Intended for

**Manor Farm Propco Limited** 

Document type

**Technical Report** 

Date

December 2024

# MANOR FARM, POYLE, BERKSHIRE OUTLINE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN



# OUTLINE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Project no. 1620016166-004
Prepared by Christopher Roberson

Checked by Callum Mackenzie / Tom Smith

Approved by Jon Eudall

Description Outline Construction Environmental Management Plan

Doc Ref 1620016166-004\_1\_Manor\_Farm\_OCEMP

This report is produced by Ramboll at the request of the client for the purposes detailed herein. This report and accompanying documents are intended solely for the use and benefit of the client for this purpose only and may not be used by or disclosed to, in whole or in part, any other person without the express written consent of Ramboll. Ramboll neither owes nor accepts any duty to any third party and shall not be liable for any loss, damage or expense of whatsoever nature which is caused by their reliance on the information contained in this report.

## **CONTENTS**

1.	INTRODUCTION	5
1.1	Purpose of the CEMP	5
1.2	Structure	6
2.	PROPOSED DEVELOPMENT	7
2.0	Site Location and Environmental Constraints	7
2.1	Proposed Development	15
2.2	Construction Programme and Phasing	16
2.3	Construction Methodology	17
3.	LEGISLATION AND GUIDANCE	18
3.1	Relevant Legislation	18
3.2	Relevant Industry Guidance	19
3.3	Specific Client Requirements	19
3.4	Contractor Policies	19
4.	ENVIRONMENTAL MANAGEMENT PLAN IMPLEMENTATION AND MANAGEMENT	21
4.1	Leadership and Commitment	21
4.2	General	21
4.3	Environmental Policy	22
4.4	Environmental Aspects & Impacts	22
4.5	Roles and Responsibilities	23
4.6	Environmental Training, Awareness and Competence	23
4.7	Communication and Public Liaison	23
4.8	Considerate Constructors Scheme	24
4.9	Meetings	24
4.10	Monitoring and Inspections	25
4.11	Non-Compliance, Corrective and Preventative Actions	26
4.12	Emergencies	27
4.13	Consents, Licences and Permissions	30
4.14	General Requirements	30
4.15	Good Housekeeping	31
4.16	Cleaning of Roads	31
4.17	Site Compound	31
4.18	Construction Site Access	31
4.19	Hours of Working	32
4.20	Security	32
4.21	Hoarding and Fencing	33
4.22	Services and Utility	33
4.23	Lighting	33
4.24	Reinstatement of Working Areas on Completion	33
4.25	Health and Safety	34
4.26	Cumulative Effects	34
4.27	Outline Management Plan Measures	35
OUTLINE	MANAGEMENT PLAN 01: AIR QUALITY (DUST)	35
OUTLINE	MANAGEMENT PLAN 02: AIR QUALITY (VEHICLE EMISSIONS)	38
OUTLINE	MANAGEMENT PLAN 03: THE WATER ENVIRONMENT, CONTAMINANTS	39

OUTLINE MANAGEMENT PLAN 04: ARCHAEOLOGY AND BUILT HERITAGE	41
OUTLINE MANAGEMENT PLAN 05: CONSTRUCTION TRAFFIC	42
OUTLINE MANAGEMENT PLAN 06: NOISE AND VIBRATION	44
OUTLINE MANAGEMENT PLAN 07: LIGHTING	46
OUTLINE MANAGEMENT PLAN 08: CONTAMINATED LAND	47
OUTLINE MANAGEMENT PLAN 09: ECOLOGY	49
OUTLINE MANAGEMENT PLAN 10: CONSTRUCTION WASTE	51
OUTLINE MANAGEMENT PLAN 11: ARBORICULTURE	52
OUTLINE MANAGEMENT PLAN 12: SOCIO-ECONOMICS	53
OUTLINE MANAGEMENT PLAN 14: AVIATION	54

### **APPENDICES**

### Appendix 1

Risk Aspects and Impacts Template

### Appendix 2

Construction Method Statements

### Appendix 3

Roles and Responsibilities

### Appendix 4

Complaints Log

### Appendix 5

Monitoring Records

### Appendix 6

Register of Non-Compliance, Corrective and Preventative Actions

### Appendix 7

**Emergency Procedures** 

### **Appendix 8**

Register of Consents, Licences and Permissions

### 1. INTRODUCTION

1.0.1 Ramboll UK Limited (hereafter referred to as 'Ramboll') has been instructed by Manor Farm Propco Limited (the 'Client') to prepare an Outline Construction Environmental Management Plan (OCEMP) for Land at Manor Farm, Poyle Road, Slough, the 'site') in association with the potential redevelopment of the site as a data centre and battery energy storage system facility (BESS) (the 'proposed development').

### 1.1 Purpose of the CEMP

- 1.1.1 The purpose of the OCEMP is to set out the construction and operational phase mitigation measures for the proposed development to ensure compliance with environmental commitments, requirements and best practice. This OCEMP has been produced to support the detailed application (the 'application') for the proposed development.
- 1.1.2 This OCEMP describes a number of recommended measures to avoid, minimise and control adverse environmental impacts associated with the construction and operation of the proposed project. The OCEMP will document the commitment to safeguarding the environment through the identification, avoidance and mitigation of the potential negative environmental impacts which are associated with the proposed development.
- 1.1.3 The Principal Contractor will undertake the works in accordance with the provisions of the OCEMP. The Construction Environmental Management Plan (CEMP) will be developed by the Principal Contractor to address any subsequent planning requirements relevant to the proposed development and taking account of any development in the project design. The CEMP produced by the contractor will be submitted to the planning authority for approval, prior to commencement of the works.
- 1.1.4 This OCEMP is a live document and will be updated and referred to as required during the planning, design and construction periods. This OCEMP shall also be updated after any significant changes that would alter environmental mitigation and management measures such as changes in design, construction methodology or further environmental information becoming available. Following consent, this OCEMP will be updated by the Principal Contractor, and approved by the Client and Slough Borough Council (SBC) before being implemented for the duration of the construction stages of the project. Instructions for the Principal Contractor to update, implement and maintain this OCEMP are written in [red font and square brackets].
- 1.1.5 This document does not detail any requirements for Health and Safety risk assessments and prevention measures to be assessed by the Principal Contractor. However, all those working on site must comply with all the relevant statutory provisions in respect of safety and will be required to work in such a way as to ensure the safety of the public and site workers.
- 1.1.6 The OCEMP will be an integral component of the overall Project Management system and should be read in conjunction with the Principal Contractor's environmental management system and other relevant construction phase plans.

### 1.2 Structure

### 1.2.1 This OCEMP has been structured as follows:

- Section 1 outlines the purpose of the OCEMP and introduces the proposed development;
- · Section 2 introduces the proposed development;
- Section 3 outlines the relevant minimum standards, legislation and guidance it is expected the proposed development will need to comply with;
- Section 4 sets out the mechanisms through which the CEMP and environmental requirements would be implemented and managed;
- Appendices set out templates for the following for implementation during construction:
  - o Appendix 1 Risk Aspects and Impacts Template;
  - Appendix 2 Demolition and Construction Method Statements;
  - Appendix 3 Roles and Responsibilities;
  - Appendix 4 Complaints Log;
  - Appendix 5 Monitoring Records;
  - o Appendix 6 Register of Non-Compliance, Corrective and Preventative Actions;
  - o Appendix 7 Emergency Procedures; and
  - o Appendix 8 Register of Consents, Permits, Licences and Permissions.

