



THE GOODSYARD

Code of Construction Practice

September 2019



ballymore.



CONTENTS

1.1	Preface.....	2
1.2	Introduction	3
1.3	Purpose.....	4
1.4	Environmental Management	4
1.5	General Requirements	6
1.6	Air quality	11
1.7	Archaeology and Cultural Heritage	12
1.8	Ecology and Landscaping	13
1.9	Ground Conditions	15
1.10	Noise and Vibration.....	16
1.11	Surface water and Groundwater	17
1.12	Traffic and Transport.....	19
1.13	Waste and Materials	21
1.14	Energy Management.....	23

THE GOODSYARD

1.1 PREFACE

- 1.1.1 This is a Code of Construction Practice prepared by Temple.
- 1.1.2 It is submitted in relation to amendments ("Proposed Amendments") that are being made to the planning applications and applications for listed building consent (the "Applications") for the redevelopment of Bishopsgate Goodsyards. The Applications as amended by the Proposed Amendments form the "Revised Scheme".
- 1.1.3 On 21st July 2014 Bishopsgate Goodsyards Regeneration Limited (the "Applicant") submitted the Applications to the London Borough of Hackney and the London Borough of Tower Hamlets (the "Boroughs").
- 1.1.4 On 23rd September 2015 the then Mayor of London directed that he would act as local planning authority for the purposes of determining the Applications.
- 1.1.5 On 12th April 2016 the then Mayor deferred the determination of the Applications to allow the Applicant to address the issues raised in the Stage III Report.
- 1.1.6 The Applicant has carefully reviewed the issues raised in the Stage III Report and has liaised closely with the Mayor of London, the Boroughs and other stakeholders and consultees and is now submitting amendments to the Applications to address their feedback.
- 1.1.7 In broad terms, the Applicant is making the following Proposed Amendments to the Applications:
- Plot 1 (Formerly Plots A and B)**
- 1.1.8 The Proposed Amendments maintain the height of the building and the type of uses, as currently proposed and retains the bridging over the London Overground box. The building massing is proposed to be revised to include setbacks at the upper levels as a result of feedback from the GLA and the Boroughs to address the relationship with adjacent buildings.
- Plot 2 (Formerly Plots F and G)**
- 1.1.9 The Proposed Amendments replace the two tallest residential buildings with a commercial building with retail at the ground floor. The building would extend up to 29 storeys and would be the tallest building proposed. This building is being submitted with all matters in detail.

- 1.1.10 The reduction in height of Plot 2 means that no part of the scheme is now visible in views from the South Bastion of Tower Bridge.

Plot 3 (Formerly Plot K)

- 1.1.11 The Proposed Amendments maintain the height and footprint of the building and the type of uses, as currently proposed. The Proposed Amendments address design comments in respect of the treatment to Phoenix Street and the listed Oriel Wall along Commercial Street.

Plot 4 (Formerly Plot C)

- 1.1.12 The Proposed Amendments maintain the uses within this building and comprise retail at ground floor with residential above. The height of the building is proposed to be reduced to 19 storeys.

Plot 5 (Formerly Plot D)

- 1.1.13 The Proposed Amendments maintain the uses within this building and comprise retail at ground floor with residential above. The height of the building is proposed to be reduced to between 6 -13 storeys.

Plot 6 (Formerly Plot E)

- 1.1.14 The Proposed Amendments change the use of this building to a cultural type use with retail use. The height of the building is proposed to be reduced to up to 5 storeys in order to address comments raised by the GLA in respect of daylight and sunlight impacts along Sclater Street and the massing in the north-east part of the site.

Plots 7, (Formerly Plots H, I, J), 8, 8A, 8B,10 and 11 (the Pavilion)

- 1.1.15 The Proposed Amendments maintain the mix of retail uses within the Oriel as well as the potential for Class D1/D2 uses within the Braithwaite arches with public open space above, as currently proposed (Plot 7). Plot 8 introduces hotel and residential uses with access at ground floor level within a 25 storey building to the west of Braithwaite Street, plus 4 storey pavilion buildings on top of the existing arches. The Proposed Amendments introduce residential within Plot 10 with retail at ground floor. The Proposed Amendments introduce retail use within a single storey building in Plot 11.

Public Open Space

- 1.1.16 The overall amount of public space as part of the Proposed Amendments would increase at platform level, including an area of consolidated open space at the eastern end of the platform.
- 1.1.17 The Proposed Amendments, and the rationale for them, are explained fully in the Planning Statement prepared by DP9 Ltd. The Proposed Amendments to the Applications have required some changes to be made to the CoCP and other documentation originally submitted with the Applications.
- 1.1.18 Rather than issuing tracked changed documents, the Applicant has issued this revised CoCP which replaces in its entirety that submitted previously.

Description of the 'applications'

- 1.1.19 It should be noted that references in this document to 'application' should be taken to read 'applications' reflecting the fact that two identical planning applications were originally submitted – one to the LBH and one to the LBTH with each borough tasked with determining consent for the extent of the Revised Scheme that fell within each respective area. Therefore, references to 'planning permission; should be taken to read 'planning permissions' given that two planning permissions will be required for the Revised Scheme to proceed in its entirety.

1.2 INTRODUCTION

General

- 1.2.1 This Code of Construction Practice (CoCP) has been prepared by Temple Group Ltd. ('Temple') on behalf of Bishopsgate Goods Yard Regeneration Limited ("the Applicant") to support a planning application (part in detail and part in outline) for a comprehensive mixed-use redevelopment ("the Revised Scheme") of land formerly known as Bishopsgate Goods Yard in Shoreditch, London.
- 1.2.2 This CoCP has been prepared to support the planning application to LBTH and LBH.
- 1.2.3 The site is approximately 4.4 hectares (ha) in size, located partly within the London Borough of Hackney (LBH) and partly within the London Borough of Tower Hamlets (LBTH). It is bounded by Bethnal Green Road to the north, Brick Lane to the east, a rail line (serving Liverpool Street Station) to the south and Shoreditch High Street to the west. Braithwaite Street runs through the site connecting Bethnal Green Road to Commercial Street.

- 1.2.4 The site lies within the City Fringe Opportunity Area (CFOA), as identified and adopted within the London Plan (March 2016). The site is also identified within the LBTH Managing Development Document (MDD) (2013), within the LBTH Local Plan 2031, and is identified in LBH's Site Allocations Local Plan (SALP) (2016), although no particular reference is made to the site within the LBH Draft Local Plan 2033. In developing the Proposed Development and undertaking the Environmental Impact Assessment (EIA), a series of measures to minimise the impacts of construction on the environment have been identified and set out in this Code of Construction Practice (CoCP). Compliance with the CoCP will be a requirement of the agreement between The Applicant, who is the body responsible for delivering the scheme and the Principal Contractors selected to construct the Proposed Development ('the Contractors').
- 1.2.5 The purpose of the Code of Practice is to provide detailed guidance to enable the contractor/applicant to develop an appropriate system of work that would be employed for construction activities and documented in detailed within the Construction Environmental Management Plan (CEMP), Site Waste Management Plan (SWMP) and other Method Statements (MS).
- 1.2.6 The information contained within these documents and the subsequent detailed CEMP and MS would be conveyed to all relevant 3rd Party Stakeholders for consent/approval as required via Temple Group. When finalised, the detailed CEMP and MS would be conveyed to all construction staff to inform the construction activities. As work progresses the MS may be amended to incorporate changes in the working environment. Prior to any changes being implemented, consultation would take place and amended activities. Approvals would be sought from the relevant 3rd Party Stakeholders. As a minimum these would include the LBH and LBTH and the Environment Agency (EA).
- 1.2.7 These documents should be read in conjunction with each other and specific sections of the ES, where relevant to specific areas of interest
- 1.2.8 In this CoCP, "construction" includes all site preparation, demolition, materials delivery, materials & waste removal and all related engineering & construction activities including Substructure and Superstructure and cladding and fit-out.
- 1.2.9 The "Revised Scheme", for the purposes of this CoCP, is defined as the land within the various limits shown on the plans and sections submitted as part of the planning application.
- 1.2.10 The CoCP addresses the general obligations of all of the Contractors in so far as their construction activities affect the general public and neighbouring property.
- 1.2.11 This forms Part A of the CoCP and is intended to set the site wide principals and framework, under which site specific CoCPs will be developed (Part B's) at subsequent stages of planning.

Structure of this Document

1.2.12 This document is structured as follows:

- Section 2: Purpose of the CoCP – outlines the purpose of the CoCP.
- Section 3: Environmental Management – Sets out the mechanism for which environmental requirements are managed.
- Section 4-12: Environmental requirements by topic – sets out the measures that will be implemented to minimise the impacts from construction activities as far as reasonably practicable on a topic by topic basis.

1.3 PURPOSE

1.3.1 This CoCP sets out a series of proposed measures and standards of work, which shall be applied by the nominated contractors throughout construction to:

- provide effective planning, management and control during construction to control potential impacts upon people, businesses and the natural and historic environment; and
- provide the mechanisms to engage with the local community and their representatives throughout construction.

1.3.2 The purpose of the CoCP is to define minimum standards of construction practice required of Contractors as they affect the environment, amenity and safety of local residents, businesses, the general public and the surroundings in the vicinity of the Revised Scheme. Development of the CoCP will be progressed by The Applicant and the Contractors through discussions with the LBH and LBTH and other statutory bodies.

1.3.3 This document comprises the general principles of minimising impacts during construction of the Revised Scheme. A further CoCP (referred to as CoCP Part B) will be prepared for The Applicant by the contractor responsible for the work site contract that will set out site specific standards and the specific measures which will be used to minimise impacts at each work site. All the specific standards and measures in the later CoCP will be consistent with the general principles set out in this document.

1.3.4 This CoCP has been aligned with the ES Addendum documentation with the aim of ensuring that likely significant construction effects that are reported in the ES Addendum will either be avoided or mitigated.

1.3.5 Compliance with this CoCP will not absolve the Contractors or their sub-contractors from compliance with all legislation and bylaws relating to their construction activities.

