



Construction Environmental Management Plan

807 High Road, London, N17 8ER

October 2022

Waterman Infrastructure & Environment Limited

Pickfords Wharf, Clink Street, London, SE1 9DG
www.watermangroup.com

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Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Date	Prepared by	Checked by	Approved by
First	October 2022	Habiba Bernier	Milly Bowen	Suzanne Craig
				

Comments	First issue for design team review.
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List of Abbreviations

AQDMP	Air Quality and Dust Management Plan
BS	British Standard
BRE	Building Research Establishment
BREEAM	BRE's Environmental Assessment Method
CCS	Considerate Constructors Scheme
CCTV	Closed-circuit television
CEMP	Construction Environmental Management Plan
CLP	Construction Logistics Plan
CL:AIRE	Contaminated Land: Applications in Real Environments
Defra	Department for Environment, Food & Rural Affairs
DEMP	Demolition Environmental Management Plan
DoW CoP	Definition of Waste: Code of Practice
EA	Environment Agency
EMS	Environmental Management System
EWG	European Waste Catalogue
HRWT	High Road West Tottenham Ltd
HSE	Health and Safety Executive
IAQM	Institute of Air Quality Management
ICE	Institution of Civil Engineers
ISO	International Organization for Standardization
LB Haringey	London Borough of Haringey
MMP	Materials management plan
NRMM	Non-road mobile machinery
PERA	Preliminary Environmental Risk Assessment
PHS	Planning and Heritage Statement
PPE	Personal protective equipment
PPG	Pollution Prevention Guidance
SPD	Supplementary planning document
SWMP	Site Waste Management Plan
UXO	Unexploded ordnance
WMM	Waste minimisation and management
WRAP	Waste Resources Action Programme
WSI	Written Scheme of Investigation
WTN	Waste transfer note

1. Introduction

1.1 The Brief

High Road West Tottenham Ltd (HRWT) (the Applicant) has appointed Waterman Infrastructure & Environment Limited (Waterman) to prepare a Construction Environmental Management Plan (CEMP) to support the redevelopment of 807 High Road, London, N17 8ER (the Site). The Site lies within the London Borough of Haringey (LB Haringey).

1.2 Background

1.2.1 Planning permission HGY/2021/0441

Planning permission for the redevelopment of the Site was granted subject to conditions by LB Haringey in September 2021 (application reference HGY/2021/0441). The proposed development was described as:

“Demolition of the existing buildings and the erection of a replacement building up to four storeys to include residential (C3), retail (Class E, a) and flexible medical / health (Class E, e) and office (Class E, g, i) uses; hard and soft landscaping works including a residential podium; and associated works”

Documents accompanying the planning application included:

- an Arboricultural Impact Assessment prepared by Hallwood Associates in March 2020;
- an Archaeological Desk Based Assessment prepared by L – P : Archaeology (no date);
- a BREEAM Accredited Professional Stage 2 Report – Concept Design prepared by eb7 in August 2020;
- a Construction Management Plan prepared by Base Contracts Ltd;
- an Energy & Sustainability Statement prepared by P3R in August 2020;
- a Noise Impact Assessment prepared by Emtec Products Ltd in March 2020;
- a Planning & Heritage Statement prepared by TH Property Ltd in April 2020;
- a Preliminary Risk Assessment (PERA) prepared by Waterman in March 2020; and
- a Site Waste Management Plan (SWMP) prepared by SitePlan in March 2020.

These documents have been used to inform the sections of this CEMP.

Condition 31

This CEMP has been prepared pursuant to Condition 31 of the 2021 permission, which states:

“(b) The...CEMP shall include an Air Quality and Dust Management Plan (AQDMP).

I No development shall commence (other than demolition) until a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority.

(d) The...CEMP shall provide details of how demolition and construction works respectively are to be undertaken and shall include:

- A construction method statement which identifies the stages and details how works will be undertaken;*
- 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;*
- Details of plant and machinery to be used during demolition/construction works;*
- Details of an Unexploded Ordnance Survey;*

- v. Details of the waste management strategy;*
 - vi. Details of community engagement arrangements;*
 - vii. Details of any acoustic hoarding;*
 - viii. A temporary drainage strategy and performance specification to control surface water runoff and Pollution Prevention Plan (in accordance with Environment Agency guidance);*
 - ix. Details of external lighting; and,*
 - x. Details of any other standard environmental management and control measures to be implemented.*
- I The AQDMP shall be in accordance with the Greater London Authority SPG Dust and Emissions Control (2014) and shall include:*
- i. Mitigation measures to manage and minimise demolition/construction dust emissions during works;*
 - ii. Details confirming the Plot has been registered at <http://nrmm.london>;*
 - iii. Evidence of Non-Road Mobile Machinery (NRMM) and plant registration shall be available on site in the event of Local Authority Inspection;*
 - iv. An inventory of NRMM currently on site (machinery should be regularly serviced, and service logs kept on site, which includes proof of emission limits for equipment for inspection);*
 - v. A Dust Risk Assessment for the works; and*
 - vi. Lorry Parking, in joint arrangement where appropriate.*
- (f)...construction works shall only be carried out in accordance with an approved...CEMP. Additionally, the site or Contractor Company must be registered with the Considerate Constructors Scheme. Proof of registration must be sent to the Local Planning Authority prior to any works being carried out.*

REASON: To safeguard residential amenity, reduce congestion and mitigate obstruction to the flow of traffic, protect air quality and the amenity of the locality."

1.3 Report Scope

The aim of this CEMP is to ensure that potential impacts to the environment and sensitive local receptors resulting from the construction works are avoided or minimised, as far as reasonably practicable.

The purpose of this CEMP is to present environmental management information required by Condition 31 of the 2021 planning permission. It should be read alongside the Applicant's detailed Construction Logistics Plan (CLP) (prepared by Waterman in October 2022 to discharge Condition 30) and Demolition Environmental Management Plan (DEMP) (prepared by Waterman in October 2022 to discharge part of Condition 31).

This CEMP report also:

- describes the Site, the proposed development, and the relevant planning history;
- demonstrates how construction and other Site activities and supporting design will properly integrate the requirements of environmental legislation, policy, good practice, and those of the environmental regulatory authorities and third parties;
- identifies nearby sensitive receptors that could be impacted by construction activities;
- systematically considers environmental impacts associated with construction (excluding impacts associated with logistics / transport which are being prepared separately);
- demonstrates how the Applicant and its Principal Contractor will consider, assess, and mitigate these potential impacts;
- ensures compliance with relevant environmental legislation, guidance, and standards;

- commits the Applicant and its Principal Contractor to undertaking construction works in an environmentally responsible manner to minimise disruption to the surrounding area; and
- provides a review, monitoring, and audit mechanism for environmental performance as the project progresses.

The Principal Contractor, when appointed, will have overall responsibility for works at the Site. It will also be expected to refine the construction strategy and update this document as the project progresses.

This CEMP is intended to be a living document. It will be subject to refinement as the project evolves, and any significant changes would be agreed with LB Haringey where required.

1.4 Report Structure

This CEMP systematically considers the following topics:

- the Site and the proposed development;
- codes and standards applicable to the construction works;
- responsibilities and contacts;
- general Site management (including external lighting);
- Air Quality and Dust Management Plan (AQDMP);
- unexploded ordnance;
- construction waste management;
- community engagement and management of complaints;
- noise and vibration;
- water management and pollution control;
- other standard environmental management and control measures;
 - archaeology and built heritage;
 - management of soil contamination; and
 - environmental auditing and verification monitoring.

1.5 Assumptions and Limitations

This document was completed in accordance with a scope of works agreed between Waterman and the Applicant as detailed in Waterman's fee letter (reference WIE16362-101-20210707-CWS-Fee, dated 07 July 2021).

The content of this document is based on information made available to Waterman during preparation of the planning application.

It is assumed this CEMP will be reviewed and further developed prior to the start of the project.

The Principal Contractor, once appointed, will agree to comply with the arrangements set out in this document and update it as necessary throughout the works.

2. The Site and Proposed Development

2.1 Site Location

The Site's location is shown on the figure below. A larger version of this plan is presented in Appendix A.

Figure 1: Site location plan



Source: F3 Architecture and Interiors drawing titled "LOCATION PLAN" drawing number 807HR-1000-ZZ-L00-GA-A-0800 dated 06 March 2020.

The Site occupies an area of approximately 0.05 hectares (ha). It is bound by Percival Court and 809-811 High Road (Domino's Pizza) to the north, High Road to the east, 803-805 High Road (The Bricklayers pub) to the south, and 1 Chapel Place to the west. The wider surrounding area is characterised by a mix of residential, commercial, and light industrial buildings.

2.2 Surrounding Area

The Site lies within a mixed-use commercial, retail, residential and light industrial area.

Potentially sensitive receptors are summarised in the table below. The mitigation measures to be implemented during construction would endeavour to minimise disturbance to these receptors.

Table 1: Summary of potentially sensitive receptors

Category	Sensitive receptor / land use	Nearest approximate distance from the Site boundary within 500m
Residential	Intermittent residential properties within 500m, the closest being houses and flats on White Hart Lane, some of which have back gardens	55m southwest
Educational	London Academy of Excellence Tottenham	140m east
	Sunrise Pre-school	220m northeast
	Sunbeams Academy	240m east
	Brook House Primary School	250m north
	Little Learners Nurseries	340m north
	St Francis de Sales Junior School	370m south
	Haringey Sixth Form College	370m west
	Duke's Aldridge Academy	400m east
	Vale School	420m east
Commercial / retail	Intermittent retail and commercial properties within 500m, the closest being Domino's Pizza to the north and The Bricklayers (Public House) to the south	adjacent to the Site boundaries
	Elite Photo & Video (photography studio)	20m north
	Tottenham Funeralcare	30m east
	Amore Bridal (dress shop)	60m north
	Divine Solutions Schoolwear (uniform shop)	60m northeast
	White Hart Corner Shop	65m south
	Tottenham Post Office	80m north
	De Dandanus Restaurant	85m southwest
	Caribbean View (restaurant)	95m northeast
	The Coach & Horses (Public House)	170m north
Community / recreational	B&M Home Store	250m northwest
	Tottenham Hotspur Stadium	140m southeast
	Calvary Church of God in Christ	240m east
Built heritage	St Francis de Sales Church	310m south
	19 listed buildings within 500m, the closest of which is a Grade II listed building named 797 and 799 High Road	30m south
Transportation	A1010 High Road	adjacent to the eastern boundary
	White Hart Lane Station (bus stop M)	30m east
	White Hart Lane train station	230m southwest

Category	Sensitive receptor / land use	Nearest approximate distance from the Site boundary within 500m
Controlled waters	Secondary A aquifer (Kempton Park Gravel Member)	within the Site boundary
	Unproductive stratum (London Clay formation)	within the Site boundary
	The Moselle river	360m west
Habitats and species	Primary habitat of built-up areas and gardens	within the Site boundary

2.3 Historical Uses

From 1909 the Site comprised commercial and residential buildings. Historical mapping suggests it has been in its current formation since the late 1940s.

The surrounding area historically comprised mixed residential, commercial and light industrial uses. In the late 1800s and early 1900s, the area supported a brewery, a railway line, a tramway, a train depot, a warehouse, a number of manufacturers and a dye works. In the late 1900s and early 2000s, the area supported a printing works, an engineering works, a haulage depot, 3 electrical substations and a number of factories, warehouses and scrap yards.

2.4 Current Layout

A plan showing the Site's current layout is presented in Appendix A.

The Site currently comprises a Tottenham Hotspur Football Club training and storage facility at ground floor level. Above ground floor the building splits into two blocks. The main block faces High Road and is arranged over first and second floor and is currently vacant. The second block faces Percival Court and is arranged as first floor residential use and is also unoccupied.

2.5 Proposed Development

The proposed development involves:

- the demolition of existing buildings (the Applicant's DEMP should be referred to for details of demolition works);
- the construction of a building comprising up to four storeys to include residential, retail, flexible medical / health and office uses; and
- hard and soft landscaping works including a residential podium and associated works.

3. Applicable Codes and Standards

3.1 Relevant Guidance and Standards

The following guidance and standards are relevant to this section:

- BREEAM Accredited Professional Stage 2 Report – Concept Design 2020;
- the Considerate Constructors Scheme (CCS);
- International Organization for Standardization (ISO) 14001 – environmental management system;
- “Working at construction and demolition sites: PPG6” (withdrawn in 2015 but remains good practice);
- LB Haringey’s Sustainable Design and Construction Supplementary Planning Document (SPD) 2013; and
- Condition 31 of planning permission HGY/2021/0441.

3.2 Considerate Constructors Scheme (CCS)

The aim of the CCS is to improve the image of construction by encouraging good communication with neighbours, good quality welfare facilities, and greater environmental awareness.

The appointed Principal Contractor will be expected to work under the guidelines of the CCS (as required by part (f) of Condition 31). Its targeted score will be added to this document in due course, and proof of registration will be added to Appendix B.

3.3 Contractor Management System

The appointed Principal Contractor will be required to have an Environmental Management System which is accredited to, or in accordance with, ISO 14001, the international standard for Environmental Management Systems (EMS). Once appointed, the Principal Contractor will be expected to:

- adhere to all procedures and guidelines stated within this CEMP;
- consider this CEMP in its policies, procedures, targets, and objectives;
- comply with all relevant legislation; and
- implement pollution prevention policies and procedures on Site in accordance with “Working at construction and demolition sites: PPG6”, Pollution Prevention Guidelines.

3.4 Working at Construction and Demolition Sites: PPG6

Pollution Prevention Guidelines (PPG) “Working at construction and demolition sites: PPG6” (second edition) was published by the Environment Agency in 2012. It was withdrawn in 2015 but remains good practice. It is aimed at site managers, foremen, and supervisors / anyone who manages the day-to-day operation of a demolition site. It includes guidance on pollution prevention planning, drainage, materials storage, oil use, waste management, and incident response.

