - Trackout

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

APPENDIX D

IAQM REFERENCE TABLES – MITIGATION MEASURES

Key to tables:

H Highly recommended
D Desirable
N Not required

Mitigation for all sites: Communications

Mitigation measure	Low Risk	Medium Risk	High Risk
1. Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.	N	H	H
2. Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager.	H	H	H
3. Display the head or regional office contact information.	H	H	H
4. Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The level of detail will depend on the risk, and should include as a minimum the highly recommended measures in this document. The desirable measures should be included as appropriate for the site. In London additional measures may be required to ensure compliance with the Mayor of London's guidance. The DMP may include monitoring of dust deposition, dust flux, realtime PM10 continuous monitoring and/or visual inspections.	D	H	H
Site Management			
5. Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.	H	H	H
6. Make the complaints log available to the local authority when asked.	H	H	H
7. Record any exceptional incidents that cause dust and/or air emissions, either on- or off-site, and the action taken to resolve the situation in the log book.	H	H	H
8. Hold regular liaison meetings with other high risk construction sites within 250 m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport/deliveries which might be using the same strategic road network routes.	N	N	H
Monitoring			
9. Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100 m of site boundary, with cleaning to be provided if necessary.	D	D	H
10. Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked.	H	H	H

11. Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.	H	H	H
12. Agree dust deposition, dust flux, or real-time PM_{10} continuous monitoring locations with the Local Authority. Where possible commence baseline monitoring at least three months before work commences on site or, if it a large site, before work on a phase commences. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction.	H	H	H
Preparing and maintaining the site			
13. Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.	H	H	H
14. Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.	H	H	H
15. Fully enclose site or specific operations where there is a high potential for dust production and the site is actives for an extensive period.	D	H	H
16. Avoid site runoff of water or mud.	H	H	H
17. Keep site fencing, barriers and scaffolding clean using wet methods.	D	H	H
18. Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.	D	H	H
19. Cover, seed or fence stockpiles to prevent wind whipping.	D	H	H
Operating vehicle/machinery and sustainable travel			
20. Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London NRMM standards, where applicable.	H	H	H
21. Ensure all vehicles switch off engines when stationary - no idling vehicles.	H	H	H
22. Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.	H	H	H
23. Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).	D	D	H
24. Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials.	N	N	H
25. Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).	N	D	H
Operations			
26. Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	H	H	H
27. Ensure an adequate water supply on the site for effective dust/particulate matter suppression/ mitigation, using non-potable water where possible and appropriate	H	H	H
28. Use enclosed chutes and conveyors and covered skips.	H	H	H
29. Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such	H	H	H

equipment wherever appropriate.			
30. Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.	D	H	H
Waste management			
31. Avoid bonfires and burning of waste materials.	H	H	H

Measures specific to Earthworks

Mitigation Measure	Low Risk	Medium Risk	High Risk
36. Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.	N	D	H
37. Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable.	N	D	H
38. Only remove the cover in small areas during work and not all at once.	N	D	H

Measures specific to Construction

Mitigation Measure	Low Risk	Medium Risk	High Risk
39. Avoid scabbling (roughening of concrete surfaces) if possible.	D	D	H
40. Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.	D	H	H
41. Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.	N	D	H
42. For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust.	N	D	D

Measures specific to Trackout

Mitigation Measure	Low Risk	Medium Risk	High Risk
43. Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.	D	H	H
44. Avoid dry sweeping of large areas.	D	H	H
45. Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.	D	H	H
46. Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.	N	H	H
47. Record all inspections of haul routes and any subsequent action in a site log book.	D	H	H
48. Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.	N	H	H
49. Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).	D	H	H
50. Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.	N	H	H
51. Access gates to be located at least 10 m from receptors where possible.	N	H	H

Method Statement 1

Control of death or disturbance of in-situ sheltering or foraging fauna

Completed by:
Andrea Hughes – Town Park Phase B Construction Environmental Management Plan Authors
Based upon the findings of the mitigation matrix (Table 6.1 and 6.2 of Town Park Phase B CEMP)

Risk Activities/Tasks
Establishment of site compound and facilities including protective heras fencing and signage where required. Provision and maintenance of drainage and pollution control measures including wheel wash facilities. Provision of drainage, surfacing and formal areas with suitable landscaping.

Actions Required

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.
- 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

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 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.
- 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

Method Statement 2

Control of lighting impacts upon bats, nocturnal species and adjacent residents

Completed by:
Rebecca Kingston – Town Park Phase B Construction Environmental Management Plan Author
Based upon the findings of the mitigation matrix (Table 6.1 and 6.2 of Town Park Phase B CEMP)

Risk Activities/Tasks
Establishment of site compound and facilities including protective heras fencing and signage where required. Provision and maintenance of drainage and pollution control measures including wheel wash facilities. Provision of drainage, surfacing and formal areas with suitable landscaping.

Actions Required
• 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.

Method Statement 3

Control of noise impacts upon on-site and off-site personnel

Completed by:
Rebecca Kingston – Town Park Phase B Construction Environmental Management Plan Author
Based upon the findings of the mitigation matrix (Table 6.1 and 6.2 of Town Park Phase B CEMP)

Risk Activities/Tasks
Establishment of site compound and facilities including protective heras fencing and signage where required. Provision and maintenance of drainage and pollution control measures including wheel wash facilities. Provision of drainage, surfacing and formal areas with suitable landscaping.

Actions Required

- Appropriate space to be provided for parking and turning of operative, construction and visitor vehicles. Appropriate construction routing to be set out for construction traffic within a Construction Traffic Management Plan;
- All vehicle drivers to be advised of agreed haulage routes selected to minimise any noise impact arising from additional lorry movements within a Delivery Plan;
- Site works to take place only during work hours of:

  Monday to Friday - 0800hrs to 18:00hrs

  Saturday - 08:00hrs to 13:00hrs.

  Sundays and Public Holidays - No work on site is permitted
- Silencers or mufflers as appropriate to be fitted to plant and machinery;
- A Prior Consent agreement with Winchester will be sought for any substantial or particularly noise-sensitive project. Under Section 61 of the Control of Pollution Act 1974 prior agreement can be reached on noise controls, which prevent the need for formal interventions, which may later be introduced without warning, with associated delays and costs. Noise problems as far as is practical

will be anticipated in advance and control measures will be agreed with the local authority to prevent problems later;