1.4 ENVIRONMENTAL MANAGEMENT

Applicable Codes, Standards and Acts of Parliament

1.4.1 There are many Codes, Standards and Acts of Parliament which cover environmental and related matters, and these are referred to as applicable in this CoCP. Notwithstanding those references, compliance with them will not discharge the Contractors from complying with any other legislative requirements applicable at the time of construction activities.

1.4.2 The Contractors will be required to sign up to and adhere to the Considerate Constructors Scheme which is a voluntary code of practice and encourages firms to be sensitive to the environment. To adhere to these codes of practice construction should:

- ensure worksites appear professional and well managed;
- give utmost consideration to their impact on neighbours and the public;
- protect and enhance the environment;
- attain highest levels of safety performance; and
- provide a supportive and caring working environment.

Environmental Impact Assessment

1.4.3 An environmental impact assessment (EIA) has been undertaken for the project and an Environmental Statement has been prepared in accordance with the Environmental Impact Assessment Regulations 2017, as amended. Through the EIA process, mitigation identified with respect to construction effects has been embedded within the CoCP in order to form part of the proposals for the construction of the project. The findings of the EIA are reported in the Environmental Statement. The contractor will comply with and provide the mitigation measures described in the CoCP.

Construction Environmental Management Plan

1.4.4 The contractor/developer for each work package shall produce and implement site specific construction environmental management plans (CEMPs) for each site, in full accordance with the CoCP, in consultation with the local authority, and the EA. The CEMP will demonstrate how the CoCP will be implemented by the contractor through its EMS. The CEMP will be produced as part of and supporting the Construction Phase Plan that will define how works and associated risks will be managed in compliance with the HSE Standard.

1.4.5 The CEMP will be the overarching environmental management plan covering general site operations and overall management of the construction works. It will include, but is not limited to, details of the controls regarding general site layout and operations, working hours, site lighting, security, emergency planning and response, fire prevention and control, utility works, and worker access and welfare.

1.4.6 The CEMP will include specific management plans including:

- Pollution incident response plan: to include details of controls to be adopted to manage pollution incidents and procedures to be followed in the event of any pollution incidents.
- Emergency preparedness plan this will include procedures to deal with hazards and incidents and will take into account the security requirements.
- Lighting management plan: to provide design layouts and to demonstrate how the requirements are met by the design.
- Traffic management plan: to include details of traffic (and lorry) control measures, site access points, access for non-motorised users (e.g., cyclists and pedestrians), public roads that will be used during construction and control of construction traffic, together with advertising and notification procedures regarding planned road works. Highway and public right of way reinstatement will also be included.
- Noise and vibration management plan: to include details of measures to control and mitigate noise and vibration during construction, Section 61 consent application process, together with details regarding monitoring systems to be employed during the construction works.
- Air quality management plan: to include details of dust and air pollution control measures, vehicle and plant emissions, and odour.
- Water management plan: to include details of water use, site drainage, protection of watercourses, controls to prevent contamination of surface water and groundwater resources, flooding and dewatering and will detail monitoring systems to be employed during the construction works.
- Land quality: although not a management plan, this will include details of site assessment and remedial practices.
- Site waste management plan: to include details for the handling, storage, transfer and removal of waste materials and contaminated materials, as well as measures to be implemented for the reuse or recycling of excavated material and waste.
- Ecology and landscape management plan: to include details of procedures and mitigation measures relating to legally protected and notable species, habitat protection and reinstatement.
- Heritage management plan: to include details of measures for protecting listed structures and areas of archaeological interest as well as controls to be put in place to protect heritage assets adjacent to the construction works.

- Community liaison plan: to include community engagement, helpline/website information, as well as local authority and other stakeholder engagement. A mechanism for dealing with complaints will also be detailed.
- Resource management plan: these will include details for resource use management (water, energy and materials).

1.4.7 The CEMP, its subsidiary plans and other management plans, will be live documents that are subject to updating and refinement by the contractor/developer as required in response to the changing needs of the works during construction. The contractor shall agree alterations in the scope of the CEMP with the Employer and in consultation with relevant stakeholders.

1.4.8 The CEMP will set out the contractor's arrangements to provide supervisory and site personnel with adequate training relevant to their roles prior to being employed on the construction site, including project induction and site-specific environmental induction. Supervision, training and competency requirements are set out within the Construction Phase Plan

1.4.9 The CEMP will include details of those responsible for the effective implementation of the plan and will also set out the procedures to be implemented to monitor compliance with the plan during construction. Contractors will manage sites and achieve formal certification under the Considerate Constructors Scheme operated by the Construction Federation.

Environmental Management System

1.4.10 The appointed Contractors will be required to develop and implement Environmental Management Systems (EMS) that follow the principles of BS EN ISO 14001. The EMS provides the process by which environmental management both within its organisation and in relation to its operations is undertaken to ensure the relevant findings of the ES are addressed through the construction phase. The Contractors' EMSs will include the Contractors' environmental policies, operational, monitoring and auditing procedures. This is to ensure compliance with all environmental requirements, and to monitor compliance with environmental legislation and the environmental management provisions in the ES and CoCP Part A and the CoCP Part B. Specifically, the EMS will set out:

- The procedures to be implemented to plan and monitor compliance with environmental legislation and the CoCP;
- The key environmental aspects of the work and how they will be managed;
- Staff competence and awareness requirements and how these are achieved and maintained; and
- Record keeping arrangements.

- 1.4.11 The lead Contractors' EMS will cover the activities of all their contractors. The lead Contractors will also be required to coordinate with other Contractors and relevant parties that may affect their work. This will be documented in the CoCP Part B.

Enforcement

- 1.4.12 The CoCP (Part A and Part B) will be enforceable through the planning consents for site preparation and remediation where applicable, and construction of the various stages of the development throughout the entire build out programme of the Revised Scheme. The Applicant will develop an EMS which will set out the arrangements and responsibilities for implementing, auditing and enforcing the environmental mitigation set out in the CoCP. The Applicant, through conditions of contract, will ensure developers/contractors will have active roles and ensure compliance in the following ways:
- the employment of or a designated role for an Environmental Manager to oversee stakeholder liaison, compliance and monitoring checks;
 - The Applicant's Project Director will receive reports regarding the performance of the developers / contractors with respect to compliance with the CoCP and other relevant environmental legislation; and
 - The Contractor's Construction Manager (CM) or equivalent will ensure that their work is planned and managed so that it is undertaken in a manner consistent with the environmental requirements of the CoCP. The Contractor's CM will require their Construction Environmental Site Manager (CESM) to undertake a programme of monitoring and auditing to confirm compliance to the CoCP.
- 1.4.13 The provisions of the CoCP will be incorporated into all construction contracts. The Contractors will be required to comply with all the terms of the CoCP relevant to their area of the site. The Applicant will take all appropriate action as required to ensure Contractors compliance with the terms and conditions of their contracts including compliance with the CoCP.
- 1.4.14 The Contractor will submit their CoCP Part B to LBH and LBTH, which they must approve before any construction work can commence.

Skills, Training and Competence

- 1.4.15 The Contractors will seek to employ staff with skills, qualifications and experience appropriate to the needs of the works to be carried out during construction (including holding a registration with relevant recognised competence schemes). Where appropriate, the Contractors will identify training needs for the construction workforce and will ensure that appropriate training requirements are fulfilled. Site briefings and toolbox talks will be carried out on a

regular basis to ensure the construction workforce have a level of knowledge on environmental topics, health, safety and community relations, and can effectively follow environmental control procedures.

1.5 GENERAL REQUIREMENTS

Community Relations

- 1.5.1 A key aspect of the successful management of the project will be the maintenance of good relations with site neighbours and the general public, as well as future occupiers of the site (who occupy completed earlier phases of the Revised Scheme, whilst other later phases are still being finalised).
- 1.5.2 The Applicant and/or the Contractors will take all reasonable steps to engage with stakeholders in the local community, focussing on those who may be affected by the construction works including residents, businesses, community resources and specific vulnerable groups.
- 1.5.3 The Applicant and/or the Contractors will develop a stakeholder engagement programme and will provide appropriately experienced community engagement personnel to implement the programme, provide relevant information on the project and be the point of contact to resolve community issues.
- 1.5.4 Local residents will be invited to liaison meetings prior to commencement of works on-site. In order to keep the general public informed about the development, appropriate signage and information boards will be displayed on site hoardings. This will include contact details for the site and general construction information.
- 1.5.5 A clear point of contact will be provided to deal with any queries and provide immediate response to any issues raised. It is also proposed that periodic meetings will be held on site to explain the works anticipated for the forthcoming month and how these will impact upon our neighbours.

Advance notice of works

- 1.5.6 The Applicant and/or the Contractors will ensure that local residents, businesses, occupiers, general users of the area and Local Authorities are informed in advance of construction activities that may affect them. Relevant parties will be identified in the CoCP Part B. Notifications will detail the nature, estimated duration and working hours of the works. All notifications will include the community helpline number to which any enquires can be directed. The Contractors will be responsible for preparing and issuing the notifications subject to The Applicant's approval.

- 1.5.7 The Applicant and the Contractors in consultation with the Local Authorities will decide whether to arrange any further liaison or consultation with the public on a local basis.

Community Helpline

- 1.5.8 The Applicant and/or the Contractors will establish an email address and telephone helpline staffed at all times during working hours to manage enquiries on construction activities from the general public and local businesses. Such communication means will also be used as the first point of contact in the event of an emergency or incident. Contact details will be widely promoted and displayed at appropriate locations around the site hoarding.
- 1.5.9 The Applicant and/or the Contractors will establish a process for handling all enquiries including complaints. All enquires will be recorded and a log will be maintained that will include details of the response and action taken. This will be available upon request for inspection to LBH and LBTH. All enquires, whether a query or a complaint, will be dealt with in a timely manner.

