



Notting Hill Home Ownership

CANNON FACTORY AND ASHLEY HOUSE, AND ASHLEY PARK

Construction Environment Management Plan
(CEMP)



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CONTENTS

1	BACKGROUND AND CONTEXT	1
1.1	INTRODUCTION	1
1.2	PURPOSE OF THE CEMP	2
1.3	LEGAL COMPLIANCE	2
1.4	STRUCTURE OF THE CEMP	5
2	SITE INFORMATION	6
2.1	SITE AND SURROUNDING AREA	6
2.2	PROPOSED DEVELOPMENT DESCRIPTION	7
3	GENERAL ENVIRONMENTAL REQUIREMENTS	9
3.1	REQUIREMENTS AND CONSENTS	9
3.2	OBJECTIVES AND TARGETS	9
3.3	ROLES AND RESPONSIBILITIES	9
3.4	COMPETENCE, TRAINING AND AWARENESS	11
3.5	INTERNAL COMMUNICATION	12
3.6	EXTERNAL COMMUNICATION	12
3.7	METHOD STATEMENTS	14
3.8	INCIDENT RESPONSE	15
4	GENERAL DEMOLITION AND CONSTRUCTION INFORMATION	17
4.1	WORKS PROGRAMME	17
4.2	DEMOLITION AND CONSTRUCTION EQUIPMENT	17
4.3	WORKING HOURS AND RESTRICTIONS	19
4.4	VEHICLE ACCESS, ROUTING AND TURNING	19
4.5	WASTE AND MATERIAL MANAGEMENT	20
4.6	TRAFFIC AND HIGHWAYS	22

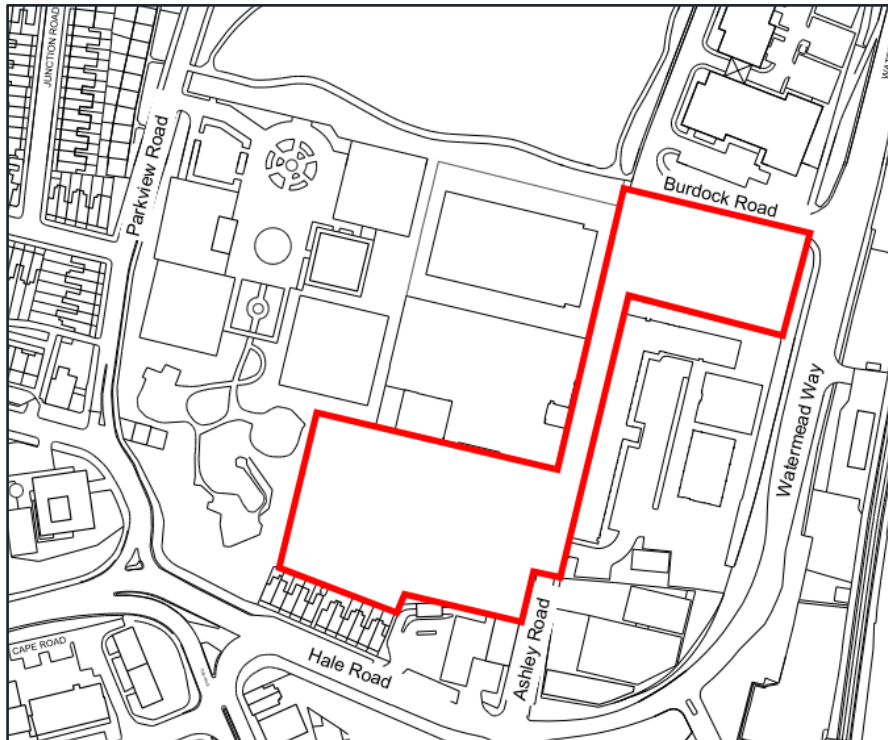
4.7	COMMUNICATIONS AND COMPLAINTS	22
4.8	ROAD AND FOOTPATH CLOSURE	22
4.9	SITE COMPOUND	22
4.10	SITE ACCOMODATION AND WELFARE FACILITIES	23
4.11	MATERIAL STORAGE AND HANDLING	23
4.12	LIGHTING	23
4.13	SECURITY AND HEALTH AND SAFETY ONSITE	24
4.14	EMERGENCY PROCEDURES	24
4.15	CONTRACTOR TRAINING	24
5	KEY ENVIRONMENTAL ISSUES	26
5.1	POTENTIAL SIGNIFICANT ENVIRONMENTAL EFFECTS	26
6	ENVIRONMENTAL CONTROL MEASURES	27
6.1	ENVIRONMENTAL PROCEDURES	27
6.2	ASBESTOS	27
6.3	ECOLOGY	28
6.4	GROUND CONTAMINATION AND WATER QUALITY	28
6.5	HAZARDOUS SUBSTANCES	30
6.6	HERITAGE AND ARCHEOLOGY	31
6.7	LANDSCAPE AND VISUAL	31
6.8	LOCAL AIR QUALITY	32
6.9	NOISE AND VIBRATION	33
6.10	UNEXPLODED ORDNANCE (UXO)	34
7	MONITORING	36
7.1	MONITORING, CONTINUAL IMPROVEMENT AND REVIEW	36
7.2	REPORTING	36
7.3	COMMUNICATION AND COMPLAINTS	36
8	SUMMARY	38

1 BACKGROUND AND CONTEXT

1.1 INTRODUCTION

- 1.1.1. WSP has been commissioned by Notting Hill Home Ownership (the ‘Client’) to prepare a detailed Construction Environmental Management Plan (CEMP) to support an application to discharge of Condition 24 and Condition 9 of the planning permission reference as HGY/2016/4165 and APP/Y5420/W/19/3232707 respectively, for the demolition and construction works at **Cannon Factory and Ashley House, and Park** (hereafter referred to as “the Proposed Development”).
- 1.1.2. The Proposed Development comprises of:
- Cannon Factory and Ashley House A Site (HGY/2016/4165) - Demolition of the existing buildings at Cannon Factory and Ashley House and erection of three buildings to provide 3,171sqm of commercial floorspace Gross External Area (GEA) (Class A1/A3/B1/D1), and 256 residential units (Class C3), new public realm, landscaped amenity space, car and cycle parking and all associated works; and
 - Ashley Park Site (APP/Y5420/W/19/3232707) - Demolition of existing buildings and erection of a part 6, part 8 storey building to provide 97 residential units (Class C3), 170sqm of commercial floorspace (GEA) (Class A1/A3/B1), new public realm, car and cycle parking and associated works.
- 1.1.3. The Proposed Development falls within the Ashley Road South Masterplan (ARSM) which encompasses over 2.67ha of land.
- 1.1.4. The Site boundaries are shown in **Figure 1-1** below.

Figure 1-1 - Proposed Site Boundary



- 1.1.5. This CEMP sets out the overarching principles for demolition and construction management of the Proposed Development pursuant to Conditions 24 and 9 of the planning permission reference as HGY/2016/4165 and APP/Y5420/W/19/323270 issued by the London Borough of Haringey (LBH).
- 1.1.6. For avoidance of doubt, this CEMP supports an application for the full discharge Conditions 24 and 9 of the planning permission referenced as HGY/2016/4165 and APP/Y5420/W/19/323270 only.

1.2 PURPOSE OF THE CEMP

- 1.2.1. This CEMP has been designed to discharge planning Conditions 24 and 9 for the Proposed Development. The CEMP is a live document and the responsibility for this document following planning will lie with the Principal Contractor/Demolition Contractor. It will be their responsibility to update and ensure it is reviewed and updated on a regular basis throughout the construction phase as new environmental construction measures are identified and implemented.
- 1.2.2. This CEMP sets out the overarching principles for demolition and construction management of the Proposed Development pursuant to Conditions 24 and 9 of the planning permission referenced as HGY/2016/4165, and APP/Y5420/W/19/323270 issued by the LBH.
- 1.2.3. Furthermore, this CEMP aims to:
- Provide an overview of the methodology to be adopted during demolition and construction of the Proposed Development;
 - Outline the environmental constraints on and around the Site and the potential impacts of these;
 - Ensure that mitigation measures set out in the environmental application reports submitted as part of the Outline Planning Application are implemented during demolition and construction;
 - Ensure that industry best practice standards are adopted throughout the construction of the Proposed Development; and
 - Be a point of reference for the project team, interested parties and site workers.

1.3 LEGAL COMPLIANCE

- 1.3.1. Considerable environmental legislation applies to the works to be undertaken. The expectation is that all relevant legislation, including requirements for licences, permits and / or consents shall be identified, and the appointed Principal Contractor and if applicable, separate Demolition Contractor, will be required to provide details of how compliance is to be achieved, as part of the demolition and construction process.
- 1.3.2. For each significant environmental aspect, the relevant applicable environmental legislation and regulations will be identified from, but not limited to the list provided in **Appendix C**. The list of relevant legislation and its applicability to the Site and the works will be reviewed and updated where necessary.
- 1.3.3. The production of a CEMP is a requirement of Conditions 24 and 9 of the aforementioned planning permissions. The Conditions sets out a number of elements that are required to be provided within, and alongside, this CEMP prior to the commencement of any demolition and construction work. The wording of Condition 24 and 9 and a description of where the relevant information can be found within this CEMP is provided in **Table 1-1a** and **Table 1-1b**.

Table 1-1a Planning condition under HGY/2016/4165

Condition 24			Presented in Report
PRE- COMMENCEMENT - CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN			
Prior to the commencement of development a CEMP for the relevant Phase shall be submitted to and approved in writing by the Local Planning Authority. The CEMP shall provide details of how demolition and construction works are to be undertaken and include:			-
a)	i)	The identification of stages of works;	S4.1 and Table 4-1
	ii)	Details of working hours, which unless otherwise agreed with the Local Planning Authority shall be limited to 08.00 to 18.00 Monday to Friday and 08.00 to 13.00 on Saturdays);	S4.3
	iii)	Details of all plant and machinery to be used during demolition and construction stage, including an inventory of all Non Road Non-road Mobile Machinery (NRMM);	S4.2 and Table 4-2
	iv)	Details of an Unexploded Ordnance Survey;	S6.10 and Appendix D
	v)	Details of community engagement arrangements;	S3.6
	vi)	Details of any acoustic hoarding;	S6.9
	vii)	A temporary drainage strategy and performance specification to control surface water runoff and Pollution Prevention Plan (in accordance with Environment Agency guidance); and	S3.8 and S4.14
	viii)	Details of external lighting.	S4.12
b)		The inventory of NRMM shall be kept onsite during the course of the demolitions, site preparation and construction phases. All machinery shall be regularly serviced and service logs kept onsite for inspection. Records shall be kept onsite which details proof of emission limits for all equipment. This documentation shall be made available to local authority officers as required until development completion. The works shall only be carried out in accordance with an approved CEMP.	S4.2.3
Reason: To safeguard residential amenity, protect areas of nature conservation interest and prevent adverse impact on air quality within an Air Quality Management Area (AQMA) as required by Policies 7.14, 7.18 and 7.19 of the London Plan (2016), Policy SP13 of the Haringey Local Plan (2013) and Saved Policy ENV7 of the Haringey Unitary Development Plan (2006). The Local Planning Authority is satisfied that the pre-commencement requirements of the condition are so fundamental to the development permitted that it would have been otherwise necessary to refuse the whole permission.			

Table 1-1b Planning condition under APP/Y5420/W/19/3232707

Condition 9			Presented in Report
Prior to the commencement of development a CEMP for the relevant Phase shall be submitted to and approved in writing by the Local Planning Authority. The CEMP shall provide details of how demolition and construction works are to be undertaken and include			-
a)	i)	The identification of stages of works;	S4.1 and Table 4-1
	ii)	Details of working hours, which unless otherwise agreed with the Local Planning Authority shall be limited to 08.00 to 18.00 Monday to Friday and 08.00 to 13.00 on Saturdays;	S4.3
	iii)	Details of all plant and machinery to be used during demolition and construction stage, including an inventory of all Non Road Non-road Mobile Machinery (NRMM);	S4.2 and Table 4-2
	iv)	Details of an Unexploded Ordnance Survey;	S6.10 and Appendix D
	v)	Details of community engagement arrangements;	S3.6
	vi)	Details of any acoustic hoarding;	S6.2
	vii)	A temporary drainage strategy and performance specification to control surface water runoff and Pollution Prevention Plan (in accordance with Environment Agency guidance);	S3.8 and S4.14
	viii)	Details of external lighting	S4.12
b)		Prior to the commencement of the development, evidence of site registration at <i>nrmmlondon</i> to allow continuing details of Non-Road Mobile Machinery (NRMM) and plant of net power between 37kW and 560 kW to be uploaded during the construction phase of the development shall be submitted to and approved by the Local Planning Authority. All plant and machinery to be used during the demolition and construction phases of the development shall meet Stage IIIA of EU Directive 97/68/ EC (or equivalent) for both NOx and PM emissions and be uploaded to <i>nrmmlondon</i> prior to use onsite.	S4.2.4
c)		An inventory of all NRMM shall be kept onsite during the course of the demolitions, site preparation and construction phases of the development hereby approved. All machinery should be regularly serviced and service logs kept onsite for inspection. Records should be kept onsite which details proof of emission limits for all equipment. This documentation shall be made available to Local Authority officers as required until development completion.	S4.2.3
		The works shall only be carried out in accordance with an approved CEMP.	-

1.4 STRUCTURE OF THE CEMP

1.4.1. This CEMP is based on established good management practice through British Standards and Construction Industry Research and Information Association (CIRIA) guidance, and includes the following information:

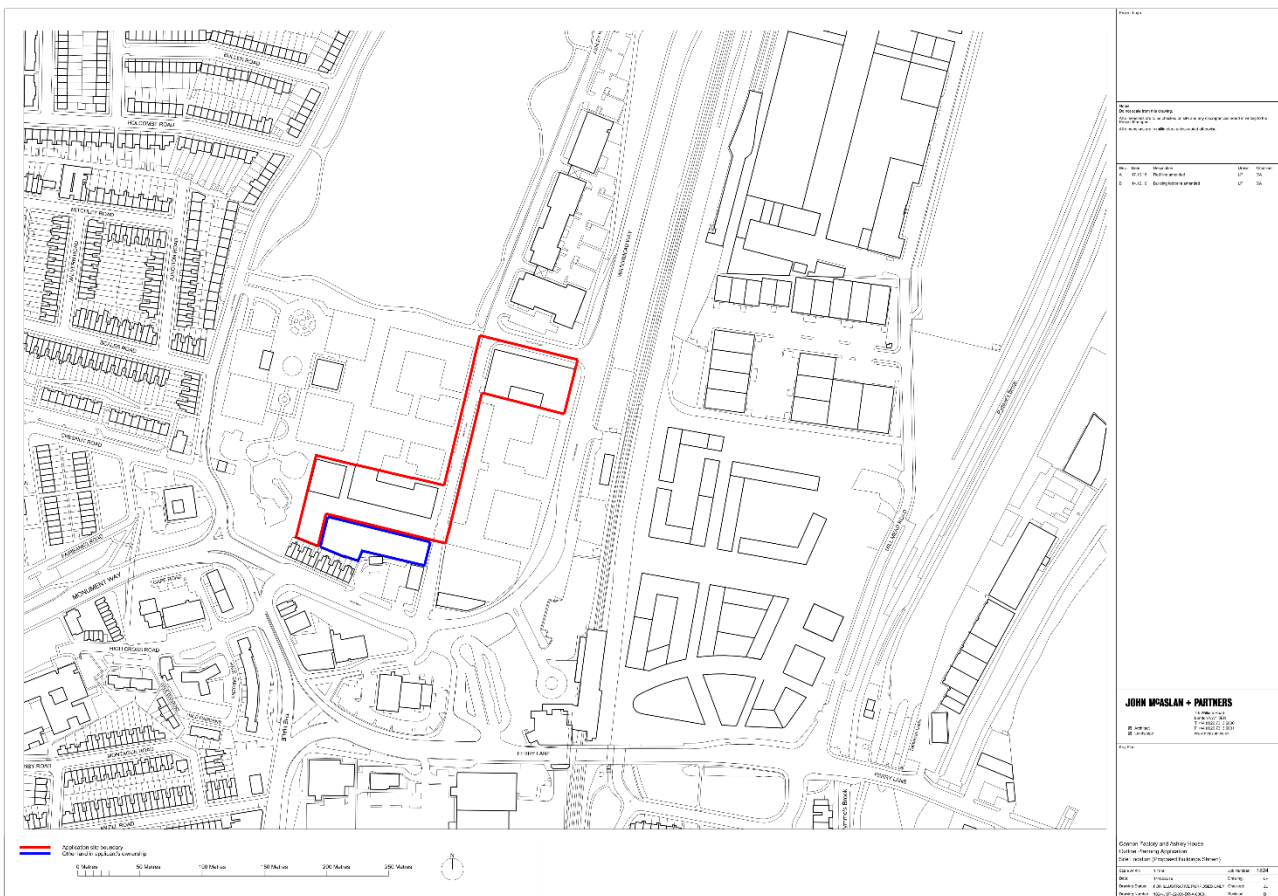
- **Site information:** including a description of the Site and surrounding area, the Proposed Development and details of community engagement arrangements as required by Conditions 24a(v) and 9a(v);
- **General Environmental Requirements:** including an overview of general requirements and consents, roles and responsibilities, competence and training requirements, communication protocols, method statement requirements and incident response protocol;
- **General Demolition and Construction Information:** including the works programme as required by Conditions 24a(i) and 9a(i), working hours and restrictions as required by Conditions 24a(ii) and 9a(ii), an overview of plant requirements as required by Conditions 24a(iii) and 9a(iiii), indicative vehicle access and routing plans, waste and materials management measures, measures to mitigate and manage potential traffic and transport impacts, complaints procedure, plans for road/footpath closures, site compound arrangement, site accommodation and welfare facilities, requirements relating to material storage and handling, external lighting as required by Conditions 24a(viii) and 9a(viii), proposals to ensure the security of the Site, emergency procedures and contractor training requirements;
- **Key Environmental Issues:** summary of the potential significant environmental effects that require controlling, mitigation and managing;
- **Environmental Control Measures:** methods for managing environmental risks including from land and groundwater contamination, asbestos, Unexploded Ordnance Survey (as required by Conditions 24a(iv) and 9a(iv)) and hazardous substances, and specific management plans relating to dust, ecology, noise and vibration and landscape and visual effects.
- **Monitoring:** procedures for recording and reporting monitoring results and taking remedial action in the event of any non-compliance, details of receptors, threshold values and analysis and reporting methods; and
- **Summary:** a summary of the purpose of the CEMP and key environmental considerations that will need to be taken into account during demolition and construction.

