

# **Appendix 6.2**

# FRAMEWORK CEMP – WEST



# FRAMEWORK CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)

LAND AT JUNCTION 10, M40 – WESTERN DEVELOPMENT INCLUDING ENABLING WORKS

**APRIL 2024** 

Quod 21 Soho Square London W1D 3QP

# **CONTENTS**

1	INTRODUCTION	1
2	SITE, DESCRIPTION OF DEVELOPMENT AND CONSTRUCTION	3
3	RESPONSIBILITIES AND MANAGEMENT STRUCTURE	10
4	TRAINING AND SITE RULES	14
5	COMMUNICATION AND COMMUNITY ENGAGEMENT	17
6	MONITORING	18
7	GENERAL CONSTRUCTION MANAGEMENT	20
8	ENVIRONMENTAL CONTROL MEASURES	25

#### 1 INTRODUCTION

#### 1.1 Purpose

- 1.1.1 Three planning applications are submitted for redevelopment of land in relation to the proposed employment development of land on two plots north of Junction 10 of the M40 motorway. These comprises two outline applications for redevelopment on each plot (the 'Eastern Site' and 'Western Site') and a detailed planning application for enabling works on the Western Site.
- 1.1.2 The purpose of this Framework Construction Environmental Management Plan ('CEMP') is to outline the overarching details and principles to minimise, manage and/or mitigate the environmental effects of the works associated with the redevelopment proposals of approximately 43.45 hectares (ha) of land in relation to the planning application for the Western Site (the 'Western Development') and the planning application associated with enabling works, covering an extent of approximately 10.6 ha within the Western Site boundary (the 'Enabling Works').
- 1.1.3 The Framework CEMP details the environmental management, controls and safety procedures that will need to be adopted during the carrying out of the Development, thereby providing a tool to ensure the successful management of the likely environmental effects as a result of the construction activities. The CEMP seeks to ensure that all enabling, demolition and construction works cause the minimum disruption to the local businesses and members of the public. More specifically, the Framework CEMP aims to:
  - Ensure that relevant mitigation measures set out in the Environmental Statement ('ES') (Volume I, April 2024) submitted as part of the planning applications are implemented during all construction activities; and
  - Ensure that relevant legislation, Government and industry standards, and construction industry codes of practice and good practice standards are implemented and adhered to.
- 1.1.4 This Framework CEMP has been prepared to enable Cherwell District Council ('CDC') and third parties to understand the nature of the standard environmental management and control measures that are to be implemented during the carrying out of the Enabling Works and Western Development.
- 1.1.5 Once appointed, the Principal Contractor will be bound by the Framework CEMP and will apply the requirements set out therein to the development of the individual phase(s) or works of the Development so as to ensure that the document is specific to the works and processes that are to be employed by contractors during all enabling and construction activities, and thereby creating a site-Specific CEMP for development of that phase(s) or works. The site-Specific CEMP will be subject to approval by CDC which will be subject to and secured by planning condition.
- 1.1.6 While this Framework CEMP considers and is applicable to all works comprised in the carrying out of the Development, i.e. enabling and construction, should the Applicant appoint different Principal Contractors to undertake only one element of the works, i.e. the Enabling Works, this Framework CEMP can be refined to create a works-specific Enabling Environmental Management Plan ('EEMP') for those works and used to part discharge the

- planning condition for those works.
- 1.1.7 The Framework CEMP demonstrates the commitment of the Applicant to undertaking the Development in such a way as to avoid or minimise environmental effects and disruption to neighbours and provides a mechanism for the implementation of recommended mitigation measures and monitoring throughout the works.
- 1.1.8 This Framework CEMP includes the following:
  - **Site Information:** including description of the Western Site, surrounding environment and other proposed developments, as well as an environmental management structure, roles and responsibilities;
  - Enabling Works and Construction Information: a description of the anticipated Enabling Works and construction activities, anticipated programme and phasing, working hours, details of haulage routes, equipment to be used, etc.;
  - Environmental Management and Control Measures: potential environmental issues related to the enabling and construction works, details of the site inspection and audit programme, methods for managing environmental risks and reducing impacts, emergency procedures, waste and hazardous materials storage procedures, liaison with the local community, and specific project environmental procedures relating to waste and materials management, dust and air quality, noise and vibration, vehicle management and protection of water quality; and,
  - Monitoring: procedures for recording and reporting monitoring results and taking remedial action in the event of any non-compliance.

# 2 SITE, DESCRIPTION OF DEVELOPMENT AND CONSTRUCTION

# 2.1 Site and Surrounding Area

- 2.1.1 The Western Site is situated approximately 6.5 kilometres (km) north west of Bicester town centre in Oxfordshire, and is located wholly within the administrative boundary of CDC. The Western Site is considered against the Local Plan¹ policies including 'SLE1: Employment Development'. Saved policies of the 1996 Cherwell Local Plan also carry some weight including EMP4: Employment Development in Rural Areas.
- 2.1.2 Figure 2.1 illustrates the location of the Western Site and the Enabling Works Site. Figure 2.2 shows the indicative red line planning application boundary of the Western Site and the Enabling Works Site.

#### **The Western Site**

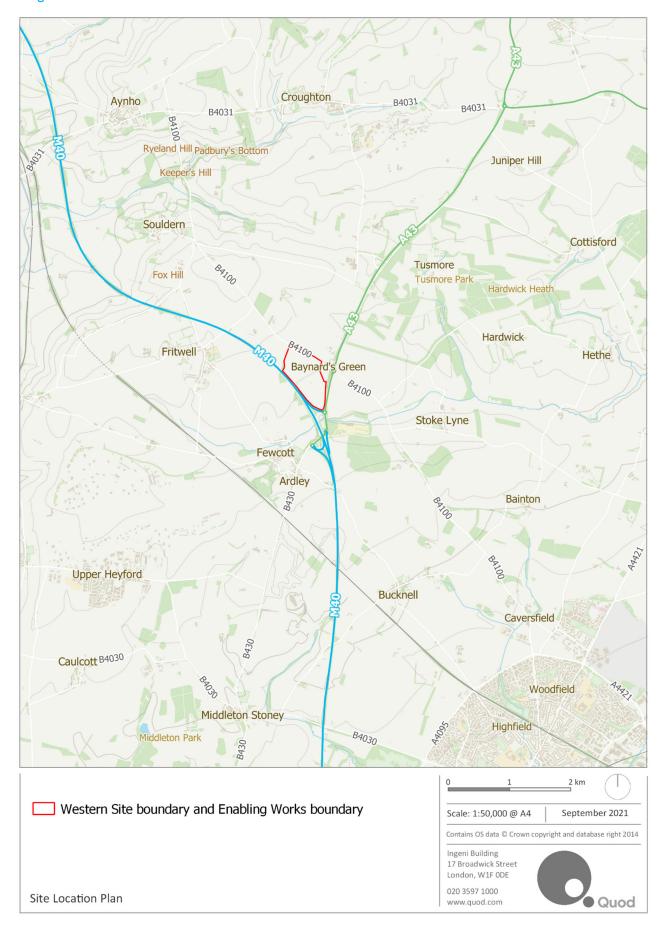
- 2.1.3 The Western Site, centred on National Grid Reference ('NGR') SP 54512 29039, is bound by the B4100 to the north, the A43 to the east, the M40 to the south and agricultural land to the west. One farm building, used for storage, is located in the centre of this Western Site. A small number of residential properties are located adjacent to, but outwith, the north east corner of the Western Site bound by the A43 and B4100 on other sides this includes Baynard House, Baynard Barn, The Cottages and associated outbuildings, and Medkre. Baynards Green, now converted to a commercial estate, is located approximately 200m north of the Western Site boundary, across the B4100.
- 2.1.4 The Western Site currently comprises agricultural land, currently in use for arable farming. The fields have narrow tree belts around some of their perimeters and hedgerows are present along the majority of Site boundaries and within the Western Site itself. There are some dry ditches within the Site boundary and areas of bare ground around the perimeter of the Site (illustrated in Figure 2.3).

#### The Enabling Works Site

- 2.1.5 The Enabling Works Site covers an area of approximately 10.6 hectares ('ha') and is bound by the M40 motorway to the west and the A43 to the south. The Western Site boundary encompasses the majority Enabling Works Site. A small number of residential properties are located adjacent to the Enabling Works Site boundary, in Baynards House and across the B4100 in Baynards Green (approximately 200m north). Baynard House, The Cottages and associated outbuildings, and Medkre are located immediately east of the Enabling Works Site.
- 2.1.6 The Enabling Works Site predominantly comprises existing agricultural land, currently in use for arable farming together with a small section of the B4100 road. The field that houses the Enabling Works Site has narrow tree belts around some of its perimeters and comprises areas of bare ground, one farm building, dry ditches and hedgerows (Figure 2.3).