- Noisy plant and equipment will be sited as far away as is practicable from sensitive receptors. The use of barriers, such as soil mounds, site huts, acoustic sheds and partitions to deflect noise away from noise sensitive areas will be employed wherever necessary and practicable. Rapid access to portable acoustic screens such as those specified in British Standard BS5228:1997:Part 1 will be provided;
- Where necessary to control noise, hoardings may be provided. Hoarding may take the form of security hoards, or purpose built noise screens. Specific noise reduction hoarding is available where noise impact becomes a particular issue, or effective hoarding can be constructed on site from two sheets of 12mmmm board filled with a sound absorbing material such Rockwool;
- If required, effective screening/hoarding will be appropriately sited between the noise source and the potential receptor, contain no holes and ensure that the screening material overlaps with minimal gaps;
- All plant and machinery will comply with relevant statutory and manufactures' requirements. Vehicles and plant used for the purpose of the works will be fitted with effective exhaust silencers, maintained in good and efficient working order and operated to minimise noise emissions;
- Machinery in intermittent use will be shut down in the intervening periods between work or throttled down to a minimum. Noise emitting equipment required to run continuously e.g. generators, will be housed in suitable noise reducing enclosures;
- Only "sound reduced" compressors shall be used. Models will be fitted with properly lined and sealed acoustic covers that shall be kept closed whenever the machinery is in use;
- Pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers. Equipment that breaks concrete, brickwork or masonry by bending or by bursting shall be used in preference to percussive tools as far as practicable;
- Where practicable rotary drills bursters actuated by hydraulic, chemical or electrical power will be used for excavating hard or extrusive materials;
- Plant will be maintained in good working order so that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum; and

- Care will be taken when loading or unloading vehicles, or moving materials etc to reduce noise impact.

Method Statement 4

Control of pollution impacts to adjacent ditches and drains on-site, off-site flora and fauna and local receptors

Completed by:
Andrea Hughes – Town Park Phase B Construction Environmental Management Plan Authors
Based upon the findings of the mitigation matrix (Table 6.1 and 6.2 of Town Park Phase B CEMP)

Risk Activities/Tasks
Establishment of site compound and facilities including protective heras fencing and signage where required. Provision and maintenance of drainage and pollution control measures including wheel wash facilities. Provision of drainage, surfacing and formal areas with suitable landscaping.

Actions Required
• Systems of temporary drainage must be installed to ensure that no polluted surface runoff enters adjacent drains. Any surface water collected to be directed via treatment before discharge; • Any new or existing live surface water drains to be bunded to ensure that no surface water enters them; • Adjacent and/or site roads to be swept and sprayed with water to prevent dust nuisance; • Where possible over-site hard standing to be retained & haul routes to be hard surfaced; • 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.**

- Stockpiling to be in accordance with best practice within CIRIA 'Environmental best practice on site guide (5th edition);
- 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;
- Fuels and chemicals to be stored in accordance within CIRIA 'Environmental best practice on site guide (5th edition);
- All tanks and containers to be labelled with nature of contents and total volume secured;
- Fuel storage and delivery facilities to be on impermeable surface in a secondary containment system;
- Provision of spill kits at all storage areas & provision of emergency response numbers;
- Biodegradable hydraulic oil to be used for machinery/plant where possible;
- All deliveries to be supervised and levels of tanks checked before delivery;
- Stockpiles to be sited so as not be subject to inundation during extreme rainfall events;
- Contingency plan required for temporary covering of stockpiles during adverse weather conditions;
- Sorted & screened material to be placed on a prepared clean granular surfacing;
- Supervisors to be familiar with the provisions of CIRIA 'Environmental best practice on site guide (5th edition) re control of contaminated run off.

APPENDIX D: Incident Response Plan

Stop – Contain – Notify

Diesel Spills

Call for aid

Stop work immediately and prevent any more material escaping, e.g. right the jerry can, close valves

Call for aid

Protect any adjacent surface water feature using the adjacent spill kit contents. Clear up spill

Notify the site manager / foreman with the following information:

- where the substance has entered the drain/watercourse or is affecting the environment
- substance involved
- location
- reason for incident
- quantity involved.

Site Manager will dispose of used materials appropriately and replace the used kit

Spillage type

Major: Cannot be controlled, pollution has entered, or could enter a drain or watercourse. Report to the foreman/supervisor immediately

Minor: Can be controlled, pollution has note entered, and cannot enter a drain or watercourse. Report to the foreman/supervisor immediately

Foreman/supervisor instructions

Major: Contain and report immediately

Minor: Clean up immediately using appropriate materials (granules, pads etc)

In Major instance report to EA (see contact below)

Contact

Environment Agency (EA) Emergency Spill Line **0800 80 70 60**

Worthing Office **03708506506**

Write up report of incident to be retained in site records including:

- date, time, location of spill
- substance(s) involved
- action taken to contain it
- lessons learnt.

Adapted from: Environmental good practice on site guide (fourth edition) CIRIA

APPENDIX E: Construction Noise Monitoring Report

HOLBURY
CONSULTANCY SERVICES









Construction Noise Monitoring Report

Berewoood
Hampshire

September 2025

For Grainger Plc
Final

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Grainger Plc

Berewood, Hampshire

Construction Noise Monitoring – Monthly Report

List of Contents

Sections

1 Introduction 1

2 Monitoring Locations 2

3 Methodology 5

4 Monitored Data and Significance 6

5 Conclusions 9

Figures

Figure 1.1: Site Location 1

Figure 2.1: Noise Monitoring Locations – September 2025 2

Tables

Table 2.1: Monitoring Locations and Conditions 4

Table 3.1: Monitoring Instrumentation 5

Table 4.1: Noise Measurement Results 8

Appendices

APPENDIX A: Illustrative Masterplan

APPENDIX B: Monitoring Locations (Imagery)

APPENDIX C: Time History Graphs

1 Introduction

1.1 Holbury Consultancy Service Ltd has subcontracted Air Quality Experts Limited (AQE) to complete Monthly Noise Monitoring of the ongoing construction activities associated with the development of Land to the West of Waterlooville, Hampshire (Berewood), on behalf of Grainger Plc.

1.2 Berewood is approximately 209 hectares (ha). The eastern boundary is formed by London Road, existing allotment land and rear gardens of existing residential development at Marrelswood Gardens, Purbrook Gardens, Forest End and Maurepas Way. The western boundary of the site adjoins open countryside/ agricultural land and defi ned by Newlands Lane.

1.3 The site is located within the administrative boundary of Winchester City Council (WCC) and Havant Borough Council (HBC).