2 SITE INFORMATION

2.1 SITE AND SURROUNDING AREA

- 2.1.1. The Site consists of two existing buildings which are two storeys, and occupy the majority of the footprint of the Site. The Site is accessed from Ashley Road via Burdock Road and Watermead Way (A1055).
- 2.1.2. The Site within which the Proposed Development will be undertaken is illustrated in red in **Figure 2-1** below.

Figure 2-1 The Site



- 2.1.3. Within the Site there are no listed buildings, and the Site is not located within a Conservation Area.
- 2.1.4. Berol House, which is located within the centre of the wider ARSM area on Ashley Road, is a locally listed building of merit and will be retained. This is located outside of the Site boundary to the east.
- 2.1.5. **Table 2-1** below identifies the potential receptors that have been recognised as being potentially sensitive to the works during construction, due to their location in proximity to the Site.

Table 2-1 - Potential Sensitive Receptors within the vicinity of the Site

Receptor	Location
Archaeological Remains	- The Site does not contain any listed buildings or Scheduled Ancient Monuments. - The Site lies adjacent to two Areas of Archaeological Importance (AAI), Broad Lane and The Hale directly to the south-west, and the Lee Valley to the east. - Given the historic heavy development of the Site the potential for archaeological remains is limited.
Habitats	- The Site is considered unlikely to support any rare or protected species due to lack of suitable habitats and relative isolation of the Site from areas of known value of nature conservation; - The Site is considered unsuitable for amphibians and reptiles; and - A low range of common and widespread bird species are likely to breed in the limited shrubs and trees within the Site.
Trees	There is no open space within the Site and only a few trees, which are located along the eastern boundary with Watermead Way (A1055).
Existing Receptors	The Site is bounded: - To the north by Down Lane Park and adjacent is the Harris Academy Tottenham (primary and secondary education); - To the south by the BP petrol garage and a single row of terrace houses. The Stratford College London is collected with Sentinel House; - To the east by Watermead Way (A1055) and beyond this a number of Unite Student accommodation buildings (up to 10 storeys); and - To the west by Down Lane Park which contains the Pavilion Pre-school. Beyond this lies the residential area of Bruce Grove. This residential area falls within the Bruce Grove Conservation Area.
Existing Road Network	Watermead Way (A1550) is to the east of the Site, which connects the Site to the M25 to the north. The A10 is to the west of the Site.

2.2 PROPOSED DEVELOPMENT DESCRIPTION

- 2.2.1. The Cannon Factory and Ashley House sites are located on Ashley Road, Tottenham Hale in the LBH. They are currently occupied by Cannon Factory (1,748 sqm GIA) and Ashley House (1,486 sqm GIA) which constitute low grade, inefficient and unattractive uses of this prominent, accessible and important site within Tottenham Hale.
- 2.2.2. Within the site comprises existing buildings known as the Cannon Avent Former Futon Factory and Ashley House. The Proposed Development includes the demolition of these buildings and will include the following:

- Erection of three buildings to provide 3,171 sqm of commercial floorspace (GEA) (Class A1/A3/B1/D1), and 256 residential units (Class C3), new public realm, landscaped amenity space, car and cycle parking and all associated works; and
- Erection of a part 6, part 8 storey building to provide 97 residential units (Class C3), 170 sqm of commercial floorspace (Class A1/A3/B1), new public realm, car and cycle parking and all associated works.

2.2.3. The sites fall within the wider Ashley Road South Masterplan (ARSM) which encompasses over 2.67ha of land controlled by developers Notting Hill Housing and Berkeley Square Developments who are collaborating to bring forward the redevelopment of the sites providing a unique opportunity for comprehensive regeneration. A plan of the Proposed Development can be found in **Appendix A**.

3 GENERAL ENVIRONMENTAL REQUIREMENTS

3.1 REQUIREMENTS AND CONSENTS

- 3.1.1. The Proposed Development shall be carried out within the requirements of (but not limited to) relevant legislation shown in **Appendix C**.

AUDITS AND INSPECTIONS

- 3.1.2. Once work commences, internal environmental inspections and audits on the Proposed Development will be conducted on a regular basis. Audits will be carried out in accordance with the Environmental Management System (EMS) to assess the environmental performance of the Proposed Development and to check compliance with the legal and contractual requirements.
- 3.1.3. Environmental inspections will take place in accordance with the EMS to ensure the Site is assessed and requirements set out within this CEMP are adhered to whilst demolition and construction activities are taking place.

CONSENTS

- 3.1.4. A register of consents covering planning, highways and environment will be prepared and maintained by the Principal Contractor (and Demolition Contractor if relevant) to keep track of any progress. This will enable the project team to plan for consents to be applied for and obtained prior to the relevant works activity commencing.
- 3.1.5. The progress of the preparation, submission and internal approval of the consents identified as being required will be tracked using the consents register.
- 3.1.6. This CEMP will be the overarching document outlining and tracking the delivery and achievement of legal compliance.

HEALTH AND SAFETY

- 3.1.7. This document provides an overview of the health and safety measures and processes that are likely to be adopted during the demolition and construction phases of the Proposed Development. However, is not intended to fulfil any legislative obligations of the Principal Contractor with regard to occupational health and safety.

3.2 OBJECTIVES AND TARGETS

- 3.2.1. The objective of this CEMP is to ensure all those involved in the demolition and construction phases of the Proposed Development follow a project specific framework which outlines all environmental impacts associated with implementation of the Proposed Development activities. It ensures the environmental risks are properly identified and outlines the mitigation to be employed throughout both the demolition and construction phases of the Proposed Development.

3.3 ROLES AND RESPONSIBILITIES

- 3.3.1. Personnel with defined environmental responsibilities are detailed in **Table 3-1** below. Each individual will sign to confirm that they understand and accept their designated duties and responsibilities (signed copy available on request). Where there is more than one individual with responsibilities, these personnel will sign a project induction which will confirm the acceptance of their environmental/sustainability responsibilities.

Table 3-1 – Personnel with defined environmental responsibilities

Key Personnel	Role
Project Manager/Director	Overall environmental management of the Proposed Development, ensuring that all works are carried out in accordance with the CEMP.
Environmental Advisor/Manager	- Work with project managers to ensure consents are embedded within the programme; - Monitor submission of consent applications and ensure their timely delivery; - Provide input to consultation with consent granting bodies, commitment holders and other third parties; - Co-ordinate and manage all required scheduled consents and property notifications; - Ensure environmental consents are obtained in line with the programme; - Maintain and update the consents register in line with requirements and ensure review of individual deliverables by project specialists; - Monitor and report progress on consents and commitments; - Monitoring construction works including the sub-contractors for compliance against Environmental Risk Assessment and method statement control measures; - Co-ordination of all environmental documentation; - Monitoring environmental training, consultation and implementation of sub-contractor procedures; - Attending Site Health and Safety Executive (HSE) committee meetings; - Monitoring of all site environmental incidents and ensuring they are reported and investigated; - Undertaking site inspections; - Accompanying HSE Managers and Environment Agency (EA) inspections; - Advising the Project Manager on the implementation of the EMS; - Compliance with duty of care, the Site Waste Management Plan (SWMP) or any permits and/or exemptions; - Monitoring and measurement of waste; - Communicate sustainability good practice, innovation and targets to the project team and supply chain; - Keep a record of Key Performance Indicators (KPIs); and - Act as the main point of contact on environmental matters relating to the Proposed Development.
Technical Manager	- Raise innovation at team meetings; - Capture good ideas/innovations/lessons learnt; - Track progress of improvements and support if needed; - Grow the culture of innovation by effective means of communication e.g. presentations, site visits, engagement with our supply chain; and - Ensure environmental issues and constraints are included in individual designs, in accordance with environmental design procedures.
Planning Manager	- Plan works to avoid sensitive times of year; - Plan works to avoid working unsociable hours; and

Key Personnel	Role
	Plan into the Proposed Development consents/surveys required and the time scales in which they take to obtain.
Construction Manager	- Advising Principal Contractor / Demolition Contractor representative if applicable on the implementation of the EMS; - Monitoring construction works including the sub-contractors for compliance against Environmental Risk Assessment and any method statement control measures; - Monitoring environmental training, consultation and implementation of sub-contractor procedures; - Accompanying site safety, health and environment (SHE) Inspections and any environmental authority inspections; and - Attending SHE co-ordination meetings.
Works Supervisors/Site Manager	- Ensuring that all site work is carried out in accordance with method statements, task briefings and activity briefings; - Ensure that staff under their supervision is aware of their environmental responsibilities; - Ensure key risks are identified and brief operatives on environmental topics; and - Carry out site inspections to identify any environmental issues.
Safety, Health and Environment Advisor/Manager	- Accompanying SHE Inspections and any environmental authority inspections; - Leading SHE co-ordination meetings; - Ensure compliance with environmental policies, standards and procedures; and - Ensure compliance with environmental legislation.
General Operatives	- Ensuring environmental mitigation measures are carried out during the course of their duties, in line with work package plans, task briefings and activity briefings; - Working considerably with a good working ethic in order to minimise adverse environmental impacts and follow all site rules communicated during briefings and project training sessions; - Informing their line management of any environmental issues they have onsite, so that these can be communicated to the project management team for further investigation; and - Attending the project induction prior to commencing work where details of the Site environmental rules will be provided.

- 3.3.2. A contact number that the public can use, normally the Project Manager, should be displayed prominently on the Site board and provided at entrances, on perimeter hoardings and where possible and appropriate at community locations.

3.4 COMPETENCE, TRAINING AND AWARENESS

- 3.4.1. The Principal Contractor/Demolition Contractor shall identify the training needs of their employees and subcontractors so that they can implement the requirements of this CEMP into briefings and construction method statements.

- 3.4.2. Specific training needs will be developed for individuals to reflect the work to be carried out on the Proposed Development and the significant risks and opportunities identified.
- 3.4.3. The requirement is for all personnel to be aware of their general environmental management responsibilities, and for those whose work may cause, or have the potential to cause, a significant impact on the environment, to receive specific environmental awareness briefings. Environmental awareness will be reinforced through information, such as poster campaigns, environmental/sustainability performance indicator reports and environmental alerts available on-site notice boards.
- 3.4.4. All contractors are responsible for ensuring the competency of their environmental staff. In the event that environmental training is needed for staff, a contractor is responsible for ensuring this requirement is fulfilled. Any training provided to members of the project team will be logged and any certification documents will be produced by the relevant members of staff as evidence that they hold the required competencies.
- 3.4.5. The Principal Contractor will be required to meet Client expectations and identify opportunities for improvement and implement any necessary actions to improve the services provided.

3.5 INTERNAL COMMUNICATION

- 3.5.1. Arrangements for co-operation and co-ordination between all parties involved in the Proposed Development (including Client, Principal Designer, etc.) and engagement of the workforce is undertaken through regular meetings and the forums.
- 3.5.2. Communication on environmental issues within the project team will take place through face-to-face conversation, e-mail and telephone. The project management team will be made aware of all environmental issues at the earliest possible opportunity. Communication on environmental matters will be maintained through construction meetings chaired by a member of the SHE project team or a senior manager.
- 3.5.3. Environmental issues identified by any member of the project team will be communicated to the relevant personnel to ensure any required actions are carried out. Dissemination of information will take place in several forms, as appropriate, including meetings to discuss particular project issues, method statements, task/activity briefings, toolbox talks, inductions, environmental notices and environmental alerts. Records that these have been carried out and who received them will be recorded on briefing registers and collated by the project administrator. The Environment Manager will provide updates to the supervisors at each site to ensure policies and procedures on display are up to date. Supervisors will also be notified of any legislation changes which may affect working practices onsite.
- 3.5.4. Any unexpected finds/occurrences by site staff can be reported to their supervisors, which will then give notification to a member of the SHE project team. A SHE representative will advise on the course of action to be taken.

3.6 EXTERNAL COMMUNICATION

COMMUNICATION WITH THE CLIENT

- 3.6.1. The Principal Contractor/Demolition Contractor will liaise regularly with the Client and their representatives regarding the programme of works, nature of the operations and the methods to be employed to minimise adverse environmental impacts. This will include progress meetings as well as

the production and submission of progress reports which will cover environmental/sustainability issues. The Principal Contractor/Demolition Contractor will also supply all relevant supporting information and documentation to the Client for matters concerning consents and the environment in accordance with the appropriate timescales.

STATUTORY AUTHORITIES AND NON-GOVERNMENTAL ORGANISATIONS

- 3.6.2. In the event of stakeholder liaison being required with local authorities or Non-Governmental Organisations (NGOs), the Principal Contractor/Demolition Contractor will identify the requirement and seek authorisation from the client to undertake the task. Where consultation is required, a representative from the client will be invited to attend alongside the relevant Principal Contractor/Demolition Contractor personnel.
- 3.6.3. Project staff will keep an archive of any e-mail correspondence between themselves and statutory authorities and NGOs concerning the activities taking place. In the event that any complaints are received via statutory authorities or NGOs a log of correspondence and complaints will be kept up to date by the Principal Contractor/Demolition Contractor.

PUBLIC RELATIONS

- 3.6.4. The Principal Contractor/Demolition Contractor will not communicate with residents unless approval has been granted by the client.
- 3.6.5. A minimum of 14 days prior notification by letter drop to those properties likely to be directly impacted before works are due to commence will be adhered to. The letter will outline where exactly the works are taking place, what activities are involved, timescales for the work and potential impacts. The process for distributing letters to the public is as follows:
- Draft letter written by Principal Contractor/Demolition Contractor;
 - Draft letter submitted to the Client for approval;
 - Final letter returned to the Principal Contractor/Demolition Contractor with appropriate distribution list; and
 - Letter delivered to residents a minimum of 14 days prior to works commencing.

PUBLIC ENGAGEMENT

- 3.6.6. During demolition and construction, the general public within the vicinity of the works will be consulted in a timely manner, on noisy works and any road closures.
- 3.6.7. The Principal Contractor will be expected to make arrangements for liaison with the local community and these will be set out in the Community Engagement Plan.
- 3.6.8. During the works, communication with neighbours will be maintained as a minimum via notice boards (displaying contact details for key personnel) and newsletters updating progress and key upcoming activities.
- 3.6.9. All licenses issued shall be displayed prominently on hoardings, scaffolds, gantries or fences.