3.5 LB Haringey’s Sustainable Design and Construction SPD 2013

A Sustainable Design and Construction SPD¹ was adopted by LB Haringey in March 2013 which provides guidance on how development in Haringey should be designed to ensure that it is as sustainable as possible. Environmental aspects it advises on include:

- water management;
- pollution – air, noise, light and land;
- waste minimisation and management;

¹ LB Haringey “Sustainable Design & Construction Supplementary Planning Document” available from <https://www.haringey.gov.uk/planning-and-building-control/planning/planning-policy/local-plan/supplementary-planning-guidance-documents/sustainable-design-and-construction-spd> (accessed 01 September 2022).

- biodiversity areas of protection and methods of improvement; and
- transport – sustainable modes and accessibility.

3.6 The Applicant's Sustainability Standards and Aspirations

The Applicant's planning-stage sustainability aspirations were set out in its BREEAM report (listed in section 1.2.1), hereafter referred to as the "BREEAM report". The BREEAM report set out the aim of achieving a rating of 'Excellent' for the proposed development under the BREEAM New Construction 2018 manual; though it is noted LB Haringey's policy position is BREEAM 'Very Good'.

The BREEAM pre-assessment targeted the following issues of relevance to this CEMP:

- Man 3, responsible construction practices, complying with which involves:
 - ensuring all timber and timber-based products used during construction are legally harvested and traded timber;
 - operating an environmental management system during construction, e.g. ISO 14001;
 - actions (to be implemented by the Principal Contractor) to minimise risks such as pollution management; and
 - assigning responsibility to an individual for monitoring, recording, and reporting energy use, water consumption, and transportation data (where measured).
- Mat 03, responsible sourcing of materials;
- Wst 01, construction waste management, complying with which involves promoting resource efficiency (e.g. tonnes of waste generated per 100m²) and diverting resources from landfill (more detail is included in section 8.4); and
- Wst 02, use of recycled and sustainably sources aggregates, which encourages the reuse of site-won materials and tracking the source and transport of aggregates.

4. Responsibilities and Contacts

4.1 Key Responsibilities

To ensure environmental standards are maintained, every person working on Site should be aware of their responsibilities. Responsibilities are set out in the Table 2 below. This table may be completed and reproduced to be displayed on Site notice boards or used in staff training as required.

In general, the Principal Contractor will have overall responsibility for implementation of the CEMP including detailing roles and responsibilities in method statements and plans of work for each activity. It should be noted that multiple roles can be fulfilled by one person / party.

As part of their induction, all Site personnel must be made aware of the importance of maintaining good relations with the local community and neighbours.

Table 2: Key responsibilities

Person / organisation	Responsibility
The Applicant: <i>HRWT</i>	undertaking formal communication with neighbours and LB Haringey in relation to key stages of the works.
Project Manager: <i>To be confirmed</i>	person involved in the management of the project on behalf of the Applicant, issuing instructions to the Principal Contractors necessary.
Principal Contractor: <i>To be confirmed</i>	- ensuring the requirements of this CEMP are adhered to at all times; - ensuring all Site staff and contractor(s) undertake their activities in accordance with best practice and the requirements of the CEMP; - liaising with LB Haringey as appropriate; - ensuring appropriate monitoring is undertaken by the nominated environmental monitoring co-ordinator (see below); - ensuring that unacceptable levels of environmental pollution (including fuel spillages, odour, noise, dust, or vibration) do not arise from their activities on the Site; - ensuring that: - statutory environmental requirements are met; - environmental good practice and control is employed; - relevant procedures are followed; - resources (personnel and financial) are available to meet the environmental management requirements; and - corrective actions are implemented. - all visitor, workforce and community accidents, incidents and near misses are recorded and action taken to reduce the likelihood of them recurring; - records and other relevant documentation are maintained; - adequate processes and equipment are in place to ensure that staff and Site occupants are provided for in the case of a medical emergency; - identifying and implementing initiatives to promote and maintain the health and wellbeing of all Site operatives within the Site footprint; - establishing management practices and facilities encouraging equality, fair treatment and respect of all Site operatives; and - providing secure, clean, and organised facilities for all operatives within the Site footprint.
Transport Co-ordinator	co-ordinating deliveries and controlling vehicles accessing and leaving the Site;

Person / organisation	Responsibility
(nominated by, and reporting to, the Principal Contractor): <i>To be confirmed</i>	• recording distances travelled by each vehicle to and from the Site; and • ensuring that fleet operators capture and investigate any road accidents, incidents and near misses and reports these back to the Principal Contractor where such statistics will be analysed.
Environmental Monitoring Co-ordinator (nominated by, and reporting to, the Principal Contractor): <i>To be confirmed</i>	• monitoring dust, noise and vibration within the vicinity of the Site as required; • auditing of CEMP; and • ensuring that complaints regarding dust, noise or vibration are appropriately investigated and responded to.
Liaison Manager (nominated by, and reporting to, the Principal Contractor): <i>To be confirmed</i>	• liaison with neighbours and LB Haringey regarding Site specific issues; • producing a regular newsletter to inform stakeholders of progress, issues and upcoming work; and • keeping the Site notice board up to date, including with appropriate contract information.
Designer: <i>To be confirmed</i>	• minimising the production of waste through design, incorporating standard length materials; • selecting materials with a lower environmental impact wherever possible; and • ensuring the development design meets the requirements of the Construction (Design and Management) Regulations 2015 (minimising hazards for construction e.g. use of hazardous materials).
Sub Principal Contractor Site managers: <i>To be confirmed</i>	• reporting incidents to the Principal Contractor; • minimising waste; • ensuring that all staff adhere to statutory environmental requirements and the CEMP; • ensuring that resources (personnel and financial) are available to meet the environmental management requirements; • ensuring that corrective actions are implemented; and • Ensuring that records and other relevant documentation are maintained and reported to the Principal Contractor including energy use and water consumption.
Site personnel: <i>To be confirmed</i>	• all Site staff are responsible for adhering to the requirements of the procedures outlined in this CEMP, ensuring that legislative requirements and good environmental practice are met within their job function; and • as part of the Site induction, all staff will be made aware of the importance of maintaining good relations with the local community and neighbours.

4.1 UK Environmental Regulators

Details of the applicable UK environmental regulators responsibilities and contact numbers are provided in the table below.

Table 3: Applicable UK environmental regulators

Regulator	Responsibilities	Contact number	Website
Environment Agency	Discharges to land and controlled waters, waste, effluent discharges, abstraction licenses, some nature conservation functions, ground contamination and enforcing environmental legislation.	03459 33 55 77	www.environment-agency.gov.uk
Thames Water	Authorising trade effluent consents.	0800 316 9800	https://www.thameswater.co.uk/contact-us
LB Haringey	Noise, air quality, traffic, planning, contaminated land. Some powers under waste legislation to stop and search waste carriers, and confiscate vehicles.	020 8489 5504	https://www.haringey.gov.uk/contact-haringey-council

4.2 Key Project Contacts

Key contacts will be provided and agreed following the appointment of the Principal Contractor and prior to work commencing at the Site.

4.1.1 Site address and planning reference

Address: 807 High Road, London, N17 8ER

Planning reference to which the CEMP applies: HGY/2021/0441

4.1.2 Construction Environmental Management Plan

Contact details for the person responsible for submitting the final CEMP.

Name: to be confirmed
 Address: to be confirmed
 Email: to be confirmed
 Phone: to be confirmed

4.1.3 Project Manager

Contact details of the Site project manager responsible for day-to-day management of the works and dealing with any complaints from local residents and businesses.

Name: to be confirmed by the Principal Contractor
 Address: to be confirmed by the Principal Contractor
 Email: to be confirmed by the Principal Contractor
 Phone: to be confirmed by the Principal Contractor

4.1.4 Community liaison

Contact details of person responsible for community liaison and dealing with any complaints from local residents and businesses.

Name: to be confirmed
Address: to be confirmed
Email: communityrelations@tottenhamhotspur.com
Phone: to be confirmed

4.1.5 The Principal Contractor

Contact details of where the Principal Contractor accepts receipt of legal documents for the person responsible for the implementation of the CEMP.

Name: to be confirmed
Address: to be confirmed
Email: to be confirmed
Phone: to be confirmed

5. General Site Management

5.1 Introduction

This section addresses the general Site management practices that should be employed to ensure safe and compliant operation of the works. It presents an initial construction method statement (pursuant to Condition 31 part (d)(i)), the details of which will be developed by the Principal Contractor once appointed.

More detail about construction vehicle routing, access to the Site, pedestrian safety, etc. applicable to the proposed construction works can be found in the Applicant's detailed CLP (pursuant to Condition 30).

5.2 Working Hours

The hours of work shall be restricted to the following periods in line with Condition 31(d)(ii):

- between 08:00 and 18:00 hours Monday to Friday;
- between 08:00 and 13:00 hours on Saturdays; and
- none on Sundays / public holidays.

The Principal Contractor will also have a period of up to one hour before and up to one hour after normal working hours (detailed above) for start-up and close-down. This will include (but not be limited to), for example:

- deliveries;
- moving equipment;
- unloading;
- maintenance and general preparation works; and
- start of shift safety / environmental briefings.

This will not include the operation of plant or machinery likely to cause a disturbance to local sensitive receptors.

No work (except in case of an emergency, for health and safety reasons or general office-based work) may be carried out on Sundays, Bank Holidays or Public Holidays or undertaken out of hours without prior agreement with LB Haringey.

It is recognised that there may be circumstances where the restriction on hours of work cannot be adhered to and where work cannot be completed within the hours of a single working day, but that also cannot be carried over to the following day. The Principal Contractor will endeavour to minimise the frequency and duration of such works. However, where unavoidable, the Principal Contractor will be required to justify any proposed deviation from these operating periods, provide written justification to LB Haringey, and, where practicable, notify neighbours before works outside normal hours commence.

5.3 Access and Security

It is likely the Site will be accessed from High Road to the east. More detail about vehicle routing and access can be found in the Applicant's detailed CLP.

Security measures are likely to include:

- operation of a security pass system at the main gate(s);
- requiring all staff to sign in and out;
- obligatory inductions to allow access;
- clearly marking the main gate and work perimeters with warning signs detailing potential hazards;
- segregating vehicle and pedestrian access where possible;
- demarcating vehicle and pedestrian routes;

- using crowd barriers where practicable;
- locking access points out of hours;
- providing alarms in line with Health and Safety Executive (HSE) requirements;
- installing CCTV at the main gate;
- retaining CCTV data for at least two weeks after the time of recording, which will be made available to LB Haringey on request; and
- logging security events and making these logs available to LB Haringey on request.

5.4 Hoarding

Hoarding will be maintained around the Site at all times. The hoarding will be inspected on a regular basis to ensure the safety of pedestrians using adjacent pavements is not compromised.

It is possible that portions of the surrounding pavement will be closed during the construction works and that the hoarding will therefore follow the kerb line in order to provide working room. Where required, the positioning of this hoarding must be agreed in writing with LB Haringey and all relevant licenses acquired prior to its installation. Pedestrians will be redirected safely to alternative pedestrian routes.

Hoarding specifications will be added to this CEMP in due course.

5.5 External Lighting

Generally, lighting will be sensitively positioned in relation to nearby sensitive receptors and kept to a minimum wherever possible, considering the needs for health and safety and security.

Any new external lighting will be designed in accordance with relevant guidance such as the Institution of Lighting Professionals guidance note for reduction of obtrusive light².

Floodlighting in areas adjacent to sensitive receptors shall generally be limited to the working hours and when seasonal changes in natural daylight require it.

Hoarding will be sensitively lit during hours of darkness.

5.6 Site Facilities

Facilities to be provided by the Principal Contractor will include staff welfare facilities and a Site office installed for the Principal Contractor who will hold documentation required by this CEMP. All facilities will be contained within the curtilage of the Site area. Their locations will be agreed between the Principal Contractor and LB Haringey.

The Principal Contractor will maintain housekeeping standards across the Site, such that the Site is safe, clean and organised. This includes but is not limited to facilities, materials and waste storage.

5.7 Storage

All raw and salvaged materials will be appropriately stored on Site to minimise damage by vehicles, weather, contamination by other substances, or theft / vandalism. It is unlikely any substantial external storage will occur due to space restrictions. Secure storage will be provided for items of high value, materials which are hazardous, or which are easily damaged. Packaging will be retained on goods until the materials are required. Once removed, packaging materials will be stored and returned to the supplier wherever possible. Goods will be delivered on an “as needed / just in time / early doors” basis to reduce stockpiling on-site, damage from vehicles and / or weather, and other causes of wastage.

5.8 Tree Protection

The Applicant’s Arboricultural Impact Assessment included an evaluation of the Site in accordance with BS 5837:2012 “*Trees In relation to design, demolition and construction – Recommendations*”.

² Institution of Lighting Professionals guidance “Guidance Note GN01/21: The Reduction of Obtrusive Light” 2021, available from <https://theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2021/> (accessed 1 September 2022).

The Applicant intends to retain the tree adjacent to the Site. The tree will require significant crown reduction to create sufficient clearance for construction works.

Should it not be possible to retain the tree during construction works, space will be designated within the proposed courtyard and playground area to plant four new trees to mitigate its loss.

5.9 Phasing

In its Construction Management Plan (listed in section 1.2.1), the Applicant anticipated the construction phase to comprise the following phases:

- securing the Site;
- protecting the trees and roots;
- setting up the Site hoarding around the perimeter;
- demolishing existing buildings; and
- constructing the proposed development.

6. Air Quality and Dust Management Plan

6.1 Introduction

An Air Quality and Dust Management Plan (AQDMP) to satisfy parts (b) and (e) of Condition 31 can be found in Appendix D of this document. The AQDMP includes:

- a dust risk assessment;
- details of site monitoring and procedures (including monitoring equipment and locations);
- dust and emission mitigation measures; and
- details of Non-Road Mobile Machinery (NRMM)*.