1.4 The approximate site location is illustrated in **Figure 1.1** below.

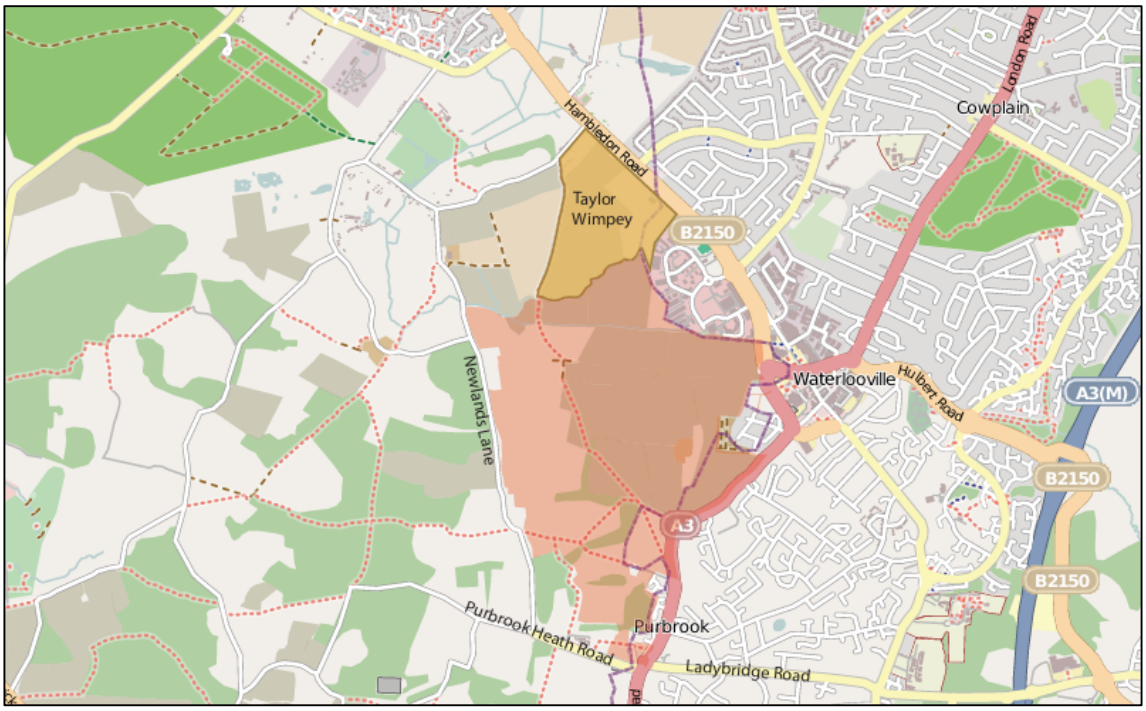


Figure 1.1: Site Location

1.5 Berewood development comprises approximately 2550 no. dwellings with associated physical, social and green infrastructure such as a local centre, primary schools, open space and employment.

1.6 The illustrative masterplan is included in **Appendix A**.

1.7 This report depicts details of the monitoring procedures, monitoring locations, equipment used and sets out the noise measurement results for **September 2025**.

2 Monitoring Locations

2.1 Attended Noise Monitoring has been undertaken on 11th September 2025 at 6No. locations along the active construction boundaries of the development site.

2.2 The noise monitoring locations are illustrated in **Figure 2.1** below. Site location imagery is included in **Appendix B.**

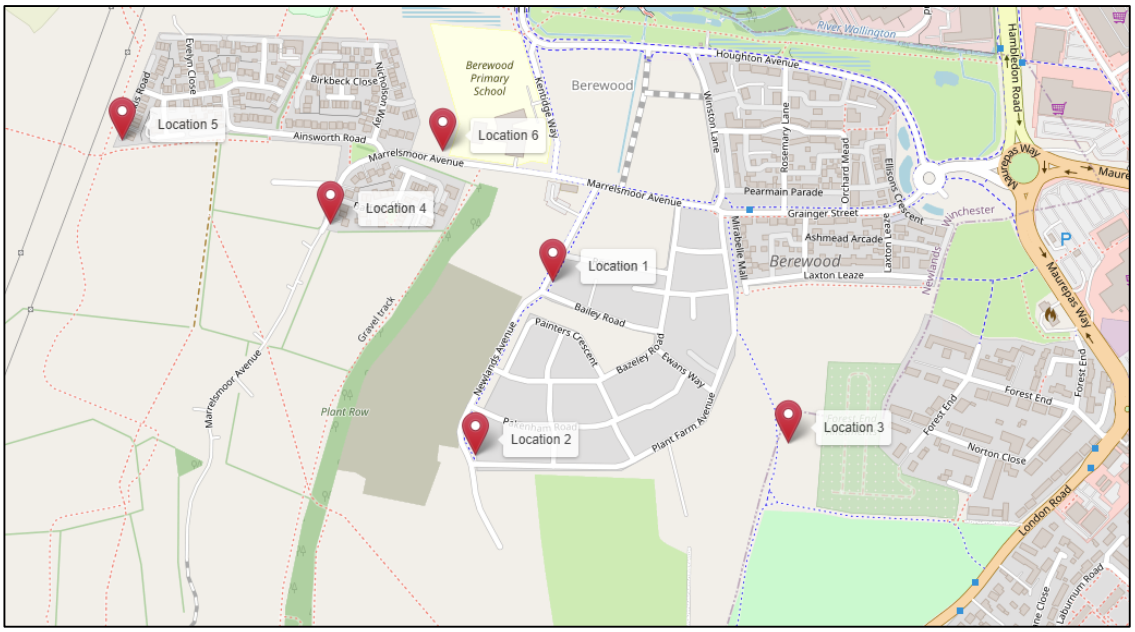


Figure 2.1: Noise Monitoring Locations – September 2025

2.3 Further details of the monitoring locations and survey conditions are included in **Table 2.1** below.

Location 1 – Newlands Avenue/Bailey Road			
Location Reference:	1	**Start Time:**	10:26
Date:	11/09/2025	**Monitoring Period:**	15 mins
Lat/Long:	X:467220; Y:109321		
Location description:	Newlands Avenue followed by Bloor Site. Monitor mounted on a Tripod 1.5m from the ground, overlooking active construction site (finishing).		
Weather:	Dry, overcast, occasional sunny spells, gentle northerly breeze (<5m/s)		
Notes:	General construction activities: generators, spray painting, vehicle movements and traffic along Newlands Avenue.		

Location 2 – Newlands Avenue/Plant Farm Crescent			
Location Reference:	2	**Start Time:**	10:47
Date:	11/09/2025	**Monitoring Period:**	15 mins
Lat/Long:	X:467116; Y:109080		
Location description:	Corner between Newlands Avenue/Plant Farm Crescent, outside N.2. Monitor mounted on a Tripod 1.5m from the ground, overlooking active construction site.		
Weather	Dry, overcast, occasional sunny spells, gentle northerly breeze (<5m/s)		
Notes:	General construction activities: digger tracks, vehicle engines/ movements, distant engines running and hammering. Traffic on Newlands Avenue.		

Location 3 – Kent Road			
Location Reference:	3	**Start Time:**	11:10
Date:	11/09/2025	**Monitoring Period:**	15mins
Lat/Long:	X:467550; Y:109103		
Location description:	Kent Road, outside No. 55. Monitor mounted on a Tripod 1.5m from the ground, overlooking active construction activity (Bloor).		
Weather	Dry, overcast, occasional sunny spells, gentle northerly breeze (<5m/s)		
Notes:	General construction activity: digger movements, reverse alarms and distant traffic.		