### 2. PROPOSED DEVELOPMENT

### 2.0 Site Location and Environmental Constraints

- 2.0.1 The site is located on land to the south of Colnbrook in Slough Borough Council (SBC), centred approximately at National Grid Reference TQ 02945 76169, as represented by the development boundary in Figure 2.1 as represented by the development boundary.
- 2.0.2 The surrounding area of the site features a mix of agricultural land, light industrial, commercial, and residential uses. To the east, the land use includes Poyle Trading Estate, the M25 motorway, and Heathrow Airport. To the south lies Wraysbury Reservoir, while the west is characterised by agricultural land, watercourses, and a lake. The northern boundary is adjacent to residential and hotel land uses, as well as agricultural land.
- 2.0.3 The site is directly bounded by:
  - Poyle Road to the east, beyond which lies the Poyle Industrial Estate;
  - Woodlands and Stanwell Road to the south, beyond which is Wraysbury Reservoir;
  - Agricultural land to the west beyond is the Arthur Jacob Nature Reserve and Colne Brook to the west; and
  - Poyle Channel to the north and Hilton Way, beyond which is a hotel.
- 2.0.4 Access to the site is via an existing access road from Poyle Road, which is currently used by industrial units.
- 2.0.5 The site covers an area of approximately 8.5 hectares (ha) and was formerly used as a landfill. The site comprises two main areas, which are connected by a strip of land that runs from north to south. The northern portion of the site ('Parcel A') consists of two large areas used for airport car parking, whilst the central and western areas of the northern section comprise a mix of light industrial and commercial units. The southern portion of the site ('Parcel B') consists of vacant former agricultural land and two derelict metal sheds, with a footpath running from west to east along its northern extent.
- 2.0.6 Parcel A is relatively flat with a nominal fall to the south-east. On the western boundary of Parcel A, there is a bund which varies between 1.2 m and 2.4 m above ground level. Excluding the bund, Parcel A has a high point of 21.72 mAOD to 19.89 mAOD. The site levels within Parcel B range from 20.61 mAOD to 19.37 mAOD, with the central area being more elevated and the topography decreasing towards the boundary edges.
- 2.0.7 The site context and environmental considerations are presented in Table 2.1 and Figure 2.2.

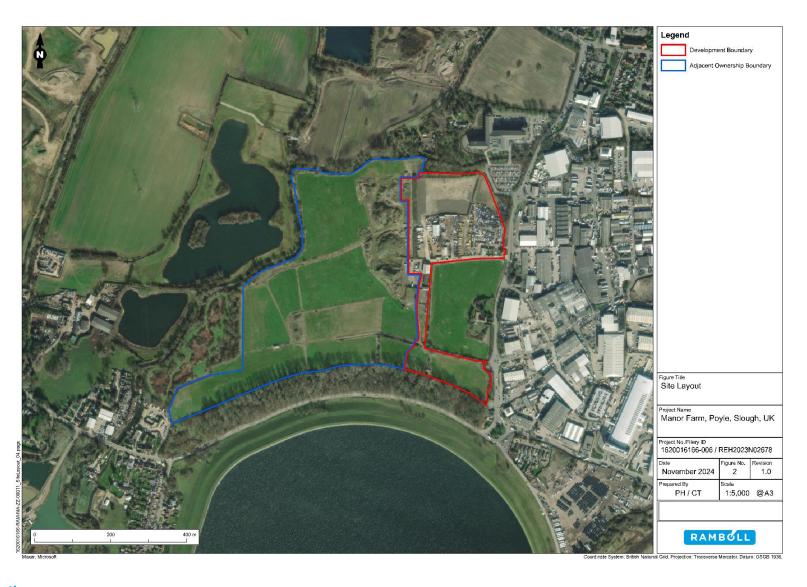
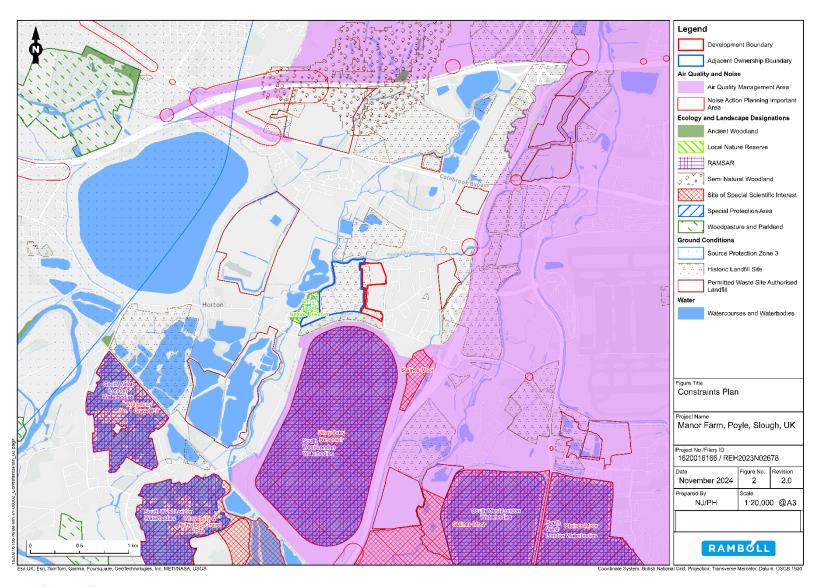


Figure 2.1: Site Location



**Figure 2.2 Environmental Constraints** 

**Table 2.1: Site Context and Environmental Considerations** 

Technical Topic	Baseline Conditions and Considerations	Sensitive Receptors within Study Area
Air Quality	<ul> <li>The site is not located within an Air Quality Management Area (AQMA). The nearest AQMA is the Spelthorne AEMA located approximately 100 m south due to NO<sub>2</sub> levels.</li> <li>No significant industrial point sources have been identified that are likely to affect the site, in terms of air quality.</li> <li>There are four SSSIs within 2 km of the site, Wraysbury Reservoir (approximately 150 m south), Staines Moor (approx. 480 m south-east) Wraysbury No.1 Gravel Pit (approximately 1.6 km south-west) and Wraysbury and Hythe End Gravel Pits (approximately 1.8 km south-west).</li> <li>The Arthur Jacob Nature Reserve LNR is located approximately 350 m to the west of the site.</li> </ul>	<ul> <li>Off-site Human Health and Amenity receptors.</li> <li>Construction workers.</li> </ul>
	<ul> <li>Groundwater</li> <li>The site is underlain by superficial deposits of Shepperton Gravel Member (sand and gravel) with an area to the north-east underlain by superficial deposits of Alluvium (clay, silt, sand and gravel).</li> <li>The bedrock beneath the site is the London Clay Formation.</li> <li>The site is not located within a Source Protection Zone.</li> </ul> Surface Water	
Water Environment	<ul> <li>The site is located within a Drinking Water Protected Area and Drinking Water Safeguard Zone.</li> <li>There are no watercourses on-site.</li> <li>The nearest identified watercourse is the Poyle Channel, which is located along the northern site boundary. This discharges into the Colne Brook located approximately 280 m to the northwest, running from north to south. The EA currently classifies the Colne Brook Water Body as being of 'moderate' ecological quality. Chemical quality did not require assessment in 2022 but was classified as 'fail' in 2019.</li> <li>There are no surface water abstractions for sensitive use within 1 km.</li> <li>There are a series of drainage ditches, including a ditch network adjacent to Poyle Road, which is located east of the site. There is also a ditch following the northern and western boundary of Parcel B and appears to route southwards and is assumed to connect to the Colne Brook.</li> <li>The risk of flooding from surface water and overland flows is low.</li> </ul>	Surface water features including the Poyle Channel and Colne Brook.