*Evidence of NRMM and plant registration, as required by Condition 31(e)(ii) will be added to Appendix B of this document in due course.

6.2 Relevant Legislation

- Environmental Protection Act 1990;
- Mayor of London's Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance (SPG) 2014;
- the Institute of Air Quality Management's (IAQM) Guidance on the Assessment of Dust from Demolition and Construction 2014; and
- IAQM Guidance on Monitoring in the Vicinity of Demolition and Construction Sites 2018.

6.3 Documentation

The following documentation will be held on file on Site:

- AQDMP;
- evidence of NRMM and plant registration;
- an up-to-date record of dust generating activities and actions taken in response to exceptional incidents or dust-causing episodes; and
- an 'Environmental complaints / spills / incidents record' containing details of any complaints in relation to dust.

7. Unexploded Ordnance Survey

7.1 Introduction

An unexploded ordnance (UXO) survey was prepared by 1st Line Defence Ltd in July 2022. The likely potential of encountering UXO at the Site was assessed, along with basic factors that affect the potential for UXO to be present. 1st Line Defence concluded that no bomb strikes were recorded on the Site, the closest bombing incident was recorded approximately 20m east of the Site. Given the findings of the UXO survey, the risk from UXO on this Site has been assessed as low / minimal. 1st Line Defence recommend that *“no further action is taken for this site”*.

A copy of the UXO survey can be found in Appendix E.

7.2 Documentation

The following documentation will be held on file on Site:

- UXO survey.

8. Construction Waste Management Strategy

8.1 Introduction

This section applies to the minimisation, management, storage, and disposal of waste generated during construction. It is also concerned with the establishment of procedures for complying with statutory and good practice requirements for waste management.

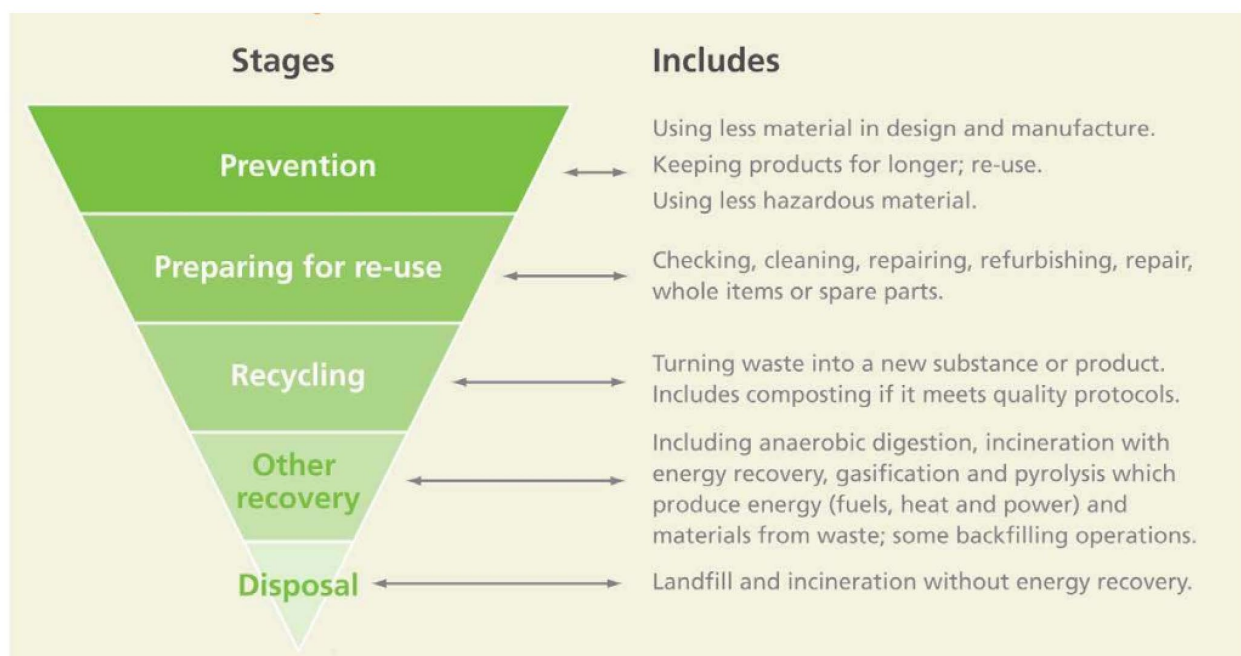
This section represents an outline version of the approved SWMP listed in section 1.2.1. The Applicant and its Principal Contractor (once appointed) will develop a detailed SWMP before starting works on Site. The SWMP can assist in evidencing the Applicant's waste targets and BREEAM assessment.

Waste minimisation and management (WMM) has several benefits, including:

- reducing disposal and material costs, e.g. by:
 - avoiding over-ordering;
 - using a walled laid-out storage and off-loading to avoid damage on delivery;
 - avoiding repetitive handling;
 - reducing waste sent to landfill (or other disposal);
- reducing carbon dioxide emissions; and
- complementing other aspects of sustainable design.

WMM should follow the principles of the waste hierarchy (shown in the figure below). The waste hierarchy is set out in national planning policy. In the first instance, finding ways to reduce waste generation. Where this is not possible, materials should be reused and recycled. Following the waste hierarchy is supported by LB Haringey policy.

Figure 1: The waste hierarchy



Source: LB Haringey Sustainable Design and Construction SPD 2013

The Principal Contractor will be responsible for ensuring the relevant documentation is completed and held on Site. Staff are also responsible for adhering to the requirements of the following procedure.

8.1.1 Approved Site Waste Management Plan

The approved SWMP (prepared by SitePlan) assessed waste minimisation opportunities, waste hierarchy routes, waste data and on Site SWMP training. It forecasted approximately 380 tonnes of waste might arise during excavation, groundworks, and construction. This included mixed construction wastes, bricks, plastics, tiles, and ceramics.

More accurate waste forecasts will be added to this document in due course.

8.2 Relevant Legislation and Guidance

- Environmental Protection Act 1990;
- Waste (England and Wales) Regulations 2011;
- List of Wastes (England) Regulations 2005;
- Hazardous Waste (England and Wales) Regulations 2005;
- Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991;
- Environmental Permitting (England and Wales) Regulations 2016, as amended;
- Clean Neighbourhoods and Environment Act 2005;
- National Planning Policy Framework 2021;
- National Planning Policy for Waste 2014;
- Waste Management Plan for England 2021;
- London Plan 2021;
- Resources and waste strategy for England 2018;
- Institution of Civil Engineers (ICE) Demolition Protocol 2008;
- CL:AIRE Definition of Waste: Development Industry Code of Practice (DoW CoP)³;
- waste management guidance⁴ produced by government bodies including Department for Environment, Food & Rural Affairs (Defra), the Environment Agency, and Ministry of Housing, Communities & Local Government: and
- LB Haringey Sustainable Design and Construction SPD 2013.

To assist in achieving best practice, the Principal Contractor will consider the following initiatives / guidance:

- Waste Resources Action Programme (WRAP) guidance documents including:
 - “*Procurement guidance for construction: Setting a requirement for Waste Minimisation and Management*”;
 - “*Practical Solutions for Sustainable Construction: Achieving Good Practice Waste Minimisation and Management*”; and
 - “*The Demolition Protocol: Aggregates Resource Efficiency in Demolition and Construction*”.
- Waste Exchange Network, an online notice board where local recyclers advertise the availability of various types of waste and companies can search for required materials⁵;
- BRE’s SmartWaste reporting tool; and

³ CL:AIRE, *Definition of Waste Code of Practice*, available from <https://www.claire.co.uk/projects-and-initiatives/dow-cop> (accessed 14 February 2022).

⁴ UK Government guidance, “*Environmental Management: Waste*”, available from <https://www.gov.uk/topic/environmental-management/waste> (accessed 14 February 2022).

⁵ Waste Exchange Network, available from <http://www.wastechange.com/cgi-bin/freexchange.cgi?gid=100273&search=london> (accessed 14 February 2022).

8.3 Procedure

In the following measures, the Applicant recognises opportunities to reduce the use of natural resources through detailed design processes and procurement. They will apply to all phases of the works.

8.3.1 Procurement

The Applicant will ensure its Principal Contractor is aware of appropriate WMM measures through the tendering and contract processes.

8.3.2 Waste disposal

Waste disposal will be minimised as much as possible in line with the waste hierarchy.

Any waste to be disposed of to landfill requires pre-treatment. Pre-treatment must be a physical, thermal, chemical, or biological process (including sorting on Site) that changes the characteristics of the waste to reduce its volume, reduce its hazardous nature, facilitate its handling, and enhance its recovery.

Mixing hazardous waste, including mixing different types of hazardous waste or mixing hazardous waste with other waste substances, is prohibited under the Hazardous Waste Regulations 2005. Wastes that have been mixed must be separated whenever possible.

All potentially hazardous materials will be clearly labelled and removed by a licensed waste contractor.

8.3.3 Excavation

A Phase II Site Investigation Report completed by Ground and Water Ltd details the chemical analysis of 3No. samples of Made Ground from the Site. Ground and Water concluded from the results of this chemical analysis that the soil on Site is non-hazardous. More information about anticipated ground conditions is set out in Section 12.2, management of soil contamination.

A waste classification assessment should be carried out when the extent of excavation (and so waste arising) is established. This should minimise the volume of hazardous waste excavated and maximise opportunities for reuse or recovery.

A materials management plan (MMP) should be prepared if excavated material is to be reused. A MMP details the type, volume, and quality of material. It should be submitted to a suitably qualified person for review. Then the project can be declared to CL:AIRE. A verification report is needed at the end of the project to confirm compliance with the MMP.

8.3.4 Material reuse opportunities

Opportunities to reuse materials in the local area will be investigated before disposal.

The Principal Contractor will contact LB Haringey to notify them of any materials requiring disposal or raise the presence of such materials at working groups. Contacting other developers in the area to collect such materials (thus reducing vehicle trips and mileage) will be encouraged.

8.4 Targets

8.4.1 BREEAM Wst 01

The development is targeting up to four credits under BREEAM issue Wst 01 which is expected to involve diverting non-hazardous construction and excavation waste from landfill.

Other waste targets will be added to this document by the Principal Contractor in due course.

8.5 Documentation

The following documentation will be completed and held on Site by the Principal Contractor:

- details of any targets for waste minimisation and recycling;
- details regarding the quantities of waste produced, reused, recycled, and sent to landfill (or other disposal);
- a record of all waste received or transferred (previously known as a Waste Transfer Note (WTN) a term still in common usage);
- hazardous waste consignment notes;
- waste carriers' registration licences; and
- environmental permits and licences for disposal sites.

It is noted the Principal Contractor is no longer required to register with the Environment Agency as a hazardous waste producer if they produce more than 500kg of hazardous waste per year at the Site. This change was made by a 2016 amendment to the Hazardous Waste (England and Wales) Regulations. In the place of the former six-digit premises code, the first six letters of the organisation's name are to be included on consignment notes.

8.5.1 Waste transfer notes and hazardous waste consignment notes

Records of transfers of waste will be kept for at least two years. Hazardous waste consignment notes will be retained for at least three years.

This documentation must include:

- an accurate description of the type, quantity, and containment of waste;
- the European Waste Catalogue (EWC) code; and
- details of the waste carrier, who must be licensed. Sufficient information must be provided to ensure that the waste disposal operator is aware of the potential hazards of the substance.

The Principal Contractor will also ensure that returns for consignment notes are collected and retained.

9. Community Engagement and Management of Complaints

9.1 Introduction

This section addresses neighbour and community liaison during the works. The Principal Contractor is responsible for ensuring compliance with the below. In addition, all staff are responsible for adhering to its requirements.

9.2 Relevant Legislation

- Clean Neighbourhoods and Environment Act 2005;
- Environmental Protection Act 1990, Part 3: Statutory Nuisance;
- Control of Pollution Act 1974; and
- Localism Act 2011.

9.3 Procedure

9.3.1 Prior to works commencing

Prior to commencement of the works, the Principal Contractor will contact relevant teams within LB Haringey to agree the scope of the community liaison strategy. Information to be provided will include:

- details of the Site and the Principal Contractor;
- Site plans;
- programme and duration of proposed works;
- any neighbours who may be affected by the works e.g. residents, offices, places of worship;
- working methods and protective measures to control dust, noise, and vibration;
- environmental monitoring regimes;
- identification of receptors and liaison strategy;
- plant and equipment to be used and level of noise they produce;
- number of major construction projects near the Site; and
- the existing ambient noise and dust / air quality levels.

The Principal Contractor will appoint a Liaison Manager to liaise with LB Haringey, local residents, businesses, and other affected parties.

9.3.2 During the works

The Principal Contractor or its Liaison Manager should keep regular communication with the local community and businesses nearby of the Site regarding progress and upcoming works. The local community should be made aware of:

- location of the planned works;
- type of works which are anticipated to give rise to effects on residents in the vicinity;
- the duration of the works;
- working hours;
- the anticipated effects of the planned works;
- proposed mitigation measures;
- contact details for enquiries; and
- complaints procedure.

During the works, communication with neighbours will be maintained via notice boards on hoardings. The notice boards will display:

- contact details for key personnel, including the Principal Contractor's full-time contact for the public / LB Haringey. The contact will be available for sharing information, registering a complaint, or requesting action;
- company details, contact addresses, names, and telephone numbers for who to contact in an emergency;
- a complaints procedure for the public;
- up-to-date information on the Site programme and progress; and
- all relevant licenses.

Where practicable, neighbours and local residents will be specifically informed about any upcoming abnormal / disruptive work or road closures. The Principal Contractor will give as much notice of these events as possible.

9.3.3 Complaints

In the event of a complaint (e.g. from a neighbour, a member of the public, LB Haringey) in relation to any on Site activities, a record will be made in a designated logbook. The record will detail:

- the nature of the complaint;
- the cause; and
- where appropriate, the remedial action taken.

Staff / contractors will immediately notify the Principal Contractor should they receive any complaints.