Location 4 – Marreslmoor Road			
Location Reference:	4	**Start Time:**	11:33
Date:	11/09/2025	**Monitoring Period:**	15 mins
Lat/Long:	X:466912; Y:109397		
Location description:	Top of Marrelsmoor Road. Monitor mounted on a Tripod 1.5m from the ground, overlooking active construction activity (Redrow).		
Weather	Dry, overcast, occasional sunny spells, gentle northerly breeze (<5m/s)		
Notes:	General construction activity: digger &HGV movements, distant hammering and drilling.		

Location 5 – Purkis Road			
Location Reference:	5	**Start Time:**	11:56
Date:	11/09/2025	**Monitoring Period:**	15 mins
Lat/Long:	X:466621; Y:109509		
Location description:	Purkis Road. Monitor mounted on a Tripod 1.5m from the ground, overlooking active construction activity (Redrow).		
Weather	Dry, overcast, occasional sunny spells, gentle northerly breeze (<5m/s)		
Notes:	General construction activity: digger movements, engines running, reverse alarms, generators (very active site).		

Location 6 - School/Marrelsmoor Avenue			
Location Reference:	6	**Start Time:**	12:20
Date:	11/09/2025	**Monitoring Period:**	15 mins
Lat/Long:	X:467065; Y:109499		
Location description:	Marrelsmoor Avenue - Outside school. Monitor mounted on a Tripod 1.5m from the ground, overlooking the road and distant construction activity.		
Weather	Dry, overcast, occasional sunny spells, gentle northerly breeze (<5m/s)		
Notes:	Children playing, traffic on Marrelsmoor Avenue (several HGV's) and some distant construction activities and generators.		

Table 2.1: Monitoring Locations and Conditions

3 Methodology

3.1 Attended Noise Monitoring has been undertaken at six locations on 11th September 2025, between 10:00 and 13:00.

3.2 The choice of locations has been based on the active construction boundaries and the presence of existing sensitive receptors nearby.

3.3 The weather conditions were dry, overcast, occasional sunny spells and light breeze <5m/s and as such considered suitable for the measurement of environmental noise.

3.4 The measurement procedures were fully compliant with ISO 1996-2:2017 Acoustics '*Description, measurement and assessment of environmental noise - Part 2: Determination of environmental noise levels*'.

3.5 The survey was undertaken in line with BS5228-12009+A1:2014 which provides recommendations for basic methods of noise control relating to construction sites, including sites where demolition, remediation, ground treatment or related civil engineering works are being carried out, and open sites, where work activities/operations generate significant noise levels, including industry-specific guidance.

3.6 The calibration of the sound level meter was verified before and after use and no irregularities were observed.

3.7 The equipment used during the noise monitoring survey is described in **Table 3.1** below.

Equipment Details	**Make/Model**	**Serial No.**	
Sound Level Meter:	Svantek 971A (Class 1)	113219	
Sound Calibrator:	Svantek SV33B (Class 1)	125670	
Source of Equipment:		Svantek UK/AcSoft	
Meter Timestamp (Start/End, GMT/BST):		GMT	
Calibration level:	114dB/1000Hz	**Audio / Octave?**	Y
Range setting:	Normal: 27.0 – 137.1	**Meas. period:**	15 Mins
Freq weighting:	Fast	**Weather Station:**	N

Table 3.1: Monitoring Instrumentation

3.8 The A-weighted $L_{Aeq,T}$, L_{Amax}, L_{Amin}, parameters were measured throughout the duration of each monitoring survey location.

3.9 A summary of the noise measurement results for each location are presented in **Section 4** overleaf. The time history graphs are included in **Appendix C.**

4 Monitored Data and Significance

4.1 BS 5228 recommends noise limits for daytime working outside living rooms and offices. Ideally noise from construction and demolition sites should not exceed the level at which conversation in the nearest building would be difficult with the windows shut.

4.2 Noise levels, between 07:00 and 19:00 hours, outside the nearest window of the occupied room closest to the site boundary should not exceed:

- **70 decibels (dBA)** in rural, suburban and urban areas away from main road traffic and industrial noise;
- **75 decibels (dBA)** in urban areas near main roads in heavy industrial areas.

4.3 In noise-sensitive situations, for example, near hospitals and educational establishments and when working outside the normal hours, say between 19:00 and 22:00 hours – the allowable noise levels from building sites should be less.

4.4 A summary of the noise measurement results for all six locations is presented in **Table 4.1** below. Any exceedances to the L_{Aeq} noise limits specified above, have been marked **bold**, where applicable.

Location 1 – Newlands Avenue/Bailey Road				
No.	Date & time	LAFmax [dB]	LAFmin [dB]	LAeq [dB] (1min)
1	11/09/2025 10:27:35	78.67	63.81	67.28
2	11/09/2025 10:28:35	80.05	65.7	71.02
3	11/09/2025 10:29:35	69.53	64.49	66.6
4	11/09/2025 10:30:35	68.66	64.48	66.25
5	11/09/2025 10:31:35	74.49	64.78	66.59
6	11/09/2025 10:32:35	79.29	64.61	69.48
7	11/09/2025 10:33:35	76.95	63.59	68.29
8	11/09/2025 10:34:35	72.38	63.69	66.04
9	11/09/2025 10:35:35	81.16	63.71	69.6
10	11/09/2025 10:36:35	77.29	63.96	67.38
11	11/09/2025 10:37:35	77.47	63.57	67.85
12	11/09/2025 10:38:35	79.81	64.83	68.91
13	11/09/2025 10:39:35	75.6	63.49	66.31
14	11/09/2025 10:40:35	73.72	64.32	67.35
15	11/09/2025 10:41:35	81.48	64.49	69.20
Location 2 –Newlands Avenue/ Plant Farm Crescent				
No.	Date & time	LAFmax [dB]	LAFmin [dB]	LAeq [dB] (1min)
1	11/09/2025 10:48:40	76.19	59.97	66.88
2	11/09/2025 10:49:40	66.79	58.08	63.67
3	11/09/2025 10:50:40	86.78	60.26	68.12

4	11/09/2025 10:51:40	74.11	60.35	65.52
5	11/09/2025 10:52:40	76.24	59.71	65.71
6	11/09/2025 10:53:40	78.56	59.95	66.46
7	11/09/2025 10:54:40	71.49	57.28	62.51
8	11/09/2025 10:55:40	75.02	53.40	60.44
9	11/09/2025 10:56:40	62.96	52.81	57.38
10	11/09/2025 10:57:40	82.99	52.88	65.12
11	11/09/2025 10:58:40	77.60	53.64	60.16
12	11/09/2025 10:59:40	63.79	54.19	57.78
13	11/09/2025 11:00:40	64.55	52.32	57.54
14	11/09/2025 11:01:40	68.83	53.72	57.99
15	11/09/2025 11:02:40	74.91	53.05	61.91