Table 2 4 Cha	Context and Fr		C
Table / I'Site	CONTRYT AND FO	ivironmentai i	nnsinerations

Technical Topic	Baseline Conditions and Considerations	Sensitive Receptors within Study Area
	<ul> <li>The site is not located within an area at elevated risk of fluvial flooding and is in Flood Zone 1 (low probability). This zone comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding (&lt;0.1% in any year).</li> <li>The site is at risk of reservoir flooding from the Wraysbury Reservoir approximately 150 m south and Queen Mother Reservoir approximately 1.2 km west, however EA information states that reservoir flooding is extremely unlikely.</li> </ul>	
Archaeology and Heritage	<ul> <li>Built Heritage</li> <li>There are no statutorily designated heritage assets, no World Heritage Sites or Historic Battlefields on the site.</li> <li>There are five listed buildings within 500 m of the site.</li> <li>The nearest listed building is the Grade II listed Hollies, located opposite the site entrance on Poyle Road. Poyle Farmhouse, a Grade II listed building is located approximately 160 m east of the site boundary. The Farmhouse is bordered by the site boundary on the northern, southern and eastern sides.</li> <li>Archaeology</li> <li>Much of the site comprises a historic landfill (following quarrying).</li> <li>Borehole data show consistent 4 m to 5 m depths of Made Ground across the potential Battery Storage area in the south of the site and therefore no Holocene period archaeology will have survived. Consequently, there is no archaeological potential in this area.</li> <li>It is possible that archaeology may have survived in the northern and eastern areas of the site. However, any archaeological remains potentially within this area are likely to be low/local significance.</li> <li>There is geo-archaeological potential within the eastern area of the site due to presence of Alluvium, however much of this may have also been removed prior to gravel extraction beneath it. Alluvium deposits, where surviving, are likely to be of low/local importance.</li> <li>Overall, archaeological survival at the site is likely to be fragmentary and will depend on the impact of past post-depositional impacts as a result of quarrying.</li> </ul>	<ul> <li>Listed buildings.</li> <li>Buried heritage assets (known and as-yet unknown).</li> </ul>
Transport	The site is located to the west of Poyle Road and approximately 800 m from Junction 14 of the M25 motorway.	<ul> <li>Residents using roads directly adjacent to the development site (i.e. Poyle Road) as well as those using local bus networks</li> </ul>

**Table 2.1: Site Context and Environmental Considerations** 

Technical Topic	Baseline Conditions and Considerations	Sensitive Receptors within Study Area
	<ul> <li>The western extent of Heathrow Airport is approximately 1.7 km to the east of the site.</li> <li>A bus stop is located to the north-east of the site on Poyle Road, serving the 5 and 305 bus routes.</li> <li>The site currently has three access points, two opposite The Hollies on Poyle Road and a gated access from the Poyle Road / Blackthorne Road roundabout.</li> <li>The busier and 'main' access is the southern priority junction opposite The Hollies, which serves a number of units and businesses. The northern 'secondary' access is also a priority junction which is used as a car park by airport users.</li> <li>There are no Public Rights of Way (PRoWs) in the vicinity of the site.</li> <li>Individual transport users (including bus passengers, people in emergencies and workers) may experience longer journey times as a result of increased road congestion during the construction phase.</li> <li>Due to higher traffic flows during the construction phase, extra consideration will be taken to minimise disruption to local residents and businesses, ensuring that the highway safety of pedestrians, cyclists and other roads users is not unduly impacted.</li> </ul>	<ul> <li>Public transport users.</li> <li>Road network.</li> <li>Pedestrians, cyclists and road users.</li> </ul>
Noise and Vibration	<ul> <li>Background noise at the residential properties surrounding the site is predominantly from the flight path from Heathrow Airport approximately 1.7 km east, with planes flying over the site at regular intervals and road traffic on the M25 approximately 800 m east, during periods when no flights are taking place.</li> <li>Flights continue into the nighttime period up to 23:30 and start again around 06:00 the following morning.</li> <li>The Local Authority typically require that noise emissions from fixed permanent plant are equal to or lower than the background levels during normal operation.</li> </ul>	<ul> <li>Existing surrounding receptors including:         <ul> <li>Hilton Hotel London Heathrow, approximately 75 m north.</li> <li>Properties appromately 90 m north.</li> <li>Poyle Farmhouse, approximately 160 m east.</li> <li>Florama, approximately 160 m east.</li> <li>Golden Cross Public House, approximately 40 m south.</li> <li>Poyle Mobile Home Park approximately 180 m south-east</li> </ul> </li> </ul>

**Table 2.1: Site Context and Environmental Considerations** 

	able 2.1: Site Context and Environmental Considerations		
Contamination	Pormer and current use of the site include a builders yard, building supplies yard, haulage depot, metal fabricators, vehicle repair workshop and an area set aside for airport car parking, most notably the active use of fuel by AS Transport and IAG aggregates.  On-site buildings have the potential to contain asbestos given their age.  The south and a marginal area in the north-west of the site has historically been subject to widespread gravel extraction and then used as a landfill (1948-1980, licensed from 1974). The northern portion of the site appears to comprise more re-worked natural deposits and construction wastes. Infilled ground in the south of the site typically contained a mixture of construction wastes as well as plastic, timber and bagged plastic waste.  There is no record or evidence of the landfill being provided with engineered controls such as a landfill cap, walls or basal layer and so effectively acts as a 'dilute and disperse' landfill. A High-Level Contaminated Land Summary Report by Ramboll (2021) concluded that concentrations of contaminants in the landfill were elevated but likely did not represent a significant risk to human health, groundwater or nearby surface water bodies.  There are two underground storage tanks (USTs), which have been decommissioned and three aboveground storage tanks (ASTs) within the site.  One electricity sub-station is situated in the north-east area of the site, as well as two additional potential sub-stations. Potential contaminants include oils and PCBs.  A minor pollution incident has been recorded in the south-east of the site involving the release of organic chemicals and products to ground surface.  Soil bunds are present around the builders yard area in the northern portion of the site.	Surface water features.     Construction workers.     Future site users.	
Ecology	<ul> <li>The Windsor Forest and Great Park SAC is located approximately 5.5 km south-west of the site.</li> <li>The Arthur Jacob Nature Reserve is located approximately 350 m to the west of the site boundary. This is a Priority Habitat for Lowland Fens.</li> <li>To the south-west of the site is the London Waterbodies SPA and Ramsar site, which includes the Wraysbury Reservoir. The Wraysbury Reservoir, located approximately 170 m south of the site boundary, is also a SSSI and Natura 2000 site.</li> <li>The site is located within the SSSI Impact Risk Zone associated with Wraysbury Reservoir.</li> </ul>	On-site habitats, including protected species.	

**Table 2.1: Site Context and Environmental Considerations** 

Technical Topic	Baseline Conditions and Considerations	Sensitive Receptors within Study Area
	<ul> <li>The on-site habitats comprise of developed land; sealed surface, buildings, bramble scrub, artificial unvegetated; unsealed surface, native hedgerows, modified grassland, mixed scrub, arable fields and mature trees. Additionally, the hedgerows located on site are classified as a Habitat of Principle Importance (HoPI). The wider landscape consists of an industrial area and the M25 to the west and further arable fields to the east.</li> <li>The on-site habitats have the potential to support breeding birds and provide foraging and commuting opportunities for bats, although no roosts have been recorded. Other wildlife observed includes amphibians such as the common toad.</li> <li>Buddleia, an invasive species, was identified in several locations across the site.</li> </ul>	
Arboriculture	<ul> <li>There are nine category B, 39 category C and four category U trees.</li> <li>None of the surveyed trees are considered to be ancient or veteran.</li> </ul>	On-site trees and hedges.
Socio-Economics	<ul> <li>The site currently comprises a mix of commercial and light industrial activities, areas of car</li> <li>parking in the north and an area of vacant former agricultural land in the south. The development of the site will increase employment opportunities which could benefit local communities (as unemployment levels in Slough are just under 3.7 %). The extent of this is dependent upon the workforce size, types of sectors where employment will be created along with the skill level required.</li> <li>The local community may experience increased traffic levels. They may also experience increased noise levels during the construction phase. Given the location of the site, nearby to the M25 and Heathrow Airport, it is anticipated that increased noise levels during construction will not have a high impact on the local community.</li> </ul>	<ul> <li>Construction workers</li> <li>Local economy</li> <li>Local community</li> <li>Local residents and businesses</li> </ul>
Aviation	<ul> <li>The site lies approximately 2 km to the west of the western end of the northern runway at London Heathrow Airport, in an area subject to aerodrome safeguarding, the process by which airspace required for safe and efficient take-off and landing at airports is maintained free of new development.</li> <li>Specific height limits apply at the site with respect to the Heathrow flight path of between 62.4 m AOD and 65.8 m AOD across the proposed data centre footprint.</li> <li>The site is also located within the safeguarding area for RAF Northolt, which is located approximately 11 km north-east, however this gives rise to a less limiting constraint than at London Heathrow Airport.</li> </ul>	<ul> <li>Flight paths for Heathrow Airport</li> <li>Safeguarding area for RAF Northolt</li> </ul>

### 2.1 Proposed Development

- 2.1.1 The proposed development as a whole would comprise the following:
  - Parcel A: Development of a new build three storey data centre with associated external works, infrastructure and substation; and
  - Parcel B: Development of a BESS with associated external works and infrastructure.