<sup>&</sup>lt;sup>1</sup> Cherwell District Council, 2016. Cherwell Local Plan 2011-2031. December 2016.

Figure 2.1: Site Location Plan



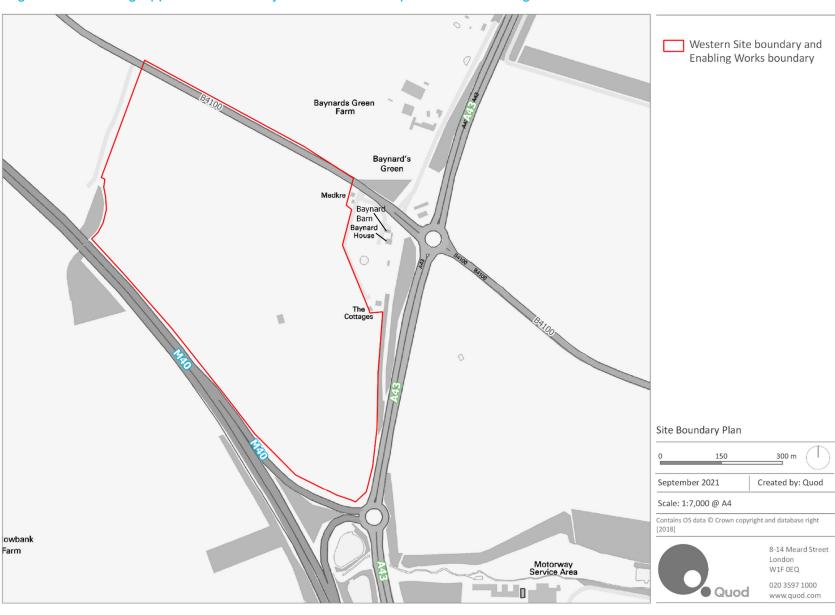
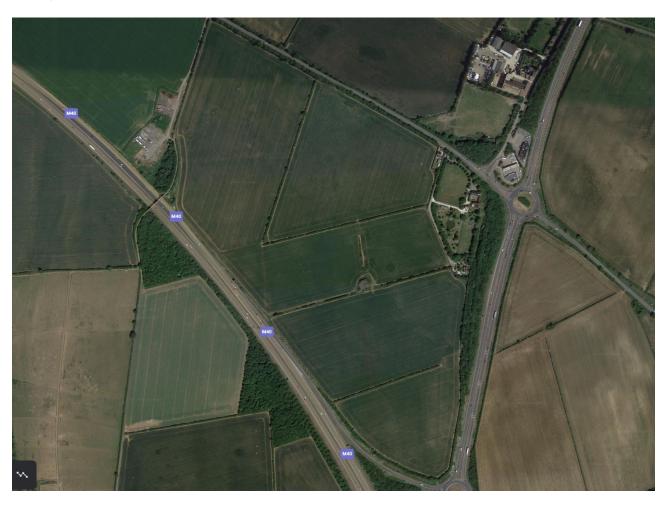


Figure 2.2: Planning Application Boundary – Western Development and Enabling Works Site

Figure 2.3: Aerial image of the Western Site and Enabling Works Site (Google Earth, February 2024)



# 2.2 Site History

- 2.2.7 A review of historic maps within the Cultural Heritage Desk-Based Assessment (Appendix 11.1), prepared by RPS, shows that the Western Site, the Enabling Works Site and surrounding area have always comprised agricultural land-use.
- 2.2.8 18<sup>th</sup> Century maps (e.g. 1768 Jeffrey's Map of Oxfordshire) show the area stood as open land with a number of trackways crossing the area, particularly a trackway in place of what presently exists as the A43 road to the east of the Western Site. An early road is also shown along the Western Site's northern boundary, this is now the B4100. Into the 19<sup>th</sup> Century, maps show the Western Site's main land-use to be of agricultural or pasture in nature, with a building shown in the northern part of the Western Site, possibly a farm building associated with those buildings at Baynard's Green to the immediate north east. The 1880 Ordnance Survey plan reveals a small cluster of agricultural buildings in the Western Site boundary. The building in the northern part of the Site is shown to have been demolished by this time. A footpath is also identified in the southern part of the Western Site. The only changes shown within the Western Site boundary during the early 20<sup>th</sup> Century and through to the present day comprise of minor internal field boundary changes. The M40 was constructed south west of the Western Site in 1992, whilst the A43 was constructed by 2004 to replace the previous road which ran alongside the Western Site's eastern boundary.

# 2.3 The Proposed Development

#### **The Enabling Works**

2.3.9 Full planning permission is sought for the Enabling Works. The Applicant is seeking planning permission for the following:

"Site clearance, construction of new site access from the B4100, permanent and temporary internal roads, an internal roundabout and a foul drainage station, diversion of an existing overhead power cable and public right of way, and soft landscaping."

2.3.10 It should be noted that the Enabling Works are not expected to involve the construction of development platforms, earthworks or levelling beyond the Enabling Works Site boundary shown in Figure 2.3. Further detail on Enabling Works activities is provided in section 2.5 below.

#### **The Western Development**

2.3.11 Outline planning permission is sought with all matters reserved and proposes the development of the Western Site for employment uses (the 'Western Development'). The Applicant is seeking planning permission for the following:

"Application for outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary office (Use Class E(g)(i)) floorspace; construction of new site access from the B4100; creation of internal roads and access routes; hard and soft landscaping including noise attenuation measures; and other associated infrastructure."

2.3.12 The Western Development will bring forward up to 98,000sqm Gross Internal Area (GIA) of commercial floorspace falling within Use Classes B8 and ancillary office (Use Class E(g)(i)). Car and cycle parking spaces will be provided in accordance with OCC standard. All

commercial units will have adjoining ancillary space, specifically office areas. Associated landscaping will be brought forward as part of the development of the Western Site.

# 2.4 Construction Programme

- 2.4.13 The anticipated construction programme and description of works outlined within this section mirrors the information supplied within Chapter 6: Construction of Volume I of the ES. As discussed in section one of this Framework CEMP, once appointed, the Principal Contractor will produce a site-Specific CEMP to make it specific to the works and construction methods that they have been appointed to undertake.
- 2.4.14 The construction programme and phasing of the Enabling Works and Western Development will be subject to market demand, although, for assessment purposes, it has been assumed to be fully complete by the end of 2026. The Enabling Works are required to facilitate early development of the Western Site and thus, will be completed before construction of the Western Development commences.
- 2.4.15 The Enabling Works will take approximately 13 -15 months to complete, starting in early 2025.
- 2.4.16 The Western Development will commence following completion of the majority of the Enabling Works, expected in mid/late-2025. A period of approximately 11 18 months is expected for construction of the proposed units with completion in mid/late-2026, subject to the grant of detailed planning consents.

#### 2.5 Description of Construction Works

2.5.17 The following sections provide an overview of the anticipated enabling and construction strategy for the Enabling Works and Western Development, as well as general site preparation works, to provide context.

# **Enabling Works**

- 2.5.18 The Enabling Works will comprise the following activities:
  - Hoarding or safety fencing would be erected around the boundary of construction areas, with fencing to protect sensitive features (e.g. vegetation to be retained);
  - Clearance of existing vegetation and structures;
  - Construction of a new access roundabout on the B4100;
  - Construction of an internal roundabout, including adjacent footpaths, landscape verge and street lighting;
  - Construction of a 7.3m wide roadway (and adjacent footpaths, landscape verge, street lighting and a bus layby) to connect the new roundabouts;
  - Construction of a foul drainage station to serve the Site and a temporary access road and electrical point;
  - Construction of swales;

- Installation of utility connections, including electricity, water, BT and GTT fibre infrastructure;
- Diversion of an existing overhead cable;
- Provision of soft landscaping and planting; and
- Diversion of the existing public right of way.

# Western Development - additional preparation works

- 2.5.19 In addition to the proposed Enabling Works, the following works are likely to take place to form the basis of the preparation of the Western Development, as required:
  - Additional ground / drainage / utilities investigations would be undertaken, as required;
  - Hoarding or safety fencing would be erected around the boundary of construction areas, with fencing to protect sensitive features (e.g. vegetation to be retained, waterbody buffers);
  - Additional enabling works to utilities may be carried out across the Western Site, if needed, involving capping-off or removal of redundant utilities, new supplies, diversions and connections, as agreed with the statutory authorities; and
  - To achieve the required site levels there may be some general civil engineering groundwork activities including excavation, grading and preparation of surfaces, and the placement/compaction of fill undertaken. During engineering groundwork activities for the Western Site, the removal of topsoil and vegetation may be undertaken.