Location 3 – Kent Road

No.	Date & time	LAFmax [dB]	LAFmin [dB]	LAeq [dB] (1min)
1	11/09/2025 11:11:30	82.58	53.97	66.48
2	11/09/2025 11:12:30	83.24	55.69	71.50
3	11/09/2025 11:13:30	80.75	53.88	67.24
4	11/09/2025 11:14:30	69.94	52.44	59.10
5	11/09/2025 11:15:30	81.38	52.82	67.72
6	11/09/2025 11:16:30	83.86	53.44	68.39
7	11/09/2025 11:17:30	78.75	52.77	62.18
8	11/09/2025 11:18:30	82.66	53.11	68.73
9	11/09/2025 11:19:30	90.3	53.42	72.77
10	11/09/2025 11:20:30	83.6	53.27	67.74
11	11/09/2025 11:21:30	79.13	51.44	61.80
12	11/09/2025 11:22:30	82.73	53.17	70.80
13	11/09/2025 11:23:30	77.94	52.2	62.97
14	11/09/2025 11:24:30	74.43	52.68	61.27
15	11/09/2025 11:25:30	77.46	52.99	64.62

Location 4 – Marrelsmoor Road

No.	Date & time	LAFmax [dB]	LAFmin [dB]	LAeq [dB] (1min)
1	11/09/2025 11:34:20	79.97	58.41	71.59
2	11/09/2025 11:35:20	79.93	57.36	70.78
3	11/09/2025 11:36:20	82.25	58.57	70.58
4	11/09/2025 11:37:20	80.45	57.44	69.69
5	11/09/2025 11:38:20	85.28	58.12	72.83
6	11/09/2025 11:39:20	89.85	63.95	**76.63**
7	11/09/2025 11:40:20	89.69	69.52	**82.76**
8	11/09/2025 11:41:20	85.25	62.36	**74.85**
9	11/09/2025 11:42:20	77.17	54.90	65.10
10	11/09/2025 11:43:20	75.07	56.02	63.02
11	11/09/2025 11:44:20	83.35	54.76	69.19
12	11/09/2025 11:45:20	81.46	57.14	70.73

13	11/09/2025 11:46:20	82.01	57.98	69.07
14	11/09/2025 11:47:20	78.14	56.55	64.67
15	11/09/2025 11:48:20	75.76	56.10	65.53
Location 5 – Purkis Road				
No.	Date & time	LAFmax [dB]	LAFmin [dB]	LAeq [dB] (1min)
1	11/09/2025 11:57:32	81.09	61.58	69.82
2	11/09/2025 11:58:32	84.12	60.95	69.87
3	11/09/2025 11:59:32	83.91	58.52	73.27
4	11/09/2025 12:00:32	86.85	58.94	72.63
5	11/09/2025 12:01:32	78.50	60.63	68.92
6	11/09/2025 12:02:32	77.43	60.86	66.87
7	11/09/2025 12:03:32	80.86	60.31	68.36
8	11/09/2025 12:04:32	77.44	57.84	68.07
9	11/09/2025 12:05:32	81.50	58.55	66.05
10	11/09/2025 12:06:32	75.27	54.63	62.18
11	11/09/2025 12:07:32	92.65	55.69	**76.69**
12	11/09/2025 12:08:32	92.33	56.05	**76.29**
13	11/09/2025 12:09:32	94.80	56.16	**77.27**
14	11/09/2025 12:10:32	81.26	56.86	66.24
15	11/09/2025 12:11:32	81.89	55.92	64.64
Location 6 – School/Marrelsmoor Avenue				
No.	Date & time	LAFmax [dB]	LAFmin [dB]	LAeq [dB] (1min)
1	11/09/2025 12:21:05	86.83	57.21	71.04
2	11/09/2025 12:22:05	84.65	57.36	70.30
3	11/09/2025 12:23:05	85.80	60.59	72.76
4	11/09/2025 12:24:05	82.70	59.73	71.57
5	11/09/2025 12:25:05	84.34	59.00	73.58
6	11/09/2025 12:26:05	80.19	58.68	69.64
7	11/09/2025 12:27:05	79.89	57.40	69.65
8	11/09/2025 12:28:05	80.83	58.19	69.70
9	11/09/2025 12:29:05	75.64	58.11	68.39
10	11/09/2025 12:30:05	86.36	59.97	71.83
11	11/09/2025 12:31:05	88.94	57.05	**75.31**
12	11/09/2025 12:32:05	75.50	55.86	66.00
13	11/09/2025 12:33:05	83.23	59.41	72.73
14	11/09/2025 12:34:05	88.83	58.03	74.40
15	11/09/2025 12:35:05	84.56	59.11	72.63

Table 4.1: Noise Measurement Results

5 Conclusions

5.1 Attended Noise Monitoring has been undertaken on 11th September 2025 at 6No. locations along the active construction boundaries of the development site.

5.2 The A-weighted $L_{Aeq,T}$, L_{Amax}, L_{Amin}, parameters were measured throughout the duration of each monitoring survey location and presented in **Section 4,** with the associated time History Graphs presented in **Appendix C.**

5.3 Six exceedances to the BS 5228 recommended noise limits for daytime working have been identified during the survey period at locations 4, 5 and 6 for the $L_{Aeq(1min)}$ averaging period.

5.4 Nonetheless, due to the intermittent nature of the activities, the $L_{Aeq(15min)}$ averaging period was not exceeded.

APPENDIX A: Illustrative Masterplan



Phase	No. of Units
Phase 1	194
Phase 2	246
Phase 3A	296
Phase 3B	122
Phase 4	48
Phase 5	356
Phase 6	169
Phase 7	20
Phase 8	171
Phase 9A & B	179
Phase 9C	102
Phase 10A	43
Phase 10B	151
Phase 11	232
Phase 12	74
Phase 13A	73
Phase 13B	70
PRS	104
Total	**2650**

N

0 m 10 m 20 m 30 m 40 m 50 m

Scale

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Investing in homes since 1912

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client
GRAINGER PLC

project
BEREWOOD, HAMPSHIRE

description
ILLUSTRATIVE MASPERPLAN

scale
NTS

date
MARCH 2018

status
PRELIMINARY

2677-C1-2001-SK1

APPENDIX B: Monitoring Locations (Imagery)