COMPLAINTS PROCEDURES

- 3.6.10. As part of the Site set-up process, site notice boards will be erected, maintained and clearly visible to third parties. A telephone number for environmental complaints will be published local to the Site. The SHE officer will be responsible for dealing with any complaints and will have the appropriate authority

to resolve any issues that may occur. Should they be required, both the SHE officer and the Site managers 'out of hours' telephone numbers will be available.

- 3.6.11. The SHE officer will maintain a close liaison with the LBH's Environmental Health Officer (EHO) at all times and should any complaints regarding environmental nuisance (e.g. dust or noise) be received by the SHE officer, the details will be passed to the EHO for verification purposes.
- 3.6.12. Should any unforeseen event occur within the construction site that has the potential to cause off-site pollution then the SHE officer will immediately notify the EHO by phone and e-mail. As far as possible, notice will be issued to the EHO for dealing with an unforeseen activity which may give rise to a particular environmental problem.
- 3.6.13. During any site work, if any complaints are received directly by the Principal Contractor/Demolition Contractor or its subcontractors, the client will be notified as soon as is practicable but within twelve hours of the complaint being received. It will be the responsibility of the Principal Contractor/Demolition Contractor's Site Manager to brief any staff responsible for unacceptable working conduct in relation to worksite neighbours whilst working on the Proposed Development.
- 3.6.14. In the event of a complaint from a neighbour, member of the public, Local Authority or any other stakeholder, whether given verbally, the Principal Contractor will record this in a designated logbook. The complaint will be managed in accordance with the Principal Contractor's Complaint process.

WORKSITE SECURITY

- 3.6.15. The Principal Contractor/Demolition Contractor will maintain a 24-hour helpline during works. Signage will be provided onsite hoardings to inform the public of the helpline number for reporting security incidents or concerns. The Principal Contractor/Demolition Contractor will follow up security incidents and concerns reported and will arrange implementation of further measures required.
- 3.6.16. The Site will be sufficiently secured to deter and prevent entrance to the Site by unauthorised persons and to prevent removal of materials or goods from the Site. Early acoustic fencing will be installed and hoarding to the Site entrance in Ashley Road. After this, heras fencing will be installed as necessary and permanent fence line will be installed as the development progresses.
- 3.6.17. The use of physical security patrols and CCTV cameras will be considered and monitored for on-going review

3.7 METHOD STATEMENTS

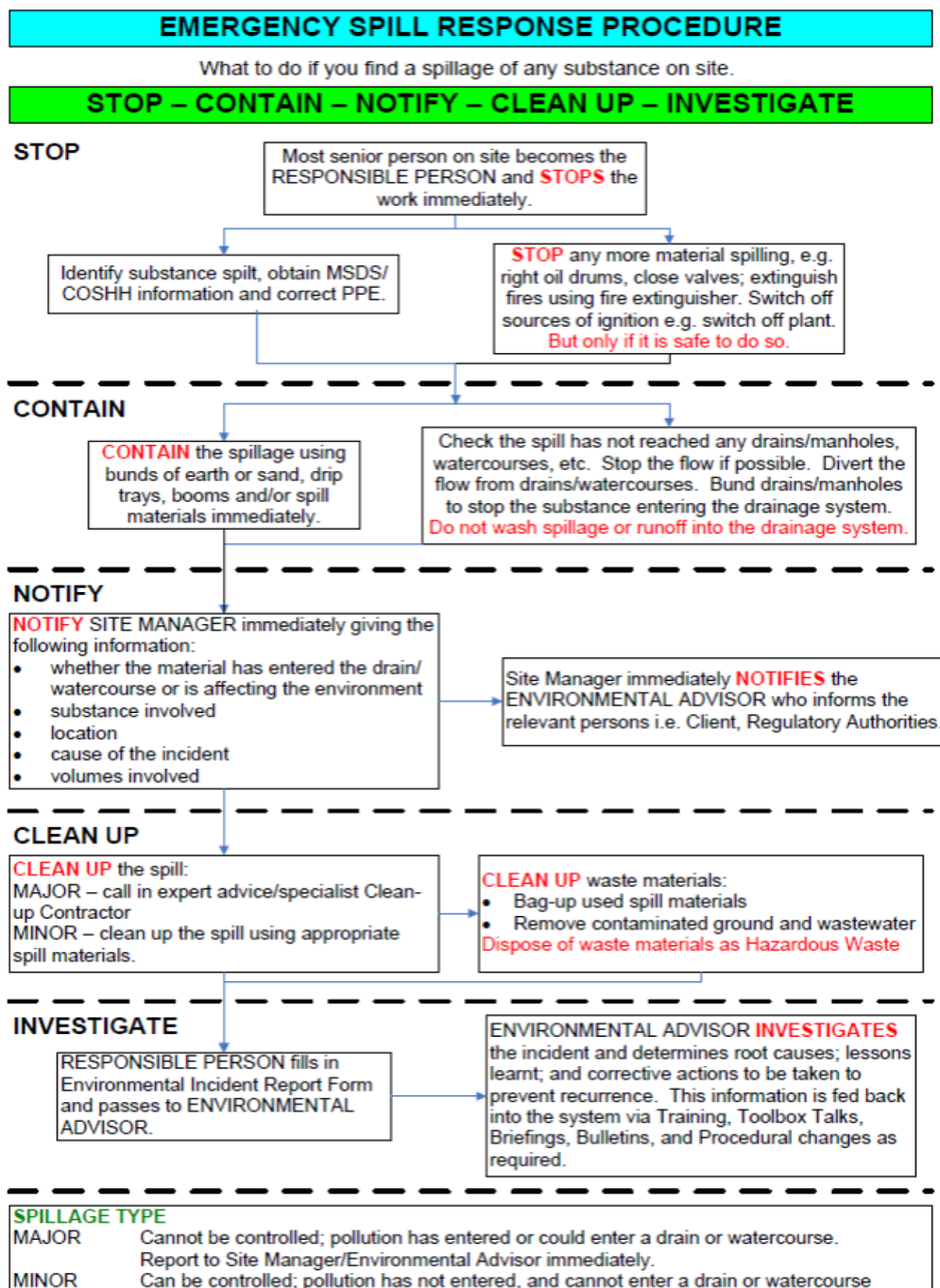
- 3.7.1. Method statements will be completed by the Principal Contractor/Demolition Contractor or subcontractor by trained engineers or other appropriately experienced personnel, in consultation with on-site staff and, where necessary, environmental specialists. Their production will include a review of the environmental risks and commitments, so that appropriate control measures are developed and included within the construction/demolition process.
- 3.7.2. Method statements will be reviewed by the Principal Contractor/Demolition Contractor or subcontractor's appointed environmental manager and, where necessary, by an appropriate environmental specialist (e.g. ecologist). Where required, method statements will also be submitted to the enforcement agencies for information (Environmental Agency, LBH etc.). As a minimum, method statements will contain the following:
 - Location of the activity and access/egress arrangements;
 - Work to be undertaken and methods of construction;

- Plant and materials to be used;
- Labour and supervision requirements;
- Health, safety and environmental considerations; and
- Any permit or consent requirements beyond those already obtained.

3.8 INCIDENT RESPONSE

- 3.8.1. An Incident Response Plan will be developed to highlight the potential pollution receptors specific to each works area and the activities taking place there. Each document will be in place within the first month of construction activities commencing and will be available for viewing and be briefed to the workforce onsite.
- 3.8.2. They will be reviewed and if necessary, updated, at least every six months. The key components of each Incident Response Plan be:
- A brief scope of works taking place onsite;
 - Types of environmental incident that have the potential to occur (however low the risk);
 - Types of hazardous material likely to be present onsite;
 - A list of pollution receptors and maps showing their location relation to the Site;
 - The procedure for responding to environmental incidents, reporting them and investigation (including spill or leak events);
 - Key contact numbers for reporting of environmental incidents; and
 - Recommendations to help reduce the likelihood of environmental incidents.
- 3.8.3. In the event of a spill or leak, the following process shown in **Figure 3-1** will be followed. This will be included in each Incident Response Plan, and this will be briefed to the workforce and displayed onsite notice boards.

Figure 3-1 Spill Response Procedure



4 GENERAL DEMOLITION AND CONSTRUCTION INFORMATION

4.1 WORKS PROGRAMME

DEMOLITION

- 4.1.1. It is estimated that the demolition period will be 10 weeks. This will be confirmed by the Principal Contractor following appointment.

CONSTRUCTION

- 4.1.2. Works will commence with demolition of the existing buildings in Q2 2023 and construction will be completed in Q4 2025. Pursuant to Conditions 24(i) and 9(i), **Table 4-1** below sets out the works programme.

Table 4-1 – Works programme

Building	Number of residential unit	Storeys	Construction Commencement date	Construction Completion date	Estimated construction period
2	15	4	Apr 2023	Sept 2024	72 weeks
2A	79	7	Jun 2023	Jun 2025	122 weeks
2B	97	8	May 2023	Apr 2025	106 weeks
3	162	17	Apr 2023	Nov 2025	136 weeks

4.2 DEMOLITION AND CONSTRUCTION EQUIPMENT

- 4.2.1. The type of plant expected to be needed for each type of demolition and construction activity is listed in **Table 4-2** below.

Table 4-2 Likely Plant required for Demolition and Construction Activities

Plant	Demolition	Substructure	Superstructure	Fit-Out
Tracked Wheel 360 Degree Excavators	✓	✓		
Skid Steer Loader	✓			
Breakers	✓			
Hand Held Breaker	✓			
Dumper	✓	✓		
Scabbler	✓			
Mobile Craneage / Tower Cranes	✓	✓	✓	

Plant	Demolition	Substructure	Superstructure	Fit-Out
Muck Away Trucks	✓			
Concrete Wagons		✓	✓	
Wire Cutters	✓	✓	✓	
Burning / Cutting Equipment	✓			
Wheel Cleaning / Washing	✓	✓	✓	
Road Sweeper	✓	✓		
Air Compressors	✓	✓	✓	
Concrete Pump		✓	✓	
Vibrating Poker		✓	✓	
Diamond Cutting Tools / Saws	✓	✓	✓	✓
Power Tools	✓	✓	✓	✓
Piling Rigs	✓	✓		
Scaffold		✓	✓	
Mobile Access Platforms	✓	✓	✓	✓
Delivery Trucks	✓	✓	✓	✓
Skips and Skip Truck	✓	✓	✓	✓
Forklift Trucks	✓	✓	✓	✓

The Greater London Authority (GLA) Supplementary Planning Guidance (SPG) on the control of dust and emissions during demolition and construction sets requirements for NRMM emissions. These are summarised in **Table 4-3**, with those applicable to the Site bolded.

Table 4-3 NRMM Engine Emission Stage Requirements (of net power between 37kW and 560kW)

Area	London SPG Stage Requirements	
	From 2015	From 2020
Central Activity Zone	IIIB	IV
Rest of Greater London	IIIA	IIIB
Rest of Country	N/A	N/A

- 4.2.2. Where feasible, the Principal Contractor/Demolition Contractor will procure NRMM in line with the engine emission requirement above. In accordance with Conditions 24 and 9, the Principal Contractor/Demolition Contractor will produce an inventory tracker for all plant and machinery used during site set up, demolition and construction, including NRMM. As a minimum the tracker will include the following NRMM data:
- Deployment start date;
 - Deployment end date;
 - Deployment duration;
 - Machinery type;
 - Machinery manufacturer;
 - Engine manufacture year;
 - Engine power;
 - Plant ID;
 - Engine EU Type Approval Number; and
 - EU Engine Emission stage.
- 4.2.3. For all sites (Ashley House A, Ashley Park, and Cannon Factory), pursuant of Condition 24b and 9c, The inventory of NRMM will be kept onsite during the course of the demolitions, site preparation and construction phases. All machinery will be regularly serviced and service logs kept onsite for inspection. Records will be kept onsite which details proof of emission limits for all equipment. This documentation will be made available to the LBH as required until development completion.
- 4.2.4. For Park Site, pursuant of Condition 9b, evidence of site registration at *nrmm.london* to allow continuing details of NRMM and plant of net power between 37kW and 560 kW to be uploaded during the construction phase of the development will be submitted to and approved by the Local Planning Authority. All plant and machinery to be used during the demolition and construction phases of the development will meet Stage IIIA of EU Directive 97/68/ EC (or equivalent) for both NOx and PM emissions and be uploaded to *nrmm.london* prior to use onsite.

4.3 WORKING HOURS AND RESTRICTIONS

- 4.3.1. The standard working hours for all construction activities will be from:
- 08h00 – 18h00 Monday to Friday; and
 - 08h00 – 13h00 Saturdays.
- 4.3.2. No continuous 24-hour activities are envisaged at this stage and any working on Sundays or Bank Holidays are not allowed unless otherwise agreed with the LBH. Any change to working hours will be agreed with the LBH if required.

4.4 VEHICLE ACCESS, ROUTING AND TURNING

- 4.4.1. Access to the Site for all vehicles is expected to be from Watermead Way (A1055), into Burdock Road and Ashley Road, which connects the Site to the M25 to the north and the A10 which runs from the Site to Whitechapel. This will be confirmed in the Updated Construction Logistics Plan to be submitted to and approved by the LBH pursuant to Condition 28 under planning reference HGY/2016/4165. Ashley Road runs directly through the Site connecting the A1055 to the residential areas to the north and Down Lane Park.

- 4.4.2. The Developer will liaise with the Highways Authority to ensure the best routing of vehicles. Routing will be confirmed in the Updated Construction Logistics Plan to be submitted to and approved by the LBH pursuant to Condition 28 under planning reference HGY/2016/4165.
- 4.4.3. Signage will be erected to direct deliveries to the required route and all material orders sent out will include specific directions and routes to be taken. No vehicles will be allowed to wait on the streets adjacent to the Site.

4.5 WASTE AND MATERIAL MANAGEMENT

- 4.5.1. Liaison with the Environment Agency will be undertaken to ensure that waste and materials handling on-site will be conducted appropriately.
- 4.5.2. The waste stream will be managed so far as is reasonably practicable to maximise the reuse of surplus materials and to ensure any adverse environmental effects are minimised. Waste will be segregated onsite into key waste streams such as excavated soil and stones, metals, wood/timber and general construction waste.
- 4.5.3. The transportation of waste to and from the Site will comply with the Duty of Care requirements. These include ensuring waste is transported by registered carriers, disposal to appropriately licensed sites and maintenance of appropriate waste transfer documentation.
- 4.5.4. The Principal Contractor/Demolition Contractor will audit waste carriers and disposal facilities and maintain documentary evidence that these requirements are being met, including a register of waste carriers, disposal sites (including transfer stations) and relevant licensing details for each waste stream. Waste contractors who remove waste will be registered with the Environment Agency.
- 4.5.5. A Site Waste Management Plan (SWMP) will be produced, providing details on forecast waste quantities and classification likely to be generated during the construction of the proposed development. The SWMP will follow the waste hierarchy, as illustrated in **Figure 4-1** below.

Figure 4-1 – Waste Hierarchy



- 4.5.6. The Proposed Development will be constructed in line with the hierarchy. The hierarchy is a classification of waste management options in order of their environmental impact. The concept provides the cornerstone of the Proposed Development's waste minimisation strategy - **reduce, reuse, recycle**. The Proposed Development will seek opportunities to operate within the top sectors of the hierarchy, where feasible designing out waste, then reusing and recycling materials, before waste recovery.
- 4.5.7. A Waste Management Strategy will be prepared by the Principal Contractor/Demolition Contractor in accordance with the principles outlined above and best practice guidance, which will be implemented throughout the demolition and construction phases.