Community Emergency Plan

- 1.5.10 A community emergency plan will be put in place, where relevant, for the worksite. This will ensure that in the case of a major emergency, when working in partnership with the relevant emergency service, the community can be kept fully informed and that adequate arrangements are in place for the evacuation of an affected area if necessary.

Working Hours

- 1.5.11 The Contractors will seek to obtain Section 61 consents from LBH and LBTH under the Control of Pollution Act 1974, for the proposed construction works (see section 9). The applications will include details on proposed working hours.

Core Working Hours

- 1.5.12 Core working hours will be from 08:00 to 18:00 on weekdays (excluding bank holidays) and from 08:00 to 13:00 on Saturdays for the demolition and construction works. The appointed Contractor must adhere to these core working hours for each worksite as far as is reasonably practicable or unless otherwise permitted under Section 61 of the Control of Pollution Act 1974.
- 1.5.13 In residential areas noisy works associated with a development (e.g. demolition, piling and earthworks) will be limited to weekdays from 0800 to 1800 hours, unless otherwise agreed. Sites in proximity to noise sensitive receptors are expected to agree such quiet periods as are operationally necessary for the

noise sensitive receptors, coordinating with other sites in the vicinity to ensure such periods align. The developer will ensure that the contractor adheres to these working hours for each site unless otherwise agreed with LBH and LBTH.

- 1.5.14 Guidance on the site-specific variations to core hours and/or additional hours likely to be required will be included within the CoCP Part B following consultation with LBH and LBTH.

- 1.5.15 Except in the case of an emergency, any work required to be undertaken outside of core hours (not including repairs or maintenance) will be agreed with the LBH and LBTH prior to undertaking the works under Section 61 of the Control of Pollution Act 1974 within the framework set out within the CoCPs.

1.1.1.1 Startup and close down periods

- 1.5.16 To maximise productivity within the core hours, the appointed Contractors will require a period of up to one hour before and one hour after normal working hours for start-up and close down of activities. This will include but is not limited to deliveries, movement to place of work, unloading, maintenance, and general preparation works. This will not include operation of plant or machinery likely to cause disturbance to local residents or businesses. These periods will not be considered an extension of core working hours.

1.1.1.2 Additional hours of working

- 1.5.17 Certain specific construction activities may require extended working hours for reasons of engineering practicability, season, weather and safety. The nature and timing of these works and the associated extended working hours will be agreed with LBH and LBTH through the Section 61 process and notified to relevant stakeholders. The Contractors will be required to liaise and consult with the LBH and LBTH prior to applying for a Section 61 consent and will be required to maintain regular consultation with the LBH and LBTH throughout the duration of the construction works to help facilitate the Section 61 process with regards to additional working hours.

- 1.5.18 In the case of work required in an emergency or which if not completed would be unsafe or harmful to workers, the public or local environment, LBH and LBTH will be informed as soon as reasonably practicable of the reasons and likely duration.

Construction site layout and good housekeeping

- 1.5.19 The Contractors will follow a "good housekeeping" policy at all times. This will include, but not necessarily be limited to, the following requirements:

- General maintenance and cleanliness of site boundary, welfare facilities and storage areas;

- Provision of adequate welfare facilities for site personnel;
- Appropriately located designated smoking areas with waste container;
- Appropriate waste management provision and regular collections;
- Open fires will be prohibited at all times;
- Effective infestation prevention of pests or vermin including arrangements for regular disposal of food or other material attractive to pests. If infestation occurs, the Contractors will take appropriate action to eliminate and prevent further occurrence;
- Maintenance of wheel washing facilities or other contaminant measures;
- No discharge of site runoff or water discharge without agreement of the appropriate authority;
- Appropriate security and lighting;
- The use of less intrusive noise alarms which meet the particular safety requirements of the worksite, such as broadband reversing warnings, or proximity sensors to reduce the requirement for traditional reversing alarms;
- Provision of site layout map showing key areas such as material storage, spill kits, material and waste storage etc;
- Maintenance of public rights of way, diversions and entry/exit areas around the boundary of the site for pedestrians and cyclists where practicable and to achieve inclusive access;
- Lorries will enter and exit the site in a forward direction; and
- All loading and unloading of vehicles will take place off the public highway wherever this is practicable.

Hoardings and fencing

- 1.5.20 Hoardings and fencing will be provided and maintained by the Contractors. All worksites will be completely fenced from public ingress.
- 1.5.21 The following measures will be applied, as appropriate:
- Maintenance of adequate fencing and hoardings to an acceptable condition to prevent unwanted access to the construction site, to provide noise attenuation, screening, and site security where required;
 - Use of different types of fencing and hoarding (e.g. mesh fence of solid hoarding including hoardings used for noise control);
 - Painting the side of hoardings facing away from the site, and to keep them free of graffiti or posters;
 - Providing site information boards with out of hours contact details, telephone helpline number (for comments/complaints) and information on the works;
 - Displaying notices on site boundaries to warn of hazards on site such as deep excavations, construction access, etc.;

- Installing adequate lighting near hoardings, provided at least for the official hours of darkness and any time visibility is seriously reduced as stated by LBH AND LBTH;
- Retaining existing walls, fences, hedges and earth banks for the purpose of screening as far as reasonably practicable; and
- Positioning and constructing gates in the fencing or hoarding to minimise the noise transmitted to nearby noise sensitive buildings from the site direct or from plant entering or leaving the site.

1.5.22 Forms of fencing and hoarding should be fit for purpose taking into consideration location, construction activities and the surrounding landscape. Where hoarding is required, it will be 2.4m minimum height. Hoarding height and type may be altered to enhance acoustic performance for specific locations. Further details will be included within the CoCP Part B.

1.5.23 Hoardings which encroach on the public highway require a licence under S172 of the Highways Act 1980 and shall comply with the requirements of Section 4 of the "Guidance Notes for Activities on the Public Highway". Application for a hoarding licence should be made to LBH and LBTH Highways Licensing Teams.

Cranes

1.5.24 Crane Arcs must be confined within the site periphery unless agreed otherwise with the Council, Police and any third-party land and property owners. Site cranes require a licence under S177 of the Highways Act 1980, if the jib at any point extends over the public highway. Applications for this licence should be made to LBH and LBTH Highways Licensing Teams.

Lighting

1.5.25 Site lighting and signage will be provided with the minimum luminosity sufficient for safety and security purposes. Where practicable, precautions will be taken to avoid shadows cast by the site hoarding on surrounding footpaths, roads and amenity areas.

1.5.26 Motion sensor lighting and low energy consumption fittings will be installed to reduce usage and energy consumption.

1.5.27 Lighting will comply with the Institution of Lighting Engineers' guidance notes for the reduction of light pollution and the provisions of BS 5489, Code of Practice for the Design of Road Lighting, where applicable.

- 1.5.28 Site lighting will be positioned and directed as not to unnecessarily intrude on adjacent buildings and land uses, ecological receptors and structures used by protected species, nor to cause distraction or confusion to passing motorists, river users or navigation lights for air or water traffic. This provision will apply particularly to sites where night working will be carried out.

Security

- 1.5.29 Worksite security will be under the control of the Contractors who will provide adequate security to prevent unauthorised entry to or exit from the work sites.
- 1.5.30 The following measures may be used by the Contractors to prevent unauthorised access to the work sites:
- Site lighting around site perimeters;
 - CCTV and alarm systems where required and in compliance with HSE requirements and BS EN 50131 1 to 3 as appropriate;
 - Site security cameras, where used, should be sited in locations that will not cause offence to off-site local residents or businesses, e.g. not look directly into private premises windows/gardens off site;
 - Adequate security guards and patrols;
 - When there is no site activity, site gates will be closed and locked and site security provisions will be set in motion;
 - Consultation with neighbouring properties on site security matters;
 - On-going consultation with local crime prevention officers on security proposals; and
 - Preventing access to restricted areas and neighbouring properties by securing site equipment such as scaffolding and ladders.

Clearance and re-instatement of site on completion

- 1.5.31 The Contractors will reinstate all working areas both within and outside the site and accesses as work proceeds, and on completion of the construction works. All plant, materials, vehicles, temporary buildings and fencing will be removed, and the surface of the ground restored as near as practicable to its original condition.

Use of existing structures

- 1.5.32 The Contractors will not locate stockpiles for materials, stores, plant or temporary works upon or adjacent to or under existing structures such as walls, flood defences and embankments in such a way as to endanger these structures.

Existing infrastructure services

- 1.5.33 The Contractors will be responsible to undertake their own surveys to establish full extent of underground services prior to commencing works at each worksite to augment any surveys already undertaken as part of the planning submission.

Fire prevention and control

- 1.5.34 All construction sites and welfare facilities will have in place appropriate plans and management controls to prevent fires.

Welfare accommodation

- 1.5.35 Welfare facilities will be provided, as appropriate, for site personnel such as mess rooms, locker rooms, toilets and showers etc. The location of these will be agreed with LBH and LBTH.

Health and Safety

- 1.5.36 All work must be carried out in accordance with the provisions of the Health and Safety at Work Act 1974. The Health and Safety at Work Act places several general and specific duties on employers, employees and the self-employed. Section 2 of the Act places a duty of every employer to ensure as far as is practicable reasonable, the health, safety and welfare at work of all employees. Employers are also under a duty (section 3) to ensure that as far as is practicable that persons not in their own employment (e.g. contractors or sub-contractors) are not exposed to risks to their health and safety. Section 7 of the Act places duty on every employee while at work to take reasonable care of the health and safety of themselves and of others, and to cooperate with their employer or any other person regarding any duty or statutory requirement
- 1.5.37 The developers nominated representative will ensure that the appropriate industry standards for health and safety are applied and that continuous improvement in safety performance is sought, in accordance with the principles of HSG65 "Successful Health and Safety Management" published by the Health and Safety Executive.
- 1.5.38 Nothing in this code of practice should be read as replicating or replacing duties under the Construction (Design & Management) Regulations 2015. These apply to all construction projects in Great Britain with additional duties where construction phase is planned to exceed 30 working days in duration or involving more than 500-person day. The developer will ensure that adequate arrangements are in place for the discharge of all duties as named parties under the Construction (Design & Management) Regulations 2015 (CDM 2015).