#### Construction

- 2.5.20 The method of construction is dependent on the nature of the buildings, ground conditions, structures and detailed design and have therefore not been fixed at this stage. The standard construction activities anticipated for the Western Development are outlined below:
  - Structures Construction methods are likely to vary depending on the detailed design of the buildings. It is anticipated that a mix of steel and concrete frame construction would be used. Buildings would be erected from the foundations using scaffolding, mobile cranes or mobile platforms as appropriate;
  - Cladding and Fit Out The wall and roof cladding of the units will be progressively installed/constructed and may overlap steel frame construction where site logistics and structural integrity allows. Upon completion of each unit's façade, the interior floor slab will be laid and fit out and installation of mechanical, electrical and plumbing systems will commence.
  - External Works and Landscaping Areas of landscaping and open space would be prepared using large and small excavators. This would include soil preparation, tree and vegetation planting, seeding and the sustainable drainage systems as part of each phase to relevant design standards.

# 3 RESPONSIBILITIES AND MANAGEMENT STRUCTURE

# **Roles and Responsibilities**

- 3.1.1 The Construction (Design and Management) Regulations 2015 (CDM Regulations) came into force on 6<sup>th</sup> April 2015, replacing CDM 2007. As per the requirements of the CDM Regulations, the Applicant must appoint a Principal Designer and Principal Contractor prior to the commencement of works on-Site. Should the Applicant fail to appoint either a Principal Designer or Principal Contractor, the Applicant must carry out those duties in accordance with the CDM Regulations.
- 3.1.2 The roles and responsibilities of the Applicant, Principal Designer and Principal Contractor, as required by the CDM Regulations, are not outlined within this Framework CEMP and will be confirmed in writing upon the appointment of the Principal Designer and Principal Contractor by the Applicant.

# **Management Structure**

- 3.1.3 Responsibility for all environmental issues relating to the redevelopment of the Site rests with the Applicant, the Principal Designer and Principal Contractor appointed for the Development; individual responsibilities will be allocated throughout the management team relating to the co-ordination of inspection, monitoring or reporting. Such individual responsibilities are outlined below, but will be confirmed as part of the Site-specific CEMPs for the RMAs.
- 3.1.4 The Principal Contractor will have the central role in managing Safety, Heath, Environment and Quality (SHEQ) issues during enabling works and construction activities. The Principal Contractor and all sub-contractors will be required to implement the environmental management and control measures set out within the CEMP.
- 3.1.5 All works are to be carried out in compliance with the Construction (Design and Management) Regulations 2015, current legislation and guidance, and Applicant requirements.
- 3.1.6 A full contact list containing names, job titles and contact numbers of the project team members, shall be produced and maintained. This will include the Applicant's Environmental Representatives.
- 3.1.7 An indicative organigram of the proposed management and reporting structure, to be implemented, is provided in Figure 3.1 below.

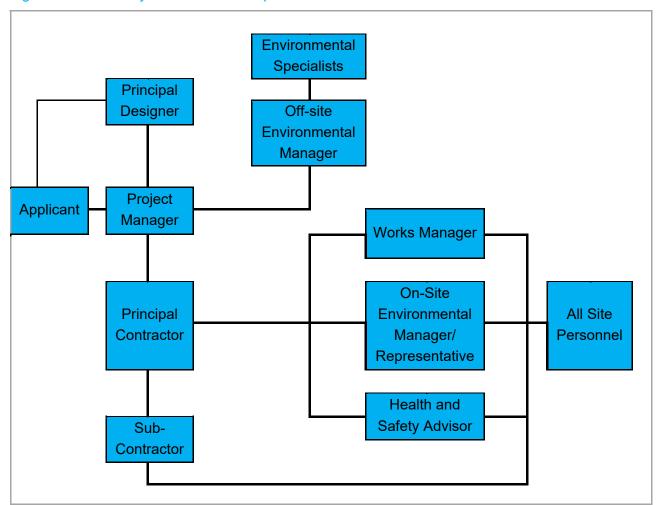


Figure 3.1: Hierarchy of Roles and Responsibilities

# **Individual Requirements**

3.1.8 The duties of the Principal Designer, Project Manager, Construction Manager, Works Manager, Environmental Manager/Representative and other personnel are detailed below.

#### Principal Designer (can be the Applicant /or nominated party)

- Review and approve the Site-specific CEMP;
- Submit Site-specific CEMP to CDC for approval;
- Assign appropriate resources to construction activities; and
- Undertake regular site inspections which will include compliance with environmental requirements.

#### Project Manager (can also be Principal Designer)

- Allocate appropriate project resources to deal with environmental issues;
- Ensure that the CEMP is effectively established and implemented throughout the project;
- Review and approve environmental action plans; and

Designate representative responsible for environmental issues.

#### Works Manager (part of Principal Contractor team)

- Understand the major environmental constraints and implications for the project;
- Ensure that the need for compliance with environmental issues is communicated to the rest of the project team and sub-contractors;
- Act on findings of internal and external audits;
- Ensure complaints are being addressed and responded to;
- Ensure appropriate pollution response provision is made;
- Report to Senior Management (Principal Designer/Project Manager) on any environmental breaches; and
- Implement and maintain the operation of the CEMP.

#### On-Site Environmental Manager/Representative (part of Principal Contractor team)

- Implement and maintain the CEMP;
- Understand the environmental issues associated with the project;
- Maintain and review the environmental risk register;
- Co-ordinate and maintain consultation with CDC, local residents/businesses, and other interested parties on environmental issues including complaints process;
- Maintain the complaints log;
- Comply with the CEMP;
- Ensure environmental audits are carried out and pursue any corrective actions;
- Report on environmental incidents to Senior Management and Environmental Regulators as required;
- Co-ordinate with the Project Manager, regular reviews of the CEMP during the project to ensure its continued effectiveness throughout construction activities; and
- Co-ordinate environmental awareness training and ensure relevant responsibilities are included within site induction.

Health and Safety Advisor (note: could be same as Environmental Manager/Representative)

- Undertake regular site inspections;
- Carryout audits at regular intervals defined within the CEMP; and
- Provide advice and support to Project Management Team.

#### **Environmental Specialists**

 Relevant specialists will be employed if necessary during the project to undertake specialist monitoring, undertake surveys and advise the construction staff.

#### **Collective Responsibilities**

Project Management Team (Outlined above, including Works Manager, Sub-Agents, Quantity Surveyors, Site Engineers, Section Foremen) and Sub-contractors

- Comply with the CEMP;
- Maintain CEMP document control system;
- Implement the requirements of the CEMP and its supporting documents on-site;
- Report immediately to Environmental Representative/Manager on any environmental incidents;
- Ensure site personnel are aware of their environmental obligations and have undergone site environmental awareness training;
- Implement the action necessary to resolve non-compliance issues; and
- All subcontractors should comply with the CEMP, its operational control and procedures while on-Site.

#### All Personnel – to be communicated during induction training

- Comply with all operational controls and working procedures implemented by this Framework CEMP;
- Undergo environmental awareness training;
- Report to supervisor immediately on any environmental incidents; and
- Suggest potential modifications and improvements to CEMP.

#### 4 TRAINING AND SITE RULES

- 4.1.1 Contractual arrangements will require all contractors provide suitably qualified staff to manage and execute works for which they are responsible. The Principal Contactor will require that all employees demonstrate an appropriate awareness of local sensitivities (e.g. location of residents/ businesses), expected code of conduct, working knowledge of the legislation, codes of practice, and guidance relevant to the activities in which they are engaged.
- 4.1.2 A training regime shall be implemented to ensure that all staff members, including subcontractor's personnel, receive focused environmental training to ensure their competence in carrying out their duties on the project.

#### **Site Induction**

- 4.1.3 The Principal Contractor will operate induction schemes for all personnel to ensure that they are aware of their individual responsibility to comply with the Site-specific CEMPs. The Principal Contractor will be responsible for identifying the training needs of his/her personnel and will ensure that appropriate training is provided. Training will include information on local considerations and the Applicant's expectations on site behaviour, "toolbox talks" for site operatives to maintain an appropriate level of awareness on safety, health and environmental topics and to advise employees of changing circumstances as work progresses. Records will be kept of attendance.
- 4.1.4 General site induction shall be developed to introduce all site personnel to the environmental issues connected with the Development, important environmental controls associated with the day to day operation e.g., boundary control, housekeeping, waste management, and the emergency procedures. A full register of induction attendance shall be maintained on-site.
  - Responsibility: Environmental Manager/Representative:
  - Action: Develop general site induction to include environmental issues and ensure induction records are maintained.