Location 1 – Newlands Avenue/Bailey Road





Location 2 – Newlands Avenue/Plant Farm Crescent





Location 3 – Kent Road





Location 4 - Marrelsmoor Road





Location 5 – Purkis Road





Location 6 – School Marrelsmoor Road

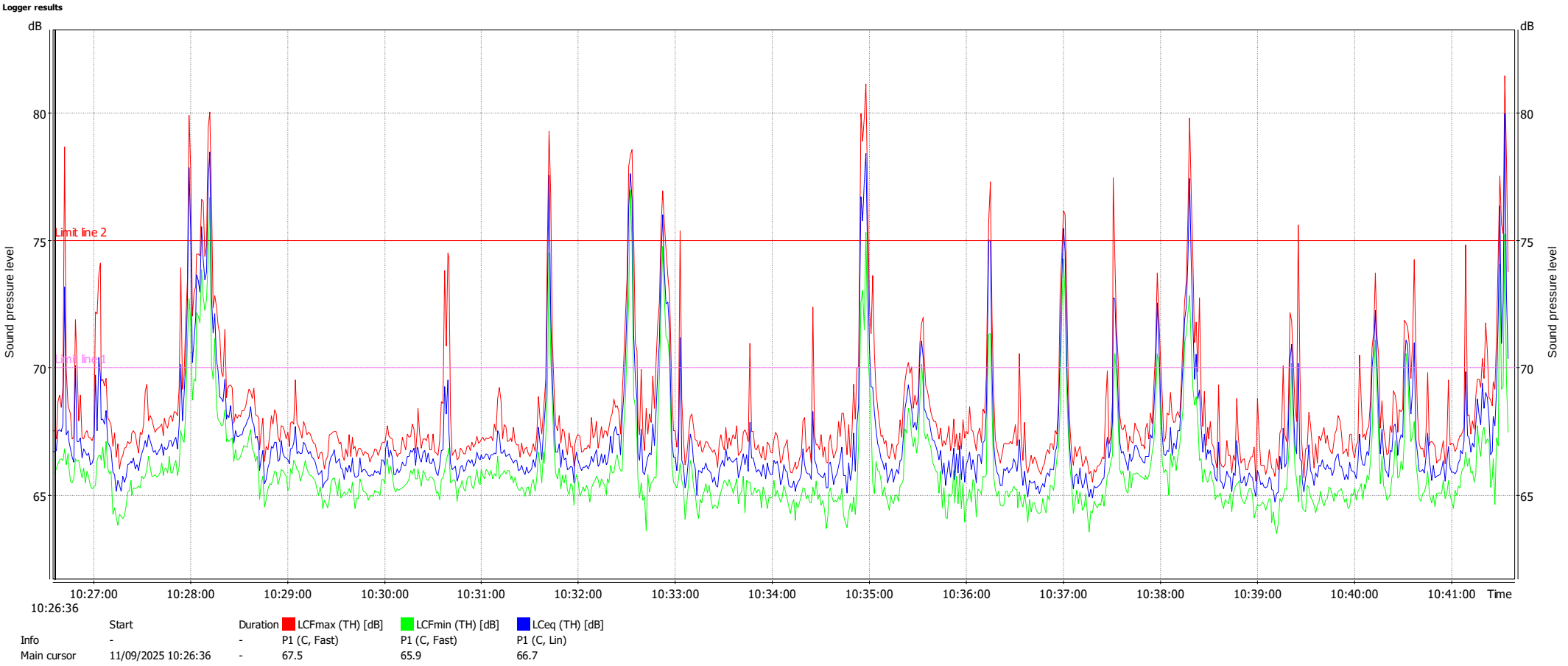




APPENDIX C: Time History Graphs

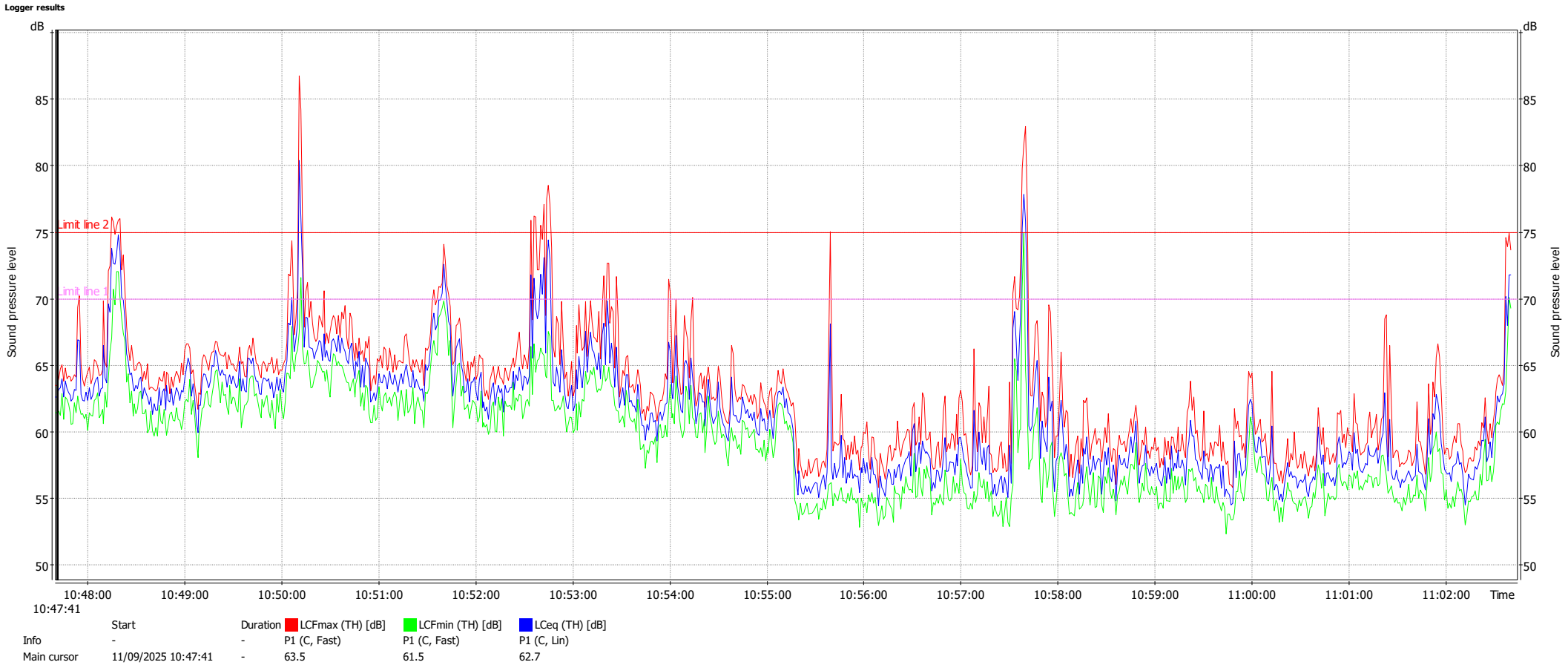
Location 1 – Newlands Avenue/Bailey Road

2025-09-11 10:26:36 (15min)