Emergency preparedness and pollution incident control

- 1.5.39 The Contractors will prepare and implement appropriate measures to control the risk of pollution due to construction activities, materials and extreme weather events and document in an incident control plan.
- 1.5.40 The Contractors will consult with the relevant organisations, statutory bodies and other relevant parties such as the Health and Safety Executive (HSE) (Construction), the Fire Authority, the Ambulance Service, the Environment Agency (EA), Natural England (NE), utilities companies and LBH and LBTH (emergency planning and pollution control functions) when preparing response measures. Reference should also be made to the EA Pollution Prevention Guidelines (PPG) 21 (Incident Response Planning).
- 1.5.41 In the event a pollution incident does occur, the relevant Contractor will be required to investigate and provide a report including the following:
- A description of the pollution incident, including its location, the type and quantity of contaminant and the likely receptor(s);
 - Contributory causes;
 - Adverse effects;
 - Measures implemented to mitigate adverse effects; and
 - Any recommendations to reduce the risk of similar incidents occurring.

Emergency preparedness

- 1.5.42 The Contractor will prepare and maintain an “emergency contacts” set of procedures for the work site with contact details displayed prominently. The Contractor will be required to follow the procedures in any site emergency. The procedures will contain emergency phone numbers and the method of notifying Local Authorities and all other relevant services, for action by the Contractor and/or The Applicant. Contact numbers of The Applicant’s key personnel will also be included.

Emergency access

- 1.5.43 The Contractor will ensure that the requirements of the relevant fire authority will be followed for the provision of site access points.
- 1.5.44 The Applicant and the Contractor will work in partnership with the relevant emergency service as appropriate.
- 1.5.45 A community emergency plan and management controls will be developed for all worksites to ensure that in the case of a major emergency the community can be kept fully informed and that adequate arrangements are in place for the evacuation of an affected area if necessary.

Unexploded ordnance

- 1.5.46 The Contractor will include procedures to deal with unexploded ordnance encountered on site and ensure that all operatives are aware of them.

Clearance and re-instatement of sites

- 1.5.47 On completion of construction works plant, materials, equipment, temporary buildings and vehicles not required during subsequent activities will be removed from the site.

Protection of existing structures

- 1.5.48 The Contractor will be required to make their own investigations and to take all appropriate actions concerning but not limited to existing foundations, buildings, structures, walls, roadways, sewers cables and other services, apparatus and installations.

1.1.1.3 Safeguarding

- 1.5.49 The Contractor will properly safeguard all buildings, structures, works, services or installations from harm, disturbance or deterioration during the construction period. The Contractor will take all necessary measures required for the support and protection of all buildings, structures, pipes, cables, sewers, railways and other apparatus during and immediately after the construction period.
- 1.5.50 A protection zone around the London Overground and the Central Line will be clearly marked out. All works carried out within these zones will be in accordance approved asset protection plans.

Cosmetic damage

- 1.5.51 Minor cosmetic damage may, on occasion, occur as a consequence of construction. Where this is the case, provision will be made for repairing any material damage.

1.6 AIR QUALITY

Air Quality Management - general provisions

- 1.6.1 The provisions of the Air Quality Standards Regulations 2010, the Environment Act 1995, Environmental Protection Act 1990 and all other pertinent legislation will be complied with.
- 1.6.2 The ES Addendum noted that the overall dust risk for dust soiling effects is predicted to be high during the construction phase. The overall dust risk for health effects is also predicted to be high. However, standard good practice measures to mitigate dust emissions from the construction phase of the Revised Scheme is included within this CoCP.
- 1.6.3 The Applicant will require the Contractor to manage dust, air pollution, odour and exhaust emission during the construction works in accordance with Best Practicable Means (BPM). This will include the measures outlined below.

Construction plant, vehicles and equipment

- 1.6.4 The Contractor will also be expected to maintain compliance with the Control of Substances Hazardous to Health (COSHH) Regulation 2002 and with the HSE Construction (Design and Management Regulations) 2015.
- 1.6.5 Measures will be implemented to limit emissions from construction plant, vehicles and equipment, which will include the following, as appropriate:
- Construction plant, vehicles and equipment, will be located away from sensitive receptors, exhausts directed in an appropriate height / direction where practicable and enclosures, shielding and filters used where appropriate;
 - Construction plant, vehicles and equipment will be operated in accordance with manufacturer's guidance and will be regularly maintained and checked, with records kept on site;
 - Movement of construction traffic will be kept to a minimum;
 - Construction vehicles will not be left idling when not in use;
 - Damping down of dust generating vehicles and equipment and roads and access will be kept clean by methods such as brushing and provision of dust suppression;
 - Provision of easily-cleaned hard standings for vehicles;
 - Watering of unpaved surfaces and roads;
 - Control of cutting or grinding activities on site will be conducted using equipment and techniques which reduce emissions and incorporate

- appropriate dust suppression measures;
- Use of electrical / battery powered equipment and low emission vehicles where practicable;
- Non-road mobile machinery (NRMM) will use ultra-low sulphur diesel, where reasonably practicable;
- Use of sheeting during demolition works;
- Vehicles and plant will be switched off and secured when not in use: and
- Site access points will be designed to minimise queuing traffic adjacent to access points.

Transportation, storage and handling of materials

- 1.6.6 Dust and air quality management measures will be implemented to limit pollution arising from the transportation and storage of materials, including the following, as appropriate:
- Sheeting dusty materials and deliveries such as excavated material entering, leaving and moving around the worksite. This will apply to road or waterway transportation;
 - Stockpiles will be located away from sensitive receptors, watercourses and surface drains, will take into account the predominant wind direction relative to sensitive receptors where reasonably practicable and will be enclosed / sheeted and sprayed with water as appropriate;
 - Dry, dusty materials will be stored inside or enclosed to ensure no escape;
 - For certain dust generating activities, such as mixing grout or cement-based materials, appropriate techniques to prevent dust emission will be used;
 - The number of handling operations for materials will be kept to the minimum reasonably practicable; and
 - Materials handling areas will be maintained to constrain dust emissions through the use of measures such as watering facilities to reduce or prevent escape of dust from the site boundaries.

Conveyors

- 1.6.7 Dust pollution associated with conveying material will be limited through the use of the following measures, as appropriate:
- Drop heights from conveyors to stockpiles will be kept to the minimum reasonably practicable;
 - Conveyor transfer points will be enclosed, and damping of conveyor loads; and
 - Conveyors will be enclosed where crossing roads, watercourses and other public areas.

Excavations

- 1.6.8 Dust pollution from excavations will be limited through the use of the following measures, as appropriate:
- Drop heights from excavators to vehicles involved in the transport of excavated material will be kept to the reasonably practicable minimum; and
 - Materials will be compacted after deposition, with the exception of topsoil and subsoil on areas to be used for landscaping.

Monitoring

- 1.6.9 The Applicant will require the Contractor to develop and implement inspection and monitoring procedures to assess the effectiveness of measures to prevent dust and air pollutant emissions from the construction of the Revised Scheme. Any Air Quality monitoring locations that may be required will need to be agreed with LBH and LBTH. Site inspections within and adjacent to the site will be carried out to visually assess dust and air pollution that may be generated from the site and appropriate action will be taken where appropriate.

1.7 ARCHAEOLOGY AND CULTURAL HERITAGE

Cultural heritage management – general provisions

- 1.7.1 The site has a low potential to contain prehistoric, Roman or Saxon remains; a moderate potential to contain later medieval remains; a high potential to contain post-medieval remains of medium significance and a very high potential to contain 19th century railway remains of medium significance.
- 1.7.2 The effects of construction and demolition are likely to be greatest to the west of the site where Plots 1 and 2, which will have accompanying basements, will be located. A permanent, direct, major-moderate adverse effect before mitigation is anticipated for post-medieval and 19th century remains in this area, representing the greatest potential impact on the site pre-mitigation.
- 1.7.3 The ES Addendum concluded that with the implementation of the proposed mitigation, the residual effects would be negligible.

- 1.7.4 During the works the Contractors will seek to minimise any impact on heritage assets, their setting and the wider historic environment. The Contractor will manage the impact of construction works in accordance with accepted industry practice, taking into account the relevant sections of the National Planning Policy Framework (NPPF) (2018) and local development plans.

- 1.7.5 General management measures will include:

- Identification of locations and descriptions of all known cultural heritage assets within and adjacent to construction works, including restrictions to construction methods to protect cultural heritage assets;
- The Applicant will ensure that any cultural heritage survey and mitigation works prior to and during construction, including archaeological watching briefs and heritage recording if appropriate, are properly programmed;
- The Contractors will use a suitably qualified organisation or person to undertake all Cultural heritage works; and
- The Applicant and / or the Contractors will consult with Historic England (HE) and the LBH AND LBTH as appropriate through all stages of the implementation of the programme of cultural heritage works.

- 1.7.6 The Contractors will comply with the requirements of the relevant legislation in respect of listed buildings and Listed Building Consents. Attention is drawn to the Planning (Listed Buildings and Conservation Areas) Act 1990, the Ancient Monuments and Archaeological Areas Act 1979 and the Historic Buildings and Ancient Monuments Act 1953 within the Register of Historic Parks and Gardens by HE.

Heritage assets

- 1.7.7 The Contractor will develop, in consultation with HE and LBH and LBTH, procedures, where appropriate, to avoid damage to important structures or archaeological remains.

Written Scheme of Investigation

- 1.7.8 A Written Scheme of Investigation (WSI) will be prepared, if appropriate, prior to site preparation and construction, in consultation with HE and LB and LBTH. This document will detail the generic principles, standards, methods and techniques to be employed for cultural heritage works.

Archaeological works

- 1.7.9 The Contractors will be responsible for implementing such archaeological interventions associated with ground works during construction as are required to mitigate the effects of the Revised Scheme. The Contractors will facilitate archaeological specialists to undertake the work. All finds will be reported to the appropriate authorities.