The parapet height of the data campus is 23 m; maximum screen height would be 30 m. This is required to support the heights of equipment contained within both the building and service equipment at roof level.

Access to the site would comprise:

- Parcel A: Access via existing access on Poyle Road to the east of the site; and
- Parcel B: Access via an existing track behind the agricultural field to the east of the site.
- 2.1.2 Figures 2.4 and 2.5 represent the proposed development layout from drawing CON-COR-ZZ-ZZ-D-A-00104 prepared by Corgan.

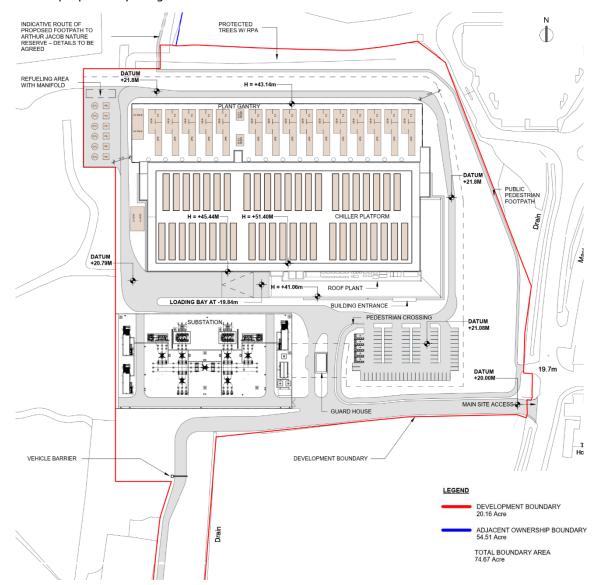


Figure 2.4: Proposed Development Layout (Parcel A)

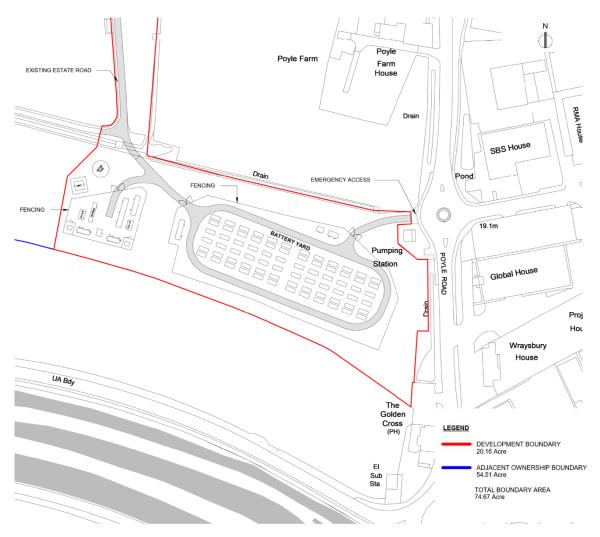


Figure 2.5: Proposed Development Layout (Parcel B)

### 2.2 Construction Programme and Phasing

- 2.2.1 The proposed development will involve the following key work phases:
  - Detailed Design Stage;
  - Tender and Procurement Stage;
  - Evaluation and appointment of successful Tenderer(s) (hereafter referred to as The Principal Contractor);
  - Site preparatory works including the preparation of all required Detailed Safety and Health, and Environmental Management documents;
  - Site mobilisation;
  - Demolition and Construction Stage;
  - Completion; and
  - Handover, Testing and Operational Readiness Stages.
- 2.2.2 The Principal Contractor will provide a detailed programme of works when available.

### [Principal Contractor to insert Detailed Construction Programme]

2.2.3 Standard hours of work are Monday to Friday 08:00 to 18:00 and Saturday 08:00 hrs to 13:00 hrs. These recommended times may be extended to 7.30 am if there are no noisy activities on Saturdays. Workers may arrive at site 30 minutes prior, but no noisy work should be done outside these times unless changed by prior agreement, and noise should be kept to a minimum in the first hour.

Contractors should inform local residents prior to particularly noisy activities and provide contact details.

### 2.3 Construction Methodology

- 2.3.1 The proposed development construction works will therefore include the following key activities:
  - i. Excavation works;
  - ii. Temporary works;
  - iii. Sub-structure works;
  - iv. Superstructure works;
  - v. Envelope and roof works;
  - vi. Fit-out;
  - vii. Statutory authority connections and service connections;
  - viii. External works;
  - ix. Hard landscaping works;
  - x. Utilities and service installation.
- 2.3.2 The Principal Contractor will provide detailed construction method statements in Appendix 2 when available, covering environmental considerations of each activity.
- 2.3.3 Details of machinery to be used on site are unknown at this time, but are likely to be standard site equipment including tracked excavators, HGV wagons, etc.

[Principal Contractor to append relevant detailed method statements to Appendix 2]

### 3. LEGISLATION AND GUIDANCE

- 3.0.1 All parties, contractors and consultants working on this project shall be subject to the laws of the United Kingdom and the various international/regional protocols and agreements to which the United Kingdom is a party. In the event that legislation is updated, the latest version shall be followed. All relevant new legislation will be followed as appropriate. This document outlines most current legislation at the date of issue. It is the responsibility of the Principal Contractor to ensure that they are up to date with the details of the latest iterations of legislation relevant to the project throughout the duration of the contract.
- 3.0.2 The Principal Contractor should set out the CEMP in a clear format and must address all key environmental risks and associated measures. The Principal Contractor must be aware of and comply with the legislation and guidance set out in this document, any specific planning conditions which may be associated with the proposed development, and other relevant documentation as prescribed by the Employer and planning authority.

### 3.1 Relevant Legislation

- 3.1.1 It should be noted that the appointed Principal Contractor will be required to be aware of their obligations under legislation. Such legislation, includes, but is not restricted, to:
  - National Planning Policy Framework 2023;
  - Draft National Planning Policy Framework 2024;
  - Planning Practice Guidance;
  - Air Quality Strategy for England, Scotland, Wales and Northern Ireland (AQS);
  - Air Quality (England) Regulations 2015;
  - Control of Pollution Act 1974;
  - Control of Pollution Regulations 1996;
  - Environmental Protection Act 1990;
  - Environmental Permitting (England and Wales) Regulations 2016
  - Noise Policy Statement for England 2010;
  - Water Environment (Water Framework Directive) (England and Wales) Regulations 2017;
  - Water Act 2003;
  - Waste Framework Directive 2008;
  - Landfill Directive (1999);
  - Waste Management Licensing (England and Wales) Regulations 2005;
  - The Waste (England and Wales) Regulations 2011;
  - List of Wastes (England) Regulations 2005;
  - The Hazardous Waste (England and Wales) Regulations 2005;
  - Environmental Damage (Pollution and Remediation) Regulations 2015;
  - National Planning Policy for Waste 2014;
  - Waste Management Plan for England 2021;
  - The Groundwater Directive (Water Framework Directive) (England) Direction 2016
  - Contaminated Land (England) Regulations 2012;
  - Groundwater (England and Wales) Regulations 2009;
  - The Control of Asbestos Regulations 2012;
  - Ancient Monuments and Archaeological Areas Act 1979;
  - Planning (Listed Buildings and Conservation Areas) Act 1990;
  - Natural Environment and Rural Communities Act 2006;
  - Clean Neighbourhoods and Environment Act 2005;
  - Environment Act 2021;
  - The Conservation of Habitats and Species Regulations 2017;
  - Wildlife and Countryside Act 1981;
  - The Waste Framework Directive (2008/98/EC) (an amendment to the Waste Framework

- Directive 2006/12/EC); and
- Landfill Directive (1999/31/EC).