4.6 TRAFFIC AND HIGHWAYS

- 4.6.1. It is intended that the main access to the Site will be via Watermead Way (A1055) into Burdock Road and Ashley Road, with access to Buildings 2, 2A and 2B via the Berol Link and Building 3 via the access entrance at the immediate south of Building 3. This will be confirmed in the Updated Construction Logistics Plan to be submitted to and approved by the LBH pursuant to Condition 28 under planning reference HGY/2016/4165.
- 4.6.2. Vehicles will only enter and leave the Site in the agreed working hours. There are no unusual deliveries restrictions. The speed of vehicles will be 10mph on the internal Site roads. All details will be confirmed in the Updated Construction Logistics Plans to be submitted to and approved by the LBH pursuant to Condition 28 under planning reference HGY/2016/4165.
- 4.6.3. Vehicle route surfaces will be maintained in good condition and free of potholes and adequately drained.
- 4.6.4. A one way traffic system will be put in place inside the Site with a 'reverse only' parking policy. Pedestrian access to the compound will be via a segregated walkway.
- 4.6.5. Traffic routes are to be planned so that where practicable they are segregated by suitable barriers and signage to pedestrian and vehicle traffic can move safely. Warning signs will be put in place where pedestrian routes cross vehicle routes. Routing will be confirmed in the Updated Construction Logistics Plan to be submitted to and approved by the LBH pursuant to Condition 28 under planning reference HGY/2016/4165.
- 4.6.6. Vehicle traffic routes should be planned to avoid the need for reversing by establishing one way systems. The onsite gateman will liaise via walkie talkie with site management when deliveries arrive and instructions will be given to avoid and reduce the amount of reversing.
- 4.6.7. A wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the Site where reasonable practicable) will be implemented. This will prevent the spread of mud and debris onto the roads. There will be an adequate area of hard surfaced road between the wheel wash facility and the Site exit. In the event the mud and debris is tracked onto the local roads, road sweeping and cleaning will take place.

4.7 COMMUNICATIONS AND COMPLAINTS

- 4.7.1. The communication and complaints procedure is outlined in detail in Section 7.3 of this CEMP.

4.8 ROAD AND FOOTPATH CLOSURE

- 4.8.1. Any temporary road closures will be agreed with the Highways Authority, Local Planning Authority and the local police. Notices will be posted to alert the public to any planned road closures and / or diversions.

4.9 SITE COMPOUND

- 4.9.1. The Site compound location is yet to be determined. The compound will be provided with temporary supply of both water and electricity along with a temporary drainage connection to the main drainage system if possible.

4.10 SITE ACCOMODATION AND WELFARE FACILITIES

- 4.10.1. All staff will benefit from site accommodation and welfare facilities (site offices, locker / drying room, toilets and shower, canteen) in accordance with Schedule 2 of the Construction (Design and Management) Regulations 2015.
- 4.10.2. Welfare facilities will comply with the Construction (Health & Safety and Welfare) Regulations 1996 and all site operatives are obliged to use the facilities.

4.11 MATERIAL STORAGE AND HANDLING

- 4.11.1. A secure and bunded storage area will be located on-site and will be provided for the duration of the construction period.
- 4.11.2. Plant and equipment would be stored in areas that are less susceptible to possible pollution incidents, or in dedicated areas of hard standing. A spill kit will be available for use in the event of an incident.
- 4.11.3. All deliveries will be supervised by a responsible person. Any fuel deliveries will take precautions to ensure that the fuel storage tanks are checked before and during delivery to prevent overfilling.
- 4.11.4. Vehicles will be off-loaded using the lorry mounted HIAB/forklift or site forklift. Where practicable, the loading and unloading operations must be carried out so as to avoid the need for persons to climb onto the vehicles to undo straps etc. If this is not possible then a system of fall prevention, for example scaffold platforms with guardrails, will be provided.
- 4.11.5. Where possible, pre-cast and prefabricated elements will be delivered directly to their final position; thereby limiting the number of plant movements associated with double handling. All deliveries would be dealt with at the designated materials handling locations.
- 4.11.6. Where appropriate, windbreak netting / screening will be positioned around material stockpiles and vehicle loading / unloading areas, as well as exposed excavation and material handling operations, to provide a physical barrier between the Site and the surroundings.
- 4.11.7. Loading and unloading of vehicles, dismantling of equipment such as scaffolding or moving equipment or materials around the Site will be conducted in such a manner as to minimise noise generation.

4.12 LIGHTING

- 4.12.1. The extent of the area to be lit will vary during the different stages of construction according to area of construction, security and health and safety requirements. Site lighting will be provided to ensure the safety and security of the Site and will be at the minimum luminosity necessary.
- 4.12.2. Where appropriate, lighting to Site boundaries will be provided and illumination will be sufficient to provide a safe route for the passing public. In particular, precautions will be taken to avoid shadows cast by the hoarding onsite on surrounding footpaths, roads and amenity areas.
- 4.12.3. Lighting will also be designed, positioned and directed so as not to unnecessarily intrude on adjacent buildings and land uses and so as to prevent interference with local residents, road traffic signals and signing or passing motorists. Site activity lighting will be turned off when not required and internal hoarding lights will be placed on timers. The lighting will be designed to comply with the provisions of BS5489, Code of Practice for the Design of Road Lighting, where applicable.

4.13 SECURITY AND HEALTH AND SAFETY ONSITE

- 4.13.1. Only authorised persons will be allowed on the Site. To prevent unauthorised access to Site the following arrangement will be implemented:
- During Working Hours, the Site will be controlled and employ single vehicle delivery gates that will be attended by full time personnel; and
 - During Out of Hours, the Site will be monitored with a CCTV system linked to a Call Out control centre.
- 4.13.2. The Site compound will have a secure boundary constructed with hoarding. The entire compound (compound and material storage and cycle parking) will sit on hardstanding.
- 4.13.3. There will be a full time gateman at the compound entrance to manage access onto Site.
- 4.13.4. Health and safety arrangements onsite will involve barriers, platforms and hoardings being erected, adapted and maintained throughout the construction phase to completely segregate the public from construction activity. Any hoardings that result in poorly lit walkways will have bulkhead lights fitted.
- 4.13.5. All Site hoarding will conform to the Council's standards unless otherwise agreed with the Council in writing.
- 4.13.6. Everyone employed on-site in relation to the Proposed Development will receive a site specific induction to inform them of the health and safety arrangements, welfare onsite and to ensure they understand the requirements of the risk assessment and method statement relevant to their work. Workers will be informed of their legal obligation to comply with health and safety.

4.14 EMERGENCY PROCEDURES

- 4.14.1. Procedures will be set in place to respond to any emergency incidents which may occur onsite. A Site Pollution Incident Response Plan will be developed by the Principal Contractor/Demolition Contractor prior to any works commencing onsite.
- 4.14.2. All appropriate staff will be trained and made aware of the spill contingency plan set in place, following EA Pollution Prevention Guidelines 21 and 22 as best practice. In the event of any incident the Developer will be notified. Additionally, the Environment Agency and any other interested bodies will be notified as required

4.15 CONTRACTOR TRAINING

- 4.15.1. The CEMP will form part of all tender documents circulated to all trades associated with the development of the Site to ensure that the agreed principles are communicated.
- 4.15.2. Site specific inductions completed by the Site Management Team for all staff and contractors new to the development will include reference to the key sensitivities outlined in this CEMP.
- 4.15.3. In order to ensure that environmental issues are communicated onsite, the environmental training and on-going communication methods as detailed in **Table 4-4** will be carried out. This list is not exhaustive.

Table 4-4 - Environmental Training and Communication

Meeting / Briefing / Training	Frequency	Attendees
HSEQS Progress Meetings	Monthly	The Developer, Principal Contractor/Demolition Contractor and Project Manager
Induction Training (which will include Environmental aspects)	On first visit to site	All persons carrying out work onsite (site personnel, sub-contractors)
RAMS briefings	Every job task	All involved in task
Environmental Toolbox Talks will be carried out appropriate to the construction works being carried out onsite at that time.	Every job task	All persons carrying out work onsite (site personnel, sub-contractors)
Environmental briefings e.g. Environmental Bulletins / Alerts, Lessons Learnt, Results of Inspections / Audits.	As required	All persons carrying out work onsite (site personnel, sub-contractors)
Job specific training e.g. 1. Dealing with spillages 2. Environmental awareness 3. Site Waste Management 4. Management Environmental Representative	As required	As identified for personnel with environmental responsibilities

5 KEY ENVIRONMENTAL ISSUES

5.1 POTENTIAL SIGNIFICANT ENVIRONMENTAL EFFECTS

5.1.1. A schedule of potential environmental effects relating to each topic is provided in **Table 5-1** below.

Table 5-1 – Potential Significant Environmental Effects

Topic	Potential Environmental Effect
Ecology	■ Potential destruction of ecological habitats; and ■ Potential disturbance due to increased noise levels during construction of the Proposed Development.
Ground Contamination and Water Quality	■ Degradation of groundwater as a result of spills during the construction of the Proposed Development.
Hazardous Substances	■ Potential exposure of workers to hazardous substances and contaminated land; and ■ Mobilisation and transfer of existing hazardous materials as a result of building activities.
Heritage and Archaeology	■ Potential impacts on Listed Building nearby arising from construction works.
Landscape and Visual	■ Negative visual impacts associated with the construction of the Proposed Development and lighting onsite; and ■ Negative visual impacts as a result of the completed development.
Local Air Quality	■ Increase in dust deposition at nearby sensitive receptors during certain construction activities; and ■ Exhaust fumes from increased construction vehicle movements.
Noise and Vibration	■ Noise arising from construction works; ■ Increase in noise levels associated with increased traffic as a result of the construction vehicles; and ■ Increase in vibration effects, particularly in relation to any piling (foundations) and drilling work during construction.

6 ENVIRONMENTAL CONTROL MEASURES

6.1 ENVIRONMENTAL PROCEDURES

- 6.1.1. The Client will ensure that all sub-contractors and Site based staff adhere to the relevant local policies and good practice guidelines for implementation during all Site activities.
- 6.1.2. In order to avoid / mitigate against any significant environmental effects, a series of Proposed Development Environmental Procedures (PEP) have been proposed.
- 6.1.3. Responsibilities for the implementation of each PEP has been assigned to specific members of the Project team, which it is envisaged will comprise:
- Principal Contractor/Demolition Contractor (Site based);
 - Environmental Manager (Site based); and
 - Environmental Consultants (i.e. air quality, ecology and noise specialists).
- 6.1.4. A list of the key PEP's is provided in **Table 6-1**. Further details relating to each PEP are contained within **Appendix B** of this CEMP.

Table 6-1 – Proposed Development Environmental Procedures

Procedure	Title	Procedure Relevant To:		
		Principal Contractor/Demolition Contractor	Environmental Manager	Environmental Consultants
PEP/01	Waste Management	✓	✓	
PEP/02	Noise and Vibration	✓	✓	✓
PEP/03	Dust and Local Air Quality	✓	✓	✓
PEP/04	Vehicles Management	✓	✓	
PEP/05	Hazardous Substances	✓	✓	

6.2 ASBESTOS

- 6.2.1. An asbestos survey will be undertaken prior to the demolition of any existing building on the Site by a suitably qualified asbestos consultant and if found, an Asbestos Management Plan will be prepared prior to and implemented during the demolition phase to minimise risk to demolition personnel and the public. All demolition operatives will undergo asbestos training as appropriate to the task they are undertaking onsite.
- 6.2.2. Asbestos fibres were identified in one of the nine intrusive locations sampled within the Made Ground adjacent to the Site. Although robust measures will be put in place to remove the risk of asbestos exposure during construction, the risk cannot be entirely removed.

- 6.2.3. All site operatives will undergo Asbestos Awareness training and all Ground worker sub-contractors will require appropriate asbestos training. Asbestos awareness is to be included in the Site induction and tool box talks.

6.3 ECOLOGY

- 6.3.1. A Phase 1 Habitat Survey was undertaken in 2016 by WSP on the Proposed Development site to identify the potential for the wider ARSM area to support protected species. Consultation with the LBH confirmed that the planning conditions under both applications do not specify an ecology assessment, thus an update on ecological survey should not be required. Report findings confirm that the Site is dominated by hard standing and buildings with limited intrinsic ecological value. Semi-natural habitats are restricted to a small number of trees, areas of ephemeral vegetation and introduced shrubs. Invasive plant species including Virginia creeper *Parthenocissus quinquefolia* and Japanese Knotweed *Fallopia japonica* were noted.
- 6.3.2. The habitats presented within the Site are of negligible intrinsic conservation value, however, they provide suitable habitat for certain species of up to Borough conservation value (Black redstart *Phoenicurus ochruros*) and species for which associated legislation is relevant to the Proposed Development (nesting birds and Japanese Knotweed).
- 6.3.3. The tree line to the north of the Ashley Gardens site, within the Down Lane Recreation Ground will be retained and protected as part of the Proposed Development.
- 6.3.4. Measures will be implemented to protect all existing vegetation where possible, such as site hoarding to prevent unauthorised access and using BS 5837:2012 Trees in relation to design, demolition and construction as guidance.
- 6.3.5. The Site and wider ARSM area does not include any statutory designations for nature conservation. The Lee Valley Special Protection Area (SPA) and Ramsar (a designated site of European importance) lies 449m to the east of the wider ARSM site. Three statutory designated sites of national importance are also present within a 2km radius, the closest of which is Walthamstow Reservoir Sites of Special Scientific Interest (SSSI), 449m to the east, which is a component of the Lee Valley SPA and Ramsar.
- 6.3.6. To the immediate north-west, approximately 30m away, of the Cannon Factory is the Down Lane Recreation Ground Site of Local Importance to Nature Conservation (SLINC) which is of conservation value at the local scale. This is the closest of 15 non-statutory designated sites within a 2km radius of the Site.
- 6.3.7. The Principal Contractor/Demolition Contractor will comply with relevant legislation and should maintain habitats intact and undisturbed, and if possible, enhance natural habitats. If it is not possible to maintain habitats in their existing condition, replacement habitat of equivalent or richer ecological status should be created. If protected species are unexpectedly discovered, work should cease and advice should be sought immediately from a suitably qualified ecologist.

6.4 GROUND CONTAMINATION AND WATER QUALITY

- 6.4.1. The closest major watercourse to the Site is the River Lea, which is located approximately 400m to the east.
- 6.4.2. The area also consists of a number of large reservoirs, the closest being the Lockwood Reservoir. The River Lea ultimately discharges into the River Thames approximately 9km to the south.

- 6.4.3. A Preliminary Risk Assessment was prepared and submitted in 2017 as part of the planning application which identified potential sources of contamination.
- 6.4.4. In addition, a Geotechnical Assessment was undertaken by RSK Environmental Ltd in March 2015 to obtain information regarding ground conditions, from which risks to end-users, the environment and structures were assessed and mitigation measures outlined. Further investigations are being undertaken pursuant to Conditions 25 and 8 under planning reference HGY/2016/4165 and APP/Y5420/W/19/3232707 and will be submitted to the Local authority for approval accordingly.
- 6.4.5. The following methods should still be implemented during construction to ensure the safety of construction workers, visitors and to avoid any potential pollution of surface and ground water:
- Use of appropriate Personal Protective Equipment at all times during the construction works;
 - Provision of adequate hygiene facilities for washing and changing; and
 - Excavated soils will be used on-site wherever possible.
- 6.4.6. In the event of the discovery of unexpected contaminated ground after the development has begun, development must be halted on the part of the Site affected to the extent specified by the Local Planning Authority in writing.
- 6.4.7. In addition to the above, it is recommended that the following mitigation measures also be applied:
- Implementation of an appropriate temporary drainage system will be required in order to minimise the potential risks of contamination or excess sediment reaching nearby surface water. This will include road gully's left at base course level to enable surface water to discharge into the drainage system, with a hessian protection filter system.
 - Any contaminated material encountered on-site, the handling, storage and removal will be subject to current waste management legislation and guidance (see **Appendix C**); and
 - Excavated soils will be re-used on-site wherever possible.
- 6.4.8. Should significant unexpected contamination be encountered this will be managed appropriately and reported to the Environmental Agency. It is noted that a site investigation shall be designed and undertaken prior to commencement of development as required by Condition Conditions 25 and 8 under planning reference HGY/2016/4165 and APP/Y5420/W/19/3232707.

Methods of Working

- 6.4.9. All demolition and construction activities will be undertaken in accordance with legislation and the Environment
- 6.4.10. Agency Pollution Prevention Guidance (PPG) and other relevant documents, in particular:
- PPG 1: General Guide to the Prevention of Pollution of Water Resources (Environment Agency, reviewed July 2013);
 - PPG 2: Choosing and using Storage Tanks (Environment Agency, April 2014);
 - PPG 3: Choosing and using Oil Separators (Environment Agency, 2006);
 - PPG 6: Working at Construction and Demolition sites (Environment Agency, April 2014);
 - PPG 7: Operating Refuelling Facilities (Environment Agency, August 2011);
 - PPG 13: Vehicle Washing and Cleaning (Environment Agency, July 2007);
 - PPG 21: Pollution Incident Response Planning (Environment Agency, 2004); and
 - PPG 22: Dealing With Spills (Environment Agency, April 2011).