# **Toolbox Talks and Method Statement Briefings**

- 4.1.5 Toolbox talks and method statement briefings will be given as the work proceeds and will cover the environmental management and control measures related to specific activities undertaken during the works, for example refuelling, hazardous waste removal, spill response etc. A full register of toolbox talks and method statement briefing attendance shall be maintained on-site.
  - Responsibility: Environmental Manager/Representative
  - Action: Regularly assess site activities and ensure relevant training requirements are met. Develop and deliver specialised toolbox talks as required to ensure Enabling Works and Western Development activities are carried out in accordance with Framework CEMP.

# **Training Records**

4.1.6 All training records will be maintained and filed on-Site. The records shall include the content of the courses (induction and toolbox training), record of attendance and schedule of review.

# **Emergency Procedures and Incident Reports**

- 4.1.7 Procedures will be implemented to respond to any emergency incidents which may occur on-Site. In order to ensure compliance with the requirements of the relevant legislation and to avoid or mitigate against any significant environmental impacts, an Emergency Preparedness Plan (EPP) will be developed by the Principal Contractor.
- 4.1.8 All staff will be trained and made aware of the EPP set in place. In the event of any incident, the Principal Contractor's Environmental Health and Safety Team will be notified as well as the Applicant. Additionally, the CDC Environmental Health Officer (EHO) and any other interested bodies will be notified, as required.

#### **Site Rules**

- 4.1.9 The Enabling Works Site and Western Site rules shall be developed to include environmental controls wherever applicable. Site rules should be displayed in all on-Site offices, and welfare facilities. A list of 'Site Rules' to be implemented on-Site is provided below, where appropriate:
  - All personnel visiting or working on-Site must complete induction training prior to accessing the Enabling Works Site and the Western Site;
  - All plant/equipment used during the construction activities must be compliant with the Provision and Use of Work Equipment Regulations 1998 (PUWER), maintenance and relevant certificates must be retained on-Site;
  - All substances to be used or handled on-site must have the Control of Substances Hazardous to Health (COSHH) assessment available on-Site for staff members to consult;
  - At the end of each working day all means of access, e.g. steps, ladders left in position must be secured/removed to prevent unauthorised persons and hazardous areas;
  - Smoking is prohibited on-Site, except in designated areas, and the possession or use of alcohol or drugs is prohibited;
  - Staff members must maintain the Enabling Works Site and Western Site welfare facilities for the duration of the works;
  - A qualified First Aider/ Emergency First Aider to be present on-Site at all times.
  - Standard Personal Protective Equipment (PPE) is required on-Site at all times, as well as additional Protective Equipment as required for specific works;
  - Use of audio equipment is not permitted on-Site, except in designated areas;
  - All staff members must work to their safety method statements and abide by all safety signs at all times;

- The Principal Contractor and all Sub-contractors on-Site must co-operate in the interest of health and safety;
- All Principal Contractor and Sub-contractor staff members must conduct themselves and perform their duties on-Site in a safe manner;
- All work areas must have clear, well maintained signage;
- Appropriate firefighting equipment to be maintained on-Site;
- No fires are permitted on-Site;
- All waste materials must be collected and removed from the Enabling Works Site and Western Site at regular intervals; and,
- Acts of threat or violence will not be tolerated and any offender will be removed and permanently excluded from the Enabling Works Site and Western Site.

# 5 COMMUNICATION AND COMMUNITY ENGAGEMENT

# **Statutory Authorities and Interested Parties**

- 5.1.1 The Construction Manager in conjunction with the Applicant and with the support of the Environment Manager/Representative or any appointed specialists will be responsible for the liaison on environmental matters with statutory and non-statutory authorities.
- 5.1.2 Consultation should be established and maintained with a number of regulatory bodies with regard to the environmental aspects of this project, as required, and could include: Environmental Health Officer (CDC); Environment Agency (EA); Health and Safety Executive; and Emergency Services.
  - Responsibility: Construction Manager / Environmental Manager/Representative
  - Action: Establish and maintain consultation with the CDC and other interested parties about the status of the project, potential impacts, mitigation measures, predicted time scales of activities etc.

# **Local Community Engagement**

- 5.1.3 The Principal Contractor should commit to providing community relations personnel, who will be the first line of response to resolve issues of concern or complaints. Occupiers of neighbouring properties and businesses will be informed in advance of works taking place.
- 5.1.4 Site boards outlining information on the project and forthcoming works will be erected at the entrance to the Site. Site contact numbers will be displayed as appropriate, along with the complaints procedure.
  - Responsibility: Environmental Manager/Representative
  - Action: Establish and maintain consultation with local businesses, and other interested parties about the status of the project, potential impacts, mitigation measures and predicted time scales of activities.

# **Complaints Management**

- 5.1.5 A formal complaints procedure will be developed, the Environmental Manager/Representative will be responsible for receiving, recording and responding to external complaints.
- 5.1.6 The Environmental Manager/Representative will have their telephone number displayed for quick response to complaints. The complaints will be logged, together with a record of the responses and action taken.
  - Responsibility: Environmental Manager/Representative
  - Action: Log complaints, conduct investigation, develop any corrective action, produce written response to complaints and generate monthly report of complaints received.

#### **6 MONITORING**

# **6.1 Environmental Monitoring Programme**

6.1.1 Scheduled monitoring of environmental performance and formal compliance auditing will be conducted throughout the Enabling Works and Western Development. This will enable the overall effectiveness of established environmental measures and compliance procedures to be assessed and allow areas of underperformance to be identified so corrective actions can be taken to strengthen environmental safeguards or improve outcomes.

# **Inspections**

6.1.2 Regular inspections will be carried out on all construction activities and work areas in order to check compliance with the Site-specific CEMPs and regulatory conditions. The results of these inspections shall be recorded as part of the SHEQ auditing procedure.

# **Event Based Inspections**

6.1.3 Event based checks shall be conducted by the Project Manager/Construction Manager and Environmental Manager/Representative following any significant event such as rainfall of sufficient quantity to generate run off, high winds, the receipt of an environmental complaint, issue of a non-compliance report or any exceedance in monitoring results. Event based checks should be record on a separate inspection form detailing the reasons, observations, findings and outcomes of the inspection which should then be recorded and actions closed out.

# 6.2 Reporting

# **Monthly Reporting**

6.2.4 A monthly environmental monitoring report should be prepared and submitted for review to the Applicant and Project Team. The report shall include a summary of environmental issues and actions during the period to ensure compliance with the CEMP, including details of any action item requests, complaints received, incidents and associated investigations and corrective actions, and environmental inductions and awareness training provided during the period.

# 6.3 Performance

# **Progress Meetings**

6.3.5 Performance against the objectives and targets outlined in the Framework CEMP and the Site-specific CEMPs should be reviewed at regular progress meetings. Progress meetings can include internal Principal Contractor meetings and Project Team meetings with Applicant and Applicant representatives. Performance against 'rolling' targets can be reviewed and corrective actions agreed, as required. These actions should be monitored to demonstrate continuous review and improvement.

- Responsibility: Project Manager/Principal Designer
- Action: Environmental issues to be added to the agenda of all internal progress meetings and external progress meetings (Applicant /Principal Contractor/Principal Designer).

#### **CEMP Review**

6.3.6 The Applicant, Principal Designer and Principal Contractor will ensure that controls outlined in the Site-specific CEMPs are properly implemented and regularly monitored to ensure their effectiveness. Changes to the controls will be instigated if they are not achieving their objectives. The CEMP shall be revised and refined required, to ensure it remains consistent with environmental regulatory requirements and conditions of planning approval.

#### 7 GENERAL CONSTRUCTION MANAGEMENT

#### 7.1 Hours of Work

- 7.1.1 The standard working hours for all activities will be:
  - 07:00 18:00 hours weekdays;
  - 07:00 13:00 hours Saturday; and,
  - No working on Sundays or Bank Holidays.
- 7.1.2 The following enabling activities shall be permitted to take place within the period before and after normal working hours as outlined above:
  - Arrival and departure of workforce on site;
  - Deliveries and unloading;
  - Check and examinations of plant and machinery (including test running) and the carrying out of essential repairs / maintenance to plant and machinery;
  - Site inspections and safety checks; and
  - Site clean-up.
- 7.1.3 No continuous 24-hour activities are envisaged for works and any working on Sundays or Bank Holidays will be subject to reasonable notice. Any change to working hours will be agreed in advance with CDC.
- 7.1.4 These hours will be strictly adhered to unless or in the event of:
  - An emergency demands continuation of works on the grounds of safety;
  - Minor internal works are being carried out within the confines of the building envelope;
     and
  - Completion of an operation that would otherwise cause greater interference with the environment /general public if left unfinished.