### 3.2 Relevant Industry Guidance

- 3.2.1 The Principal Contractor should take due consideration of, and incorporate best practice guidance, including but not limited to the following:
  - BS 5837:2012. Trees in relation to design, demolition and construction;
  - BS 3998: 2010. Tree Work. Recommendations;
  - BS 5228:2009+a1:2014. Code of practice for noise and vibration control on construction and open sites – Noise;
  - BS5489; 2005. Code of Practice for the Design of Road Lighting, Guidance Notes for the Reduction of Light Pollution GN01 2005;
  - CIRIA (2001). C532. Control of water pollution from construction sites. Guidance for consultants and contractors;
  - CIRIA (2006). C649. Control of water pollution from linear construction projects. Technical Guidance;
  - CIRIA (2007). C698. The Site Handbook for the Construction of SuDS CIRIA C698;
  - CIRIA (2008). C679. Invasive species management for infrastructure managers and the construction industry;
  - CIRIA (2023). C741. Environmental Good Practice on Site;
  - CIRIA (2015). C753. The SuDS Manual;
  - DEFRA (2009). Construction Code of Practice for the Sustainable Use of Soils on Construction Sites;
  - Environment Agency Guidance (Piling and Penetrative Ground Improvement Methods on Land
  - Affected by Contamination. 2001 (NC/99/73);
  - Environment Agency Guidance on Standard Pollution Mitigation Measures;
  - Environment Agency Pollution Prevention Guidance (PPGs) whilst these have been formally withdrawn they continue to provide best practice so have been included;
  - Environment Agency (2010). Managing Invasive Non- Native Plants in or Near Freshwater;
  - Environment Agency (2013). Environmental Management guidance. Managing Japanese knotweed on development sites;
  - Environment Agency (2013). The Knotweed Code of Practice;
  - Environment Agency (2013). Environmental management guidance. Japanese knotweed, giant hogweed and other invasive species;
  - Control of Substances Hazardous to Health (COSHH) regulations guidance on the Health and
  - Safety Executive website; and
  - Highways England (March 2020). Design Manual for Roads and Bridges. Sustainability & Environmental Appraisal LA 120 Environmental management.

### 3.3 Specific Client Requirements

3.3.1 The Principal Contractor will be obliged to ensure that any site-specific Client requirements in relation to environmental management, including (but not limited to) relevant Client procedures, are fully complied with for the duration of the demolition and construction phase.

### 3.4 Contractor Policies

3.4.1 The Principal Contractor shall deliver and promote continual improvement in environmental performance among all Contractors in compliance with Client Requirements which will be

- communicated to all personnel on the Project and will be displayed prominently at the Project site offices.
- 3.4.2 In addition, the Project Team's Environmental Management System (EMS) and core processes for management of Programme Planning and Initiation, Hazard Analysis, Inspections, Monitoring, and Corrective Actions, Assessments and Audits, Emergency Preparedness, General Environmental Requirements, Environmental Planning, Environmental Assessment and Due Diligence and Environmental Permitting and Approvals shall inform the CEMP and Materials and Waste Management Plan.

# 4. ENVIRONMENTAL MANAGEMENT PLAN IMPLEMENTATION AND MANAGEMENT

- 4.0.1 This OCEMP is provided in outline form to support the detailed application for the proposal.
- 4.0.2 This OCEMP is a live document and will be updated and referred to as required during the planning, design and construction periods. This OCEMP shall also be updated after any significant changes that would alter environmental mitigation and management measures such as changes in design, construction methodology or further environmental information becoming available. As a minimum, this OCEMP will be reviewed at 4 weekly intervals during the construction period.
- 4.0.3 During the construction period revisions of this OCEMP will be agreed with the Client representative and SBC, recorded in and will be stored electronically on-site.
- 4.0.4 The Principal Contractor will take ownership of the CEMP and its implementation throughout the construction period. The Principal Contractor and its supply chain will carry out work in accordance with best industry practices in order to minimise, as far as reasonably practicable, any adverse environmental impact of their construction activities.
- 4.0.5 The Principal Contractor will also take responsibility for the environmental performance of subcontractors. The Principal Contractor will provide a copy of the CEMP, reporting procedures and all relevant environmental information to all subcontractors.

### 4.1 Leadership and Commitment

- 4.1.1 The Project's Senior Management will demonstrate leadership and commitment with respect to the project's EMS by:
  - being accountable for the effectiveness of the EMS and project-wide participation;
  - ensuring that the environmental policy, environmental aspects, and environmental objectives are established and compatible with the strategic direction and context of the organisation;
  - ensuring the integration of EMS requirements within the Project's execution processes;
  - ensuring the resources needed for the EMS are available;
  - communicating the importance of effective environmental management and conformance with environmental requirements;
  - confirming that the EMS is achieving its intended outcomes;
  - directing and supporting persons to contribute to the effectiveness of the EMS;
  - · promoting continual improvement; and
  - supporting other relevant management personnel to demonstrate their leadership as it applies to their areas of responsibility.

### 4.2 General

- 4.2.1 The Principal Contractor will be required to have a recognised environmental management system such as ISO 14001, or be able to demonstrate that they are actively working towards implementing such a system.
- 4.2.2 The works Principal Contractor will undertake the works in accordance with the provisions of the CEMP. The CEMP will be developed by the Principal Contractor to address any subsequent planning conditions relevant to the proposed development and will be reviewed by the Employer and the Employer's Representative.

- 4.2.3 The Principal Contractor will review the OCEMP and develop the CEMP as appropriate and shall issue the updated CEMP. A record of the review and any recommendations will also provide (for review and approval by the Employer and the Employer's Representative) Environmental Control Plans (ECPs), which will be maintained and updated in accordance with the CEMP. ECPs will include (if applicable), but will not be restricted to:
  - · Air Quality Control Plan;
  - · Construction Noise and Vibration Control Plan;
  - Pollution Prevention Control Plan;
  - Water Resources and Energy Use Control Plan;
  - Ecological and Arboricultural Control Plan;
  - Traffic Management Control Plan;
  - · Contamination Land Control Plan; and,
  - Soil Erosion and Sedimentation Control Plan.
- 4.2.4 The Principal Contractor will also be obliged to ensure that any site-specific Client requirements in relation to environmental management, including (but not limited to) relevant the Client procedures, are fully complied with for the duration of the demolition and construction phase.

### 4.3 Environmental Policy

- 4.3.1 The Principal Contractor shall have an environmental policy dated and signed by the most senior person in the company. The policy shall:
  - Be appropriate to the nature, scale and environmental impacts of the organisations activities, products and services;
  - Include a commitment to continual improvement in environmental performance;
  - Include a commitment to comply with all applicable legislation and with other requirements to which the organisation subscribes which relate to its environmental aspects;
  - Provide a framework for setting and reviewing objectives and targets;
  - Be documented, implemented and maintained;
  - Be communicated to all persons working for or on behalf of the organisation; and
  - Be available to the public.