Complaints about odour, noise, dust, or vibration will be addressed directly by the Principal Contractor. The complaint will be reviewed and where appropriate immediate actions employed to rectify the problem.

All complainants will be contacted by the Principal Contractor or their representative for further discussion. If the problem persists, the Principal Contractor will endeavour to identify a mutually acceptable resolution with the complainant.

Where a valid grievance is raised, measures will be put in place, where practicable, to avoid recurrence of the complaint. If significant issues arise, a Construction Working Group will be established.

The Principal Contractor will provide regular updates to the Project Manager with regard to complaints received and subsequent resolutions.

9.4 Documentation

All complaints will be recorded in the logbook with details of remedial action taken. The logbook will be held in the Site office, available for inspection by LB Haringey during working hours.

10. Management of Noise and Vibration

10.1 Introduction

This section applies to the management of noise and vibration during the construction works. All staff are responsible for complying with the requirements of the below.

The CCS states that the noise of plant, vehicles and radios should be kept down; noise including that from the loading of skips should be suppressed using baffles or sound-deadening quilt and the use of radios should be moderated, with the volume maintained at a reasonable level.

Noise and vibration effects arising from the works (including construction traffic) have the potential to cause temporary disturbance to existing surrounding sensitive receptors. General plans for the control of noise and vibration are outlined in this section.

The significance of noise impacts depends upon a number of factors, including:

- the noise level;
- the nature of the noise;
- the time at which the noise occurs;
- whether the noise is temporary or permanent;
- whether the impact is a result of a new source, or whether it is a change to an existing source; and
- the sensitivity of the receptor.

Procedures for controlling the impacts of noise and vibration are described below.

10.1.1 Mitigation measures

The following mitigation measures will be implemented by the Principal Contractor to minimise noise and vibration generated from the proposed works and disruption to nearby sensitive receptors. Measures to mitigate the effects of noise and vibration during construction will include:

- briefing all staff on their noise and vibration minimisation responsibilities, which will be reviewed regularly;
- using low impact techniques where possible;
- erecting hoarding / fencing around the Site boundary;
- keeping gates closed as much as possible to minimise stray noise;
- fitting vehicles and mechanical plant with effective exhaust silencers;
- shutting down machines when they are not in use;
- ensuring all plant and equipment is powered by mains electricity or other quieter technology rather than locally powered sources;
- keeping noisy plant or equipment as far as reasonably practicable from sensitive noise receptors; and
- taking care when loading or unloading vehicles to reduce impact noise.

10.2 Documentation

The following documentation will be held on file on Site:

- details of all complaints received;
- details of corrective action taken if complaints are received or excessive noise is identified; and
- information regarding maintenance.

11. Water Management and Pollution Control

11.1 Introduction

A Flood Risk Drainage Strategy was prepared by Waterman in June 2020. Waterman assessed the potential effects of tidal, fluvial, groundwater, pluvial and artificial sources of flooding upon the proposed development. The management of foul and surface water runoff was also assessed and a strategy to manage Site runoff was proposed. Waterman concluded that the proposed development has a low probability of flooding from tidal, pluvial, groundwater and artificial sources. Waterman confirms that surface water runoff from the Site can be managed sustainably to ensure that flood risk is not increased elsewhere.

The Environment Agency's (EA) Flood Map for Planning indicates that the Site is predominantly located within Flood Zone 1, denoting a low probability of flooding from tidal and fluvial sources. Flood zone 2 borders the site to the east, which denotes a medium probability of river flooding.

Pollution incident control procedure applies to public safety, emergency and other unplanned activities during the construction works. All staff are responsible for complying with the requirements of the procedure.

As a best practice measure, the Principal Contractor will implement pollution prevention policies and procedures on Site in accordance with PPG6: Working at construction and demolition sites. The Pollution Incident Response Plan will be prepared by the Principal Contractor.

Details of the temporary drainage strategy and performance specification to control surface water runoff will be added to this document by the Principal Contractor in due course.

11.2 Relevant Legislation and Guidance

The works will be carried out in compliance with relevant legislation and with due adherence to relevant guidance. The following are of specific relevance to water management and pollution control:

- Environmental Protection Act 1990;
- Water Framework Directive and Water Environment (Water Framework Directive) (England and Wales) Regulations, 2003;
- Water Industry Act 1991, as amended;
- Environmental Permitting (England and Wales) Regulations 2016;
- Control of Pollution (Oil Storage) (England) Regulations 2001, as amended;
- EA Pollution Prevention Guidelines – General Guidance to the Prevention of Water Pollution (PPG01) 2013 (these were withdrawn by the EA in December 2015 but are still considered best practice);
- BS 6031:2009: Code of Practice for Earthworks;
- Environmental Damage (Prevention and Remediation) Regulations 2015;
- Land Drainage Act 1991;
- Health and Work etc Act 1974, as amended;
- PPG6: Working at construction and demolition sites (withdrawn in 2015 but remains good practice); and
- National Planning Policy Framework 2021.

11.3 Potential Sources, Pathways and Impacts

Contaminants associated with the works could include:

- chemical e.g. fuels, oils, lubricants and cleaning chemicals; and

- physical e.g. dust, silts, and sediments.

Potential sources and pathways of pollution from construction may include:

- runoff entering watercourses from:
 - exposed ground, excavations, material stockpiles, tracks, and haul routes;
 - recently reinstated areas (road verges, etc.); and
 - areas of disturbed excavated materials.
- plant washing and vehicle wheel wash areas;
- fuel and chemical storage / refuelling areas;
- leaking / vandalised plant and equipment;
- pollution of groundwater or surface water through chemical, oil, and fuel spills;
- introduction of other pollutants (e.g. drilling runoff / silt) into the surface water drainage system;
- pollution of groundwater or surface water due to unforeseen contamination; and
- increased vertical contamination percolation following removal of hardstanding.

11.4 Pollution Prevention and Incident Response Plans

11.4.1 Prevention

The Principal Contractor will prepare plans showing all watercourses, potential sources of pollution, and drainage within the Site.

Runoff should not discharge to any ditches, watercourses, drains, sewers, or soakaways without an agreement with the appropriate authority. All contractors will be responsible for ensuring appropriate authorisations are in place and that copies of the consents from EA and / or Thames Water are kept on Site.

All redundant pipework should be sealed off before works commence and filled with a suitable material, such as cement grout, to prevent any rodent infestations or possible subsidence.

The Principal Contractor will prepare measures to prevent incidents and damage to services during excavations, tunnelling, or other activities. These may include:

- monitoring of groundwater quality and water levels;
- information regarding emergency procedures to deal with any water contamination arising from the works, including the provision of spill kits;
- ensuring any storage of oil-based materials, including petrol, diesel and above ground fuel and oil storage tanks, comply with the Control of Pollution (Oil Storage) (England) Regulations 2001 as amended;
- maintaining stationary plant to ensure no leakages of oil or fuel and any secondary containment measures do not overflow; and
- providing a suitable Site drainage system, including pollution cut-off valves, with suitably sized treatment facilities.

The Principal Contractor and any sub-contractors will be required to conduct their activities in accordance with relevant EA guidance to prevent polluting watercourses.

An inventory of potential pollution sources and details regarding the management of these sources will be documented by the Principal Contractor. The inventory will be updated as works progress.

11.4.2 Incident response plan

A Site Pollution Incident Response Plan will be developed by the Principal Contractor. This Plan will detail the events and levels that constitute an incident requiring an emergency response and the procedures for dealing with it.

The Plan will include:

- identification of staff responsible for implementing environmental management and emergency response;
- instructions for using emergency response spill kits and sediment control materials;
- detailed procedures for the response to an incident and the personnel responsible for their implementation;
- plans of all sources of potential pollution such as refuelling areas and chemical storage areas;
- summary and plans of local environmental sensitivities, e.g. watercourses, water dependent habitats, designated habitats and water users;
- location(s) of spill kits and other pollution control or emergency response equipment; and
- a summary sheet of procedures and key contact details, which will also be displayed at prominent locations / on all machinery around the Site.

The Plan will be communicated with all Site staff as follows:

- the distribution of key contact details for those responsible for implementing the Plan;
- training in environmental incident and response procedures;
- making them aware of environmental risks and what to do in the event of a spillage;
- instructions for using safety equipment (which will be included in Site inductions), including recovery from incidents.

Spill control

The Principal Contractor will establish a spill control procedure as part of its operating procedures, which will be adhered to in the event of a spill.

All vehicles on Site will be fitted with oil spill kits. Vehicles delivering hydrocarbons will be fitted with oil spill kits and sand trays will be placed below any oil or fuel filling activities. Spare oil spill kits will be held in the Site office at all times.

A suitable number of spill kits will be kept on Site in the vicinity of the work in progress and areas of hazardous material storage. As a minimum, spill kits should contain absorbent granules, sandbags, and drain covers. Where possible, absorbent pads and booms will be used instead of granules and sandbags.

Used spill kits must be disposed of appropriately (e.g. as hazardous waste) where relevant.

In the event of a spillage or other pollution incident, the Principal Contractor will be notified immediately and will take immediate steps to prevent environmental pollution, for example:

- protection of drains following a spillage of oil or other chemical;
- use of spill kits following a spillage of oil or other chemical; and
- turning off equipment or other source of fumes, noise, or dust.

Incident reporting

Incidents that will be reported to the Principal Contractor include:

- spillages of chemicals, oils, fuels, unplanned or non-consented discharges;
- release of fumes and gases; and

- any incident that could lead to enforcement action from LB Haringey or any other regulatory body, public complaint or media attention.

If it is considered that a fugitive release to air, water or ground may have occurred, the following action will be taken:

- ensure that it is safe to remain in the area;
- locate and switch off any isolation switches, valves or pumps if possible;
- contact the following bodies where appropriate and follow their instructions:
 - Environment Agency – 0800 80 70 60;
 - London Fire Brigade – 999 (emergencies) 020 8555 1200 (non-emergencies); and
- where possible, damage control measures will be undertaken to prevent dispersion of gases or pollution from entering drains or water courses. For example, create containment sumps, pump liquid to temporary storage areas (such as lined skips), and block or clear drains as appropriate.

11.5 Documentation

A log of environmental incidents and remedial actions taken will be maintained on Site and held by the Principal Contractor.

The Principal Contractor's Site Manager will have overall responsibility for:

- ensuring all emergency procedures are understood by all Site staff and sub-contractors;
- preparations for, and reports of, any incidents are fully documented and reported to the Site Manager; and
- the Site Manager is fully briefed regarding the arrangements, including making available current inventories of all safety-related equipment held on Site.

Copies of liaison with the regulator(s) in the event of an incident will be retained on Site.

The following should also be developed:

- a Pollution Incident Response Plan for any pollution events / spills;
- an inventory of pollution sources associated with construction and specific pollution prevention;
- health and safety risk assessments;
- a programme for drills (desktop and practical dependant on the risk);
- copies of environmental permits / discharge consents;
- copies of effluent monitoring records (if required by any discharge consent);
- copies of water monitoring data and visual inspections where relevant;
- drainage management plan(s), kept up to date as works progress; and
- an environmental incident logbook for use in the event of a pollution incident. Should a pollution incident occur, appropriate notification to the EA / Thames Water will take place and a record of the incident will be maintained in an environmental incident logbook by the Principal Contractor.

12. Other Standard Environmental Management and Control Measures

12.1 Archaeology and Built Heritage

12.1.1 Introduction

The Applicant's Archaeological Assessment did not identify any known archaeological assets within the Site boundary. The assessment concluded that the proposed development will not cause material reduction in the archaeological significance of the Site.

The Applicant's Planning and Heritage Statement (PHS) did not identify any known heritage assets within the Site boundary. The PHS concluded that the proposed development will not cause material reduction in the heritage significance of nearby listed buildings or conservation areas.

12.1.2 Potential impacts

Potential impacts from construction works to built heritage include:

- indirect impacts on designated heritage assets as a result of changes to their setting; and
- impacts to off Site designated heritage assets due to vibration from construction activity.

12.1.3 Procedure

Where required, off Site Listed Buildings will be monitored for movement or damage if activities are being undertaken in proximity to the building or structure.

If discovered during construction, artefacts including signage, plaques, date stones, objects associated with historic uses, and written or illustrative materials will be stored for inspection by the Heritage Consultant prior to its onward salvage or disposal. Potentially sensitive material will be handled through appropriate channels.

12.1.4 Documentation

A Chance Find procedure will be developed and retained at the Site office. If required a Written Scheme of Investigation (WSI) and any associated records will also be retained by the Principal Contractor.

12.2 Management of Soil Contamination

12.2.1 Introduction

A Phase II Site Investigation Report (hereafter referred to as the Site investigation) prepared by Ground and Water Ltd in September 2022 deemed the Site to represent a low risk in relation to contaminated land. The Site investigation includes details of the Site setting and Site works, encountered ground conditions, a contamination risk assessment, contamination recommendations and a remediation strategy.

The geology beneath the Site is recorded as superficial Kempton Park Gravel Member and bedrock deposits of the London Clay Formation (clay and silt).

12.2.2 Summary of Previous Assessments

Ground and Water's Site investigation did not identify any contamination exceeding human health criteria and risks to Controlled Waters were considered to be low. Laboratory screening for asbestos found no detectable asbestos fibres within the samples of soil. Nevertheless, an Asbestos Management Strategy is recommended to enable any potentially asbestos containing materials to be identified and removed from Site in a way that prevents cross-contamination.

The ground gas regime at the Site was recorded as a low risk consequently ground gas protection measures were not required as part of the proposed development.

12.2.3 Procedures

Based on the findings of the Site investigation, other than the recommended Asbestos Management Strategy, no other remediation measures are deemed necessary as part of the proposed development works.

The Site investigation states that groundworkers should report any evidence of contamination to the Site Manager. This may include visual indicators, such as fibrous materials within the soil, discolouration, or odours and emission. If any of these indicators of contamination are discovered, advice must be sought from a qualified person and LB Haringey must be informed.