- 6.4.11. The Principal Contractor/Demolition Contractor and all sub-contractors must take precautions during the demolition and construction phase to protect the entire drainage system from siltation or pollution.

6.5 HAZARDOUS SUBSTANCES

- 6.5.1. Materials used in the demolition and construction process such as oil, fuel, solvents and paints have the potential to cause serious pollution incidents. Therefore, the Environmental Agency's Pollution Prevention Guidelines and other relevant guidance will be followed during the handling and storage of such materials.
- 6.5.2. All workers on-site will be made aware of potential contamination issues on the Site and will use best practice techniques during the demolition and construction phases. The operation of construction vehicles and the handling, use and storage of hazardous materials will be undertaken as follows:
- Construction vehicles and plant will be regularly maintained and supplied with spill kits and drip trays to reduce the risk of hydrocarbon contamination;
 - Refuelling would be undertaken in specified areas where there is non-permeable hardstanding and drainage passes through an oil interceptor prior to discharge. Drip trays will be installed to collect leaks from diesel pumps;
 - Adequate bunded and secure areas with impervious walls and floors, with a capacity of 110% of substance volume, are to be provided for the temporary storage of fuel, oil and chemicals onsite during construction;
 - Oil interceptor(s) will be installed on discharge points from any temporary oil storage/refuelling areas; and
 - Development of site pollution control procedures in line with Environmental Agency's Pollution Prevention Guidelines, and appropriate training for all construction staff. Provision of spill containment equipment such as absorbent material onsite.
- 6.5.3. Hazardous materials already present on-site, or proposed to be used during the construction works, will be identified and an appropriate Control of Substances Hazardous to Health Assessment carried out.
- 6.5.4. The Principal Contractor/Demolition Contractor will comply with relevant legislation, technical guidance and regulations in the identification, handling, storage, recovery and disposals of waste. Provision will be made for a suitably qualified consultant to identify "hazardous waste" so that materials can be appropriately managed and disposed of during works.
- 6.5.5. Disposal sites and routes will be identified by the Principal Contractor/Demolition Contractor in consultation with the LBH and the Environmental Agency. Consideration should be given to transportation modes and alternatives to reduce the adverse environmental effects, times, landfill capacity and license conditions.
- 6.5.6. Management of the waste stream will be important to maximise the re-use of surplus materials and minimise any adverse effects resulting from disposal. Works should be carried out in such a way that the amount of spoil and waste to be disposed of is minimised and transported/disposed of in accordance with the Regulations.
- 6.5.7. Where contamination is identified at a Site during ground works, a procedure for handling and disposal of material is to be agreed with the LBH. A validation report is to be submitted to the LBH following completion of any remedial works at the Site.

- 6.5.8. The Principal Contractor/Demolition Contractor should comply with all relevant legislation and regulations when dealing with contaminated materials. The Principal Contractor/Demolition Contractor will prepare a full management plan where contaminated land is identified in order to comply with all relevant handling and disposal legislation. Where earthworks or piling operations are planned, a detailed site investigation will be carried out to ensure appropriate mitigation.
- 6.5.9. The Principal Contractor/Demolition Contractor is to endeavour to reuse and recycle construction and demolition waste to reduce wastage of construction materials, also enabling the reduction in vehicles movements from the Site. Measures should be employed to reduce waste that arises during construction.

6.6 HERITAGE AND ARCHEOLOGY

- 6.6.1. Berol House, located within the centre of the wider ARSM area on Ashley Road, is a locally listed building of merit and will be retained. This is located outside of and to the south of Cannon Factory Building 3.
- 6.6.2. The former pencil works building of three storeys was built by 1913. The pencil works was once a significant employer in the area and is one of the few remaining historic buildings in a previous hub of industry. The building has a low sensitivity rating according to the Environmental Statement submitted in 2017.
- 6.6.3. It is currently used as a serviced office building, and will be retained and enhanced for employment workspace under another development application (Planning reference: HGY/2017/2044 Berol Yard – Berkeley Square Development’s Hybrid Application).

6.7 LANDSCAPE AND VISUAL

- 6.7.1. The following measures may be considered during demolition and construction works to ensure protection of the existing townscape setting and views to the Site:
- Temporary screening to the sensitive visual receptors through the implementation of solid construction hoardings. Natural screens such as trees and hedgerows shall be retained where possible;
 - Use of attractive hoardings to screen low-level ‘clutter’;
 - Appropriate location, organisation and phasing of construction activities;
 - Tidy Site management to reduce the visual clutter associated with building works; and
 - Large plant will be located away from the most sensitive receptors, where there are viable alternative locations.
- 6.7.2. The hoarding to be erected around the Site (or around the wider ARSM area, depending what is more appropriate for the particular stage of works) will visually contain many of the construction activities from the surrounding character areas in terms of influencing their visual setting.
- 6.7.3. Hoardings should be well lit in poorly lit walkways and any gates should be positioned to minimise the noise transmitted to nearby sensitive receptors.
- 6.7.4. The Principal Contractor/Demolition Contractor is normally required to provide steel beam framed structures rather than scaffolding where such structures are to be in place for relatively long period of time.

6.8 LOCAL AIR QUALITY

- 6.8.1. The Proposed Development is within an Air Quality Management Area. The Institute of Air Quality Management (IAQM) Guidance on the Assessment of Dust from Demolition and Construction (2014) identifies the likely potential Air Quality impacts and mitigation measures associated with construction and demolition activities.
- 6.8.2. Relevant potential impacts associated with the Proposed Development include:
- Dust deposition resulting in soiling of surfaces;
 - Visible dust plumes that are evidence of dust emissions;
 - Elevated PM₁₀ concentrations as a result of dust generating activities onsite; and
 - An increase in the increase in concentrations of airborne particles and NO₂ due to exhaust emissions from diesel powered vehicles and equipment used on-site, as well as vehicles accessing and egressing the Site.

MITIGATION METHODS FOR THE SITE

- 6.8.3. Notwithstanding the Air Quality and Dust Management Plan to be submitted to and approved by the LBH under Conditions 26 and 10 under planning reference HGY/2016/4165 and APP/Y5420/W/19/3232707, in line with the best practice to be implemented at the Site, IAQM guidelines, and in in order to minimise the nuisance and impact arising from dust produced during the construction phase, the following measures are to be implemented:
- Site planning;
 - Solid barriers along the Site boundary (or boundary of the wider ARSM area, depending which is more appropriate during a particular stage of work) will be provided;
 - No bonfires or burning of any material will be permitted anywhere onsite;
 - Wherever possible, operating plant will be positioned away from Site boundaries to prevent exhaust fumes from drifting over to neighbouring premises and will be well maintained to ensure they are working correctly and efficiently;
 - During excavation works, material will be dug and surplus material immediately loaded to waiting vehicles for transportation off Site. To reduce unnecessary handling, where possible, some material will be stockpiled to be reused. Material will be covered during transportation;
 - Damping down of any earthworks stockpiles and the use of water bowsers to spray larger areas of the Site will be implemented to suppress dust generation;
 - Minimise surface areas of stockpiles (subject to health and safety and visual constraints regarding slope gradients and visual intrusion) to reduce area of surfaces exposed to wind pick-up;
 - Where appropriate, windbreak netting / screening will be positioned around material stockpiles and vehicle loading / unloading areas, as well as exposed excavation and material handling operations, to provide a physical barrier between the Site and the surroundings;
 - Where practicable, stockpiles of soils and materials will be located on the southern side of the Site, as far as possible from sensitive properties, taking account of prevailing wind directions and seasonal variations in the prevailing wind;
 - Areas where soil has been exposed (e.g. during landscaping) will be re-vegetated as quickly as is practicable; and
 - Avoid the use of diesel or petrol powered generators by using mains electricity or battery powered equipment where possible (and if safe to do so)

Construction Traffic

- All vehicles / skips transporting waste or excavation arisings will deploy suitable covers over loads;
- Design controls for construction equipment and vehicles could be implemented and only appropriately designed vehicles will be used for materials handling;
- Ensuring that all construction plant and equipment is maintained in good working order and not left running when not in use;
- Construction traffic movements will avoid the morning and evening peak hours to reduce traffic congestion and the corresponding adverse environmental / safety impacts;
- Establishing jet wash facilities at all access points into the Site, minimising the transfer of dust and particulate matter onto surrounding highways. The use of a road sweeper on the local highway network is also recommended;
- Construction vehicle access arrangements shall be designed to avoid sensitive streets or narrow, congested roads;
- Materials deliveries and vehicle access to the Site will be timed to avoid the need to queue outside the Site prior to opening or whilst other deliveries are completed;
- Regular inspection of local highways and site boundaries to check for dust deposits will be conducted. If necessary, cleaning and/or removal should be undertaken; and
- Detailed mitigation measures to control construction traffic will be discussed with the LBH to establish the most suitable access and haul routes for the Site traffic. The most effective mitigation will be achieved by ensuring that construction traffic does not pass along sensitive roads (residential roads, congested roads, via unsuitable junctions, etc.).

Operations

- Use of dust-suppressed tools for all operations;
- In the event that mobile crushing plant and / or concrete batching plants are to be operated on the Site, the LBH must be contacted in advance and the necessary authorisations (e.g. EPA, Part B processes) obtained. Operation of such plant will be undertaken in line with best practice, and wherever possible be located within an enclosure;
- Skips, chutes and conveyors will be covered to ensure that dust does not escape. Material drop heights to and from such equipment will also be minimised where practicable.

6.9 NOISE AND VIBRATION

- 6.9.1. The construction works will comply with BS 5228:1997 Noise and Vibration control on construction and open sites. Early acoustic fencing will be installed and hoarding to the Site entrance in Ashley Road and the following mitigation measures will be considered:

Plant and Equipment

- Plant will be certified to meet relevant current EU legislation and should be no noisier than would be expected based on the noise levels contained in Annex C and Annex D of BS 5228-1: 2009 Noise and Vibration Control on Construction and Open Sites;
- Noisy plant or equipment will be situated as far as possible from site boundaries and will be fitted with effected exhaust silencers, maintained in good and efficient working order and operated in such a manner as to minimise noise emissions. Plant will comply with the relevant statutory requirements;
- Compressors will be fitted with properly lined and sealed acoustic covers which will be kept closed whenever in use;

- Pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers;
- Equipment and vehicles to be shut down when not in use;
- Semi-static equipment is to be sited and oriented as far as is reasonably practicable away from noise sensitive receptors and will have localised screening if deemed necessary; and
- Where practicable, mains electricity to be used instead of generators.

METHODS OF WORKING

- Site inductions will highlight the need for vehicle horns and alerts to only be used when absolutely necessary;
- No work which is audible at the Site boundary will be undertaken outside the specified hours, except in cases of emergency where safety is an issue, or where a prior agreement has been reached with the LBH;
- The Principal Contractor/Demolition Contractor will comply with the requirements of the *Control of Pollution Act 1974* (with particular reference to Part III), the *Environmental Protection Act 1990*, the *Health and Safety at Work Act 1974* and the *Control of Noise at Work Regulations 2005*;
- Burning equipment will be used in preference to cold cutting where possible;
- Large concrete pours (for which an extension of working hours may be necessary) will commence as early as possible within normal working hours so that activities can be completed within normal working hours as far as possible;
- All trade contractors will be made familiar with current noise legislation and the guidance contained in *BS 5228 (Parts 1 and 2)* which will form a prerequisite of their appointment;
- Unless agreed in advance, all deliveries will be during the construction site hours and on a “just-in-time” basis to avoid/minimise vehicles waiting outside or on the Site with engines running. No construction vehicles will be permitted to wait along Ashley Road;
- Loading and unloading of vehicles, dismantling of equipment such as scaffolding or moving equipment or materials around the Site will be conducted in such a manner as to minimise noise generation;
- Deviation from approved method statements will be permitted only with prior approval from the Principal Contractor/Demolition Contractor and other relevant parties. This will be facilitated by formal review before any deviation is undertaken;
- A contact number which the public may use shall be displayed prominently on the Site board and any noise complaints will be reported to the Principal Contractor/Demolition Contractor and immediately investigated..

Monitoring and Reporting

- 6.9.2. Noise and Vibration levels during demolition and construction will be monitored in accordance with the provisions of BS 5228 (1997) by a qualified Acoustician using an approved noise device, and through regular communication with those residents in close proximity to the Site. Any noise issues (through complaints or exceedance of trigger levels) are expected to be resolved quickly.

6.10 UNEXPLODED ORDNANCE (UXO)

- 6.10.1. A Preliminary UXO Threat Assessment has been obtained through Envirocheck. This provides a list of UXO threat sources and makes recommendations based on the probability of the UXO risk identified. The full Assessment is included in **Appendix D**, in summary, the identified risk probability is Medium.

- 6.10.2. Prior to the commencement of any demolition or construction works commencing on-site, a detailed threat assessment will be procured from Envirocheck. In the event that the results of this assessment show a down-graded risk to Low, no further action or mitigation is required. In the event that the results of this assessment confirm the Medium risk or elevate the risk, the following will be undertaken for the duration of all works onsite:
- Toolbox talks will be delivered specific to works and associated UXO risk will be attended by all operatives and risk awareness training will be undertaken by all site personnel; and
 - An Explosive Ordnance Disposal (EOD) operative will be present onsite during all intrusive works.

7 MONITORING

7.1 MONITORING, CONTINUAL IMPROVEMENT AND REVIEW

- 7.1.1. The Environmental Manager will hold the responsibility for maintaining a register of all environmental monitoring, which will be made available for auditing and inspection.

7.2 REPORTING

- 7.2.1. Reporting procedures will be defined by the Environmental Manager who will hold overall responsibility for providing feedback to the Principal Contractor/Demolition Contractor and the Developer on the environmental performance of the construction works.
- 7.2.2. All injury accidents occurring as a result of work activities undertaken for the Proposed Development or conditions are to be reported to the Site Management and recorded in the Site Accident Book. First aid will be provided and where necessary, arrangements will be made to get the injured person to hospital.
- 7.2.3. Site Management will report all injury accidents, 'near misses' and dangerous occurrences to the Principal Contractor/Demolition Contractor's Health and Safety department who will carry out an investigation of all notifiable injury accidents and incidents as scheduled under The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013. Minor injury accidents will be investigated where it is deemed beneficial.

Environmental Incidents

- 7.2.4. The Principal Contractor/Demolition Contractor will advise the LBH within 24 hours and any incidents of non-compliance with the CEMP and will respond to any reported incidents within 24 hours, or as soon as reasonable practicable. In the event of working practices being deemed dangerous either by the LBH or the HSE, immediate remedial action will be taken.
- 7.2.5. The formal procedure for handling Environmental Incidents will be developed and agreed by the Principal Contractor/Demolition Contractor and Site Manager but may include a procedure similar to that detailed below:
- 7.2.6. Environmental Incidents are to be reported to the Site Manager;
- 7.2.7. The Site Manager (or nominated representative) will record full details of the Environmental Incident and ensure that they are responded to as soon as reasonably practicable (preferably within one hour but always within 24 hours);
- 7.2.8. The Site Manager (or nominated representative) will monitor and ensure that appropriate action is taken; and
- 7.2.9. The Site Manager (or nominated representative) will undertake an investigation to assess what corrective and preventive action, or further investigation is necessary to avoid recurrence of the Environmental Incident.

7.3 COMMUNICATION AND COMPLAINTS

- 7.3.1. The Principal Contractor/Demolition Contractor will define procedures for managing incidents. A centralised register of all reported complaints and incidents will be maintained by the Site Manager.