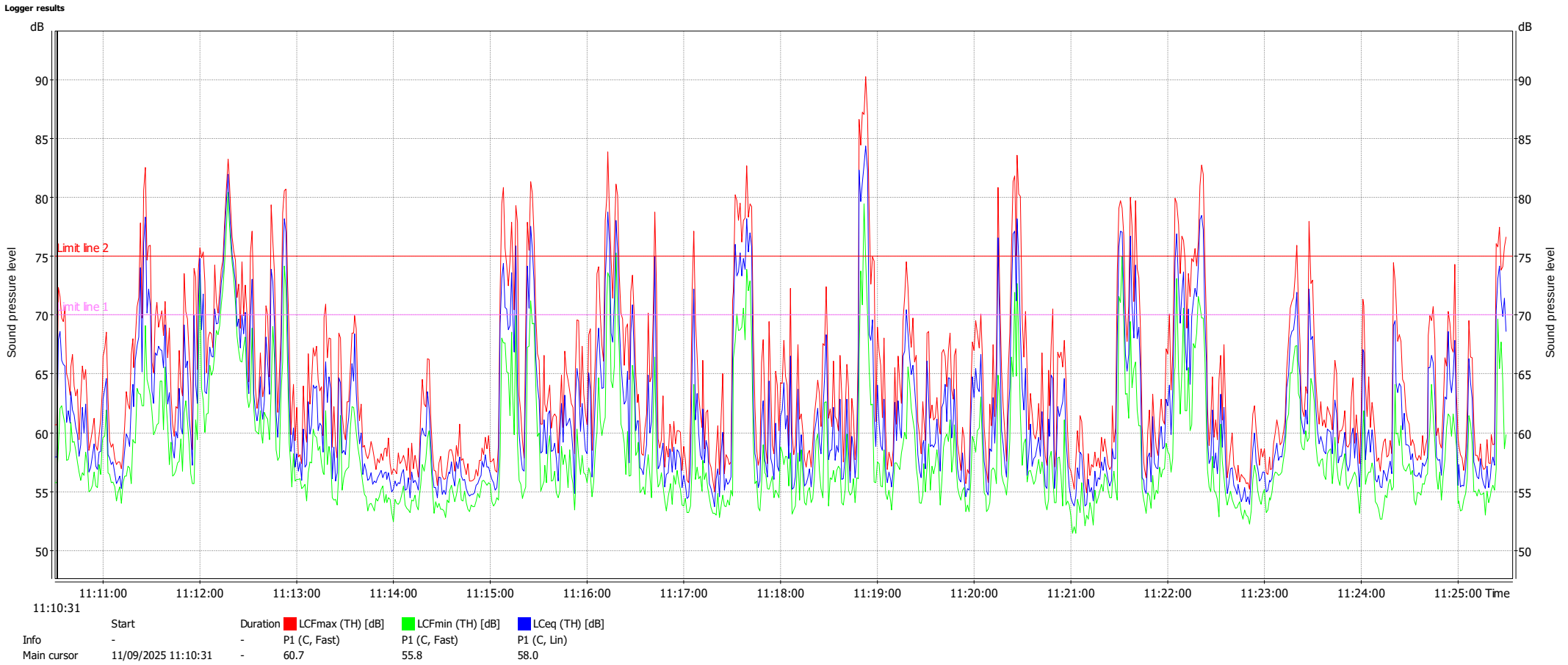
Location 2 – Newlands Avenue/Plant Farm Crescent

2025-09-11 10:47:41 (15 min)



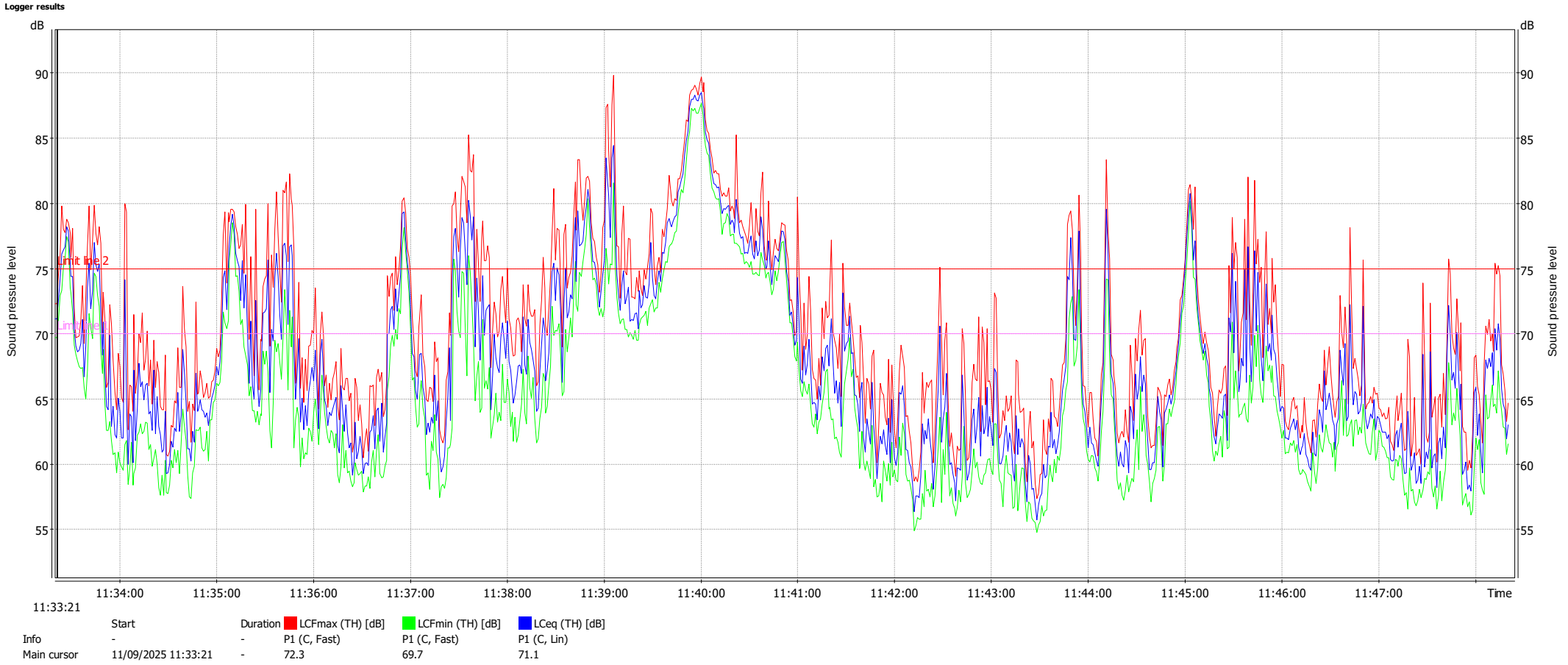
Location 3 – Kent Road

2025-09-11 11:10:31 (15 min)