1.8 ECOLOGY AND LANDSCAPING

Ecological management – general provisions

- 1.8.1 There are six non-statutory designated sites for nature and ecology within 1 km of the site. The closest is Spitalfields City Farm and Allen Gardens SINC, which is 100 m to the east of the site and is designated as important at the Borough level. There is Open Mosaic Habitat on Previously Developed Land on the site which is important at the Borough level, particularly for the invertebrates living in this habitat.
- 1.8.2 The nesting bird, foraging bat and small infrequent black redstart populations were assessed by the baseline survey in the ES Addendum to be important at the local level only. All other habitats and species present were assessed as of importance in the vicinity of the site only.
- 1.8.3 Because the Proposed Amendment will be constructed in phases, there will be refuge habitat available which reduces the impact on habitats, invertebrates, black redstart and other birds in particular.
- 1.8.4 Appropriate measures will be adopted to protect the ecology of the area in which the Revised Scheme is constructed, with special attention to specified areas of ecological value, as identified within the ES Addendum.
- 1.8.5 The Contractor will adopt appropriate measures to protect the biodiversity and limit habitat loss in the area of the Revised Scheme.
- 1.8.6 The Contractor will comply with the provisions of the Wildlife and Countryside Act 1981, as amended, and other relevant nature conservation legislation and relevant policy and guidance. The following general principles will be applied where practicable:
- Standards of dust and air pollution control, as set out in section 5 will be applied to protect adjacent wildlife habitats;
 - Undertaking ecological surveys prior to and during construction where appropriate;

- Habitat loss will be minimised by restricting the working width and extent of worksite areas and associated access routes to a necessary minimum. Removal of habitats and enhancement works will be undertaken as appropriate, in consultation with Natural England (NE) and the EA;
- Suitable precautions will be taken to prevent the entry of pollutants into any bodies of water and any incidents reported to the EA and NE (see also requirements of section 10) - adjacent habitat will be fenced off and staff given awareness training, where appropriate;
- Procedures to be developed in the event of an unexpected protected species or important habitat being encountered;
- Preparation of individual species / habitat management plans; and
- Undertaking ecological watching briefs as appropriate.

Measures to reduce potential impacts on ecological resource

- 1.8.7 Management measures for potential ecological impacts are also addressed in other sections of this document including:
- Control of dust (see section 5)
 - Control of water quality (see section 10)
 - Control of noise and vibration (see section 9); and
 - Lighting (see section 4.5).
- 1.8.8 The programming of construction works will follow requirements set out in the ES, other relevant project documents and ecological best practice guidance. In particular, the timing of construction works will be undertaken with due regard to the following:
- Site clearance works – to mitigate potential impacts on protected and/or notable species; and
 - Works within watercourses – to mitigate potential impacts on plants, migratory fish, mammals, birds, amphibians and invertebrates.
- Statutory designated sites, non-statutory sites, protected habitats and species**
- 1.8.9 The Contractor will manage impacts upon any non-statutory designated sites of ecological interest, and other areas of notable habitat where relevant. There are no statutory designated sites within the sphere of influence.
- 1.8.10 The Contractor will obtain and comply with the requirements of any wildlife licences, including all protected species licences necessary for construction of the Revised Scheme.

- 1.8.11 The timing of construction works will be undertaken with due regard to the following:
- Site works – to mitigate potential impacts on protected and/or notable species e.g. nesting wild birds whereby potential nesting habitat should only be cleared between September and February (inclusive); and
 - Works within watercourses – to mitigate potential impacts on plants, migratory fish, mammals, birds, amphibians and invertebrates.
- 1.8.12 Prior to and during construction, The Applicant and / or the Contractor will consult with NE, the EA, local wildlife trusts, and LBH and LBTH as appropriate.

Invasive and noxious species

- 1.8.13 Appropriate measures for the treatment/control of invasive, non-native species (both plants and animals) and injurious weeds will be implemented in accordance with the ES.

Protection of trees

- 1.8.14 Tree protection measures will be included within an Arboricultural Method Statement and Trees Constraints Plan.
- 1.8.15 The Contractor will avoid the loss of trees wherever practicable and will employ a suitably qualified Arboricultural consultant to oversee any works in relation to trees.
- 1.8.16 Retained trees will be protected in accordance with *BS 5837: 'Trees in relation to design, demolition and construction'*. Any essential remedial work to trees adjacent to construction activity will be carried out by suitably trained or qualified personnel in accordance with *BS 3998: Tree work - Recommendations*.
- 1.8.17 The Contractor will be required to submit a request for removal or alterations to protected trees for approval by The Applicant in consultation with LBH AND LBTH or stakeholders.
- 1.8.18 Impacts on all trees whether statutorily protected or not within or in the vicinity of the site will be minimised by the adoption of suitable mitigation measures which will include the following, as appropriate:
- Installation of protective fencing;
 - Measures to prevent compaction of soils including matting is to be installed around the root zone to minimise soil compaction;
 - Implement vegetation buffer strips;
 - Selective removal of lower branches in an approved manner, to reduce damage by construction plant and vehicles;

- any works to the tree canopies will be undertaken by a qualified tree surgeon;
- notwithstanding the above, construction activities will be controlled to minimise compaction of the ground beneath the entire tree canopy. No heavy plant or materials or plant will be stored, and construction movements will be controlled by fencing or other means so as to minimise vehicle movement within the canopy footprint;
- The existing ground levels will not be altered beneath the extent of the tree canopy, unless agreed by an arboriculturist in relation to tree pruning requirements;
- No ploughing, ripping, storage of materials or soil tipping, etc. will take place in the protected areas beneath the tree canopy;
- All works to ground within the protected area will be undertaken by hand, unless agreed otherwise with the arboriculturist; following guidance for working within root protection zones (RPZ); and
- Works within the root protection area of trees (RPA) will be avoided wherever practicable. However, where some works within the root protection area cannot be avoided, e.g. for access, it is possible (if LBH AND LBTH's arboriculture officer agrees) to use cellular confinement systems to minimise/avoid compaction to the ground. Protection will still be required to avoid physical damage to the tree (i.e. trunk, branches or crown). In addition, if works are deemed essential within the RPA, it will be noted that the length of time of the impact will also be limited.

Tree replacement

- 1.8.19 Any tree that is damaged or cut down without approval or dies as a consequence of the construction will be treated or be replaced by a suitably sized transplant to the approval of LBH AND LBTH or stakeholder.
- 1.8.20 The supply, storage, handling, planting and maintenance of new planting will be undertaken in accordance with appropriate British Standards, including BS 5837 Trees in relation to design, demolition and construction; BS 3998 Tree Work. Recommendations and BS 4428 Code of practice for general landscape operations (excluding hard surfaces), BS 3936 Nursery stock, BS 4043 Transplanting semi-mature trees, BS 5236 Cultivation and planting of trees in the advanced nursery stock category and other appropriate guidance including the UK Forestry Standard and the UK Woodland Assurance Standard.

Monitoring

- 1.8.21 The Contractor must undertake appropriate monitoring of the consequences of construction works on ecological resource and of the effectiveness of the management measures designed to control ecological effects, associated with

works that may affect protected or notable species, statutory designated or non-statutory sites of ecological interest.

1.9 GROUND CONDITIONS

Land quality management – general provisions

- 1.9.1 The Applicant will require the Contractor to adopt appropriate measures to protect, assess, mitigate and remediate land where appropriate.
- 1.9.2 Any site assessment and remediation work required will be based upon Defra/EA's Model Procedures for the Management of Land Contamination (CLR11).
- 1.9.3 Measures to protect water resources are outlined in section 10 and measures to manage waste and materials are included in section 12.

Site investigation and risk assessment

- 1.9.4 The baseline assessment carried out for the 2015 Proposed Development identified and described occasional low levels of ground contamination. the likely negative effects on site workers, nearby residents, site users, groundwater beneath the site, and on-site and nearby buildings are considered negligible in all cases.
- 1.9.5 If additional or higher level contamination were identified during demolition and construction, remediation of soils or groundwater might become necessary. In this case, the Contractor will, where applicable, produce an Outline Remediation Strategy and verification plan providing details of the data that will be collected in order to demonstrate that the remedial works are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action. The verification plan will be submitted to The Applicant for review prior before submitting to LBH and LBTH. No occupation of the site will occur until the verification report demonstrating completion of any required remediation is submitted to LBH and LBTH.
- 1.9.6 Where there is a potential for soil gas generation, any gas protection measures required for buildings and structures will be included in the building design. Control measures will be designed and constructed in accordance with industry best practice and guidelines.

- 1.9.7 Any contaminated material encountered will be dealt with in compliance with best practice and statutory guidance; for example the Control of Substances Hazardous to Health (COSHH) Regulations and through the Construction Design and Management (CDM) Regulations.

- 1.9.8 In the event that contamination is found at any time that was not previously identified, the Contractor will report this in writing to LBH and LBTH. The investigation, risk assessment and where necessary remediation measures outlined above will be completed, and will be subject to approval in writing by LBH and LBTH.

Materials management and mitigation measures

- 1.9.9 The Contractor will not bring soils or infill materials onto the site unless they have been satisfactorily proven to be uncontaminated and present no risks to human health, property and the environment. A declaration to this effect, together with acceptable documentary evidence to confirm the origin of all imported soils and infill materials, supported by appropriate chemical analysis test results, will be submitted by the Contractor and approved in writing by LBH and LBTH prior to occupation.
- 1.9.10 The Contractor, in accordance with the EA Guidance Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention (EA, 2001) will undertake a piling risk assessment to determine the suitable piling method to mitigate against the potential for vertical or horizontal migration of contaminants both during construction and operation.
- 1.9.11 Where contaminated material is present the Contractor will:
 - Provide appropriate Personal Protective Equipment (PPE) to be used at all times including gas monitoring equipment and breathing apparatus, where necessary, to minimise the risk of ingestion, inhalation of dermal contact. Suitable welfare facilities including clean water for washing will be supplied for use by all site personnel;
 - Manage contaminated waste in accordance with current legislation;
 - Treat contaminated material for potential re-use at the site or dispose of it as a controlled waste, e.g. as hazardous waste to a designated landfill;
 - Ensure the safe storage and handling of hazardous materials such as fuels during the remediation and the construction phases; and
 - Set out procedures for the protection of adjacent sites including dust suppression and dewatering activities.