#### 7.2 Welfare Facilities

7.2.5 The Principal Contractor will provide welfare facilities for all employees. Site cabins and/or suitable rooms will be made available for breaks and when weather prevents works. Welfare facilities will be equipped with heating, tables, chairs, a means of heating food and boiling water, wash basins and toilets facilities. Welfare facilities will be located with good access, lighting and ventilation and will be maintained and cleared on a regular basis.

# 7.3 Construction Plant and Equipment

7.3.6 An indicative list of large plant and equipment that are likely to be used at various stages of construction are shown in Table 7.1. A detailed listed of plant and equipment to be used will be provided in the Site-specific CEMP once the Principal Contractor has been appointed.

Table 7.1: Indicative list of large equipment and plant to be used during the Enabling Works and Western Development

	Stage of Works					
Plant and Equipment	Enabling Works	Drainage, Infrastructur e and Servicing	Superstructur e	Facad e	Fit-Out	Landscape
360º Excavator	~	<b>~</b>				
Tower / Mobile Crane		<b>&gt;</b>	~	<b>*</b>		
Dumper	<b>*</b>	>	~			<b>~</b>
Breaker	<b>&gt;</b>	>				
Compressor & Air Tools		<b>&gt;</b>	~	<b>*</b>	<b>~</b>	
Drills / Cutters		>	~	<b>&gt;</b>	<b>~</b>	<b>✓</b>
Compacter / Roller	<b>*</b>	<b>&gt;</b>	~			
Concrete Pumps		>	<b>~</b>	<b>&gt;</b>		
Generators	~	<b>&gt;</b>	~	<b>~</b>		
Concrete Vibration Equipment	<	<b>*</b>	~			
Scaffolding			~	~	<b>~</b>	
Fork Lift Truck	~	<b>~</b>	~	~	~	~
Goods/ Passenger Hoist	~	<b>~</b>	~	<b>~</b>	~	~
Mast-climber Platforms	<b>~</b>	<b>~</b>	~	<b>~</b>	~	
Mechanical Road Sweeper	<b>~</b>	<b>~</b>	~	<b>~</b>	~	~
Floodlights	<b>*</b>	<b>*</b>	~	<b>~</b>	~	~
Hydraulic benders and cutters		~	~	<b>~</b>	~	
Lorries and Vans	~	<b>&gt;</b>	<b>~</b>	<b>~</b>	<b>~</b>	~
Muck away Lorries	<b>*</b>		<b>~</b>			
Ready mix concrete trucks	~	~	~			

# 7.4 Construction Compound and Material Storage

- 7.4.7 The final location/s of the construction compound and material storage areas will be confirmed upon appointment of the Principal Contractor.
- 7.4.8 The detailed construction compound layout plan will incorporate the following;
  - Parking areas for Enabling Works Site and Western Site operatives and visitors;
  - Loading and unloading areas;
  - Plant and machinery storage area;

- Material storage area; and
- Welfare facilities.

# 7.5 Construction Traffic Management

# **Construction Traffic Management Plan ('CTMP')**

- 7.5.9 A CTMP will be prepared and submitted to CDC and Oxfordshire County Council (OCC), prior to commencement of on-Site works. The CTMP will ensure that a strategy for planning of the construction access routes will be implemented to take into account current legislation, police, fire authority and Health and Safety Executive guidance, local authority transport schemes and neighbourhood lorry restrictions.
- 7.5.10 In addition, the CTMP will be reviewed and updated in-line with the construction programme and is expected to include details of the following:
  - Temporary traffic control measures, if required;
  - Timing controls (e.g. limiting peak period vehicle movements);
  - Temporary and permanent access to the works for personnel/vehicles
  - Traffic management procedures for waste disposal vehicles;
  - Personnel and vehicle segregation;
  - Safety measures to protect the public;
  - Equipment, e.g. road cones, temporary fencing and signage;
  - Provision to ensure that vehicles can be loaded and unloaded off the public highway where possible;
  - Measures to encourage the site labour force to use public transport to travel to and from the Site;
  - Housekeeping measures (e.g. HGV wheel washing prior to vehicles leaving the Enabling Works Site and Western Site, use of road sweepers); and,
  - Consultation and liaison process with neighbouring businesses, construction sites and other stakeholders.

#### **Access and Haul Routes**

- 7.5.11 During construction, vehicles will access and egress the Site via roundabouts connecting to the B4100. Access to the Western Development during the construction works will be gained via a roundabout constructed during the Enabling Works on the B4100.
- 7.5.12 Directional signage will be implemented to ensure that construction traffic utilises designated routes to minimise the effect on the surrounding road network. Locations for temporary signage for the approved route will be discussed with the CDC/OCC Highway Officers.
- 7.5.13 Heavy Good Vehicle (HGV) movements will be restricted as far as reasonably possible so as to avoid peak traffic flow periods (i.e. from 08h00-09h00 and 17h00-18h00).

7.5.14 All construction traffic entering and leaving the Site will be closely controlled and during delivery times, traffic marshals will be positioned at the egress/ingress point to control and record entry and exit movements.

# Site Parking

7.5.15 On-Site parking for construction workers will be restricted to an absolute minimum, both during the Enabling Works and construction of the Western Development. This will only be made available to those construction personnel who need to carry heavy equipment or materials to the Enabling Works and Western Development. Unapproved parking on public roads will not be allowed and the labour force will be encouraged to use public transport. Any local traffic management measures for Western Site access will be agreed with the CDC/OCC prior to construction commencing.

# **Loading and Unloading**

7.5.16 All goods deliveries will be directed to a designated area on-Site where all vehicles will be unloaded and the materials taken to the appropriate storage area.

# **Vehicle Cleaning Facilities**

- 7.5.17 Wheel washing facilities could include, but not limited to, drive-over dry ramp system, drive through bath system, and high pressure spray wash systems. Drive-over dry ramp system works on the vibration effect created by the vehicle tyres driving over inverted steel bars on a raised platform, the vibrations and motion flexes open the tyre treads enabling dirt and debris to fall to the ground.
- 7.5.18 A drive through bath system comprises of the central bath section which contains internal metal grids that are submerged in water. As the vehicle drives through the bath and over the metal grids, the tyres flex enabling dirt to fall out while the water effectively washes the tyres.
- 7.5.19 A high pressure spray system comprises of either the manual washing of the vehicle, by a Site staff member, in a designated wash area; or the installation of an automated drive through wheel washing facility that sprays water over the tyres of the vehicle as it drives through or stand on a raised platform.

# 7.6 Storage of Plant and Materials

- 7.6.20 The construction compound will be defined within the Site-specific CEMP. Plant and equipment will be stored in areas which are less susceptible to possible pollution incidents, or on dedicated hard standings.
- 7.6.21 Hazardous substances, such as diesel, oil, chemicals, cement, cleaning materials and paint, used during the construction process have the potential to cause serious pollution. A bunded storage area will be located on the Site in the main compound and will be provided for the duration of the construction period for the storage of oils, fuels, chemical and other hazardous construction materials. The base and bund walls will be impermeable to the material stored and be of 110% capacity of the liquids being stored in line with Environment

- Agency ('EA') Guidelines. Access to the hazardous storage area will be restricted to those people who are authorised to do so and have adequate training.
- 7.6.22 Storage areas will be regularly checked and documented. Leaking or empty oil drums will be removed from the Enabling Works Site and Western Site immediately and disposed of via a licensed waste disposal contractor.
- 7.6.23 Refuelling will occur in designated areas on an impermeable surface and away from any drains or stormwater outlets. Adequate spill kits will be available in the event of an accident and staff will be made aware of how to respond to an incident.
- 7.6.24 Storage areas and containers will be protected against vandalism and unauthorised interference and securely locked when not in use.

# 7.7 Security

- 7.7.25 A 2.4m high construction hoarding, or similar, will be erected around the perimeter of the work or phases in advance of the commencement, with gated access put in place. Banksmen will aid HGVs in entering and exiting the Site, and open and close the gates.
- 7.7.26 Only authorised personnel will be permitted on Site. All visitors will be required to enter through the main entrance gate to the Site and report to the Construction Manager/Site Manager. All visitors will be required to sign in and out to ensure that Site management are aware of the number of people on-Site in the event of an emergency.
- 7.7.27 Visitors will be required to undergo induction training, wear the necessary PPE i.e. safety helmet, hi-visibility attire, safety footwear and will be accompanied by a representative onsite at all times.
- 7.7.28 The hoarding and all storage areas will be checked on a daily basis to ensure that it is maintained in good condition and remains secure. All entrance and exit gates into the Enabling Works Site and Western Development will be secure at all times.
- 7.7.29 All mobile plant/equipment will be parked safely and locked within a designated area to prevent tampering, and keys to all plant/equipment will be kept in a secured location.