If contamination not previously identified is found to be present at the Site during ground works, no further development (unless otherwise agreed with LB Haringey) will be carried out on the relevant part of the Site until a remediation strategy has been submitted to LB Haringey and written approval obtained. The remediation strategy will detail how this unsuspected contamination shall be dealt with.

The contractor must ensure that any material excavated is analysed. If the land is found to be contaminated, the contractor must ensure no cross-contamination with the ground or groundwater in addition to monitoring the disposal of the contaminated land under a strict consignment note system.

All contaminated land reports should be signed off by a Suitably Qualified Person.

12.2.4 Documentation

The following documentation will be held on the Site:

- a log of environmental incidents and remedial actions;
- relevant approvals from LB Haringey; and
- copies of waste transfer and consignment notes of any contaminated soil removed from the Site.

12.3 Environmental Auditing and Verification Monitoring

12.3.1 Introduction

Regular environmental audits will be undertaken by the Principal Contractor (or by a suitably qualified environmental consultant on their behalf) to ensure that the requirements of this CEMP are being implemented. The frequency of the audits will be dependent upon the potential for the works being carried out to give rise to environmental impacts but are generally anticipated to be once every two to four weeks during the main phases of construction.

The audits will include a Site inspection and a review of documentation. Audits will be recorded on a Site record sheet (or similar), an example of which is presented in Appendix C. This will include a review of in-house auditing.

Non-conformances will be reported to the Principal Contractor's environmental manager with a deadline for remedial action, where necessary.

An Environmental Site Champion will be appointed by the Principal Contractor to promote sustainability and best practice in environmental management.

12.3.2 Environmental Reviews

Environmental issues will be included as an item on the agenda at Progress Meetings, attended by the Principal Contractor, Sub Principal Contractors, relevant Trade Principal Contractors and other members of the Project Team where appropriate. Where relevant, the following should be discussed:

- results of monitoring;
- complaints, including cause and remedial action;
- neighbourhood liaison;

- communications with LB Haringey and other statutory bodies; and
- incidents and near misses that have taken place.

12.3.3 Documentation

The following documentation will be retained on Site for inspection as indicated in the previous sections of the CEMP:

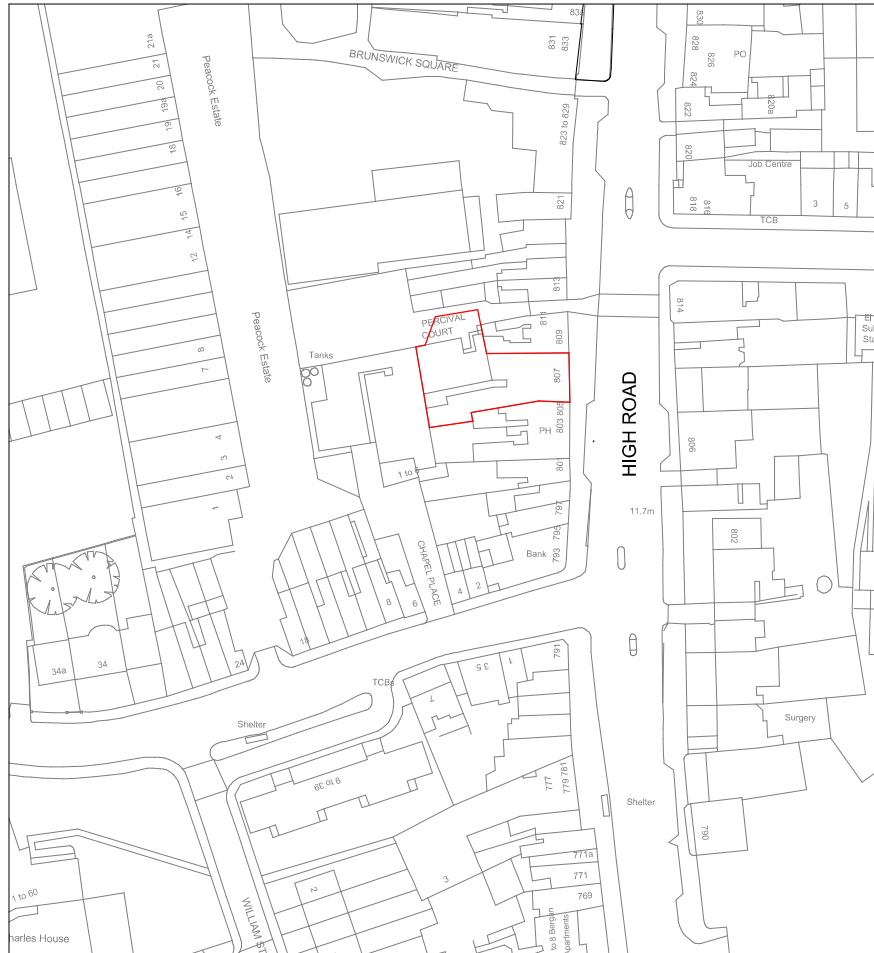
- complaints logbook with details of the response made to complaints received;
- dust monitoring records;
- plant maintenance and defect records;
- details of waste recycling targets and records;
- records of quantities of waste produced, reused, recycled, and disposed of to landfill (or other disposal);
- waste transfer notes, hazardous waste consignment notes, and waste carriers' registration(s);
- copies of Environmental Permits, discharge consents, and licenses;
- results of any water quality testing; and
- environmental incident logbook containing details of environmental incidents and corrective action.

APPENDICES

A. Plans and Drawings

F3 Architects drawing titled “LOCATION PLAN”, drawing number 807HR-1000-ZZ-L00-GA-A-0800, dated 6 March 2020.

F3 Architects drawing titled “EXISTING GA PLAN L00”, drawing number 807HR-1000-ZZ-L00-GA-A-0810, dated 6 March 2020.



LEGEND: SITE LOCATION

APPLICATION SITE

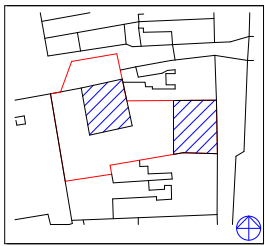
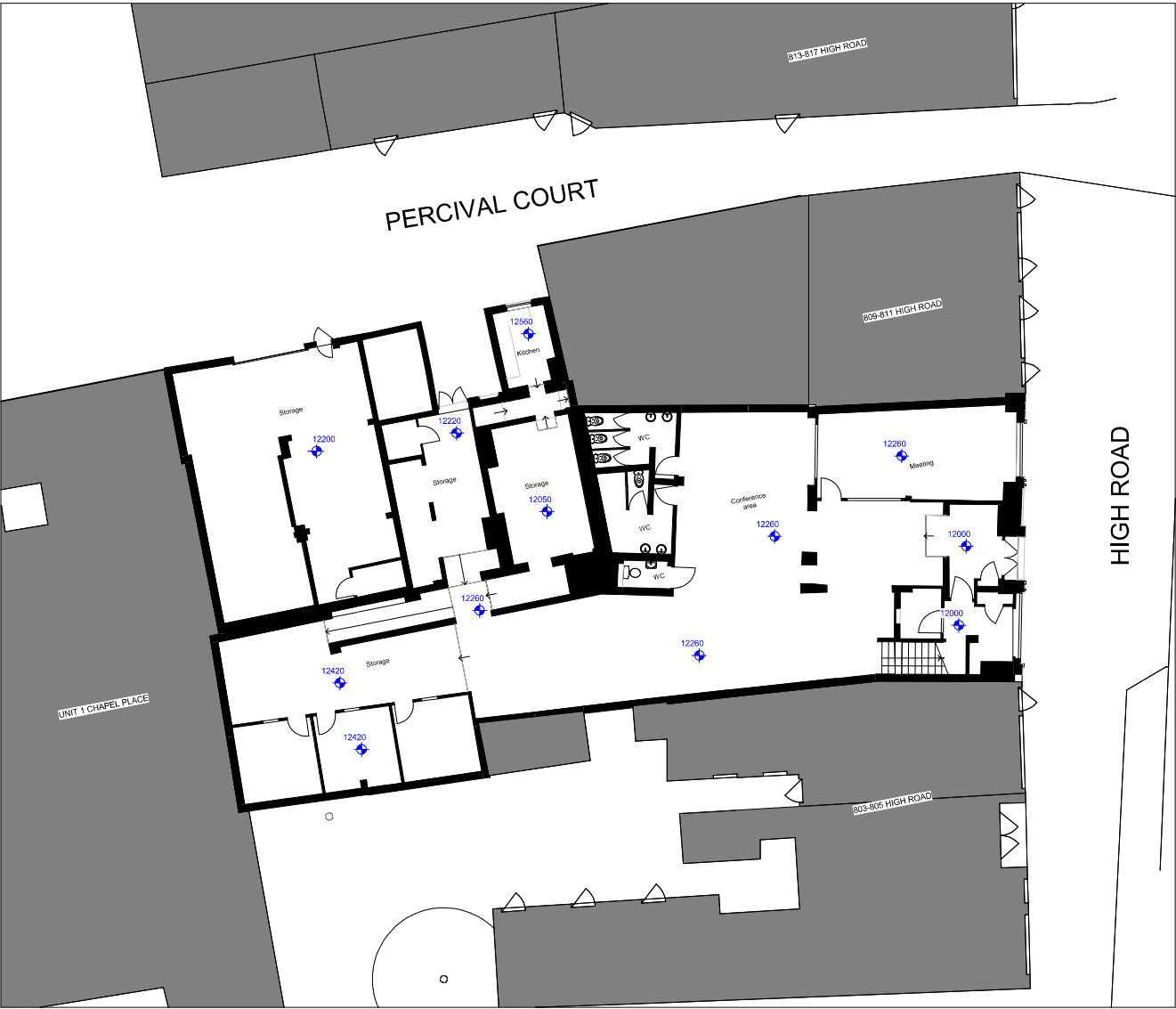


A: 5 Rochester Mews - London - NW1 9JB
T: 020 7267 8332
W: f3architects.com
E: info@f3architects.com

P1	06/03/2020	PLANNING	AL	AB	
No.	DATE	DESCRIPTION	DRN	CHK	
REVISION HISTORY					

Except for Planning purposes, figured dimensions only are to be taken from this drawing.
All dimensions are in millimeters unless otherwise stated.
All dimensions shall be checked on site prior to works commencing.
Any discrepancies shall be reported to the Architect.
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drawing LOCATION PLAN		scale @ A3 1:1250	
status PLANNING	checked by AB	date drawn 06/03/20	project ref: 190411
drawing number 807HR-1000-ZZ-L00-GA-A- 0800			revision P1



KEY PLAN

NOTES:

DRAWING TO BE USED IN CONJUNCTION WITH ALL OTHER DRAWINGS, SPECIFICATIONS, DOCUMENTS AND CONSULTANT INFORMATION.
CAD DRAWINGS BASED ON SURVEY INFORMATION BY OTHERS. ALL DIMENSIONS TO BE SITE CHECKED.
LINE FEARS SHOWN INDICATIVELY AND ARE SUBJECT TO FURTHER SITE INVESTIGATIONS AND EXISTING SPECIFICATION REQUIREMENTS.
INTERNAL FURNITURE LAYOUTS SHOWN FOR INDICATIVE PURPOSES ONLY.
LANDSCAPE/SCULPTURE REMAIN SHOWN FOR INDICATIVE PURPOSES ONLY.

REVISION HISTORY			
No.	DATE	DESCRIPTION	BY
P1	06/03/20	PLANNING	AL
No.	DATE	DESCRIPTION	BY

Architect

F3 ARCHITECTURE + INTERIORS
A: 5 Rochester Mews - London - NW1 9JR
T: 020 7267 8332
W: f3architects.com
E: info@f3architects.com

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All dimensions are in millimetres unless otherwise stated.
All dimensions shall be checked on site prior to works commencing.
Any discrepancies shall be reported to the Architect.
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Health and Safety

Project Name

807 HIGH ROAD
LONDON
N17 8ER

Drawing Title

EXISTING GA PLAN L00

Date

06/03/20

Status

PLANNING

Drawn By/Checked By Approved By Scale Size Project Ref

AL AB DB 1:100 A1 190411

Project Agent Zone/Level Type/Rate/Drawing No. Revision

807HR-1000-ZZ-L00-GA-A-0810 P1

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B. Proof of Registrations

Considerate Constructors Scheme

Non-Road Mobile Machinery

[To be added by Principal Contractor in due course]

C. Site Review Record Sheet

FORM A: SITE REVIEW RECORD SHEET

(To be completed in conjunction with Form B)

Date of visit:

Time:

Name of person undertaking visit:

Checklist:

Issue	Observation	Required Action (numbered)
General		
What activities are currently being undertaken at the Site?		
Does the Site appear clean and tidy from the outside? Including hoarding, viewing apertures, entry points, pedestrian signs, pavement ramps etc.		
Can all road signs / names be seen?		
Is the reception clearly signed and does the receptionist know how to deal with unexpected visitors? Were you escorted to the person you are visiting?		
Is the Site clean and tidy internally?		
Are all Site facilities within the Site boundary?		
Are Site operatives using the correct rest facilities (ie not congregating in public areas?)		
Are Site operatives aware of the Site Environmental Policy and how it relates to them?		
Are Site operatives appropriately dressed and is the radio ban being enforced?		
Does the main Principal Contractor operate an Environmental Management System?		

Issue	Observation	Required Action (numbered)
Has the Site registered with the Considerate Constructors Scheme? If yes, what is the target score?		
Does the main Principal Contractor have an environmental materials policy, used for sourcing of materials to be utilised on Site?		
Is floodlighting limited to working hours and shielding in place where light may cause a nuisance?		
Energy / CO₂		
Are there any energy saving measures in place on Site?		
Is on Site energy use / CO ₂ produced from onsite energy use being monitored, recorded and reported monthly. Who is the named individual responsible for this?		
Is the distance travelled by transport to and from the Site being monitored to enable CO ₂ emissions to be calculated? Is this recorded and reported monthly?		
Public Relations and Community Liaison		
Have any complaints been received from the public or neighbours? If so, give details.		
Are gates kept closed and entry points manned?		
Are pedestrian walkways signed and clear of obstructions and allow access for mobility impaired people or people with sight / hearing difficulties?		
Is the vehicle routing both on and off Site being followed?		
Are vehicles queuing to access the Site and are vehicles waiting to enter or leave the Site switched off?		
Is wheel washing and street sweeping being undertaken and is it effective at reducing mud on the roads?		