Asbestos

- 1.9.12 Appropriate precautions must be taken if materials containing asbestos are encountered. Where identified, asbestos will be removed by a suitability licensed asbestos removal contractor and managed in accordance with the relevant statutory controls governing its disposal.

1.10 NOISE AND VIBRATION

Noise and vibration management – general provisions

- 1.10.1 The ES Addendum noted that during the construction phase, noise levels will be higher than existing ambient noise levels requiring the investigation of further best practicable means measures to reduce the temporary minor to moderate adverse effect.
- 1.10.2 The Contractor will apply BPM (as defined by section 72 of the Control of Pollution Act 1974) to minimise noise and vibration on neighbouring sensitive receptors.
- 1.10.3 The Contractor will liaise and consult with LBH and LBTH with regard to permissible levels of noise, and will apply to LBH AND LBTH for Section 61 consent under the Control of Pollution Act 1974.
- 1.10.4 The recommendations of BS 5228: Code of practice for noise and vibration control on construction and open sites parts 1 and 2, will be implemented, together with the specific requirements of this CoCP.

Measures to reduce noise and vibration impacts

- 1.10.5 Noise and vibration management measures will be implemented to minimise noise and vibration during construction. This will include where appropriate:
- Careful selection of plant machinery and equipment, use of silencers, regularly maintaining equipment and shutting down equipment when not in use including turning off engines;
 - Construction of hoarding, screens and enclosures at a height and extent to achieve appropriate noise attenuation;
 - Plant should always be used in accordance with manufacturers' instructions;
 - Internal haul routes should be kept well maintained;
 - Selecting methods of works that are less intrusive e.g. for piling or breaking out concrete;

- Using non-audible warning systems where safety permits and minimise reversing of vehicles to minimise use of vehicle reversing alarms;
- Planning of construction traffic around sensitive receptors and careful programming so that activities which may generate significant noise would be planned with regard to local occupants and sensitive receptors;
- Drop heights of materials should be minimised;
- Suitable sited equipment so as to minimise noise impact on sensitive receptors and used away from where possible. Loading and unloading should also be carried out away from such areas where possible;
- Regular and effective maintenance by trained personnel should be undertaken to keep plant and equipment working to manufacturers specifications;
- Plant and vehicles should be sequentially started up rather than all together;
- Use of site enclosures and temporary stockpiles to provide acoustic screening; and
- Ensuring pro-active links between noise management activities and community relations activities including prior warning and explanation given to residents ahead of potential adverse effects.

Section 61 Consent

- 1.10.6 The Contractor will seek to obtain Section 61 consent from LBH and LBTH under the Control of Pollution Act 1974, after the application has been reviewed by The Applicant. Applications will be made at least 28 days prior to work commencing on site. Details contained with the Section 61 will be discussed in advance with LBH and LBTH and dialogue between The Applicant, Contractor and Local Authorities will continue for the duration of the construction period.

Vibration

- 1.10.7 Criteria and/or procedures for vibration control are specified for four purposes and assessed using four different sets of parameters:
- To protect the occupants and users of buildings from disturbance, for which vibration dose values are assessed (VDVs are defined and their application to occupants of buildings is discussed in BS 6472-1 Guide to evaluation of human exposure to vibration in buildings – Vibration sources other than blasting, 2008);
 - To protect buildings from risk of physical damage, for which peak component particle velocities are assessed in accordance with BS 7385 - 2 Evaluation and measurement for vibration in buildings. Guide to damage levels from ground borne vibration, 1993;
 - To protect particularly vibration-sensitive equipment and processes from damage or disruption, for which peak component particle velocities are

assessed in accordance with BS 7385 - 2 Evaluation and measurement for vibration in buildings. Guide to damage levels from ground borne vibration, 1993; and

- To protect particularly vibration-sensitive equipment and processes from damage or disruption, for which peak component acceleration, velocity or displacement are assessed as appropriate to each process or item of equipment.

- 1.10.8 In establishing criteria, controls and working methods, the Contractor will take account of guidance in BS6472-1: BS 5228: ISO 4866: Mechanical vibration and shock, vibration of fixed structures, Guidelines for the measurement of vibrations and evaluation of their effects on structures and BS 7385-2.

Monitoring

- 1.10.9 The Contractor will undertake regular noise monitoring at worksites in line with the Section 61 consent to highlight any potential noise impacts arising from the scheme. Further details of noise monitoring will be provided in the CoCP Part B.
- 1.10.10 Sound levels should be monitored according to the methods set out in Appendix B of BS 5228: Part 1. All measurements should be made on a sound level meter complying with BS EN 61672-1:2013 Electroacoustics – Sound Level Meters Part 1 – Specifications. A programme of noise monitoring by a suitably qualified noise practitioner will be agreed between the developer and the Council.

1.11 SURFACE WATER AND GROUNDWATER

Surface water and groundwater management – general provisions

- 1.11.1 The ES Addendum concluded that the effects on groundwater, surface water and flood risk will be negligible, with the exception of a minor adverse effect on the Taplow Gravels aquifer because that aquifer is likely to already be in contact with the Made Ground.
- 1.11.2 There are no surface water bodies within 1 km of the site and the underground River Walbrook is hydrologically isolated from the site. The site is connected to the River Thames via the sewer network which can overflow into the River Thames during periods of high runoff. The water quality of this stretch of the River Thames is sometimes of poor chemical condition but is considered to be in moderate ecological condition; this section of the Thames cannot achieve a higher ecological condition because it has been heavily modified from its natural

state. Although the River Thames is not classed as a Fishery there are good populations of fish in the local section.

- 1.11.3 The site is at a low risk of flooding by rivers but there is a risk of limited flooding from surface water at present. The site lies within a heavily urbanised area and runoff from the site could affect surrounding areas if not properly managed.
- 1.11.4 The Applicant will require the Contractor to manage site activities and working methods to protect the quality of surface water and groundwater resources. Monitoring systems will be employed during the construction works and emergency procedures in the case of any pollution incidents. BPM will be used (e.g. through the use of silt traps and the re-use of water in wheel washers) where appropriate. Where required, the contractor will obtain appropriate approval for works from the relevant regulatory body or statutory undertaker, which could affect any surface water or groundwater resource.
- 1.11.5 All ground and surface water bodies (including source protection zones, abstractions and areas at risk of flooding) that could be affected by the construction will be identified as well as sources of potential pollution and drainage arrangements on the site. Measures to be used to protect surface water and groundwater from pollution, include site good practice, the EA Groundwater protection: Principles and practice (GP3); and precautions to be taken to prevent damage to services and to avoid pollution during service diversions and excavation ground penetration.
- 1.11.6 The Contractor will be responsible for confirming the full extent of underground services prior to commencing works and undertaking surveys where necessary.
- 1.11.7 The Contractor will adhere to the measures outlined in:
- CIRIA guidance 532 Control of water pollution from construction sites: Guidance for consultants and contractors;
 - CIRIA guidance 584 Coastal and Marine Environmental Site Guide; and
 - CIRIA guidance 515 Groundwater Control – Design and Practice.

Measures to reduce surface water and groundwater impacts

- 1.11.8 Protection measures for works in or adjacent to surface waterbodies will be provided in accordance with requirements set out by the EA. All measures will be in line with the requirements set out within the EA's General Guide to Prevention of Pollution (PPG 1), Works and maintenance in or near water (PPG5) and Maintenance of structures over water (PPG23) and Control of water pollution.

Waste water, surface water and groundwater

- 1.11.9 The Contractor will apply for consents and approvals from the relevant authorities to enable discharge of dewatering, surface water run-off and waste

water from the construction site to soakaway or filtration systems, watercourses, foul sewers or disposal off-site. All waste water and site discharges will only be permitted where the effluent quality and discharge location is acceptable to the relevant authorities.

- 1.11.10 The Contractor will adhere to the following mitigation measures that will be applicable to construction sites:
- Procedures for monitoring groundwater levels and quality at abstraction boreholes where appropriate;
 - Storage of potentially polluting materials, plant and equipment will be more than ten metres from any water body, including drains;
 - Fuel stores will be located away from surface water drainage, and will be double-bunded with a capacity of 110%;
 - Refuelling will always be undertaken remotely from drainage and surface water features, over a plant nappy and using automatic shut-off fuel delivery systems;
 - Pumps, generators and small plant will have drip trays to collect any fuel or oil spills;
 - Where wheel washes are installed adjacent to site accesses or egresses, these will be self-contained, would recycle wash water as much as possible and would not directly discharge to the environment;
 - Topsoil would be replaced if appropriate where practicable, to prevent scouring and increased runoff;
 - Provision of a suitable construction site drainage system including cut-off valves, ditches or drains and sustainable drainage systems, or equivalent, with suitably sized treatment facilities such as settlement or detention basins;
 - Emergency response procedures would be developed and implemented that covered any incidents that might lead to release of pollutants to the aquatic environment;
 - Implementation of a site drainage plan; and
 - Spill kits will be available in the event of a fuel spillage and personnel will be trained in their use.
- 1.11.11 The Contractor will also comply with BS 6031 Code of practice for earthworks, regarding the general control of site drainage including, for example, all washings, dewatering, abstractions and surface water run-off, unless otherwise agreed by the Applicant. Any monitoring stations or boreholes should be protected from physical damage. If boreholes are decommissioned the Contractor will follow Good practice for decommissioning redundant boreholes and wells (EA January 2012 or subsequent guidance).
- 1.11.12 Where contaminated land is present, a full management plan will be prepared by the Contractor to comply with all relevant handling and disposal legislation (including dewatering discharge from piling operations).