#### 8 ENVIRONMENTAL CONTROL MEASURES

# 8.1 Waste Management

- 8.1.1 Waste produced on-Site will be subject to the Duty of Care under the Environmental Protection Act (1990)<sup>2</sup>. It is the joint responsibility between the Principal Contractor and the Applicant to ensure that waste produced on-Site is disposed of in accordance with relevant legislation. The transportation of waste to and from the Enabling Works and Western Development will also comply with the Duty of Care requirements.
- 8.1.2 The overall Development (Enabling Works and Western Development) will seek to maximise the reuse of materials generated on-Site, where possible, in order to minimise waste disposal. Additional intrusive site investigations may be required prior to construction commencing to identify any areas of contamination present on-Site. Further soil sampling during construction activities will be undertaken for classification and disposal of waste soils, if required, and will follow the methodology described in the following two EA publications: Framework for the Classification of Contaminated Soils in Hazardous Wastes 2004, and Waste Acceptance at Landfills: Guidance on waste acceptance procedures and criteria 2010. All soil sampling and testing will be undertaken in accordance with BS 10175: Investigation of Potentially Contaminated Sites: Code of Practice.
- 8.1.3 Waste materials will be disposed of by the contractor/s to appropriate recycling facilities or appropriately licensed landfills. The appropriate landfill for the disposal of any contaminated soil off-Site will depend on the waste classification determined from the chemical analysis or Waste Acceptance Criteria testing as necessary. The Site Manager will audit waste carriers and disposal facilities and maintain documentary evidence that these requirements are being met, including a register of waste carriers, disposal sites (including transfer stations) and relevant licensing details for each waste stream. Waste contractors who remove waste should be registered with the EA.
- 8.1.4 Materials used during the construction works such as oil, chemicals, cement, cleaning materials and paint have the potential to cause serious pollution. Therefore, the EA's Guidance for Pollution Prevention (GPP) notes and other relevant guidance will be followed during the handling, storage and use of such materials.
- 8.1.5 Procedures will be set in place to respond to any emergency incidents which may occur during the Enabling Works and Western Development.
- 8.1.6 All relevant contractors will be required to investigate opportunities to minimise and reduce waste generation in line with the Government aim of "Work towards eliminating all avoidable waste by 2050" through:
  - Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme;
  - Implementation of a 'just-in-time' material delivery system to avoid materials being stockpiled, which increases the risk of their damage and disposal as waste;

\_

<sup>&</sup>lt;sup>2</sup> Her Majesty's Stationary Office (1990). The Environmental Protection Act 1990.

- Use of standard size components in design detailing to eliminate risk at source where possible to do so;
- Attention to material quantity requirements to avoid over-ordering and generation of waste materials;
- Re-use of materials wherever feasible, e.g. re-use of excavated soil for landscaping;
- Segregation of waste at source where practical;
- Re-use and recycling of materials off-Site, where feasible, and where re-use on-Site
  is not practical (e.g. through use of an off-Site waste segregation facility and re-sale
  for direct re-use or re-processing);
- Skips will be colour coded and signposted to reduce risk of cross contamination and covered to prevent dust and debris blowing around the Enabling Works and Western Development, these will be cleared on a regular basis; and
- Burning of wastes or unwanted materials will not be permitted on-Site.

# 8.2 Air Quality, Dust, Odour and Dirt

- 8.2.7 During the construction phase, there will be various site clearance works and activities undertaken, which all have the potential to generate particle emissions arising from dust and smoke.
- 8.2.8 The main sources of particle emissions during construction activities include:
  - Haulage routes, vehicles and construction traffic;
  - Materials handling, storage, stockpiling, spillage and disposal;
  - Site preparation, earthworks and restoration after completion;
  - Construction, excavation and fabrication processes; and
  - Internal and external finishing and refurbishment.
- 8.2.9 A project Dust Management Plan ('DMP') will be written for each phase of works in advance of commencement of works on-Site and will form part of the Site-specific CEMP. This will include measures that outline requirements of monitoring of dust deposition, dust flux, real time PM<sub>10</sub> continuous monitoring and/or visual inspections in accordance with CDC requirements, if required.
- 8.2.10 As such, regular inspections to both the Enabling Works and Western Site will be carried out to monitor compliance with the DMP. Inspection results will be recorded and the inspection log will be made available to the local authority through the work period.
- 8.2.11 In addition to monitoring, a number of other mitigation methods will be implemented to minimise the effects arising from dust produced during construction works, which will be included within the DMP. These include:
  - Vehicles carrying loose aggregate and workings to/from Site will be sheeted at all times;
  - Implementation of design controls for construction equipment and vehicles and the use of appropriately designed vehicles for materials handling;

- Ensure all vehicles switch off engines when stationary so that there are no idling vehicles;
- Completed earthworks will be covered, seeded, or vegetated where appropriate and practicable;
- Regular inspection and, if necessary, cleaning of local highways and Site boundaries to check for dust deposits (and removal if necessary);
- Minimise surface areas of stockpiles (subject to health and safety and visual constraints regarding slope gradients and visual intrusion) to reduce area of surfaces exposed to wind pickup;
- Where appropriate, windbreak netting/screening will be positioned around material stockpiles and vehicle loading/unloading areas, as well as exposed excavation and material handling operations, to provide a physical barrier between the Site and the surroundings;
- During dry or windy weather, material stockpiles and exposed surfaces will be dampened down using a water spray to minimise the potential for wind pick-up;
- Use of dust-suppressed techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems, for all operations;
- Ensuring that all construction plant and equipment is maintained in good working order and not left running when not in use. Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable;
- Restrict on-Site movements to well within the Enabling Works and Western Development Site boundary, and not near the perimeter if possible;
- No unauthorised burning of any material anywhere on-Site; and
- Record all dust and air quality complaints and make complaints log available to CDC when asked.
- 8.2.12 Additional measures identified for the Enabling Works and Western Development over the above based Dust and Emissions SPG<sup>3</sup>, which are to be implemented, are set out in Table 8.1.

#### **Table 8.1: Dust Mitigation Measures**

#### Communications

Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager.

Display the head or regional office contact information.

#### Site Management

Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.

Make the complaints log available to the local authority when asked.

<sup>&</sup>lt;sup>3</sup> GLA (2014) SPG: The Control of Dust and Emissions During Construction and Demolition.

Record any exceptional incidents that cause dust and/or air emissions, either on- or off-site, and the action taken to resolve the situation in the log book.

#### Monitoring

Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make the inspection log available to the local authority when asked.

Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

Agree dust and particulate matter monitoring with the Local Authority. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction (IAQM, 2018).

#### Preparing and maintaining the site

Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.

Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.

Fully enclose site or specific operations where there is a high potential for dust production and the site is actives for an extensive period.

Avoid sit runoff of water and mud.

Keep site fencing, barriers and scaffolding clean using wet methods.

Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover.

Cover, seed or fence stockpiles to prevent wind whipping.

#### Operating vehicle/machinery and sustainable travel

Ensure all vehicles switch off engines when stationary – no idling vehicles.

Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.

#### **Operations**

Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.

Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.

Use enclosed chutes and conveyors and covered skips.

Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.

Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

#### Waste Management

Avoid bonfires and burning of waste materials.

#### Construction

Avoid scabbling (roughening of concrete surfaces) if possible.

Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a process, in which case ensure that appropriate additional control measures are in place.

#### **Trackout**

Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the site.

Avoid dry sweeping of large areas.

Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.

Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.

Record all inspections of haul routes and any subsequent action in a site log book.

Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems or mobile water bowsers, and regularly cleaned.

Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).

Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.

Access gates should be located at least 10m from receptors, where possible.