### 4.4 Environmental Aspects & Impacts

- 4.4.1 Contractors are expected to use a qualitative approach to identify and evaluate potential environmental aspects along with any controls to prevent or mitigate environmental damage. A simple risk matrix (as follows) facilitates quick reference and assignment of risk levels for each environmental aspect:
  - Extreme/serious risk;
  - High risk;
  - Moderate risk; and,
  - Low risk.
- 4.4.2 All environmental aspects rated as High or Extreme/Serious will be classified as significant and will require control or mitigation measures to manage the risk. All environmental aspects covered by a legal requirement, for example an Environmental Permit condition will also be classified as significant even if the risk is low or moderate.
- 4.4.3 The Principal Contractor shall record the results of the qualitative risk analysis in an Aspects and Impacts Register.

### 4.5 Roles and Responsibilities

- 4.5.1 Members of the Environmental Consultant team will be assigned with specific roles regarding the CEMP during the planning and design period.
- 4.5.2 Members of the Principal Contractor's project team will be assigned with specific roles regarding this OCEMP during construction. Some of these roles may be fulfilled by the same person and additional positions may be added as appropriate. The designated individuals along with their contact details are supplied in Appendix 3. During the construction period those relevant will be displayed at the site office, in order to identify those persons on site responsible for environmental matters.

### 4.6 Environmental Training, Awareness and Competence

- 4.6.1 The Principal Contractor (and their sub-contractors) would be selected with due consideration of relevant qualifications and experience. Principal Contractor will be required to employ construction staff with appropriate skills, qualifications and experience appropriate to the needs of the works to be carried out during construction.
- 4.6.2 A site induction will be provided to all construction staff before they commence work on site. Where appropriate, the Principal Contractor will identify specific training needs for the construction workforce and will ensure that appropriate training requirements are fulfilled. A baseline level of environmental awareness will be established though the site induction programme. Site inductions will cover the following as a minimum:
  - Introduction to the Environmental Manager;
  - The requirements of the CEMP and consequences of non-compliance;
  - The requirements of due diligence and duty of care;
  - Identification of environmental constraints and potential impacts of the work;
  - Procedures associated with incident notification and reporting including procedures for dealing with damage to the environment; and,
  - The benefits of improved environmental and sustainability performance; and the potential consequences of departure from specified procedures, work instructions and method statements.
- 4.6.3 Toolbox talks and induction training of all site workers, including sub-contractors and site visitors, will be implemented to ensure that site personnel are aware of this OCEMP, environmental sensitivities of the site and surrounding area, on-site pollution policy, and the measures that should be implemented to minimise potential impacts on the environment.

### 4.7 Communication and Public Liaison

- 4.7.1 The Principal Contractor will, supported by the Client, liaise with nearby residents throughout the development construction period on a regular basis to ensure they are kept well informed. This will include:
  - i. Information about site operator and contact details displayed on site hoardings; and
  - i. Information provided to neighbours to inform on key stages in the development.
- 4.7.2 A Public Liaison Officer will carry out a community relations role, which is focused on engaging with occupiers of nearby properties (both residential and business), and local amenity associations and neighbourhood forums where these exist, at all stages of the project. This community relations work will start before works begins on site.

- 4.7.3 The Principal Contractor will ensure that the public are made aware in advance of the following:
  - i. Start and end dates of construction activities;
  - ii. Nature of project;
  - iii. Principal stages of the project; and
  - iv. Details of contact name and number of appropriate site personnel.
- 4.7.4 The site environmental manager will attend meetings with the SBC environment officers where necessary to discuss responsibilities under the CEMP and of other parties involved in work on site.
- 4.7.5 Where necessary, the site environmental manager will maintain communications with representatives with other sites in close proximity to the development to manage cumulative impacts.
- 4.7.6 The public can raise any queries, concerns or complaints about the works via the following contact details, which will be made available at the site entrance:
  - i. Address: [Principal Contractor to insert address];
  - ii. Hotline: [Principal Contractor to insert hotline number];
  - iii. Email: [Principal Contractor to insert email contact]; and
  - iv. Details of the scheme and its progress will also be displayed.
- 4.7.7 Contact via phone will be available at all times during the site's working hours. Any contacts made shall be responded to quickly and effectively, with feedback provided on any action taken. All complaints will be recorded, covering: nature of complaint, cause, and where appropriate the remedial action taken. SBC may request to see recorded complaints at any time. The Complaints Log will be recorded in Appendix 4.

### 4.8 Considerate Constructors Scheme

- 4.8.1 The proposed development will be registered with the Considerate Constructors Scheme (CCS)<sup>1</sup>. The following items must be addressed to comply with the following requirements of the CCS:
  - i. Care about appearance Constructors should ensure sites appear professional and well managed;
  - ii. Respect the Community Constructors should give utmost consideration to their impact on neighbours and the public;
  - iii. Protect the Environment Constructors should protect and enhance the environment;
  - iv. Secure everyone's Safety Constructors should attain the highest levels of safety performance; and
  - v. Value their Workforce Constructors should provide a supportive and caring working environment.

### 4.9 Meetings

4.9.1 The Environmental Manager will be responsible for arranging and holding monthly meetings with the Employer and/or the Employer's Representative. The Environmental Manager will develop and distribute minutes on monthly meetings accordingly.

<sup>&</sup>lt;sup>1</sup> The CCS is a voluntary scheme, where registered sites, companies and suppliers commit to follow the Code of Considerate Practice. For additional information about the CCS, please visit the CCS website: https://www.ccscheme.org.uk

### 4.10 Monitoring and Inspections

- 4.10.1 Inspections involve on-site checks to ensure mitigation and management measures are being implemented. Monitoring is related to specific environmental objectives to ensure that mitigation and management measures are effective at preventing an environmental effect or reducing to an acceptable level that any agreed thresholds or limits are not exceeded.
- 4.10.2 For the duration of the contract, the environmental performance of the Principal Contractor will be monitored through site inspections and audits. The programme for monitoring, inspections and audits shall be specified in the contract. The Principal Contractor shall develop, implement and maintain an Environmental Inspections and Monitoring Plan.
- 4.10.3 Records of all inspections carried out should be maintained and all actions should be closed out in a reasonable time. If additional monitoring and inspections are required due to any subsequent planning conditions, these will be added to the CEMP.
- 4.10.4 Mitigation and monitoring will be carried out so that construction activities are undertaken in a manner that does not give rise to negative effects. Suitable monitoring programmes will need to be developed, implemented, documented and assessed in accordance with the specifications outlined in the CEMP.
- 4.10.5 The results of all environmental monitoring activities will be reviewed by the Environmental Manager on an ongoing basis to enable trends or exceedance of criteria to be identified and corrective actions to be implemented as necessary.
- 4.10.6 Some mitigation will require monitoring to be undertaken in order to ensure that management measures remain in place or continue to be implemented if required on an ongoing basis. Monitoring requirements for each mitigation measure are given in the Outline Management Plans (Sections Outline Management Plan 01 to Outline Management Plan 14).
- 4.10.7 Where required, the Principal Contractor will further produce monitoring proposals, to include:

  Details of receptors; Threshold values and analysis methods; Procedures for recording and reporting monitoring results; and Remedial action in the event of any non-compliance.
- 4.10.8 Where required, any monitoring will be recorded in Appendix 5.

### [If required, Principal Contractor to provide records of monitoring in Appendix 5]

- 4.10.9 Where required, the Principal Contractor will develop a schedule for inspections to be undertaken, which should cover each mitigation measure. A procedure should be put in place to log any observations/non-conformities, agreed remedial action and when this will be corrected. Details of monitoring or inspection requirements are detailed in the Outline Management Plans (Sections Outline Management Plan 01 to Outline Management Plan 12.
- 4.10.10 Inspections of construction activities will be carried out by the Environmental Manager on a daily basis to ensure all necessary environmental measures relevant to the construction activities are being effectively implanted by construction staff, ensuring legal and contractual conformity.