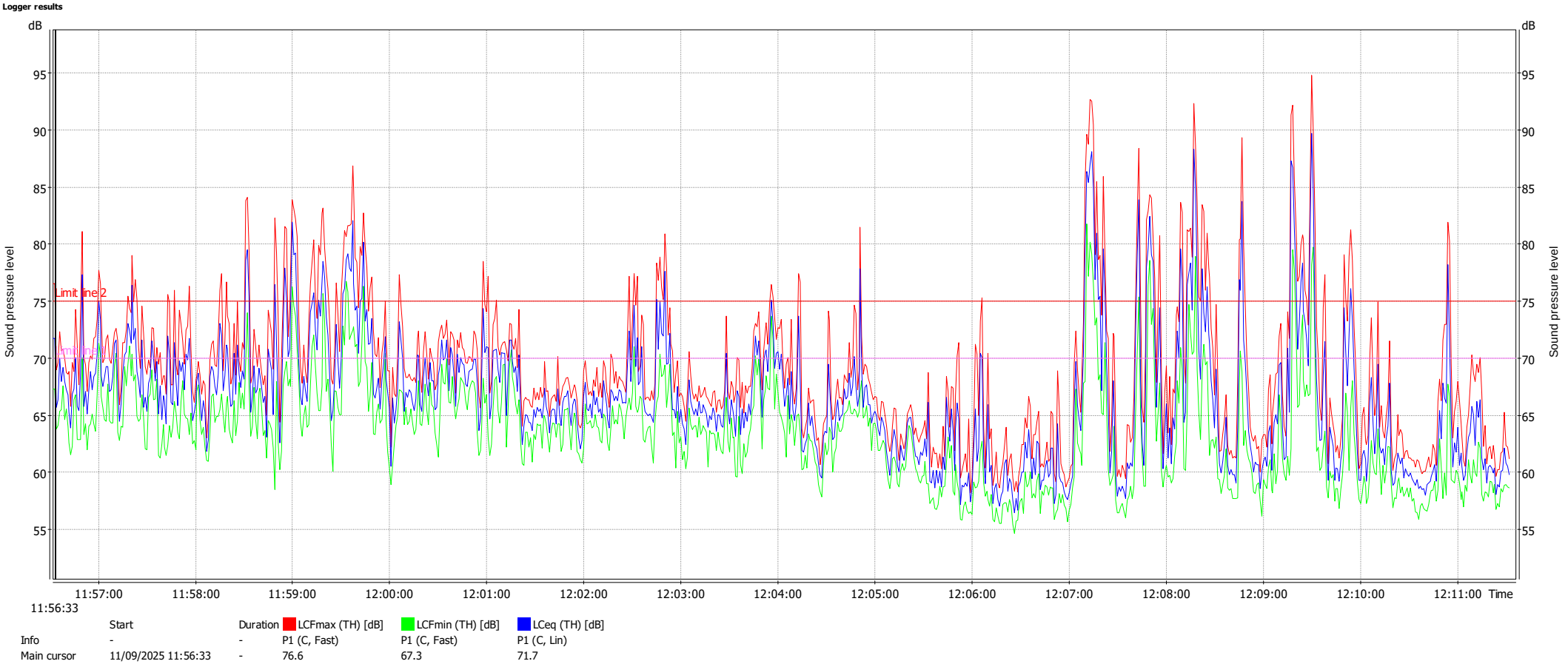
Location 4 – Marrelsmoor Road

2025-09-11 11:33:21 (15min)



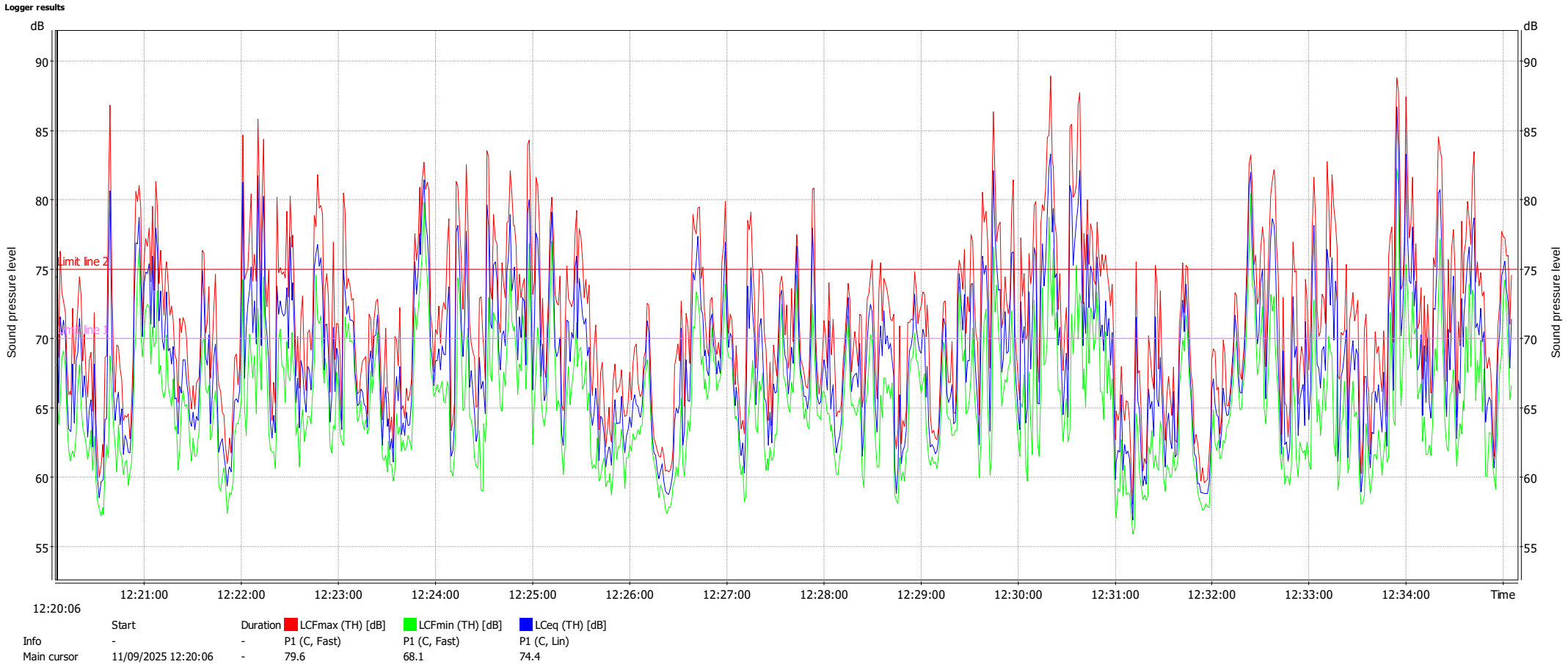
Location 5 – Purkis Road

2025-09-11 11:56:33 (15min)



Location 6 – School Marrelsmoor Road

2025-09-11 12:20:06 (15min)



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