#### 8.3 Noise and Vibration

- 8.3.13 All works must comply with BS 5228: Noise and Vibration Control and the construction and Open Sites Part 1: Noise and Part 2: Vibration. In order to ensure compliance with BS 5228 the following monitoring will be conducted:
  - A regime of noise monitoring will be adopted by the appointed contractor over the duration of the works. Readings will be recorded and kept on-Site, and made available for review by CDC, if requested.
- 8.3.14 The primary method for the control of noise will be a Section 61 consent under the Control of Pollution Act 1974 ("COPA") with CDC. A Section 61 consent sets out a dispensation and variation procedure under which consent can be applied for to carry out works which it is considered would exceed the agreed noise limits or must occur at times when such work is otherwise not approved.
- 8.3.15 The following measures will be adopted to reduce noise and vibration during the works:

- Noisy plant or equipment will be situated as far as possible from noise sensitive buildings and orientated in such a way that noise is directed away from sensitive areas wherever possible.
- Application of the principle of Best Practicable Means as defined in Section 72 of the Control of Pollution Act 1974, by carrying out all work in such a manner as to reduce any disturbance from noise to a minimum;
- All plant brought on to Site will comply with the relevant EC / UK noise limits applicable to that equipment or will be no noisier than would be expected based the noise levels quoted in BS 5228-1;
- Plant is to be properly maintained and operated in accordance with manufacturer's recommendations. Electrically powered plant is preferred, where practicable, to mechanically powered alternatives;
- When appropriate all mechanically powered plant will be fitted with suitable silencers. Items of plant on-Site operating intermittently are to be shut down in the intervening periods between use;
- Where feasible, all stationary plant would be located so that the noise effect at all occupied residential and commercial properties is minimised and, if practicable, every item of static plant when in operation is to be sound attenuated using methods based on the guidance and advice given in BS 5228-1;
- Trade contractors would at all times apply the principle of Best Practicable Means as defined in Section 72 of the COPA and carry out all work in such a manner as to reduce any disturbance from noise and vibration to a minimum;
- The Development phase(s) or works will be surrounded by a hoarding, generally 2.4 m high, which provides some acoustic shielding at ground level. The hoarding consists of plywood sheets or similar, with all knotholes, cracks and other joints sealed to minimise the escape of noise. It may be moved from time to time to suit the progress of the works;
- Siting of delivery compounds away from receptors where practicable and use of low noise techniques;
- Barriers (e.g. Site huts, acoustic sheds or partitions) will be used to reduce the levels
  of noise reaching noise sensitive receptors;
- Vehicles and mechanical plant used for the purpose of the works shall be fitted with effective exhaust silencers, maintained in good and efficient working order and operated in such a manner as to minimise noise emissions. The contractor shall ensure that all plant complies with the relevant statutory requirements;
- Machines in intermittent use should be shut down or throttled down to a minimum when not in use;
- Compressors should be fitted with properly lined and sealed acoustic covers which should be kept closed whenever in use. Pneumatic percussive tools should be fitted with mufflers or silencers of the type recommended by the manufacturers;
- No part of the works nor any maintenance of plant shall be carried out in such a manner as to cause unnecessary noise except in the case of an emergency when the work is absolutely necessary for the saving of life or property or the safety of the works;

- In the event that it is not possible to erect hoarding around the Site due to the nature of the works, i.e. earth works, mobile hoarding will be erected to reduce the effect on receptors;
- A CTMP will be adhered to in order to pre-plan and manage traffic associated with the works to minimise disturbance to sensitive receptors;
- Vehicles employed for any activity associated with the construction works will, where reasonably practicable, be fitted with effective exhaust silencers and shall be maintained in good working order and operated in a manner such that noise emissions are controlled and limited as far as reasonably practicable;
- Time slots are adopted for deliveries, in line with the CTMP, to ensure that convoys
  of vehicles do not arrive simultaneously and to avoid unnecessary idling on-Site;
- The use of sufficient clear signage to ensure that construction vehicles use only designated routes;
- Strict control to prevent temporary parking on kerbside in the vicinity of noise sensitive receptors near the Enabling Works and Western Development e.g. Baynards House;
- Shouting and raised voices shall be kept to a minimum;
- Vehicles will not wait or queue on the public highway with engines running;
- The site layout will be designed to minimise the need for reversing;
- Toolbox talks will instruct workers on noise and vibration issues; and
- A site inspection will be undertaken daily to identify and rectify any issues which may increase noise and/or vibration.

# 8.4 Biodiversity and Arboriculture

- 8.4.16 While the Western Site (and therefore Enabling Works Site) is not of significant ecological value, the on-Site scrub, hedges, amenity grassland and limited tree habitat does offer some limited opportunities for nesting birds.
- 8.4.17 Measures for the protection of ecological and arboricultural resources that will be adopted during construction works include the following:
  - All retained trees and hedgerows will be protected in accordance with BS 5837:201216. Removal of trees will be undertaken outside of the main bird nesting season (March to August inclusive), unless a scheme to minimise the impact on nesting birds has been approved in writing by the CDC. These may include a watching brief by a competent ecologist during works;
  - Construction Exclusion Zones, to be secured by means of temporary protective fencing with weatherproof signage, will be used for trees to be retained as part of the Development where no unauthorised access or construction operations are permitted;
  - Pre-construction badger survey, sensitive timing of works, careful storage of topsoil and materials, and a method statement to avoid any disturbance to setts (if required following the pre-construction survey);

- Pre-construction hazel dormouse survey, protection of existing hedgerows, and a method statement to avoid any disturbance to hazel dormouse (if required following the pre-construction survey).
- Should any ecological issues be identified during the course of development, consultation with the relevant statutory and advisory bodies such as Natural England ('NE') and the EA will be undertaken as is appropriate.
- 8.4.18 Prior to the start of works commencing all construction site members will receive a briefing on the species and habitat protection measures by the Site Manager/Ecologist and will include reference to the following legislation:
  - Schedule 1, Part 1, of The Wildlife and Countryside Act 1981 (and amendments) lists birds protected by special penalties at all times. It prohibits intentional killing/injuring, taking, possessing, disturbing and selling (including parts and derivatives, eggs, nests, etc. as applicable) as well as damaging, destroying or disturbing nests in current use or dependent young, etc.;
  - Schedule 5 of The Wildlife and Countryside Act 1981 (and amendments) prohibits deliberate killing, injuring, taking, possessing, disturbing and selling (including parts and derivatives) as well as damaging, destroying or obstructing any structure or place of refuge of listed fauna, such as bat species;
  - Under the Conservation of Habitats and Species Regulations 2017 it is illegal to kill, disturb, destroy eggs, breeding sites or resting places, to pick, collect, take cuttings, uproot or destroy in the wild as well as keep, transport, sell/exchange and offer for sale/exchange species listed;
  - The Countryside and Rights of Way Act 2000 increases the protection given by The Wildlife and Countryside Act 1981 (and amendments). The offence to intentionally damage any structure or place that a wild animal listed in Schedule 5 of the Act uses for shelter or protection or deliberately disturbing any such animal while in such a structure or place is extended so that the offence also covers reckless damage or disturbance; and,
  - The Natural Environment and Rural Affairs Act 2006 Section 14 provides a list of Priority Habitats and Species that will be specially protected by the construction activities.

#### 8.5 Ground Conditions and Contamination

- 8.5.19 Work will be carried out in accordance with relevant Construction Design Management ('CDM') Regulations 2015, details of these measures will be presented within the Pollution Response Plan ('PRP'), and the CTMP.
- 8.5.20 All the workers on-Site will be made aware of potential contamination issues on the Development during the induction and will use best practice techniques during all construction activities.
- 8.5.21 The operation of construction vehicles and the handling, use and storage of hazardous materials will be undertaken as follows:
  - Vehicles and plant will be well maintained to prevent accidental pollution from leaks.
     Static machinery and plant will include drip trays beneath oil

- tanks/engines/gearboxes/hydraulics, which will be checked and emptied regularly via a licensed waste disposal operator;
- Refuelling would be undertaken in specified areas. Drip trays will be installed to collect leaks from diesel pumps;
- The handling, use and storage of hazardous materials will be undertaken in line with the current best practice;
- Adequate bunded and secure areas with impervious walls and floors, with a capacity of 110% of substance volume, are to be provided for the temporary storage of fuel, oil and chemicals on site during construction. Valves and trigger guns will be protected from vandalism and kept locked up when not in use;
- Provision of spill containment equipment such as absorbent material on-Site;
- The appropriate utility company will be consulted on the potential requirement for an oil interceptor and sediment trap at the point where Site surface water runoff enters the sewerage network;
- Store all construction, oil, fuel and diesel materials as far from the nearby water bodies and drainage as possible; and
- A spillage Emergency Response Plan ('ERP') will be produced in advance of commencement on-Site which site staff will be required to have read and understood. On-Site provisions will be made to contain a serious spill or leak through the use of booms, bunding and absorbent material.
- 8.5.22 A member of staff will be nominated to control and monitor the Control of Substances Hazardous to Health ('COSHH') system. Suppliers must send data sheets for every hazardous substance to the Western Development. Supervisors and Safety Managers will brief staff members who will be using hazardous materials, on its safe use, disposal and any emergency procedures. Written records of these briefings will be kept in the COSHH file held on-Site.
- 8.5.23 A COSHH / fuel inventory will be maintained and key contacts listed to be notified in the event of a significant pollution incident, which may subsequently lead to the contamination of controlled waters. Directly and indirectly purchased bulk fuel and COSHH items will be stored in accordance with the relevant EA PPG/GPPs. Tanks and dispensing pumps will be locked when not in use to prevent unauthorised access. Information regarding spill prevention and disposal of COSHH items will be provided as part of the standard site induction presentations and during regular toolbox talks and the works progress.
- 8.5.24 A competent/licensed contractor will survey (pre-site preparation survey as defined by the HSE) and safely remove asbestos containing materials and other materials and structures contaminated with asbestos fibres, if found on-Site.
- 8.5.25 Piling will be carried out in accordance with EA Guidance Note on Piling / Penetrative Ground Improvement Methods on Land Affected by Contamination and ground investigations will inform the Foundation / Piling Works Risk Assessment which will define the appropriate piling methods and foundation design to mitigate risk.
- 8.5.26 Segregation of materials will be required to ensure contaminated materials do not cross contaminate other materials, and the long-term storage and management of materials on

site will be minimised. The Site-specific CEMP will also include the requirement for on-site testing of materials, and methodology to identify what, if any, remedial actions will be undertaken and how such actions will be validated and recorded if unexpected contamination is encountered during the works. A verification plan will record the placement of materials during the Enabling Works and during construction of the Western Development.