### **Daily Inspections:**

- 4.10.11 The daily inspections should include, but not be limited to, checking that:
  - The site boundary is marked out and respected;
  - · All waste is appropriately stored and segregated;
  - Waste skips are covered to prevent wind-blown litter / FOD and unnecessary foraging by birds;
  - Drip trays are in place for all stored equipment and plant;
  - All chemicals/fuels are stored with appropriate containment/bunds/cover;
  - Construction noise is within permitted limits and does not create a nuisance;
  - Dust does not create a nuisance;
  - If ecological migration methods have been implemented on site that they are working and intact; and
  - Fencing/hoarding is secure.

### **Weekly Inspections:**

- 4.10.12 The inspections should include, but not be limited to confirming that:
  - Daily checklists have been completed;
  - Waste storage areas have been checked and there is no build-up of waste materials;
  - Spill kits have been checked and contain all relevant materials;
  - The performance of all pollution control equipment has been checked and the equipment is working effectively;
  - Noise reduction/monitoring equipment has been checked and is operating effectively;
  - Septic tanks are not overfull/discharging; and
  - Special control measures identified in Permit/Planning Conditions and the CEMP are adhered to.

### 4.11 Non-Compliance, Corrective and Preventative Actions

- 4.11.1 The Principal Contractor shall establish, implement and maintain procedures to deal with actual and potential non- conformities and for taking corrective and preventative action. Non-conformities may be identified through:
  - Internal contractor audits;
  - Audits by the Employer and/or the Employer's Representative;
  - Audits undertaken by external certification bodies;
  - Audits undertaken by regulatory authorities; and
  - General observations.
- 4.11.2 The Principal Contractor procedures shall define the requirements for:
  - Identifying and correcting non-conformities;
  - Mitigating the environmental impacts of non-conformities;
  - Investigating non-conformities including identify root causes and implementing appropriate actions to avoid their reoccurrence;
  - Evaluating the need for actions to prevent non-conformities and implementing appropriate actions designed to avoid their reoccurrence;
  - Setting realistic timeframes for undertaking effective corrective and preventative actions;
  - Recording the results of corrective and preventative actions taken;
  - Reviewing the effectiveness of corrective and preventative actions; and
  - All actions identified should be appropriate to the nature and magnitude of the issue and the environmental impacts encountered.
- 4.11.3 It is the responsibility of all site personnel to report any occurrence of issues, accidents and where an environmental procedure has not been followed. Where environmental issues are identified by any

stakeholder or on-site personnel, they will be communicated to the Principal Contractor for review, who will identify a suitable course of action, and will ensure:

- i. An appropriate action is identified and implemented;
- ii. A suitable owner for the action is identified and they are informed of the fact; and
- iii. The results of the action are recorded and communicated to those that raised the issue.
- 4.11.4 The Principal Contractor will permit SBC to undertake planned inspections of the site in order to assess compliance with the CEMP. Any issues of non-compliance with the CEMP identified by SBC will be noted and agreed, and they will determine the amount of time allowed to address any non-compliance issues.
- 4.11.5 Following a non-compliance incident or report from SBC, police or other agencies the Principal Contractor will:
  - i. Deal with such issue as soon as practicable;
  - ii. Undertake monitoring to ensure that appropriate action has been taken;
  - iii. Ensure steps are taken to prevent reoccurrence; and
  - iv. Remedial action taken is agreed with relevant authority where appropriate.
- 4.11.6 The Principal Contractor will record issues, accidents or non-compliances in Appendix 6, allowing for corrective action or additional preventative action to take place and ensure that the event does not occur again.

### 4.12 Emergencies

- 4.12.1 The Principal Contractor will ensure an emergency procedure is developed, implemented and updated to identify and manage potential environmental emergency situations and potential accidents. This will include emergency pollution control measures. The Principal Contractor shall respond to actual emergency situations and prevent and mitigate adverse environmental impacts. The Principal Contractor should periodically test, review and update emergency preparedness and response procedures.
- 4.12.2 This procedure is to be developed in consultation with the emergency services where necessary. Copies of the emergency procedure will be kept on site, and provided to the appropriate emergency services.
- 4.12.3 The emergency procedure will contain:
  - i. Emergency phone numbers;
  - ii. Method of notifying SBC, and other statutory authorities;
  - iii. Emergency contact numbers for developer's and contractor's key personnel; and
  - iv. A drainage plan showing pathways and receptors.
- 4.12.4 The Principal Contractor will ensure close liaison with emergency services, local authority officers and other agencies who may be involved in response to incidents or emergency situations an ensure requirements for the provision of emergency site access are met.

### **Key Requirements**

4.12.5 During construction, accidents, incidents and emergencies that have an environmental impact may occur. In the event of an emergency, the first response is to safely locate the source of that which is giving rise to the environmental impact where appropriate and stop continuation of the situation, followed by the containment, control and mitigation of the situation.

- 4.12.6 The Emergency Response Procedure will be displayed within the Site Office / compound. A copy of the Material Safety Data Sheets for all the chemicals used on the project site will also be kept at the site office.
- 4.12.7 The main objectives of the Emergency Response Plan are to:
  - Ensure that all means are available to contain the consequences of an accidental spill, fire or release of oil/fuel;
  - Ensure that employees are suitably trained to respond to fire and spill;
  - Ensure that proper reporting takes place; and
  - Ensure that proper investigation is undertaken.
- 4.12.8 All contractor personnel and sub-contractors will be instructed and rehearsed, as appropriate, in the requirements of the emergency response procedure. Following control of an incident or emergency, an investigation will be conducted, and corrective actions identified and addressed. The Principal Contractor's Environmental Manager will verify the close out of environmental related actions and notify the Employer and/or the Employer's Representative of any emergency.

### **Emergency Incidents**

- 4.12.9 Emergency incidents are those occurring that give rise to significant adverse environmental effects including but not limited to the following:
  - Any malfunction of mitigation measure and/or environmental protection system;
  - Any emission that does not comply with requirements of the contract and relevant licenses/permits;
  - Any circumstance with potential environmental pollution; or
  - Any emergency that may give rise to environmental effects (e.g. significant spillages or fire outbreak).

### **Spill Contingency Plan**

- 4.12.10 The main causes of spillage contamination can occur through:
  - Spillage of hazardous material including fuel oils, waste materials or chemicals;
  - Spillage of wastewater sewage and other liquid effluents; and
  - Spillage of contaminated wash down water with oils, chemicals etc from vehicles, equipment and machinery.
- 4.12.11 Prior to commencing activities on site, Contractors should develop, implement and maintain a Spill Contingency Management Plan. The Plan should include but not be restricted to the mitigation measures as described in Table 4.1.

**Table 4.1 Spill Mitigation Measures** 

Activity	Mitigation Measures
	Contractors will carry out regular inspections/ audits of hazardous materials usage, handling and storage areas and regular/thorough maintenance of vehicles and hydraulic systems and inspections of sanitary facilities and disposal.
Mitigation	All contractors handling hazardous materials will keep appropriate spill clean-up material adjacent to storage and maintenance areas.
Actions / Emergency Response	Minimise the amount of diesel, oil, paint, thinners and other chemicals stored on site that pose potential spillage environmental hazards and use materials that minimize environmental impact such as lead-free paints, as
	Storage areas will be located away from drains/trenches/wastewater collection devices in an impervious bund area (volume of the storage bund >110% of the largest storage tank contained within the bund). Collection systems will be provided/bunded if necessary, under machinery or equipment that may leak hydrocarbons/hazardous substances.