- 1.11.13 The Contractor will make provisions to ensure that oil drums and containers or other potential contaminants stored on the site are controlled in accordance with the Control of Substances Hazardous to Health (COSHH) Regulations 2002.

Protection of aquifers

- 1.11.14 The Contractor will have due regard for underlying aquifers and adhere to the EA's Groundwater Protection Policy. In all instances, appropriate protection of aquifers will be undertaken, following liaison with the EA regarding the piling and construction techniques to be employed. Details of appropriate measures to prevent groundwater contamination (including monitoring) will be agreed with the EA in writing, prior to commencement of the relevant construction works.

Control and management of foul drainage

- 1.11.15 Foul water and sewage effluents produced by the construction workforce will be managed and disposed of from site facilities complying with Pollution Prevention Guideline 4: Treatment and disposal of sewage where no foul sewer is available and the EA's guidance document. Methods include connection to the local foul sewer system as agreed with the relevant authorities or containment by temporary foul drainage facilities and disposal off-site by a licensed contractor.

Flood risk and defences

- 1.11.16 The Contractor as far as reasonably practicable, will ensure that flood risk is managed safely throughout the construction and implementation period and consider flooding when planning sites and storing materials. The contractors will consult with the EA, the Lead Local Flooding Authority (LLFAs) and other relevant risk management authorities on areas at risk of flooding and make appropriate use of the EA's Floodline flood warning service for works within areas at risk of flooding.
- 1.11.17 Where temporary structures associated with the construction of the Revised Scheme are situated in close proximity to flood defences the Contractors will ensure that:
- The flood defences are protected during construction activities;
 - The stability of the defence foundations is not compromised by the weight of temporary structure on the site or construction methods;
 - The stability of the defence foundations is not compromised by scour in the foreshore in front of the structures; and
 - The Contractors will adhere to any conditions provided by the EA as part of the consent for works affecting watercourses and/or flood defences.

1.12 TRAFFIC AND TRANSPORT

Traffic management – general provisions

- 1.12.1 Estimated numbers of vehicle movements for demolition and construction periods have been produced by the Applicant and the impact of this on total traffic flows estimated within Chapter 9: Traffic and Transport of the ES Addendum. Associated effects relating to road traffic emissions and road traffic noise are assessed in Chapter 12: Air Quality and Chapter 13: Noise and Vibration of this ES Addendum, respectively.
- 1.12.2 During construction The Applicant will require, as far as reasonably practicable, that impacts on the local community from construction traffic are minimised by the Contractor and that public access is maintained. Impacts on road-based construction traffic will be reduced by identifying clear controls, hours of site operation and routes for large goods vehicles. To reduce construction workforce and visitor car trips alternative modes of travel will be encouraged.
- 1.12.3 Routes of construction traffic will be subject to approval by LBH and LBTH. It may be necessary to close or divert certain specified highways, footpaths and cycleways temporarily during the construction period. Closures will be agreed by the Contractors with LBH and LBTH, prior to the relevant work commencing.
- 1.12.4 Prior to the commencement of the works, The Applicant will ensure that Traffic Management Plans (TMPs) are produced in consultation with the highway and traffic authorities and the emergency services. TMPs will include the proposed traffic management strategy, temporary and permanent diversions of highways or other public rights of way and the site boundaries access points.
- 1.12.5 All deliveries to the site shall be booked in using a Delivery Management System run by the main Contractor. This will require all deliveries to be booked in advance by at least 48 hours, this will include paperwork, Fleet operator Recognition Scheme (FORS) (or Construction Logistics and Community Safety (CLOCS)) registered number and gate information. This will allow the site to efficiently manage the deliveries coming to the site and preventing congestion of local roads. All deliveries which have not been booked will be turned away.
- 1.12.6 The Contractor will implement traffic management measures during construction of the Revised Scheme on or adjacent to the public highways, rights of way, footpaths and cycleways and will include the following, where relevant:
- Maintain and restore the highway to its existing condition to the approval of LBH and LBTH;
 - Supplying, erecting and maintaining for the requisite periods all statutory and public information notices. The nature and location of such notices will also

- comply with the requirements of LBH and LBTH;
- Measures to provide for road safety for the public and construction staff during traffic management and temporary traffic control measures;
- Procedures for driver training;
- Procedures to be followed for permanent and temporary diversions of highways or other public rights of way or accesses;
- Measures to be implemented to reduce the impact on parking;
- Take all reasonable precautions to prevent or reduce any disturbance or inconvenience to the owners, tenants or occupiers of adjacent properties, and to the public generally and ensure access is maintained at all times where reasonably practicable;
- Procedures to address any highway incidents or vehicle breakdown of construction traffic especially at peak times; and
- Detailed site specific traffic management measures will be included in the CoCP Part B.

Pedestrian and cyclist routes

- 1.12.7 The Contractor will ensure that reasonable pedestrian routes are provided throughout the construction period and in relation thereto will meet the following requirements, where practicable:
- All temporary and diverted footways, which replace footways that are currently accessible to wheelchairs and pushchairs, will continue to be usable by such users;
 - Any temporary footways and carriageways will have uniform surfaces; there should be no steps and any gradients should be preferably 1 in 20 and no greater than 1 in 12;
 - Pavement ramps will be provided at all junctions of footways with carriageways. Gradients must not exceed 1 in 12 and the base of the ramp must be flush with the carriageway;
 - All temporary footways and ramps will be surfaced in nonslip material and kept free of mud and debris;
 - The existing pavement width along the main roads will be maintained except where this exceeds 2 metres where the Contractor may, with the prior approval of LBH and LBTH, reduce it to not less than 2 metres;
 - Clear signage will be provided at all times showing alternative pedestrian and cycle routes at each construction site. Appropriate lighting will be provided by the Contractor along temporary pedestrian routes;
 - All openings or obstructions on the carriageways and footway will be barricaded with a continuous rail (lit at night) strong enough to offer necessary resistance should a blind person walk into it; a tapping rail will be provided;

- The contractor shall give notice of planned closures or diversions of roads and footpaths to the Council, the Police, the London Fire & Rescue Service and other emergency services. This shall be sufficiently in advance of the required closure or diversion dates. A Traffic Regulation Order will need to be imposed by the Traffic Authority, defining the details of how, where, when and for how long access is to be restricted or diverted and must comply with the requirements of the Highways Act 1980;
- The contractor will be responsible for any damage caused to roads, kerbs or footpaths in the vicinity of the worksite by their activities and will carry out temporary or permanent reinstatement as required. Permanent reinstatement standards must be agreed with the Council Highways Service prior to work being carried out;
- Headroom clearance over footways will be a minimum of 2.3m. A horizontal clearance of 0.6m will be provided from the kerb line, where practicable, for any hoarding under 5.1m high, to avoid fouling by vehicles. The minimum headroom beneath any projection over the highway will be 5.7m; and
- All pedestrian routes diverted onto the carriageway will be clearly defined by continuous barriers.

Lorry movements

- 1.12.8 Access routes to and from the site to be used by Heavy Goods Vehicles (HGVs), for deliveries of material to the site and for removal of wastes, will be agreed with the LBH and LBTH prior to initiation of demolition and construction works. It is envisaged that the most heavily used HGV's on the site will be ready mix concrete trucks for the delivery of concrete and flatbed lorries for the delivery of cladding panels. Construction vehicle impacts will be mitigated through management measures (such as control of vehicles on the site, and timing of deliveries) and operational vehicles will enter and exit the site in a forward gear.
- 1.12.9 Where space is limited at worksites HGVs entering the worksite will, if required, queue at a designated holding location which may be away from the worksite. If holding areas are required, the Contractors will obtain the appropriate agreements with LBH and LBTH.
- 1.12.10 The Contractor, when entering into any sub-contract for the execution of any part of the construction works or the supply or transport of heavy loads, construction plan and materials, will incorporate in any such sub-contract provisions requiring the sub-contractor or supplier to comply with the requirements of this Clause.
- 1.12.11 Construction Logistics Plan (CLP) will be prepared which will identify the duration of the phases and will also identify methods and routes for delivery of construction materials and removal of waste materials.

Road cleanliness

- 1.12.12 The Contractor will take strict measures to minimise the spillage of mud on roads arising from construction works. These will include, but not necessarily be limited to:
- The provision of easily-cleaned hard standings for vehicles entering, parking and leaving the site;
 - The provision of contained wheel washing facilities including, where practicable, mechanical wheel spinners;
 - The use of a mechanical road sweepers and surface flushing apparatus to clean the hard standing and to remove any mud or debris deposited by site vehicles on roads, footpaths, gullies or drains in the vicinity of the site. The road sweepers or other equipment are to be readily available whenever the need for cleaning arises and will be properly used and maintained;
 - The complete sheeting of the sides and tops of all vehicles carrying mud or debris; and
 - The Contractors will ensure that vehicles are loaded in such a manner as to prevent materials falling off during their journey.

Traffic safety and control (traffic safety measures)

- 1.12.13 The Contractor will provide, erect and maintain such traffic signs, road markings, lamps, barriers and traffic control signals and such other measures as may be necessitated by the construction of the Revised Scheme and to the approval of LBH AND LBTH. Compliance with this Clause will not relieve the Contractor of any of their other obligations and liabilities under the Concession Agreement and under the relevant provisions of the Highways Act (1980).
- 1.12.14 The Contractor will not commence any work that affects the public highway until all traffic safety measures necessitated by the work are fully operational.
- 1.12.15 The traffic signs, road markings, lamps, barriers and traffic control signals will be in accordance with the requirements of the Traffic Signs Regulations.
- 1.12.16 All traffic signals including temporary signals used at road works must be type approved before they can legally be installed on public roads. Portable traffic signals must also comply with the current requirements of Regulation 31(2) of The Traffic Signs Regulations, which lays down the size, colour and type of prescribed traffic signals.
- 1.12.17 The Contractor will keep clean and legible at all times all traffic signs, road markings, lamps, barriers and traffic control signals and they will position, reposition, cover or remove them as required by the progress of the works and to the approval of LBH and LBTH.