# 8.6 Hydrology and Water Quality

- 8.6.27 Implementation of an appropriate temporary drainage system will be required in order to minimise the potential risk of increased sediment affecting the surrounding areas during construction activities on-Site. This will be detailed in the Site-specific CEMP.
- 8.6.28 During the Enabling Works and construction phase, the following general mitigation measures will be implemented to ensure that disturbance of the ground surface, as well as concrete, oils and other chemicals used during the construction process, do not impact upon the water quality of surface water receptors or local drainage regime during all construction activities:
  - The exact locations of nearby sewers and water supply infrastructure will be established by on-Site survey prior to works commencing. An appropriate protection system (i.e. temporary support structure, sheet piles, installation of secant piles etc.) will be implemented to minimise any impact to the public sewer network;
  - Silty water abstracted during excavations will be discharged to settlement tanks. Cleaned run-off will be discharged through the existing foul sewer drains. If sewer capacity is limited, then silty water will be stored and removed from the Site by tanker and disposed of at a suitably licensed location. A discharge consent detailing volumes and rates of discharge will be agreed with utility provider prior to the commencement of works, if necessary;
  - The Principal Contractor will take precautions during works to protect the entire drainage system from siltation or pollution;
  - Minimise the risk of ground contamination all plant operators will be required to clean up any small fuel or oil spillage immediately;
  - All activities should follow the Environment Agency's Pollution Prevention Guidance (PPG) notes to ensure good practice in construction;
  - Adherence to guidance provided by CIRIA in manuals C502 (Environmental Good Practice on Site) and C532 (Control of Water Pollution from Construction Sites);
  - A Pollution Incidence Response Plan will be produced in-line with the Environment Agency's PPG 21 pollution Incident Response Planning; and
  - A Flood Emergency Response Plan will also be implemented.
- 8.6.29 In the event of a significant fuel or hydrocarbon spillage the following actions will be implemented:
  - The incident will be reported immediately to the Environmental Manager/Representative;

- The Environmental Manager will then implement measures to initially prevent the spread of the spillage, particularly to any drainage point and then implement measures to clear the spillage;
- All collected waste materials will then be placed into the appropriate waste receptacles such as oil drums for disposal off-Site as hazardous waste;
- All such incidents will be recorded in the on-Site Incident Log, a copy of which will be forwarded to the Project Team; and
- In the event of a significant environmental incident occurring the Environment Agency and CDC will be advised immediately.

# 8.7 Lighting

- 8.7.30 Lighting on construction sites whether natural or artificial is essential to health and safety. Poor lighting can represent significant risks to staff members which can result in accident and injury, the quicker and easier it is to see a hazard the better the likelihood of avoiding it.
- 8.7.31 As outlined within section 35 of the CDM Regulations (2015), the Enabling Works and Western Development must be provided with suitable and sufficient lighting, which must be, so far as is reasonably practicable, by natural light. This relates to both the construction site as well as the approach and traffic route to the Enabling Works and Western Development.
- 8.7.32 Full details on lighting requirements and positions will be outlined within the Site-specific CEMP. In determining any temporary construction lighting arrangements for both the Enabling Works and Western Development, due consideration will be given by the Principal Contractor to residents and other sensitive receptors (such as ecology) that may experience a nuisance by the light.
- 8.7.33 General control measures for the use of lighting on-Site are outlined below:
  - Temporary lighting when used adjacent to residential areas must be fixed with a noise screen to keep noise levels to a minimum;
  - As far as is practical, lighting must be directed away from residential and ecological sensitive areas; and
  - Lighting should always be positioned to prevent glare.

# 8.8 Archaeology

- 8.8.34 In the event that human remains, treasure, or potentially nationally significant archaeological resource are encountered, all works at that location will cease until further instruction is provided by the Applicant's appointed archaeologist. The Principal Contractor will inform the archaeologist immediately by telephone or in person.
- 8.8.35 The Principal Contractor would confirm the circumstances of the discovery in writing within 24 hours to the Clients appointed archaeologist, providing digital photographs and as much information as is available that would assist in determining the heritage significance of the discovery.

#### **Human Remains**

- 8.8.36 Any discovered human remains would in the first instance be left *in situ*, covered and protected. The Applicant's appointed archaeologist, RPS, will inform the local coroner as appropriate.
- 8.8.37 The appointed archaeologist would obtain advice from the Ministry of Justice as to whether a licence may be required to exhume any or all remains. Where possible, preservation in situ would be preferred to exhumation.
- 8.8.38 Where possible, visible grave goods and other obvious artefacts would be recorded and removed before the end of the day of discovery, to avoid the risk of vandalism or theft.
- 8.8.39 All treatment of human remains would follow best practice guidance, or equivalent guidance at the time of writing.

#### **Treasure**

- 8.8.40 Under the Treasure Act 1996, "treasure" is objects other than coins containing at least 10% gold or silver and at least 300 years old, coins found together (but not single coins) that contain at least 10% gold or silver, groups of 10 or more coins of other metals that are at least 300 years old, any object found associated with treasure except unworked natural objects, and any other object that would have been treasure trove before the Treasure Act.
- 8.8.41 Any finds made that are identified under the Treasure Act would be reported to the Applicant's appointed archaeologist.

# Potentially significant archaeological remains

- 8.8.42 An Archaeological Desk-Based Assessment has already been undertaken for the Enabling Works Site and Western Site which concluded construction would unlikely lead to significant implications on archaeology. However, the Enabling Works Site and Western Site have been suggested as having moderate archaeological potential and it is most likely that any remains would be of a local or possibly a regional significance.
- 8.8.43 In the event that potentially significant archaeological resources are identified during the construction phase, the employer's appointed archaeologist would be contacted immediately, as well as the LPAs Environmental Advisory Service. The Applicant's appointed archaeologist would investigate, with the consultees whether preservation in situ is feasible.
- 8.8.44 If preservation in situ is not feasible, the Applicant's appointed archaeologist would produce an updated risk assessment method statements to include works appropriate to conduct an archaeological excavation on the Enabling Works Site and Western Site and achieve preservation by record. A time period for archaeological recording and excavation, which would be determined in consultation with the statutory consultees, but shall not be less than 14 days.

# 8.9 Landscape and Visual impacts

- 8.9.45 A number of measures will be incorporated during construction activities to minimise disruption and manage the impacts of the Proposed Development in terms of landscape and visual impacts. These methods include:
  - Controlling the working hours of construction activities (see section 7.1);
  - Protecting existing woodland and hedgerows (retained as part of the Proposed Development) from damage during construction to maintain screening of lower level views of construction from the north, west and south. Further details of tree and hedgerow protection is included in the Arboriculture Impact Assessment submitted alongside the planning application;
  - Contractors will seek to avoid unnecessary tree and vegetation removal;
  - Trees within or adjacent to the Site boundary which are to be retained, will be protected in line with the recommendations in BS 5837 and BS5839: Trees in Relation to Design, Demolition and Construction. Works relating to the protection of retained trees and trees subject to works will be overseen by a qualified arboricultural consultant:
  - The supply, storage, handling, planting and maintenance of new planting will be undertaken in accordance with appropriate British Standards;
  - The design of hoardings around construction activities shall include consideration of the character of the surrounding landscape. Fencing and hoarding shall be kept well maintained throughout construction;
  - Creating temporary earth bunds and acoustic fencing / construction hoarding to provide visual containment of lower level construction activity and vehicle movements;
  - Temporary stockpiles will be located in defined storage areas, away from sensitive visual receptors; and
  - Temporary lighting will be selected and sited so to minimise visual intrusion to residents, whilst maintaining the safe and efficient operation of the work site. At night and during periods of darkness, directional security lighting will be used where required.