Appendices

Issue	Observation	Required Action (numbered)
Water and Wastewater Management		
Is a drainage plan held on Site and methods of preventing silt and oils from entering the drainage system in use?		
Are there any unauthorised discharges?		
Is water use being minimised and monthly water consumption figures being recorded?		
Bulk Chemical / Fuel Storage		
Are liquids stored appropriately i.e. bunded and labelled?		
Is there any evidence of spillages? Are spill kits available?		
Are drip trays being used to fill small containers?		
Are deliveries of fuel and oil supervised and fuelling points protected from vandalism?		
Are there stockpiles of material on Site? If so, where and are they appropriately stored to prevent damage / theft etc.?		
Waste Management		
What types and quantities of waste are collected on Site?		
Are records being kept to show the amount of waste collected and how much is being reused or recycled?		
Are waste certificates and other documents in order (Hazardous Waste Consignment Notes / Waste Transfer Notes)?		
Air Quality and Odour		
Are lorries sheeted when leaving the Site?		
Are any dust clouds observed? If so, where?		

Appendices

Issue	Observation	Required Action (numbered)
Have dust action levels been exceeded? If so, give details.		
Have any odour issues been identified? If so, give details		
Noise and Vibration		
Can noise be heard as the Site is approached? If so, where is it coming from?		
Is a sign displayed prominently detailing the Principal Contractor, contact details for complaints etc.?		
Have noise action levels been exceeded? If so, give details		
Have vibration action levels been exceeded? If so, give details		
Have any statutory bodies visited the Site? Council (EHO), Environment Agency, etc.		
Are there any incidents recorded in the environmental incident's logbook?		
Other		
Other observations:		

FORM B: ENVIRONMENTAL ACTIONS SHEET

(To be completed in conjunction with Form A)

For the attention of

(Name of Principal Contractor)

All **actions** arising from the Site visit on are numbered below and should be rectified immediately. Confirmation should be forwarded to the Project Manager **within the time specified** using this form.

Required Action number	Description of how Action has been rectified	To be auctioned within the following timescale

Signed:

Print name:

Date:

Please forward to the Project Manager

D. Air Quality and Dust Management Plan



Air Quality and Dust Management Plan

807 High Road, London, N17 8ER

October 2022

Waterman Infrastructure & Environment Limited

Pickfords Wharf, Clink Street, London, SE1 9DG
www.watermangroup.com

Client Name: High Road West Tottenham Ltd
Document Reference: WIE16362-105-R-1-1-9-AQDMP
Project Number: WIE16362

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Date	Prepared by	Checked by	Approved by
First Draft	October 2022	Nancy Unger Environmental Apprentice Eleri Paterson Hughes Graduate Consultant	Iarla Kilbane Dawe Technical Director	Andrew Fowler Associate Director



Comments

Comments

Disclaimer

This report has been prepared by Waterman Infrastructure & Environment Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

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1. Introduction

- 1.1. Waterman Infrastructure & Environment Ltd, hereafter referred to as 'Waterman', has prepared this air quality and dust management plan (AQDMP) for the re-development of 807 High Road (hereafter referred to as 'the Site').
- 1.2. The Applicant, High Road West Tottenham Ltd (HRWT), secured planning consent in September 2021 (application reference HGY/2021/0441), subject to planning conditions being met. This AQDMP has been undertaken to discharge the following Planning Condition:

"31) Demolition/Construction Environmental Management Plans

(a) No development shall commence until a Demolition Environmental Management Plan (DEMP) for the relevant part of the development has been submitted to and approved in writing by the Local Planning Authority.

(b) The DEMP/CEMP shall include an Air Quality and Dust Management Plan (AQDMP).

(c) No development shall commence (other than demolition) until a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority.

(d) The DEMP and CEMP shall provide details of how demolition and construction works respectively are to be undertaken and shall include:

i. A construction method statement which identifies the stages and details how works will be undertaken;

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;

iii. Details of plant and machinery to be used during demolition/construction works; iv. Details of an Unexploded Ordnance Survey; v. Details of the waste management strategy;

vi. Details of community engagement arrangements; vii. Details of any acoustic hoarding;

viii. A temporary drainage strategy and performance specification to control surface water runoff and Pollution Prevention Plan (in accordance with Environment Agency guidance);

ix. Details of external lighting; and,

x. Details of any other standard environmental management and control measures to be implemented.

(e) The AQDMP shall be in accordance with the Greater London Authority SPG Dust and Emissions Control (2014) and shall include:

i. Mitigation measures to manage and minimise demolition/construction dust emissions during works;

ii. Details confirming the Plot has been registered at <http://nrmm.london>;

iii. Evidence of Non-Road Mobile Machinery (NRMM) and plant registration shall be available on site in the event of Local Authority Inspection;

iv. An inventory of NRMM currently on site (machinery should be regularly serviced, and service logs kept on site, which includes proof of emission limits for equipment for inspection);

v. A Dust Risk Assessment for the works; and

vi. Lorry Parking, in joint arrangement where appropriate.

(f) Demolition and construction works shall only be carried out in accordance with an approved DEMP and CEMP. Additionally, the site or Contractor Company must be registered with the Considerate Constructors Scheme. Proof of registration must be sent to the Local Planning Authority prior to any works being carried out.”

- 1.3. The aim of this AQDMP is to minimise all emissions from the Site during demolition and construction. The AQDMP gives specific instructions on how to manage impacts from dust and air pollutant emissions on the Site.

Legal Requirements

- 1.4. This AQDMP will ensure compliance with The Environmental Protection Act 1990¹ which makes it an offence to cause a nuisance to nearby inhabitants by generating dust.
- 1.5. Section 79 of the Environmental Protection Act 1990 defines a number of factors relating to dust and air pollution which constitute a statutory nuisance. This includes:
- Smoke emitted from premises so as to be prejudicial to health or a nuisance;
 - Fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;
 - Any dust, steam, smell or other effluvia arising on industrial, trade or business premise and being prejudicial to health or a nuisance; and
 - Any accumulation or deposit which is prejudicial to health or a nuisance.
- 1.6. In addition to the above it is also necessary to meet the requirements set out in “The Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance”² (SPG) issued by the Mayor of London.

¹ Legislation.gov.uk. 1990. Environmental Protection Act 1990. [online] Available at: <<http://www.legislation.gov.uk/ukpga/1990/43/section/79/enacted>>

² Greater London Authority (July 2014), ‘The Control of Dust and Emissions During Construction and Demolition’ Supplementary Planning Guidance, Greater London Authority, London.

2. Site Evaluation

- 2.1. The level of risk attached to a demolition / construction site is dependent not only on the size and scale of a development, but also the demolition / construction activities, the timing of works (seasonality) and the sensitivity of the surrounding area.

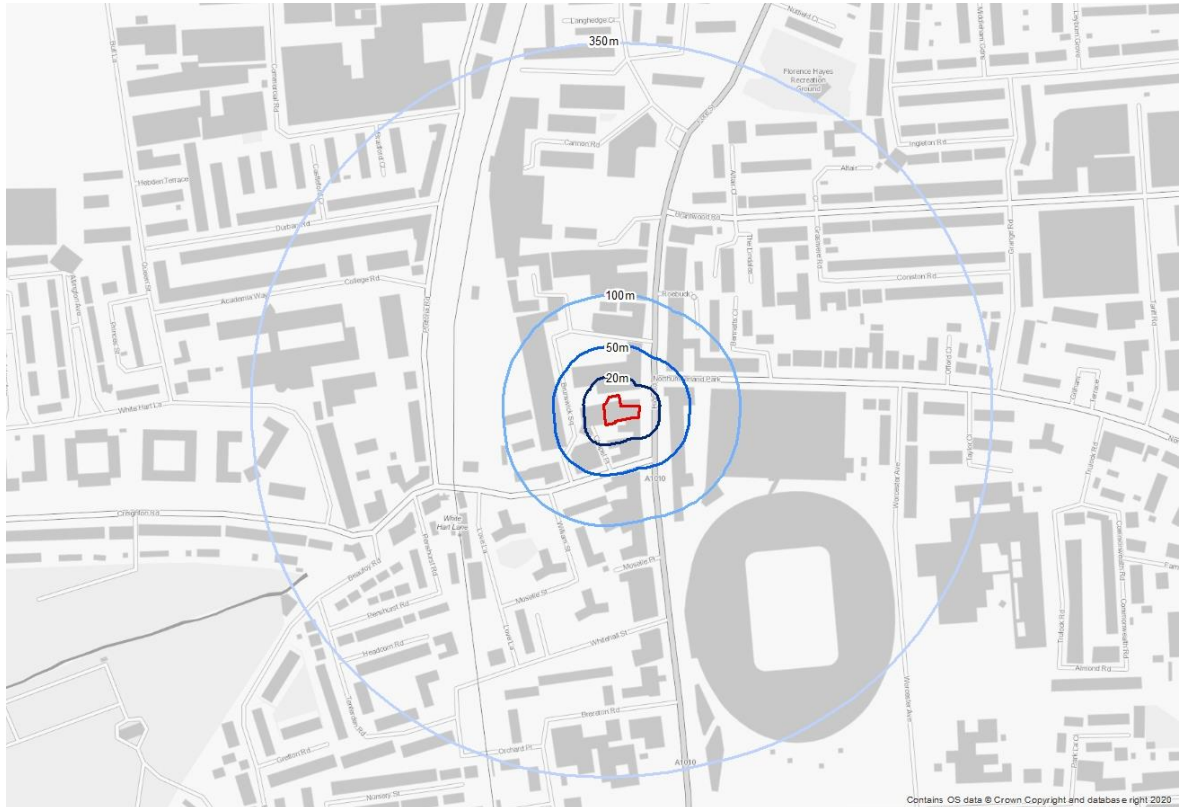
The Development

- 2.2. The Development consists of demolition of the existing buildings and the erection of two new blocks with cores to the front and rear. Block A will consist of 125m² of commercial space with street frontage and level access from the High Road. Access here will also serve a commercial unit to the first floor and two residential units on a further two floors. Block B will consist of a further seven residential units across three floors with level access from Percival Court. A raised courtyard will connect Block A to Block B. The Development will also have a service space to the rear including plant space, bin and bike storage, and access yard.

The Site and Surrounding Area

- 2.3. The Site is located within the administrative area of the London Borough of Haringey (LB Haringey) and extends to approximately 1,457m².
- 2.4. The Site is in a residential and commercial area. The nearest sensitive receptors are flats on the High Road / A1010 located within 20m to the north, south and east of the Site. Additionally, the following schools and medical services are located within 350m of the Site:
- London Academy of Excellence Tottenham, located approximately 80m east of the Site;
 - Tottenham Health Centre, located approximately 155m south of the Site;
 - Sunrise Preschool, located approximately 210m north-east of the Site;
 - Brooke House Primary School, located approximately 230m north of the Site;
 - Duke's Aldridge Academy, located approximately 320m south-east of the Site; and
 - St Francis de Sales Junior School, located approximately 330m south of the Site.
- 2.5. There are no ecologically designated sites within the vicinity of the Site or potential demolition / construction routes.
- 2.6. The Control of Dust and Emissions During Construction and Demolition SPG identifies receptors within 350m of the Site boundary, and within 50m of demolition / construction routes would be sensitive to emissions and nuisance dust from demolition / construction activities. **Figure 1** shows the area surrounding the Site where sensitive receptors could be affected.

Figure 1: Site Plan and Demolition / Construction Phase Assessment Bands



Scope of Demolition / Construction Works

2.7. The proposed works includes:

- Demolition of the existing structures to Percival Court;
- Façade retention to the refurbished High Road façade to preserve continuity with the conservation area;
- Rear extension to Block A;
- Construction of new building (Block B) to the rear of the plot with entrance from Percival Court; and
- Construction of raised courtyard garden connecting both volumes and providing communal amenity space.

Roles and Responsibilities

- 2.8. The appointed Principal Contractor is responsible for ensuring that all contractors always follow best practice to control and limit emissions of gaseous and particulate pollutants into the atmosphere from demolition / construction activities, including from vehicles and plant. A record of dust generating activities would be produced and kept up to date.
- 2.9. A trained and responsible person on Site for air quality will be identified with knowledge of pollution monitoring, control methods and vehicle emissions.

3. Dust Risk Assessment

Dust Risk Assessment Site Evaluation

- 3.1. An initial assessment was conducted to establish if a detailed assessment was required. As there are existing sensitive receptors within 350m of the boundary of the Site and within 50m of the routes that would be used by demolition / construction vehicles on the public highway the assessment will proceed to a detailed assessment.

Assessment Methodology

- 3.2. The demolition / construction dust risk assessment was based on guidance set out in the Mayor of London's Control of Dust and Emissions During Construction and Demolition SPG, and the Institute of Air Quality Management's (IAQM's) Guidance on the Assessment of Dust from Demolition and Construction, 2014³. The results of the demolition / construction dust risk assessment are detailed below.

Demolition / Construction Dust Risk Assessment Effects

Dust Emissions

- 3.3. The following demolition / construction dust assessment follows the methodology set out in Mayor of London's Control of Dust and Emissions During Construction and Demolition SPG.