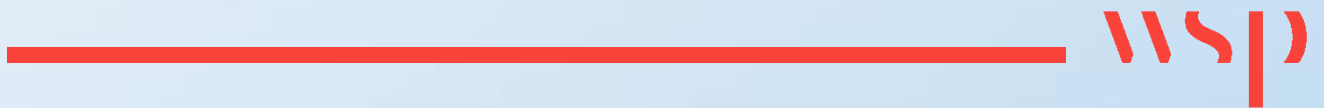
- 7.3.2. The formal procedure for handling project complaints / concerns will be developed and agreed by the Principal Contractor/Demolition Contractor and Site Manager but may include a procedure similar to that detailed below:
- 7.3.3. All Stakeholders will be able to report any concerns, complaints or other comments to Site Manager in writing, by email or in person at the site offices. Site contacts details will be provided at site entrances, on perimeter hoardings and possibly at appropriate community locations;
- 7.3.4. The Site Manager (or nominated representative) will take full details of the concerns expressed and ensure that a formal assessment is commenced of the reported concern. They will also issue an initial response to the person who has submitted the complaint / concern confirming its receipt. The Site Manager will record the date and contact information associated with a complaint / concern on a standard form and place a copy in a project grievance register;
- 7.3.5. The Site Manager (or nominated representative) will undertake an investigation to assess what corrective and preventive action, or further investigation is necessary;
- 7.3.6. The Site Manager (or nominated representative) will respond within a reasonable timescale (typically not more than 30 days) and place details of the completed corrective and preventive actions within the project grievance register. If a longer term programme is required to provide an adequate solution then this programme will be detailed on the register against the specific issue;
- 7.3.7. The Site Manager (or nominated representative) will notify the relevant stakeholder of the proposed corrective and preventive actions to be adopted;
- 7.3.8. Any corrective measures / actions will be implemented with associated implementation dates being recorded;
- 7.3.9. For long term corrective action, the complainant will be informed of proposed action; and
- 7.3.10. Following the implementation of the corrective action and agreement with the relevant stakeholder that the complaint has been adequately addressed the case will be closed and date recorded.
- 7.3.11. In the event that a complaint is not resolved to the satisfaction of the complainant directly with the Site Manager the following levels of mediation will be available:
- If the grievance cannot be adequately addressed by the Site Manager, the complaint / concern will be escalated to an appropriate contact within both the Principal Contractor/Demolition Contractor and Developer; and
 - If the grievance is still not adequately resolved the issue will be taken to the LBH for a final decision to be made.

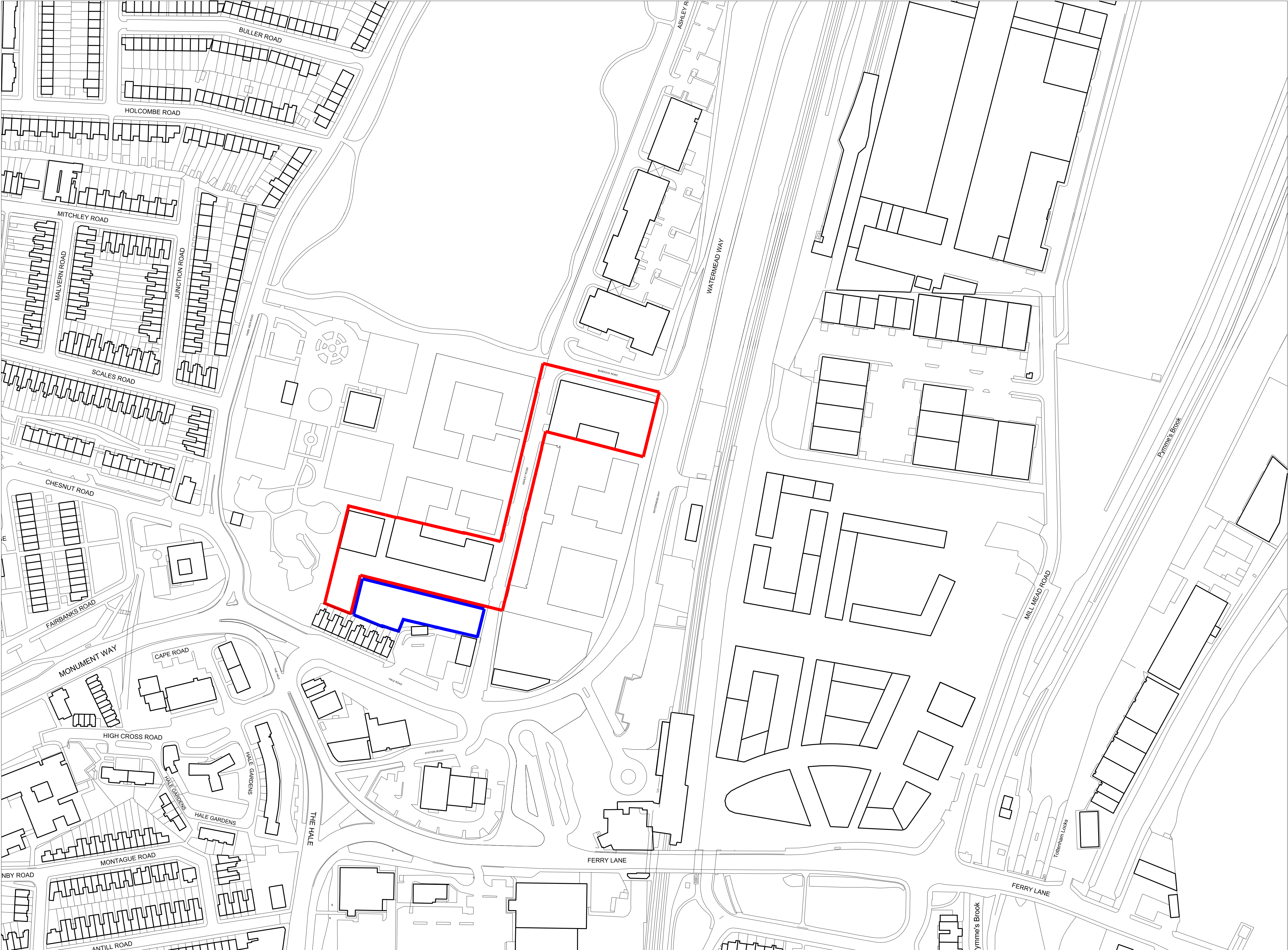
8 SUMMARY

- 8.1.1. This CEMP has been developed to outline measures to minimise and mitigate the potential negative environmental effects relating to the construction of the Proposed Development at Cannon Factory Ashley House, and Ashley House, Ashley Road, to ensure best practice is followed. This CEMP sets out the specific measures that will be adopted in order to minimise the environmental effects associated with all demolition and construction phases of the Proposed Development.
- 8.1.2. The following key environmental issues will require consideration / protection during the demolition and construction works:
- Emissions to air quality of dust from the construction works and pollutants from construction vehicle movements;
 - Disturbance to ecological features;
 - Contamination of nearby water courses;
 - Increase in noise levels as a result of the construction works and construction vehicle movements;
 - Waste arisings;
 - Vehicle management; and
 - Changes to the character of the Site.
- 8.1.3. The following will be submitted to the Local Authority 10 days prior to the demolitions works commencing:
- A site plan identifying site entrances, exits, wheel washing, hoarding, dust suppression, location of water supplies and location of nearest neighbouring receptors and Environmental monitoring point's location plan;
 - Details of exact wheel washing kits to be used in situ: A wheel washing system with rumble grids to dislodge accumulated dust and mud prior to leaving the Site is recommended near the main vehicular access;
 - The specification of the dust suppression kits to be used onsite; and
 - A copy of the asbestos survey.

Appendix A

DEVELOPMENT PHASING PLAN





Project Logo					
Notes					
Do not scale from this drawing.					
All dimensions are to be checked on site and any discrepancies noted in writing to the Project Manager.					
All dimensions are in millimeters unless noted otherwise.					
Rev.	Date	Description	Drawn	Checked	
A	17.10.16	Red line amended	LP	XA	
B	14.12.16	Building footprint amended	LP	XA	

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Architect
Landscape

Key Plan

Cannons Factory and Ashley House
Outline Planning Application
Site Location (Proposed Buildings Shown)

Scale At A1:	1:1250	Job Number:	1824
Date:	14/12/2016	Drawing:	LP
Drawing Status:	FOR ILLUSTRATIVE PURPOSES ONLY	Checked:	JL
Drawing Number:	1824-JMP-02-XX-DR-A-0003	Revision:	B

Appendix B

PROJECT ENVIRONMENTAL PROCEDURES (PEP) IMPACTS

Procedure	Waste and Materials Management
REF:	PEP/01
ACTION BY:	Principal Contractor and Site Environmental Manager
PURPOSE:	Management of the storage, handling, movement and disposal of waste materials.
PROCEDURE	<u>Classification:</u> ■ The amount of waste, its classification and disposal route will be identified at site set-up to facilitate separation and correct disposal. <u>Segregation:</u> ■ Waste materials will be segregated by type. A separate skip for special waste will be used. <u>Storage:</u> ■ All waste will be stored in designated areas which are isolated from surface drains; ■ Waste will be stored in such a manner as to prevent its escape. This may be achieved through secondary containment as necessary; ■ Stored waste will be clearly identified and its stability monitored; ■ Sufficient equipment will be provided to staff onsite to enable the safe storage and containment of waste; and ■ Skips will be covered and regularly checked to see if they are full. <u>Hazardous wastes:</u> ■ Used oil will be stored in bunded area for collection. <u>Waste licensing and Duty of Care:</u> ■ A full audit of materials leaving the Site will be made; ■ Licences of waste carriers, contractors and final disposal Sites and consignment notes will be inspected and the results recorded; ■ Waste management registers will be maintained in line with current legislation; ■ Checks will be made to ensure the accurate completion of transfer notes; and ■ Checks will be made to ensure waste reaches the destination detailed on the transfer note. <u>Records:</u> All records for waste disposal will be maintained for a minimum of three years after the completion of the contract, or any such period necessary to comply with relevant legislation.
REFERENCES:	Waste Transfer Notes Special Waste Transfer Notes ■ Controlled Waste (England and Wales) Regs 2012; ■ Environmental Protection (Duty of Care) Regs 1991; ■ Environmental Protection Act 1990: Part 2 – Waste on Land; ■ The Hazardous Waste Regs 2005 (as amended); ■ The Waste Management Licensing Regs 1994 (as amended); and ■ Control of Substances Hazardous to Health (COSHH) Regs 2002. PPG8: Safe storage and disposal of used oils (Environment Agency); Waste Management Guidance Notes (Environment Agency); CIRIA, Waste minimisation in construction, Special Publication, 1997; and WRAP, <i>Practical Solutions for Sustainable Construction: Achieving Good Practice Waste Minimisation and Management</i>.

Procedure	Noise and Vibration
REF:	PEP/02
ACTION BY:	Principal Contractor, Site Environmental Manager and Noise Consultant
PURPOSE:	Monitoring and control of noise and vibration
PROCEDURE	<u>Licensing:</u> - It will be ensured that where appropriate a Section 61 consent is in place prior to work starting (in accordance with the Control of Pollution Act 1974). <u>Identification of sensitive receptors:</u> - Local receptors to noise and vibration nuisance will be identified; and - Interested parties will be pre-notified of noise and vibration levels associated with activities onsite through the Construction Liaison Plan. <u>Plant maintenance:</u> - All plant will be maintained in accordance with the manufacturers' or suppliers' instructions; - All machines in intermittent use will be shut down when not in use; and - Where possible all plant will be placed away from the Site boundaries to reduce the effect on the local community. <u>Noise and vibration abatement measures:</u> - Working hours will be limited to those agreed with the LBH to minimise disruption to neighbours; - All vehicles, plant and other equipment will be fitted with the appropriate silencers, mufflers or acoustic covers as applicable; - Neighbours will be kept informed of the times and dates of any potential noise nuisances; and - Noise barriers, e.g. mounds of earth, fences, etc. will be put in place where necessary early in the construction works. <u>Crushing of concrete:</u> - Where possible concrete sections will be removed whole and crushed off-site; - Checks will be made to ensure that concrete crushers used onsite are fully licensed and maintained; and - No materials are to be stored upon the Site.
REFERENCES:	- Control of Pollution Act (COPA) 1974; - Environmental Protection Act (EPA) 1990: Part 3 – Statutory Nuisance; - Countryside and Rights of Way Act 2000; - Noise and Statutory Nuisance Act 1993; - Noise Act 1996; - BS5228: Noise and vibration control on construction and open sites, Parts 1 & 2 (1997), Part 4 (1992) – BSI, London; - HSE, Noise in construction, 1992; and - Ground borne vibrations arising from piling, CIRIA Technical Note 142, 1992.

Procedure:	Dust and Local Air Quality
REFERENCE:	PEP/03
ACTION BY:	Principal Contractor, Site Environmental Manager, Air Quality Consultant
PURPOSE:	Control of dust and atmospheric emissions affecting local air quality
PROCEDURE:	<u>Sensitive receptors:</u> ■ Identify potential receptors: • Residents; • Pedestrians; • Neighbouring tenants; • Local transport infrastructure; • Drainage systems; and • Controlled waters. ■ Regular communication with local residents and businesses will be established. <u>Dust risk register:</u> ■ Site activities causing dust problems and existence of sensitive receptors will be identified to assess the risk of nuisance caused by dust; and ■ Identify and record activities and receptors and any control or protection measures put in place. <u>Wind:</u> ■ Wind speed and direction will be observed prior to conducting dust-generating activities to determine the potential for dust nuisance to occur when wind direction may carry dust into sensitive areas and avoiding dust-generating operations during periods of high or gusty wind. <u>Equipment:</u> ■ All construction plant and dust abatement equipment will be maintained in good working order and will not be used if it is not in full working order. <u>Construction:</u> ■ Cutting and grinding will be conducted using dust suppressed equipment and water sprays will be used to minimise dust emissions; ■ On-site cement and concrete batching will be undertaken in enclosed areas with suitable water dowsing and wind shielding; ■ On-site aggregate handling will be carried out in enclosed areas where practicable; ■ The height from which materials will be tipped or dropped during transfer will be minimised; and ■ The mixing of large quantities of concrete or bentonite slurries shall take place in enclosed or shielded areas where practicable. <u>Vehicles:</u> ■ Haul roads and associated vehicle waiting areas will be regularly inspected and kept clean of all materials (including dust); ■ Jet washing will be undertaken on vehicles leaving the Site; ■ General site traffic will be restricted to watered or treated haul roads; and ■ Local highways and site boundaries will be regularly inspected for dust deposits and, if necessary, cleaned.

	<u>Smoke nuisance:</u> ■ No burning of rubbish or any other activity likely to give rise to dark smoke on or off the Site shall be undertaken.
REFERENCES:	■ PEP/04 Vehicles Management; ■ Environmental Protection Act 1990 (EPA); ■ Clean Air Act 1993; ■ Environment Act 1995 Part 4; and ■ Road Vehicles (Construction and Use) Regulations 1986 (as amended).