1.12.18 The Contractor shall undertake the following activities in relation to Work Related Road Risk:

- Liaise with LBH and LBTH and Transport for London (TfL) in relation any requirement to temporarily restrict car parking on construction access routes to facilitate access to the site by large vehicles;
- Register for membership of Fleet Operator Recognition Scheme (FORS);
- Ensure that all construction vehicles bear prominent signage and have an external warning device to warn cyclists of the dangers of passing the vehicle on the inside;
- Ensure that all lorries which are fitted with appropriate equipment to warn the driver of the presence of cyclists passing the vehicle on the inside;
- Ensure that all drivers have a driving licence check before commencing work and undertake appropriate driver training;
- In the event of a collision, investigate the collision and provide a Collision Report;
- Liaise with LBH and LBTH / TfL to determine any need for route signage for construction vehicles and provide such signage as agreed;
- Ensure that adequate signage to warn cyclists and pedestrians of the presence of large construction vehicles is prominently located at site access points and on construction vehicle routes between the site and the strategic network;
- Ensure that pedestrian crossing points at site access points are laid out in a safe manner and that where necessary the movement of large construction vehicles is supervised to minimise the risk of accident;
- Prepare a Construction Traffic Management Plan setting out measures to manage and control construction vehicle operation;
- Maximise the use of any other safety measures; and
- Ensure that any subcontractors are advised of and comply with the same requirements as appropriate.

Works on Transport for London Road Network (TLRN) aka 'Red Routes'

- 1.12.19 The Traffic Management Act (2004) (TMA) was introduced to tackle congestion and disruption on the road network. The TMA places a duty on local traffic authorities to ensure the expeditious movement of traffic on their road network and the networks of surrounding authorities. The TMA gives authorities additional tools to better manage parking, traffic enforcement and the management of street works.
- 1.12.20 One of the most important considerations for developers and their contractors is the assurance that they can safely construct without delays and at excessive cost. Having a good understanding of Transport for London's (TfL) processes and timescales is recommended.

London's sensitive road networks

- 1.12.21 There are two road networks in London which have been designated for their strategic importance to road users. TfL has been given certain powers on each to fulfil the requirements of the TMA.
- 1.12.22 The Transport for London Road Network (TLRN) - Red Routes
<https://tfl.gov.uk/modes/driving/red-routes>
- 1.12.23 The Strategic Road Network (SRN) - Yellow Routes with high bus and traffic volumes A list of the roads designated as Strategic roads can be found at;
<http://www.legislation.gov.uk/uksi/2005/476/schedule/made>

Works impact assessment and Permit process

- 1.12.24 For works that are proposed on or impact on either TLRN or SRN roads, contractors are required to submit a TMA notification. These notifications form part of an audit process to ensure any proposed works do not impact on the road network. In order to implement works on the TLRN you contractors require a permit. If not already registered with the London Permit Scheme applications can be made to; Section50@tfl.gov.uk

1.13 WASTE AND MATERIALS

Waste management – general provisions

- 1.13.1 The authorities responsible for waste collection would be LBTH and the North London Waste Authority. They have both identified that they have sufficient capacity to manage their share of the waste targets in the London Plan (known as the "apportioned waste targets").
- 1.13.2 In total, approximately 97,728 m³ of waste is anticipated to be generated during the demolition, excavation, and construction phase of the Revised Scheme. Applying standard conversion factors (as discussed within the Methodology section), this equates to approximately 94,935 tonnes of waste generated over the 13-year construction programme, which equates to approximately 7,303 tonnes per annum.
- 1.13.3 The Applicant will require the Contractor to implement the waste hierarchy (i.e. prevention, preparing for re-use, recycling, other recovery and disposal as set out in the Waste (England and Wales) Regulations 2011 (as amended) to ensure that material resources are used to maximum efficiency. The Contractor will, where possible, minimise waste at source and where this is unavoidable will reduce the quantity of waste sent to landfill by maximising re-use, recycling and

recovery.

- 1.13.4 During the demolition phase, all demolition material generated will be re-used during construction, wherever practicable. Any material identified as being contaminated with asbestos or other such hazardous material will be disposed of, off-site at an appropriately licensed facility by a specialist contractor. The ES Addendum provided an initial assessment of the likely material generated on-site by the demolition phase of the Revised Scheme, as shown in **Table 1**.

Table 1 Indicative Demolition Material Likely to be Generated on-site

Waste Stream	Volume of Waste (m ³)
Ground excavation	26,082
Brickwork	9,846
Total	35,928

- 1.13.5 An initial assessment of the likely construction material generated on-site, in accordance with the current scheme is shown in **Table 2**.

Table 2 Indicative Construction Waste Arisings

Waste Stream	Indicative Volume (m ³)
Block work	37,650
Plasterboard including Track	850
Flooring	640
Fixtures & Fittings	500
Ductwork	6,100
General	16,060
Total	61,800

- 1.13.6 The majority of the 9,846 m³ of brickwork will be retained for re-use on site. Waste arising from site clearance, primary infrastructure and earthworks is expected to comprise vegetation, topsoil, rubble, tarmac from former hard standings, gravel and clay material. Material excavated during ground works will be crushed and tested, any suitable materials will be used as back-fill and piling material.
- 1.13.7 Any clean excavated material that cannot be reused on-site will be removed by licensed waste carriers and sent for reuse at another development site or sent for disposal at appropriately licensed facilities (these are expected to be inert waste landfill sites).
- 1.13.8 Any contaminated material that will require removal from the site will be collected by suitable waste carriers and sent for disposal at appropriately licensed hazardous waste facilities.

Identification and classification

- 1.13.9 A method to manage waste will be prepared for the Revised Scheme by the Contractor. This will include information regarding the type and quantities of waste to be produced, waste carrier details and plans for the segregation and control of waste at each site and the re-use or disposal. The management process will include an audit programme to be undertaken by the Contractors. Although the requirement for SWMPs was revoked on 1st December 2013, it is still considered best practice to produce a SWMP or Construction Resource Management Plan (CRMP).

Segregation and storage

- 1.13.10 The Contractor will make provision for a waste storage area on the site that will include containers for the collection and segregation of waste and will be clearly labelled as per the Institution of Civil Engineers (ICE) colour coding. This is to facilitate re-use, recycling and recovery of waste. Containers will be covered with sheeting or lids.
- 1.13.11 Plastic sheeting will be used where there is a need to store excavated materials and aggregates where these are not contained within a container.
- 1.13.12 Liquid wastes will be stored on hard-surfaced areas with secondary containment systems to prevent spillages.
- 1.13.13 Waste will not be stored within 10m of any controlled watercourse, borehole, well, spring, surface water drainage system or foul water drainage system.

- 1.13.14 The Contractor will comply with approved guidance and procedures in the identification, handling, storage, and management of waste. The Contractor will also comply with the measures set out in section 10 regarding discharges to controlled waters and wastewater.

Duty of care

- 1.13.15 The Contractor will be required to comply with the relevant legislation governing storage, transfer, treatment and disposal of all waste.
- 1.13.16 Prior to the removal of waste from the site, the Contractor will put in place all relevant authorisations and maintain a register of this information. This will be in relation to the transfer of waste (waste carriers); any off-site waste management facilities (permitted or exempt sites) to which waste is taken to and any requirements for hazardous waste premises notification. The Contractor will also ensure that an environmental permit or registered exemption is in place prior to any off-site transfer, treatment or disposal of waste being undertaken.
- 1.13.17 The Contractor will be responsible for ensuring that all duty of care documentation is in line with the relevant statutory requirements for any waste leaving the site for waste transfer and that waste will be removed only by licensed carriers. Duty of care documentation will be retained by the Contractors including the retention of all parts of Waste Transfer Notes and Waste Consignment Notes (for hazardous waste), to be maintained for two and three years respectively.

1.14 ENERGY MANAGEMENT

General provisions

- 1.14.1 The Contractor will implement working methods that maximise energy efficiency. This will include but not be limited to:
- Avoiding unnecessary day and night time site, accommodation and office lighting;
 - Installing energy efficient security and task lighting, e.g. LED;
 - Providing well insulated site accommodation;
 - Consideration of the energy consumption of plant during its selection;
 - Powering-down equipment/plant when not in use;
 - Minimising the use of diesel- or petrol-powered generators and instead using mains electricity or battery powered equipment;
 - Metering of energy use/ smart meters if feasible; and

- Collection, communication and reporting of on-site energy and fuel consumption data.

- 1.14.2 The Contractor will ensure that energy management considerations are integral to the design of the works and to the construction strategy and consequent energy impacts.

- 1.14.3 The Contractor shall consider the guidance set out in all Mayoral strategies and plans.

- 1.14.4 The Contractor will consider the guidance set out in the Mayor of London's London Plan, setting a goal of zero carbon by 2050, and provide consideration to:

- Energy Infrastructure and means to achieve efficiency gains that could result in reduced energy consumption. Options to consider include renewable energy sources and secondary heat sources;
- Sustainable Infrastructure minimising the degree of embodied carbon and supporting the implementation of circular economies where possible; and
- Implementation of the mitigation measures outlined in Section 5.0 Air Quality of this document to reduce carbon emissions.

Energy management plan

- 1.14.5 The Contractor will develop and implement an energy management plan to demonstrate how energy consumption during construction will be minimised. This plan will complement the Construction Workers Travel Plan and will include, but not be limited to:

- A programme of energy audits that reviews all energy-using processes, activities and equipment on site and identifies opportunities to reduce the amount of energy consumed;
- An action plan, including staff engagement and training, to prioritise and track the implementation of measures to reduce energy consumption by all energy consuming processes, activities and equipment on site and in the site offices;
- A monitoring regime that assesses the effectiveness of energy efficient measures in the plan;
- A maintenance regime for plant and machinery to maximise fuel efficiency and operational use; and
- Proposals for reporting on the effectiveness of the plan at least annually, which shall include progress against the action plan and any targets that have been set.

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