Step 1 – Site Evaluation / Screen the Need

- 3.4. The Site is in a residential and commercial area. The nearest sensitive receptors are flats on High Road/A1010 located within 20m to the north, south and east of the Site. Additionally, the following schools and medical services are located within 350m of the Site:
- London Academy of Excellence Tottenham located approximately 80m east of the Site;
 - Tottenham Health Centre located approximately 155m south of the Site;
 - Sunrise Preschool located approximately 210m north-east of the Site;
 - Brooke House Primary School located approximately 230m north of the Site;
 - Duke's Aldridge Academy located approximately 320m south-east of the Site; and
 - St Francis de Sales Junior School located approximately 330m south of the Site.
- 3.5. There are no ecologically designated sites within 350m of the Site and so ecological receptors have been scoped out. The assessment would proceed to detailed assessment.

Step 2 – Potential Dust Emission Magnitude

- 3.6. The risk of dust impacts from the demolition / construction works has been considered based upon the magnitude of works as detailed in the SPG. This includes:
- Demolition – It is estimated the total volume of building to be demolished is likely to be less than 20,000m³. Based on this and considering the criteria in Paragraph 4.27 of the SPG, the potential dust emissions during demolition activities would be of **small** magnitude;

³ Institute of Air Quality Management, 2014, 'Guidance on the Assessment of dust from demolition and construction

- Earthworks – The Site area is approximately 1,457m². Based on this and considering the criteria in paragraph 4.29 of the SPG, the potential dust emissions during earthworks activities could be of **small** magnitude;
- Construction – It is estimated the total volume of building to be constructed is likely to be less than 25,000m³. Based on the criteria in Paragraph 4.31 of the SPG, the potential dust emissions during construction activities would be of **small** magnitude; and
- Trackout – It is estimated that there would be less than 10 heavy duty vehicle (HDV) trips in any one day. Based on this and considering the criteria in paragraph 4.33 of the SPG, the potential for dust emissions due to trackout activities would be of **small** magnitude.

3.7. A summary of the potential dust emission magnitudes is presented in **Table 1**.

Table 1: Dust Emission Magnitude

Activity	Dust Emission Magnitude
Demolition	Small
Earthworks	Small
Construction	Small
Trackout	Small

Step 3 – Sensitivity of the Area

- 3.8. In accordance with the SPG (paragraph 4.36 of the SPG, Step 2B: Define the Sensitivity of the Area), the sensitivity of the area has taken account of the following factors:
- The specific sensitivities of receptors in the area;
 - The proximity and number of those receptors;
 - The local background PM₁₀ concentration; and
 - Site-specific factors, such as whether there are trees or other vegetation to reduce the risk of wind-blown dust.

Step 4 – Sensitivity of the Area to Dust and Soiling Effects on People and Property

- 3.9. There were estimated to be between 10 and 100 high sensitivity receptors within 20m of the Site boundary. Based on Table 4.2 of the SPG, it is considered the area would be of **high** sensitivity to dust and soiling effects on people and property.
- 3.10. The summary of the sensitivity of people to dust and soiling effects is detailed in **Table 2**.

Table 2: Sensitivity of the Area to Dust and Soiling Effects on People and Property

Activity	Sensitivity of Area to Dust and Soiling Effects
Demolition	High
Earthworks	High
Construction	High
Trackout	High

Step 5 – Sensitivity of the Area to Human Health Impacts

- 3.11. The 2019 Defra background PM₁₀ concentration for the Site was 18.3µg/m³. This is below the annual mean Air Quality Strategy (AQS) objective for PM₁₀ of 40ug/m³. There are estimated to be between 10 and 100 high sensitive receptors within 20m of the Site. Based on the above and Table 4.3 of the SPG, it is considered the area is of **low** sensitivity to human health impacts.
- 3.12. The summary of the sensitivity of people to the health effects of particulate matter is detailed in **Table 3** below.

Table 3: Sensitivity of the Area to Human Health Effects

Activity	Sensitivity of Area to Human Health Effects
Demolition	Low
Earthworks	Low
Construction	Low
Trackout	Low

Step 6 – Risk of Impacts

- 3.13. Based on the dust emissions magnitude as set out in **Table 1** and taking account of the sensitivity of the area as detailed in **Tables 2** and **3**, the overall risk impacts have been identified and are presented in **Table 4**. The predicted risks are prior to, and do not take account of, mitigation applied.

Table 4: Summary of Risk

Potential Effect	Risk per Activity			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Medium Risk	Low Risk	Low Risk	Low Risk
Human Health	Negligible	Negligible	Negligible	Negligible

- 3.14. As outlined in **Table 4**, the Site is a **medium** risk site, due to dust soiling effects. Therefore, Site specific mitigation measures would be required to ensure that there are no adverse effects from the demolition / construction works.

4. Site Monitoring and Procedures

Monitoring Methodology

- 4.1. Monitoring would be undertaken in accordance with the Mayors SPG and the IAQM Guidance on Monitoring in the Vicinity of Demolition and Construction Sites 2018⁴. The final approach to dust monitoring would be discussed and agreed with LB Haringey.

Monitoring Equipment

- 4.2. Real-time dust monitoring would be undertaken using real-time dust monitors. To meet current best practice guidance, two monitors would be used. These monitors would be Monitoring Certification Scheme (MCERTS) certified and deliver accurate real-time measurement of PM₁₀, PM_{2.5}, PM₁ or Total Suspended Particulate (TSP) dust particles.
- 4.3. Remote access to the raw data could be given to LB Haringey through the web platform if required.

Monitor Locations

- 4.4. With reference to Chapter 6 of the Mayor's SPG, monitoring equipment will be positioned to allow sufficient airflow around the monitoring head and installed in accordance with current guidance.
- 4.5. The two monitors would be located on a transect and to provide both an upwind and downwind location across the Site. The exact locations of the monitors would be agreed with LB Haringey and subject to the availability of a permanent source of power. Indicative locations are presented in **Figure 2**.

⁴ IAQM. 2018. Guidance on Monitoring in the Vicinity of Demolition and Construction Sites (Version 1.1). October 2018

Figure 2: Indicative Monitoring Locations



- 4.6. Should any of the monitors need to be relocated, agreement will be made with LB Haringey setting out the rationale and the details of the new monitoring location. Once a revised location has been agreed with LB Haringey, the closure of an existing monitoring site and the setup of the new location will be undertaken in the same day to reduce the amount of time of lost monitoring. This change will also be undertaken during a period of low or no dusty work at the Site.

Action Levels

- 4.7. Action levels are typically used during monitoring on demolition / construction sites to implement mitigation measures in case of exceedances of the thresholds.
- 4.8. The IAQM Guidance on Monitoring in the Vicinity of Demolition and Construction Sites 2018⁵ presents a Site Action Level for demolition / construction projects, based on known health impacts and a study by King's College of measurement data from nine construction sites. The outcome of t

⁵ IAQM. 2018. Guidance on Monitoring in the Vicinity of Demolition and Construction Sites (Version 1.1). October 2018

his research, and endorsed by the IAQM, is a PM₁₀ Site Action Level of 190µg/m³ measured as a 1-hour mean. Therefore, the following Site Action Levels have been set:

Early Warning Level - PM₁₀ concentrations: 170µg/m³ average over a 1-hour period;

Site Action Level - PM₁₀ concentrations: 190µg/m³ average over a 1-hour period;

- 4.9. 'Early Warnings' would be triggered at 170µg/m³, approximately 10% less than the Site Action Levels. The Early Warning Level would act as an alert to make the Applicant and relevant Contractors aware that dust levels could be high and prepare the incident response procedure.
- 4.10. The particulate monitors would be set up to send email alerts in case of exceedances of these thresholds.

Incident Response Procedure

- 4.11. All incidents that result in an exceedance of the Site action levels (as set out above), would be recorded in an incident log-book and the following incident response would be undertaken:
- 4.12. On Site activities will be inspected immediately to identify likely sources;
- 4.13. If on Site activities are identified as being responsible for exceeding the action level, the activities would be halted immediately until the implementation of appropriate and effective mitigation measures, including changes in the working practices are identified; and
- 4.14. The activity would be monitored to ensure there is no repeat incident and that the mitigation measures in place are working.

Dust Complaints

- 4.15. Any dust complaints received must be recorded in a complaints log (as set out in Section 5.1 on mitigation) which will be available to LB Haringey. If dust complaints are received from the surrounding area / members of the public that attribute the cause to the onsite works, the Site management upon receiving a complaint will immediately investigate. Following investigation, if it is determined that the complaint is valid and requires further controls (within industry best practice limits) these will be implemented by the contractor. These results and actions must be recorded in the complaints log.

Reporting to the Local Authority

- 4.16. The developer is expected to report to the local authority the following incidents:
 - Exceedance of the action level, a report will be issued to the LB Haringey within 24 hours if this occurs;
 - Dust incident noticed by the contractor during the soiling inspections of surrounding areas undertaken as part of the project. Following identification of the incident the contractor will discuss the incident with LB Haringey. If it is determined that the incident is attributable to the works and requires further controls (within industry best practice limits) these will be implemented by the contractor and a report will be issued to LB Haringey within 24Hrs.
 - The contractor will submit a short monthly summary that include any exceedances and include the number complaints received by the Site directly from members of the public.

General Maintenance and Calibration

- 4.17. The Principal Contractor is responsible for the technical maintenance, calibration, annual servicing and repairs of the real-time dust monitors. LB Haringey will be notified immediately should any of these activities be undertaken and which may result in a loss of monitoring.
- 4.18. The Dust Sentry monitor would be calibrated every 6 months by the manufacturer, LB Haringey will be notified in advance for the filter change.

Power Outage

- 4.19. Should the particulate monitor experience a power failure an alert will be sent from the monitor to the Applicant and the Principal Contractors. If the monitor remains offline for a duration of one-week LB Haringey will be contacted to check to see if any maintenance is being undertaken in the local area, which may result in the power being unavailable. If LB Haringey are not aware of any works which may affect power, contact will be made with LB Haringey's lamppost maintenance contractors directly for advice as well as a visit to the effected monitor and local area to identify the cause of the issue. Should the problem continue the particulate monitor supplier will be contacted to investigate the problem further. During this event LB Haringey will be continually informed and a hand-held analyser will be available should there be an outage of one of the particulate monitors.

Damaged and Vandalised Equipment

- 4.20. If any of the monitors are damaged or vandalised LB Haringey will be informed immediately. Depending on the type of damage replacements, repairs or replacement parts will be sought to ensure the monitor is back operating as soon as possible. During this event LB Haringey will be continually informed.

Records of Details and Action Taken in Response to Exceptional Incidents or Dust-Causing Episodes

- 4.21. The Site Manager will maintain records within the site diary where action was taken in response to exceptional incidents or dust-causing episodes.
- 4.22. Full details of any complaints in relation to dust will be recorded by the Site Management Team in a 'Environmental complaints / spills / incidents record' document.

Workforce Training in Best Practice Methods for Dust Suppression, Site Housekeeping, Reporting Procedures and Communication

- 4.23. Site operatives will receive training in the onsite pollution policy as part of site induction training, toolbox talks and through communication of relevant environmental risk assessments and method statements.

5. Dust and Emission Mitigation Measures

- 5.1. Further to the monitoring, the following measures were developed with reference to the IAQM guidance for **medium**-risk sites to mitigate potential impacts during the demolition / construction phase. The mitigation measures are enforced through the planning conditions and cover:

Communications

- Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.
- Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary.
- Display the head or regional office contact information.
- Make the Dust Management Plan available and ensure this is regularly updated.

Site Management

- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;
- Make the complaints log available to LB Haringey; and
- Record any exceptional incidents that cause dust and / or air emissions, either on- or offsite, and the action taken to resolve the situation in the log book.

Monitoring

- Undertake daily on Site and off Site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to LB Haringey. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills;
- Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to LB Haringey;
- Increase the frequency of site inspections by the person accountable for air quality and dust issues on Site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions; and
- Undertake the dust monitoring. The dust monitoring methodology would be written in accordance with the Mayor's SPG and the IAQM guidance and would be agreed in consultation with LB Haringey.

Preparing and Maintaining the Site

- Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible;
- Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on Site;
- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period;
- Avoid site runoff of water or mud;
- Keep site fencing, barriers and scaffolding clean using wet methods;

- Remove materials that have a potential to produce dust from Site as soon as possible, unless being re-used on Site. If they are being re-used on Site cover as described below; and
- Cover, seed or fence stockpiles to prevent wind whipping.

Operating Vehicle / Machinery and Sustainable Travel

- Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London Non-Road Mobile Machinery standards;
- Ensure all vehicles switch off engines when stationary - no idling vehicles;
- Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable;
- A maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas;
- Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials; and
- Implement a Travel Plan that supports and encourages sustainable travel.

Operations

- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems;
- Ensure an adequate water supply on the site for effective dust / particulate matter suppression / mitigation, using non-potable water where possible and appropriate;
- Use enclosed chutes and conveyors and covered skips;
- Minimise drop heights from shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate; and
- Ensure equipment is readily available on Site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

Waste Management

- Avoid bonfires and burning of waste materials.

Demolition

- Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust);
- Effective water suppression will be used during demolition operations, alongside dust extraction where there is intensive dust generation (such as saw cutting);
- Avoid explosive blasting, using appropriate manual or mechanical alternatives; and
- Bag and remove any biological debris or damp down such material before demolition.

Earthworks

- Exposed areas / soil stockpiles to be re-vegetated to stabilise surfaces as soon as practicable;
- Use of Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable; and

- Only remove the cover in small areas during work and not all at once.

Construction

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

Trackout

- Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the Site;
- Avoid dry sweeping of large areas;
- Ensure vehicles entering and leaving the Site are covered to prevent escape of materials during transport;
- Implementation of a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable);
- An adequate area of hard surfaced road between the wheel wash facility and the Site exit;
- Public roads outside of the site will be regularly inspected for cleanliness and cleaned as necessary; and
- Access gates to be located at least 10m from receptors.

6. Non-Road Mobile Machinery (NRMM)

Overview

- 6.1. The Non-Road Mobile Machinery (NRMM) Practical Guide V.5⁶ provides guidance on the London NRMM Low Emission Zone (LEZ), including the processes and procedures that must be in place on all development sites to comply with the policy. It also signposts future changes to the policy.