Procedure:	Vehicles Management
REFERENCE:	PEP/04
ACTION BY:	Principal Contractor and Site Environmental Manager
PURPOSE:	Minimisation of the effect of vehicles onsite
PROCEDURE:	<u>Traffic Management:</u> ■ Permitted access routes for HGV movements will be clearly signed and compliance with these restrictions regularly monitored; ■ Speed limits will be set within the Site which are appropriate to the various activities which are required to be undertaken; ■ Delivery routes will be clearly marked; and ■ Plant crossings, access and egress points will be kept clean in order to avoid the deposition of debris, mud or other materials which could cause nuisance to other road users. <u>Control of dust and other materials:</u> ■ Haul roads and associated vehicle waiting areas will be regularly inspected and kept clean of all dusty materials; ■ General site traffic will be restricted to watered or treated haul roads; ■ Local highways and site boundaries will be regularly inspected for dust deposits and, if necessary, cleaned; and ■ Refer to Procedure PEP/3 Dust and Air Quality. <u>Fuel handling:</u> ■ Refuelling will be carried out as far away as feasible from any drain or other sensitive receptor, only in designated areas on impermeable surfaces; ■ Refuelling equipment will be regularly inspected with maintenance and repair as appropriate; ■ Spill kits, locks and other suitable security devices will be provided; and ■ Fuel bowsters and stores will be secure and as far as possible vandal-proof. <u>Washing vehicles:</u> ■ Wheel-washing facilities (jet washer and road sweeper) will be provided at main construction access and crossing points; ■ Hardstanding areas will be used for all plant maintenance and washing off; ■ These areas will be sited away from any drain or watercourse; and ■ Water released from this area will be directed to a temporary drainage system or pumped for off-site disposal. <u>Avoidance of nuisance from exhaust emissions:</u> ■ No vehicle or item of equipment emitting visible black smoke, other than during ignition, will be used on any construction site or public highway; ■ Combustion engines on all plant and equipment shall not be left running unnecessarily; ■ All vehicle and equipment engines and exhaust systems will be maintained so that the exhaust emissions do not breach statutory limits for the vehicle/equipment type and mode of operation; ■ All vehicles and equipment shall be maintained in accordance with the manufacturers' and suppliers' recommendations; and ■ Exhausts of vehicles and equipment used for construction shall be positioned at a sufficient height to ensure dispersion of exhaust emissions.
REFERENCES:	■ PEP/02: Noise and Vibration ■ PEP/03: Dust and Air Quality

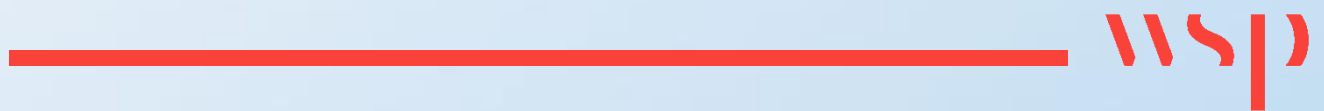
- | | |
|--|---|
| | <ul style="list-style-type: none">■ Anti-Pollution Works Regs 1999■ Clean Air Act 1993■ Environmental Protection Act 1990 – Part 3: Statutory Nuisance■ Road Vehicles (Construction and Use) Regs 1996■ Road Traffic Regulation Act 1984■ Water Industry Act 1991■ Water Resources Act 1991■ The Groundwater Regulations 1998■ PPG6: Working at Construction and Demolition sites (Environment Agency)■ PPG7: Refuelling Facilities (Environment Agency) |
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Procedure:	Pollution Incident Control
REFERENCE:	PEP/05
ACTION BY:	Principal Contractor and Site Environmental Manager
PURPOSE:	Identification, prevention and control of pollution incidents
PROCEDURE:	<u>Storage of hazardous materials:</u> - Stockpiles will be located, as far as is reasonably practicable, away from sensitive receptors such as residential areas, places of public access etc.; - Onsite storage of chemicals, fuels etc. will be checked regularly and any container found to be leaking will be removed immediately; - Hazardous substances will only be stored in dedicated enclosed areas with an impervious base; - Adequate secondary containment (bundling) will be put in place. This will be at least 110% of the capacity of the containers where possible; - Secondary containment will be regularly inspected, emptied and maintained; and - A COSHH register documenting all materials stored and safe handling requirements will be kept in the site office. <u>Handling hazardous materials:</u> - Use of potentially hazardous materials will be minimised and quantities stored will be kept to a minimum; - Designated access routes for the delivery and transport of such materials will be used; and - All site staff will be made aware of risks associated with the handling, storage and use of hazardous materials through training sessions. <u>Spill kits:</u> - Spill kits with instructions will be sited in areas of high risk and in close proximity to material storage areas; - All staff will be trained in the use of spill kits and the correct disposal of used spill control material; - Used spill kit equipment will be disposed of as hazardous waste (see PEP/02 Waste Management); and - Spill kits will be maintained and periodically inspected. <u>Site drainage and water courses:</u> - Site drainage plans will be obtained and a copy kept onsite; - The on-site drainage system will be tested; - Abandoned drains will be sealed off or removed to minimise the loss of contaminated water; and - The layout of the Site will be designed to minimise the risk of pollution reaching the groundwater or watercourse. <u>Discharge of water:</u> - Written discharge consents will be obtained prior to any discharge to public sewer from the Environment Agency or the local sewerage undertaker as appropriate; and - Consents to discharge will be recorded. <u>Actions in the event of a pollution incident onsite:</u> - Stop work onsite immediately and take appropriate safe actions to prevent further pollution occurring; - Notify Site Manager of incident, possible environmental effects and impact on works;

Procedure:	Pollution Incident Control
	■ Identify nearby potentially sensitive receptors and take appropriate actions to prevent migration of pollutants; ■ Monitor surrounding areas for further contamination / migration of pollutants; and ■ Agree and implement remediation techniques. <u>Pollution incident reporting:</u> ■ Reporting form will include the following information: ■ Date, time and location of incident; ■ The nature of the incident and a description of the events; ■ The environmental effects of the incident; ■ Immediate action taken following the incident; and ■ Corrective action taken and the date closed. ■ The completed form will be signed by the Site Manager and a copy passed to the Principal Contractor for signing. <u>Emergency contact and telephone numbers:</u> ■ A list of emergency contacts will be kept on display in the site office and in high risk areas (e.g. oil storage locations), including: ■ Site Environmental Manager; ■ Environment Agency contacts; and ■ Approved pollution clean-up contractors.
REFERENCES:	■ PEP/02 Waste Management; ■ COSHH Register; ■ Emergency contacts list; ■ Water Resources Act 1991; ■ Water Industry Act 1991; ■ Environment Act 1995; ■ Anti-Pollution Works Regulations 1999; ■ Control of Pollution Act (COPA) 1974; ■ The Groundwater Regulations 1998; ■ Environment Agency Pollution Prevention Guidelines, including: ■ PPG1 – General guide to the prevention of pollution of controlled waters; ■ PPG2 – Above ground oil storage tanks; ■ PPG4 – Disposal of sewage where no mains drainage is available; ■ PPG5 – Working in or near rivers; ■ PPG6 – Working on Construction and Demolition sites; ■ PPG8 – Safe storage and disposal; ■ PPG21 – Pollution Incident Response Planning; and ■ PPG22 – Dealing With Spills.

Appendix C

RELEVANT LEGISLATION



Environmental Legislation	Summary of Relevance to the Site
HAZARDOUS SUBSTANCES	
CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (COSHH) REGULATIONS 2002 (AND AMENDED 2003, 2004)	The COSHH regulations provide a legal framework for controlling people's exposure to all 'very toxic, toxic, harmful, corrosive or irritant' substances and apply to all places of work. There are various requirements including an assessment of the risk to the health of employees arising from their work and what precautions are needed, introduction of appropriate measures to prevent or control the risk (ensuring that measures of control do not increase the overall risk to health and safety), use of control measures and maintenance of equipment.
WASTE	
CONTROLLED WASTE (REGISTRATION OF CARRIERS AND SEIZURE OF VEHICLES) REGULATIONS 1991 (AMENDED 1988)	This legislation provides powers to control fly-tipping and prevents the unlicensed transport of waste materials. All carriers of controlled waste including the producers of building and demolition waste are required to be registered with the Environment Agency. Controlled waste is defined as household, industrial, radioactive or commercial waste other than agricultural, mineral/ quarrying or explosive wastes. This registration must be renewed every 3 years.
THE ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2010 (AMENDED 2011, 2012, 2013, 2014 AND 2015)	The Regulations consolidate the Pollution Prevention and Control and waste Management Licencing regulations to provide a more streamlined approach to environmental regulations, by allowing for a number of different activities to be regulated under one permit by the Environment Agency.
HAZARDOUS WASTE (ENGLAND AND WALES) REGULATIONS 2005 (AMENDED 2009)	The Regulations ensure the sound management, storage and safe disposal of hazardous wastes, to prevent environmental pollution and harm to human health. 'Hazardous' waste applies to wastes which contain any substance which: - is listed a hazardous waste in the List of Waste Regulations 2005 (see below); - is exceptionally classified as hazardous by the Secretary of State or any of the National Executives; or - is declared hazardous by virtue of any regulations under section 62 of the Environmental Protection Act (EPA) 1990. All hazardous waste movements require pre-notification to the Environment Agency prior to any hazardous waste being produced (where possible). Producers are required to know and document the quantity, nature, origin and final destination of the Hazardous Waste and to certify that the waste carrier is registered under the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991. Copies of the completed consignment notes must be retained for at least 3 years by all those in the waste chain.
LIST OF WASTE (ENGLAND) REGULATIONS 2005 (AMENDED 2005)	The List of Waste Regulations categorises wastes as hazardous and provides a coding system of waste and hazardous waste. Wastes included in the list are subject to the provisions of Directive 75/442/ EEC.

Environmental Legislation	Summary of Relevance to the Site
	Under the List of Waste Regulations, a set of criteria are provided to determine whether or not a waste is classified as hazardous, e.g. if it has a flash point lower than 55°C.
ENVIRONMENTAL PROTECTION (DUTY OF CARE) REGULATIONS 1991 (AMENDED 2003)	A legal duty of care is imposed on anyone – from producers to carriers and disposers of waste, to ensure that: - Waste is not illegally disposed of or dealt with without a licence or in breach of a licence or in any way that causes pollution or harm; - Waste is transferred only to an ‘authorised person’, i.e. a local authority, registered carrier or a licensed disposer; and - When waste is transferred, it is accompanied by a full written description which forms part of a waste transfer note (or consignment note for hazardous wastes). All persons subject to duty of care are required to ensure that neither they nor any other person commit an offence under the Regulations.
ENVIRONMENTAL PROTECTION ACT (EPA) 1990: PART 2 – WASTE ON LAND (AMENDED 2010)	This Act builds on the system put in place by the Control of Pollution Act with stricter licensing controls and other provisions aimed at ensuring waste handling, disposal and recovery operations do not harm the environment. It reorganised Local Authority responsibilities for waste management, introduced a duty of care for producers and handlers of waste and described the offences of unauthorised storage, treatment and disposal of waste.
ENVIRONMENTAL PROTECTION ACT (EPA) 1990: PART 2A	The section of the EPA created by the Environment Act 1995 setting out the legislative framework for identifying and dealing with contaminated land.
ENVIRONMENT ACT 1995	Inserted Part ‘2a’ to the EPA 1990 giving powers and responsibilities to Local Authorities regarding contaminated land.
DISCHARGE TO WATER / LAND	
ANTI-POLLUTION WORKS REGULATIONS 1999	Aimed at ensuring that site owners pay for the prevention and remediation of pollution arising from their activities. Notices can be served by the Environment Agency directing a site owner to carry out anti-pollution works where any poisonous, noxious or polluting matter is likely to enter, or to be, or to have been present in any controlled waters.
WATER INDUSTRY ACT 1999	The Act prohibits certain discharges to sewers including: - Any matter likely to injure the sewer or interfere with the free flow of its contents or to affect the treatment, disposal of its contents; - Liquid waste or steam at a temperature higher than 110°F or any other chemical waste which is dangerous, a nuisance or prejudicial to health; - Any petroleum spirit; and - Calcium carbide. Trade effluents may be discharged into public sewers only with the consent, or by agreement with, the sewerage undertaker (i.e. local water company). The consent may stipulate conditions relating to: - Nature or composition of the effluent; - Maximum daily volume allowed;

Environmental Legislation	Summary of Relevance to the Site
	- Maximum daily rate of flow; and - Sewer into which the effluent is discharged.
WATER RESOURCES ACT 1991 (AMENDED 2009)	The Act requires water abstractions to be licensed and certain discharges into controlled waters to be subject to Environment Agency consent. It is an offence under the Act ‘to cause or knowingly permit’: - Poisonous, noxious or polluting matter, or any solid waste matter, to enter controlled waters - Matter, other than trade or sewage effluent, to be discharged from a sewer in contravention of a relevant prohibition; - Trade or sewage effluent to be discharged into controlled waters or through a pipe into the sea (beyond the controlled waters) - Unauthorised work in a water protection zone; - Trade or sewage effluent to be discharged onto land or into a lake or pond in contravention of a relevant prohibition or; - Any matter to enter inland waters so as to cause or aggravate pollution by impeding flow. Pollution from individual discharges into water is controlled by a system of discharge consents which set legal limits on the type, concentration and total volume of discharge which can be released. If a pollution incident occurs, a description of the nature and extent of harm must be produced.
WATER ACT 2003 AND 2014	The Water Act replaces parts of the Water Resources Act 1991 and will be fully implemented by 2012. The Water Act introduces a new abstraction licence system which reduces the number of licences and encourages the development of Catchment Abstraction Management Strategies (CAMS).
GROUNDWATER REGULATIONS 1998 (AMENDED 2009)	The Regulations transpose the requirements of the Groundwater Directive into UK legislation. The Regulations aim to prevent and limit the pollution of groundwater by certain listed substances or groups of substances. The listed substances are the same as those in the Groundwater Directive. The Regulations aim to prevent entry of List I substances into groundwater and prevent groundwater pollution by List II substances. The direct or indirect discharge of List I or II substances must be subject to prior investigation and authorisation. The Regulations also allow notices to be served to control activities which might lead to an indirect discharge of List I substances or groundwater pollution by an indirect discharge of substances in List II.
CONTROL OF POLLUTION (OIL STORAGE) (ENGLAND) REGULATIONS 2001	These Regulations require a person having custody or control of oil to carry out certain works and to take certain precautions and other steps for preventing pollution of any waters which are controlled waters for the purposes of Part III of the Water Resources Act 1991. The Regulations impose general requirements in relation to the storage of oil and the types of container used. Where the Environment Agency considers that there is a significant risk of pollution of controlled waters from the oil in question it has the power to serve a notice on the person having custody or control to minimise the risk.

Environmental Legislation	Summary of Relevance to the Site
CONTAMINATED LAND (ENGLAND) REGULATIONS 2000 (AS AMENDED 2006 AND 2012)	Local Authorities have a duty to inspect land, to identify contamination and to decide whether any such land should be designated a 'special site'. Public registers of contaminated land and special sites are kept by the local authority and the Environment Agency. Following designation of land as contaminated or a special site, the enforcing authority can serve a remediation notice on the appropriate person(s) specifying what needs to be done and the period within which remedial work should be completed. The appropriate person will be the person(s) who caused or permitted the contamination of the land. If this person cannot be identified then responsibility falls to the current occupier or owner of the land.
BUILDING REGULATIONS 1991 (AS AMENDED 2002)	The Regulations impose requirements upon people carrying out certain building operations, including new buildings, building extensions and a material change of use of land or a building. Building work must comply with schedule 1 of the Regulations which include minimum standards for various aspects including site preparation, toxic substances, drainage etc.
INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (MARPOL)	The barges involved in the Proposed Development will adhere to International Convention for the Prevention of Pollution from Ships (MARPOL)
EMISSIONS TO AIR / NOISE	
ENVIRONMENT ACT 1995	The Environment Act 1995, Part IV, requires local authorities to review the quality of air within their area. The reviews have to consider the existing air quality and the likely future air quality during the 'relevant period'. Such reviews have to be accompanied by an assessment of whether any prescribed air quality standards or objectives are being achieved or are likely to be achieved within the 'relevant period'. Where any of the prescribed objectives are not likely to be achieved, the authority must designate that area as an air quality management area (AQMA). For each AQMA an air quality action plan (AQAP) will be required to set out how the authority will exercise its powers to achieve the objectives.
AIR QUALITY STANDARDS REGULATIONS 2010	Incorporates the 4th air quality daughter directive (2004/107/EC) that sets targets for levels in outdoor air of certain toxic heavy metals and polycyclic aromatic hydrocarbons.
CONTROL OF POLLUTION ACT (COPA) 1974 (SECTIONS 60, 61) (AMENDED 1989)	Section 60 of COPA gives powers to the Local Authority to control noise and vibration from construction sites. The basis of the COPA legislation is that Best Practical Means should be used to control noise and vibration pollution. Control is by service of an abatement notice (under S60) on the person responsible for the noise requiring specific controls to minimise noise and vibration. The notice may specify types of plant and machinery, hours of work, boundary noise levels, etc. Section 61 provides for the Contractor to apply to the Local Authority for consent before works commence. This protects the contractor from action by the local authority under S60, but not from individual residents' complaints.

Environmental Legislation	Summary of Relevance to the Site
CLEAN AIR ACT 1993	The Act prohibits, subject to certain conditions, the emission of dark and black smoke from chimneys serving boilers and other industrial plant. Limits also apply to dust, grit, sulphur and car fume emissions. All new furnaces shall be so far as practicable, smokeless. The Local Authority is empowered to undertake an examination of a plant likely to be causing air pollution, taking into account the possible relevance of statutory exemptions.
NOISE AND STATUTORY NUISANCE ACT 1993	This Act amends the Environmental Protection Act (EPA) 1990 to make noise emitted from vehicles, machinery or equipment in the street a statutory nuisance. It gives the Local Authority powers to serve an abatement notice on the person responsible.
NOISE ACT 1996	Introduces a new procedure for Local Authorities to seize noisy equipment, in relation to statutory nuisance offences under the EPA 1990.
CONTROL OF NOISE AT WORK REGULATIONS 2005	Requires that all employers must conduct an assessment of the exposure and therefore of the risk of their employees to noise where they have reason to believe that any of the specified action levels for various noise exposures is or could be exceeded.
CONSTRUCTION PLANT AND EQUIPMENT (HARMONISATION OF NOISE EMISSION STANDARDS) REGULATIONS 1985 (AS AMENDED 1995)	Provides for examination and certification of construction plant that comply with noise emission standards. The Regulations require that plant is certified by approved bodies. Various types of plant manufactured after the dates of the regulations are to meet noise emission standards and are certified as such.
ENVIRONMENTAL PROTECTION ACT (EPA) 1990: PART 3 – STATUTORY NUISANCE (SECTION 80)	When a complaint of statutory nuisance is made to the Local Authority by a person living in its area, the Authority has to take steps to investigate the nuisance. Statutory nuisances include any premises maintained in such a state to be prejudicial to health or a nuisance; any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance. Noise emitted from premises so as to be prejudicial to health or a nuisance.
VEHICLES	
ROAD VEHICLES (CONSTRUCTION AND USE) REGULATIONS 1986 (AS AMENDED 2015)	It is an offence to use a vehicle if it is emitting 'smoke, visible vapour, grit, sparks, cinders or oily substances' in such a way as is likely to cause 'damage to any property or injury to any person'. It is an offence to use a vehicle in such a way as to cause excessive noise.
ROAD TRAFFIC (VEHICLE EMISSIONS) (FIXED PENALTY) REGULATIONS 1997 (AS AMENDED 2002 AND 2003)	These Regulations give powers to Local Authorities to enforce vehicle emission standards at the roadside as part of the implementation of the national air quality strategy. Under the Regulations, Local Authorities may issue fixed penalty notices to users of vehicles that do not comply with emissions standards set in the Road Vehicles (Construction and Use) Regulations 1986 as amended. Appropriately trained Local Authority officers can test emissions from vehicles with the help of a uniformed police officer to stop the vehicle. The Local Authority officer may also issue a fixed penalty notice to drivers who leave their engines running unnecessarily.

Environmental Legislation	Summary of Relevance to the Site
ECOLOGY	
WILDLIFE AND COUNTRYSIDE ACT 1981	<u>Bats</u>: All bat species and their roosts are fully protected by law from disturbance, damage or destruction. Under the Act it is illegal to intentionally kill, injure or take a bat (alive or dead) or to disturb a bat when it is roosting. <u>Reptiles</u>: Gives legal protection to all selected reptile species, including the common lizard <i>Lacerta vivipara</i>, slow-worm <i>Anguis fragilis</i>, adder <i>Vipera berus</i>. Under the Act these species are protected from intentional or reckless killing, injury or sale. <u>Nesting birds</u>: Nesting birds, with certain exceptions, are protected from disturbance under the Act <u>Plants</u>: Section 13 of the Act protects wild plants listed on Schedule 8 of the Act. Under this provision, it is illegal to pick, collect, cut, uproot or destroy the plants listed in schedule 8.
CONSERVATION (NATURAL HABITAT ETC) REGULATIONS 1994 (THE HABITATS REGULATIONS)	All bat species are also protected by the Regulations under which it is an offence to deliberately kill, capture or disturb a bat, or to damage or destroy any place that a wild bat uses for shelter or breeding.
THE COUNTRYSIDE AND RIGHTS OF WAY ACT 2000	<u>Bats</u>: The Act amends the Wildlife and Countryside to make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection, or to disturb a bat while using a roost. <u>Nesting birds</u>: Nesting birds, with certain exceptions, are protected from disturbance under the Act. <u>Reptiles</u>: Gives legal protection to all selected reptile species, including the common (or viviparous) lizard <i>Lacerta vivipara</i>, slow-worm <i>Anguis fragilis</i>, adder (or viper) <i>Vipera berus</i>. Under the Act these species are protected from intentional or reckless killing, injury or sale.
HEDGEROW REGULATIONS 1997	Hedges that can be classified as 'important' for nature conservation under criteria (concerning hedgerow age, length and plant species diversity) as defined in the Regulations, are protected from damage and destruction.

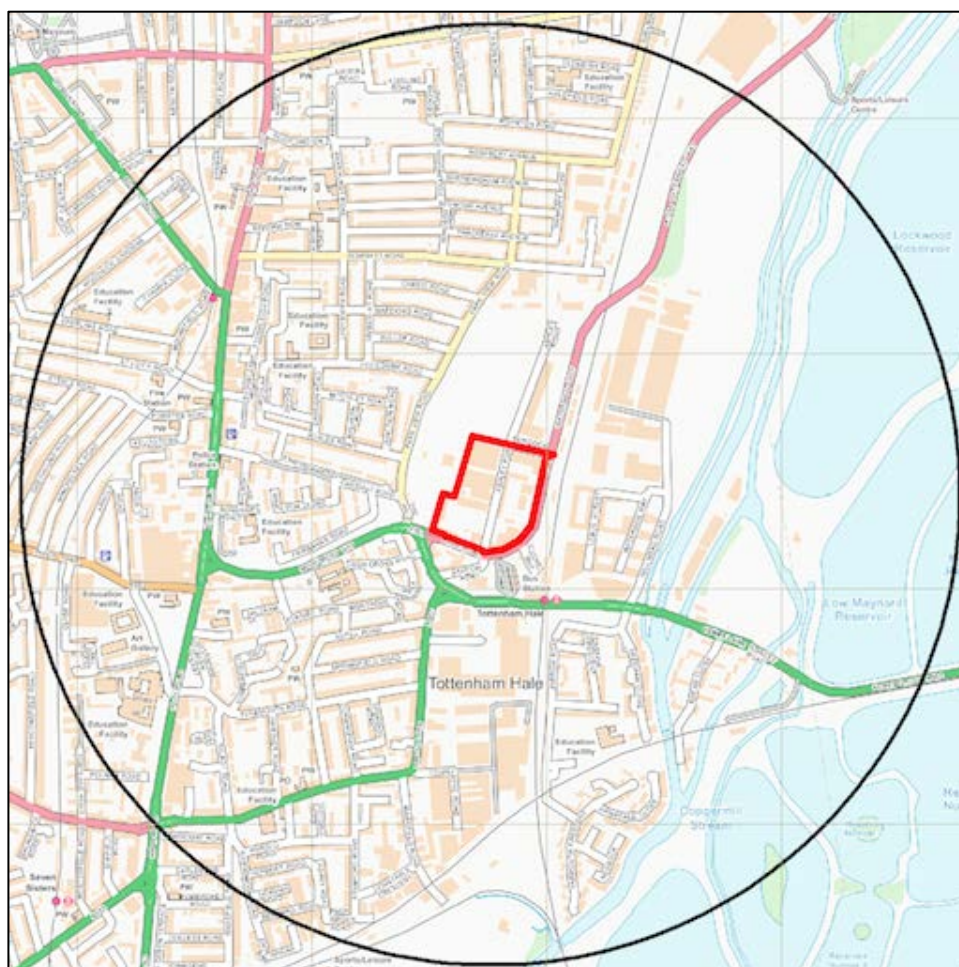
Appendix D

UXO SURVEY



PRELIMINARY UNEXPLODED ORDNANCE (UXO) THREAT ASSESSMENT

Meeting the requirements of *CIRIA C681* 'Unexploded Ordnance (UXO) – A guide for the Construction Industry' Risk Management Framework



6 ALPHA PROJECT NUMBER	P6810	ORIGINATOR	B. Wilkins
LANDMARK ORDER NUMBER	175009579_1	REVIEWED BY	C. Cole (1 st August 2018)
CLIENT REFERENCE	70046878-CMP	RELEASED BY	R. Griffiths (1 st August 2018)
SITE	Medit Flavour, Berol House, 25, Ashley Road, London, N17 9LJ		
RATING	MEDIUM – This Site requires further action to establish and mitigate any UXO risk posed		

STUDY SITE

The Study Site is described as “Medit Flavour, Berol House, 25, Ashley Road, London, N17 9LJ”, and it is centred on National Grid Reference 534380, 189700.

THREAT POTENTIAL AND RECOMMENDATIONS

UXO PROBABILITY ASSESSMENT = 3 RATING, INDICATING A MEDIUM PROBABILITY OF UXO ENCOUNTER

The rating scale can be seen on *Figure 2* (Probability of UXO Encounter). In accordance with current guidelines (*CIRIA C681 Chapter 5*), the most appropriate threat rating has been determined at this specific site for UXO threat consideration and has been used for the final assessment and recommendations.

In accordance with *CIRIA C681 Chapter 5* on managing UXO risks, *6 Alpha* recommends that the next stage in the risk management framework is:

DETAILED UXO THREAT & RISK ASSESSMENT

We would be pleased to provide this service, please contact *Envirocheck* for further details:



REPORT SUMMARY

During WWII, the Study Site was situated within *Tottenham Municipal Borough*, which recorded 23 High Explosive (HE) bomb strikes per 100 hectares; a low level of bombing.

Luftwaffe aerial reconnaissance photography associated with the Site identified reservoirs (located 470m east, 620m east, 670m south-east, 675m south-east, 780m south-east and 820m east-south-east) and a filter basin (located 580m south-east) as primary bombing targets. In addition, factories located on-site, and works, a railway station and a railway line located in the vicinity may have been considered secondary bombing targets.

Air Raid Precaution (ARP) records did not identify any HE bomb strikes on-site. However, four were identified within 120m of the Site boundary, the closest being 20m south.

London County Council (LCC) bomb damage mapping was not available. Nonetheless, given that bomb strikes impacted close to the Site's vicinity, it is likely that the surrounding structures sustained some degree of bomb damage.

Given bomb strikes were identified in close proximity to the Site; it would suggest that further action is warranted to address the potential for UXO encounter.

USING THIS REPORT

This Preliminary Assessment is designed to inform environmental and construction professionals of the potential threat of military related explosives and/or ordnance on, or in, the vicinity of the Study Site.

This assessment is designed to be employed as a site-screening tool to meet with the requirement of Phase One of the *CIRIA UXO Risk Management Framework*; there are two broad prospective outcomes; either the threat level requires a detailed threat & risk assessment; or no further action is required. In the former instance we can provide a report within 14 working days (or more quickly upon application).

Two figures accompany the report, the *Second World War* (WWII) High Explosive (HE) Bomb Density and the final Probability of UXO Encounter. The purpose of this approach is to demonstrate that whilst bomb density statistics give an indication for WWII bombing, they should not be relied upon exclusively to generate a holistic assessment.

For further information, please contact *Envirocheck*:

Website: <http://www.envirocheck.co.uk>

Telephone: +44 (0)844 844 9952

Email: customerservice@envirocheck.co.uk

DATA FINDINGS

Threat Source (within 1,000m)	Detail	
	Identified	Comments
 Airfields/Military Facilities	✗	None recorded within 1,000m.
 Ordnance Manufacture/Storage	✓	A WWI explosives factory (located 530m north-east).
 WWII Decoy Bombing Sites	✗	None recorded within 1,000m.
 WWII Defensive Features	✓	Pillboxes (located 535m south, 635m south, 790m south-east and 830m south), and an anti-tank block (located 555m south).
 WWII <i>Luftwaffe</i> Designated Bombing Targets	✓	Reservoirs (located 470m east, 620m east, 670m south-east) and a filter basin (580m south-east) were identified as primary targets.
 Secondary Bombing Targets	✓	Two factories (located on-site), works (190m south-east), and a railway station and railway line (located 210m south-east).
 WWII Bomb Strikes Within Site Boundary	✗	ARP records did not identify any HE bomb strikes on-site.
 WWII Bomb Strikes Near Site Boundary	✓	ARP records identified four HE bomb strikes 20m south, 35m south-west, 85m south-west and 120m south-west.
 WWII Bomb Damage	✗	Official bomb damage mapping was not available.
 Abandoned Bomb Register	✗	The official abandoned bomb list did not identify any abandoned bombs within 1,000m.
 WWII Bombing Density Per 100 Hectares	✓	The Site was located within <i>Tottenham Municipal Borough</i> , which recorded 23 HE bomb strikes per 100 hectares.

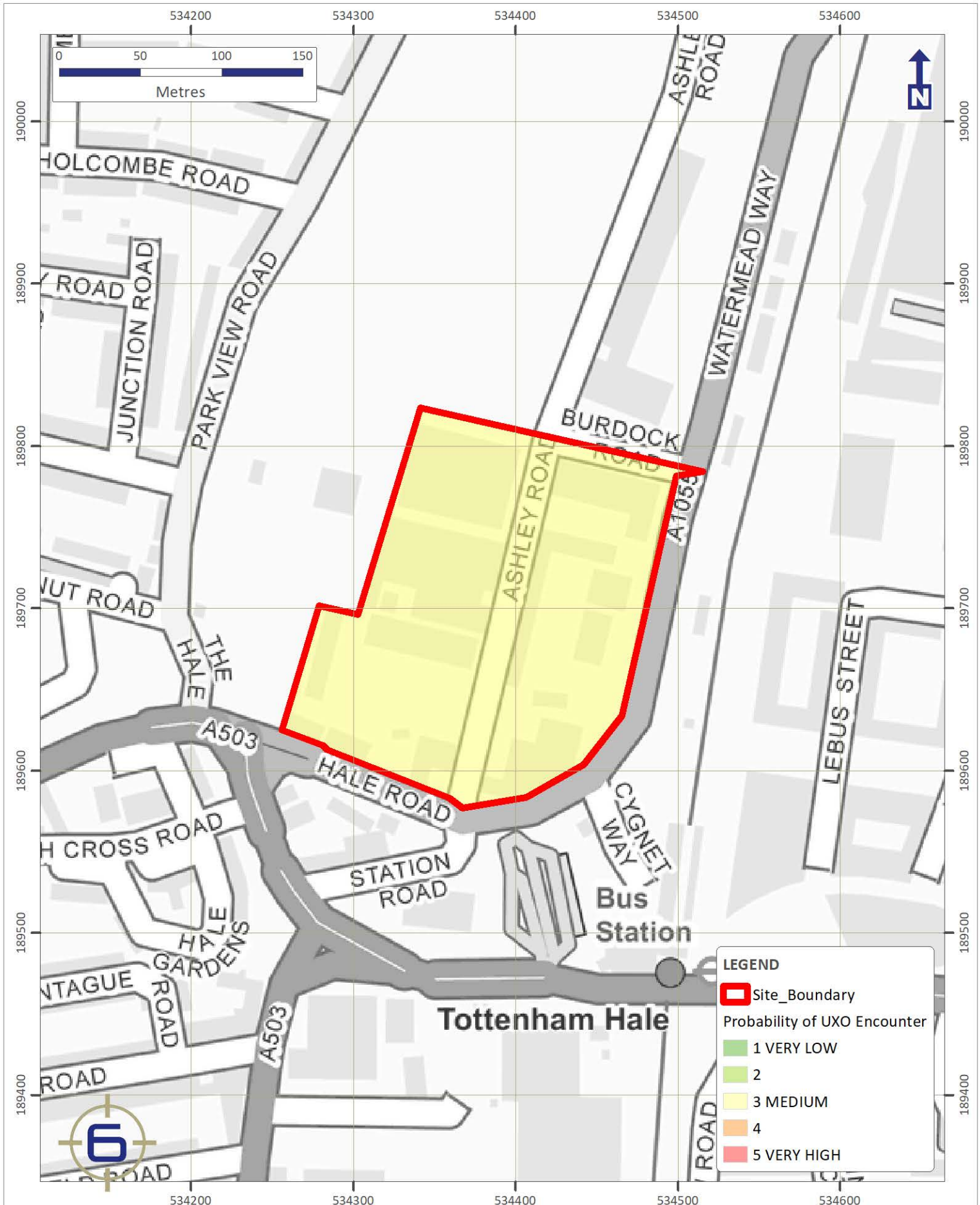
IMPORTANT NOTES

1. The term 'Preliminary UXO Threat Assessment' has been used to describe this report, to fall in line with the *CIRIA* C681 guidelines. Whilst the term 'Risk' can be justifiably used at this stage, the reader should note that the 'Consequence' function of 'Risk' is not considered. Should it be required, this would be addressed in the 'Detailed UXO Threat & Risk Assessment' (Stages 2 and 3).
2. This report is accurate and up to date at the time of writing.
3. The assessment levels have been generated from historical data and third party sources. Where possible *6 Alpha* have sought to verify the accuracy of such data, but cannot be held accountable for inherent errors that may be in third party data sets (e.g. *National Archives* or library sources).
4. *6 Alpha* have exercised all reasonable care, skill and due diligence in producing this service.
5. Whilst every effort has been used to identify all potential UXO/explosive threats, there were a number of private facilities, which may not have released privately recorded information concerning UXO/explosive threats into the public domain. It is therefore possible that some of the aforementioned sites may not be included within the database.

WWII High Explosive Bomb Density



Probability of UXO Encounter





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