Compliance

- 6.2. The current standards that need to be met depend on where the demolition / construction site is. NRMM on all sites within Greater London are required to meet Emission Stage IIIB as a minimum. NRMM on all sites within either the Central Activities Zone (CAZ) or Opportunity Areas (OAs) are required to meet Emission Stage IV as a minimum. OAs are brownfield land within London that have significant capacity for development. The impacts of these dense areas of redevelopment need to be minimised. Therefore, emission standards in these areas match those in the CAZ and Canary Wharf.
- 6.3. From 1st January 2025 the CAZ, Opportunity Areas and Greater London zones will no longer have different emission standards. All NRMM on all sites within Greater London will be required to meet Stage IV as a minimum. Constant speed engines will continue to be required to meet Stage V. The standards for the NRMM Low Emission Zone will get progressively tighter over time:
- From 1st January 2030 all NRMM within Greater London will need to meet Stage V as a minimum; and
 - The Mayor of London aims for London to be zero emissions from NRMM by 1st January 2040.
- 6.4. The Site is located within an Opportunity Area, therefore the construction machinery at the Site would need to adhere to the engine emission stage IV.
- 6.5. Appendix 1 of the NRMM Practical Guidance presents a compliance checklist flowchart.

Inventory

- 6.6. An inventory containing all NRMM used on Site is required to ensure regular servicing and service logs are undertaken and available. Types of NRMM include, but not limited to:
- Diesel Generators;
 - Bulldozers;
 - Pumps;
 - Construction Equipment;
 - Industrial trucks;
 - Forklifts; and
 - Mobile Cranes.
- 6.7. The NRMM inventory will remain on Site for inspection. Additionally, service logs should also be kept on Site for inspection. Service logs would provide evidence the machinery has been regularly serviced and detail proof of emission limits for all equipment. This documentation should be made available to local authority officers as required.

⁶ Mayor of London, Non-Road Mobile Machinery (NRMM) Practical Guide V.5, April 2022

Online Register

- 6.8. All machinery is required to be registered online using the register at nrmm.london.
- 6.9. The register is designed as a management tool to enable sites to keep a live record of machinery on Site during the course of the development.

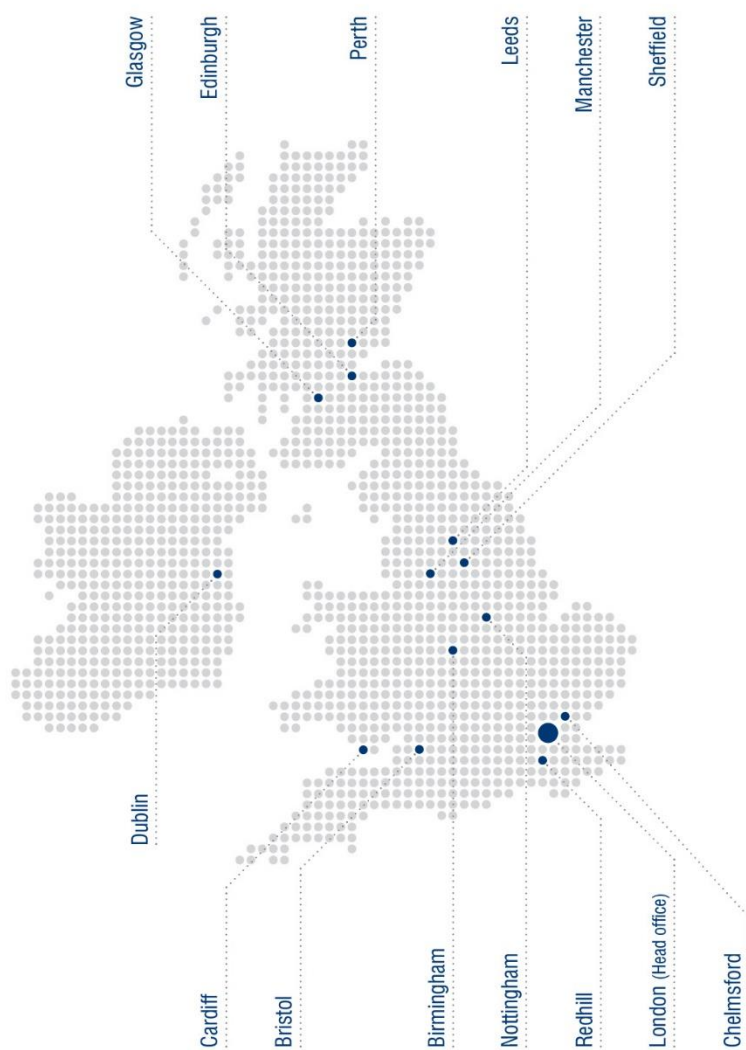
Compliance by Retrofit

- 6.10. If machinery does not meet the appropriate emissions standard, it can be retrofitted with additional pollution control equipment as an alternative to replacing it. To ensure compliance, only retrofits listed on [Non-road mobile machinery certification - Energy Saving Trust](#) would be acceptable.
- 6.11. The full retrofit policy is available on the NRMM online register.

Exemptions

- 6.12. In certain circumstances the supply of compliant equipment can be limited and retrofit solutions are not available for all types and sizes of machine. Therefore, the GLA will continue to manage requests for exemptions on a case-by-case basis. The full exemption & retrofit policy is available on the NRMM online register. Exemptions currently include:
 - Viability Exemption – If unable to procure machinery of the required Emission Stage, a Viability Exemption should be applied for online. For the exemption to be granted the machine will have to meet the next best possible emission standard and reasonable justification must be given for why the required stage cannot be met; and
 - Short Term (Emergency) Exemption – A short-term exemption can be applied for enabling non-compliant NRMM to remain on Site for up to 30 days.

UK and Ireland Office Locations



E. Unexploded Ordnance Survey



Preliminary UXO Risk Assessment

www.1stlinedefence.co.uk

Client	F3 Architects LLP
Project	807 High Road, London
Site Address	807 High Road, Tottenham, London, N17 8ER
Report Reference	PA16038-00
Date	11/07/22
Originator	LG

Assessment Objective

This preliminary risk assessment is a qualitative screening exercise to assess the likely potential of encountering unexploded ordnance (UXO) at the 807 High Road, London site. The assessment involves the consideration of the basic factors that affect the potential for UXO to be present at a site as outlined in Stage One of the UXO risk management process.

Background

This assessment uses the sources of information available in-house to 1st Line Defence Ltd to enable the placement of a development site in context with events that may have led to the presence of German air-delivered or Allied military UXO. The report will identify any immediate necessity for risk mitigation or additional research in the form of a Detailed UXO Risk Assessment. It makes use of 1st Line Defence's extensive historical archives, library and unique geo-databases, as well as internet resources, and is researched and compiled by UXO specialists and graduate researchers.

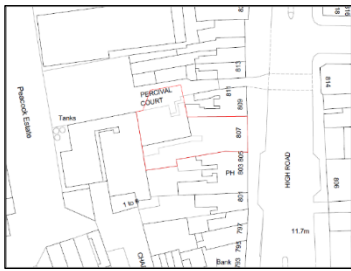
The assessment directly follows CIRIA C681 guidelines "Unexploded Ordnance, a Guide for the Construction Industry". The document will therefore assess the following factors:

- Basic Site Data
- Previous Military Use
- Indicators of potential aerial delivered UXO threat
- Consideration of any Mitigating Factors
- Extent of Proposed Intrusive Works
- Any requirement for Further Work

It should be noted that the vast majority of construction sites in the UK will have a low or negligible risk of encountering UXO and should be able to be screened out at this preliminary stage. The report is meant as a common sense 'first step' in the UXO risk management process. The content of the report and conclusions drawn are based on basic, preliminary research using the information available to 1st Line Defence at the time this report was produced. It should be noted that the only way to entirely negate risk from UXO to a project would be to support the works proposed with appropriate UXO risk mitigation measures. It is rarely possible to state that there is absolutely 'no' risk from UXO to a project.





Risk Assessment Considerations	
Site location and description/current use	The site is located in Tottenham within the London Borough of Haringey, north London. The site is bound to the north by Percival Court, to the east by A1010 High Road, to the south by adjacent residential and commercial properties, to the west by an adjacent industrial property. Recent aerial photography dated March 2021 indicates that the site comprised several residential and commercial structures atop hardstanding ground. The site is approximately centred on the OS grid reference: TQ 33841 91460. 
Are there any indicators of current/historical military activity on/close to the site?	1st Line Defence could find no evidence in-house to indicate that the site footprint had any former military use. No features such as WWII defensive positions, encampments or firing ranges are recorded to have been located at or in the immediate vicinity of the site. In addition, no information of ordnance being stored, produced, or disposed of within the proposed site boundary could be found. The closest recorded Heavy Anti-Aircraft (HAA) battery was situated approximately 2.5km to the north-west of the site in the vicinity of Firs Farm Edmonton. The conditions in which unexploded anti-aircraft ordnance may have fallen unrecorded within the proposed site are analogous to that of aerially delivered Luftwaffe bombs. For a discussion on these conditions, see the relevant sections below.
What was the pre- and post-WWII history of the site?	Pre-WWII OS mapping dated 1937 indicates that the site occupied an area of mixed composition, comprising mostly residential structures with rear gardens, as well as a small courtyard area in the south of the site. Post-WWII OS mapping dated 1958 indicates that the structural composition of the site and surrounding area have remained largely unchanged. The only discernible changes that have occurred on/close to the site was the construction of unidentified properties in the former courtyard area and rear residential gardens on site.
Was the area subject to bombing during WWII?	During WWII, the site was located within the Municipal Borough of Tottenham, which was subject to an overall high density bombing campaign culminating in an average of 103.9 items of ordnance per 1,000 acres according to official Home Office statistics. This comprised 283 high explosive bombs, four parachute mines, 18 oil bombs, five V-1 pilotless aircraft and three V-2 long-range rockets, resulting in 313 incidents across 3,013 acres. London Bomb Census mapping does not record any bomb strikes within or immediately bordering the site area. The closest recorded bombing incident was recorded approximately 20m east of the site on the opposite side of High Road. A local Tottenham bomb map does not record any bomb strikes within or immediately bordering the site area. One bomb strike was plotted approximately 20m east of the site, on the opposite side of High Road. A further four bomb strikes were plotted further to the south and south-west of the site.





Is there any evidence of bomb damage on/close to the site?	MCC 'War Damage' mapping does not record any serious damage to the structures on or immediately adjacent to the site, although it should be noted that this damage mapping only records serious damage or total destruction sustained, and does not record minor damage or blast damage. The closest structure to sustain damage was shown to be located approximately 20m east of the site on the opposite side of High Road, marked as 'Cat 3 – Border line areas, uncertain whether repairs possible, might have to be demolished.'
To what degree would the site have been subject to access?	Owing to the fact that the site predominantly comprised several structures and areas of hardstanding ground, it is thought likely that the site will have been subject to regular levels of access and observation throughout the war. Frequent access generally increases the likelihood that evidence of UXO such as bomb entry holes and cratering, will have been spotted reported and dealt with. Although, access and observation of rear gardens was generally reliant on the vigilance of individual residents.
To what degree has the site been developed post-WWII?	Post-war OS mapping and imagery indicates that the site area has been subject to very limited redevelopment in the post-war era.
What is the nature and extent of the intrusive works proposed?	The nature and extent of works proposed was not available at the time of writing.

Summary and Conclusions

During WWII, the site was located within the Municipal Borough of Tottenham, which was subject to an overall high density bombing campaign, culminating in an average of 103.9 items of ordnance per 1,000 acres. No bomb strikes were recorded on or bordering the site area on London Bomb Census mapping or on a local Tottenham bomb map. The closest recorded bombing incident was recorded approximately 20m east of the site on the opposite side of High Road. This is corroborated by MCC 'War Damage' mapping, which does not record any serious damage to the structures on or immediately adjacent to the site, the closest damage being recorded on the opposite side of High Road to the east of the site.

Owing to the fact that the site predominantly comprised several structures and areas of hardstanding ground, it is thought likely that the site will have been subject to regular levels of access and observation throughout the war. Frequent access generally increases the likelihood that evidence of UXO such as bomb entry holes and cratering, will have been spotted, reported and dealt with. Although, access and observation of rear gardens was generally reliant on the vigilance of individual residents.





Recommendations

Given the findings of this preliminary report, the risk from UXO on site is not anticipated to be above the 'background risk' for this area of the UK.

Whilst it would be possible to conduct a Detailed UXO Risk Assessment for this site, it is not anticipated that any further research would significantly alter the findings of this report. It is therefore recommended that **no further action** is taken for this site.

If the client has any anecdotal or empirical evidence of UXO risk on site, please contact 1st Line Defence.

It should be noted that although the risk from unexploded ordnance on this site has been assessed as low/minimal, this does not mean there is 'no' risk of encountering UXO. This preliminary report has been undertaken with due diligence, and all reasonable care has been taken to access and analyse relevant historical information. By necessity, when dealing with historical evidence, and when making assessments of UXO risk, various assumptions have to be made which we have discussed and justified within this report. Our reports take a common-sense and practical approach to the assessment of UXO risk, and we strive to be reasonable and pragmatic in our conclusions. As referenced, it would be possible to undertake further research into this site, but based on the evidence to hand, this is not deemed strictly necessary, and no reasonably justifiable requirement for proactive on-site mitigation has been identified.

It should however be stressed that if any suspect items are encountered during the proposed works, 1st Line Defence should be contacted for advice/assistance, and to re-assess the risk as necessary. Furthermore, we would recommend that ground personnel are always made aware of the potential for encountering UXO, what to look out for and what to do in the unlikely event that a suspect item is encountered, and that a UXO Risk Management Plan is put together for the proposed works. We would be happy to provide a template and guidance for this – contact us on 01992 245020. Should the scope of works change or additional works be proposed, 1st Line Defence should be contacted to re-evaluate the risk.



UK and Ireland Office Locations