### **Activity Mitigation Measures** The Principal Contractor shall be responsible for training all staff in the procedures for handling spills and shall provide all staff with appropriate personal protective equipment. The Principal Contractor shall provide all staff with appropriate personal protective equipment. Avoid impacting adjacent sites by ensuring all contractors activities, equipment and waste storage is confined to the allocated site boundary. In the event of a spill: Identify and safely stop the source of the spill and alert people working in the vicinity; Notify the Environmental Manager immediately giving information on the location, type and extent of the spill so that they can take appropriate action; If applicable, eliminate any sources of ignition in the immediate vicinity of the Contain the spill using spill control materials, track mats or other materials as required. Do not spread or flush away the spill: If possible, cover or bund off any vulnerable areas where appropriate such as drains, watercourses and/or sensitive habitats; If possible, clean up as much as possible using the spill control materials; Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with appropriate permits so that further contamination is limited; The Environmental Manager shall inspect the site as soon as practicable and ensure the necessary measures are in place to contain and clean up the spill and prevent further spillage from occurring; and The Environmental Manager will notify the appropriate stakeholders such as SBC and/or the EA.

### **Emergency Incident Response Plan**

- 4.12.12 The Principal Contractor will be required to detail emergency incident procedures in the CEMP and develop an Emergency Incident Response Plan. The Plan will contain emergency phone numbers and method of notifying local authorities, statutory authorities and stakeholder. The Plan will include contact numbers for key personnel. The Principal Contractor will ensure that all staff and personnel on site are familiar with the emergency requirements.
- 4.12.13 In the case of work required in an emergency, or which if not completed would be harmful or unsafe to workers, the public or to the local environment, SBC will be informed as soon as reasonably practicable of the reasons and likely duration. Examples may include: where the ground needs stabilising if unexpected ground conditions are encountered or equipment failure. In the event of an emergency incident occurring, the Principal Contractor will be required to investigate and provide a report to include the following, as a minimum:
  - A description of the incident, including location, type of incident and the likely receptor;
  - Contributory causes;
  - Negative effects;
  - Measures implemented to mitigate adverse effects; and
  - Any recommendations to reduce the risk of similar incidents occurring.
- 4.12.14 Further, if any sensitive receptor is impacted, the appropriate environmental specialists will be informed and consulted with accordingly.
- 4.12.15 Any response measures will be incorporated into an updated Emergency Incident Response Plan.

### **Emergency Access**

4.12.16 The Principal Contractor will be required to maintain emergency access routes throughout construction and identify site access points for the working area.

### **Extreme Weather Events**

4.12.17 The Principal Contractor will consider the impacts of extreme weather events and related conditions during construction. The CEMP should consider all measures deemed necessary and appropriate to manage extreme weather events and should specifically cover training of personnel and prevention and monitoring arrangements for staff. As appropriate, method statements should also consider extreme weather events where risks have been identified.

[Principal Contractor to append details of emergency procedures in Appendix 7]

### 4.13 Consents, Licences and Permissions

### **Planning Conditions**

4.13.1 Relevant planning conditions will be identified in Appendix 8.

### [Principal Contractor to append details of planning conditions in Appendix 8]

### **Environmental Permits and Consents**

- 4.13.2 Environmental permits or permissions should be identified if required for the construction period and included in this OCEMP when they become available. The Principal Contractor will be responsible for obtaining all appropriate licenses and consents in respect of site operations.
- 4.13.3 Examples of permits/licences that may be required for the construction period and operation include:
  - i. A Part A(1) Environmental Permit for a large combustion plant is anticipated to be required, as well as a GHG Permit;
  - ii. A trade effluent consent will be required if the site is planning on discharging any process water; and
  - iii. Discharge permit for removal of surface water from site into a watercourse.
- 4.13.4 The Principal Contractor will inform the Environment Agency of any works to be conducted prior to carrying out excavation below the water table, including any site de-watering. De-watering and disposal measures will be agreed in advance with the Environment Agency, including obtaining an Abstraction and/or discharge Licence if required.
- 4.13.5 Relevant permits obtained or applied for to date will be recorded in Permit Register document if applicable. This table will be updated, by the Principal Contractor, as necessary, following the consent of the proposed development.

### 4.14 General Requirements

4.14.1 It is the responsibility of the Principal Contractor to ensure compliance and to avoid and/or reduce significant adverse effects that have been identified. Where the Principal Contractor diverts from the methodologies and working areas outlined herein and/or defined in the granted planning consent and associated conditions that may be granted, it would be the responsibility of the Principal Contractor to obtain the relevant licenses, permits and consents for any such changes.

### 4.15 Good Housekeeping

4.15.1 The Principal Contractor will employ a 'good housekeeping' policy at all times. This will include, but not be restricted, to the following:

General maintenance of working areas and cleanliness of welfare facilities and storage areas;

- Provision of site layout map showing key areas such as first aid posts, material storage, spill kits, material and waste storage, welfare facilities etc;
- Maintain all plant, material and equipment required to complete the construction work in good order, clean and tidy;
- Keep construction compounds, access routes and designated parking areas free and clear of excess dirt, rubbish piles, scrap wood, etc. at all times;
- Details of site managers, contact numbers (including out of hours) and public information signs (including warning signs) will be provided at the boundaries of the working areas;
- Provision of adequate welfare facilities for site personnel;
- Installation of appropriate security, lighting, fencing and hoarding;
- Effective prevention of oil, grease or other objectionable matter being discharged from the working area;
- Provision of appropriate waste management at each working area and regular collections to be arranged;
- Excavated material generated during construction will be reused on site as far as practicable
  and surplus materials/soils shall be recovered or disposed of to a suitably authorised waste
  facility site;
- Effective prevention of infestation from pests or vermin;
- No discharge of site run-off or water discharge without agreement of the relevant authorities; and Maintenance of access at all times as required for Campus operations.

### 4.16 Cleaning of Roads

- 4.16.1 The Principal Contractor will be required to install a wheel wash during the works. The public roads will be monitored throughout the works and a road sweeper will be employed when required for the duration should the public/campus road network require cleansing.
- 4.16.2 The Principal Contractor will liaise with the local authority and all adjoining owners/residents in respect of the timing and movement of the road sweeper activity.

### 4.17 Site Compound

4.17.1 All construction and demolition (C&D) waste materials will be segregated onsite into the various waste streams, via labelled dedicated skips and storage areas. Waste will be removed from site by a suitably licensed waste haulage contractor. Each waste haulage contractor must hold a current valid waste carrier license issued by the Environment Agency

### 4.18 Construction Site Access

- 4.18.1 Access to the construction site will be via the existing site entrance off Poyle Road.
- 4.18.2 Construction parking area locations are to be selected to avoid any potential impacts to environmental receptors and to reduce any potential for impact on sensitive human receptors.

- 4.18.3 Site compounds will also act as a storage centre for construction materials. Storage of materials will be minimal. No large materials will be stored on site until such times as they are required. At no time during the project will materials or other items be placed outside the hoarding line.
- 4.18.4 The exact locations of the compound areas will be agreed with the Principal Contractor and the Client prior to the commencement of development and will be used throughout the construction period.

### 4.19 Hours of Working

### **Core Working Hours**

- 4.19.1 The timing of construction activities, core working hours and the rate of progress of construction works are a balance between efficiency of construction and minimising nuisance and significant defects. The core construction working hours for the proposed development will be:
  - Monday to Friday: 07:00 to 19:00 and Saturday 08:00 to 13:00, or as directed by the planning authority;
  - Noisy works such as earthworks will be limited to weekdays Monday to Friday 08:00 to 18:00; and
  - Minimal working hours on Sundays, or as directed by the planning authority.

### Start-up and shutdown

4.19.2 The Principal Contractor may require a period of up to one hour before and one hour after core working hours for start-up and shutdown activities in working areas. Activities permitted may include deliveries and unloading of materials, movement of staff to their place of work, maintenance and general preparation works. The use of plant machinery likely to cause disturbance, will not be permitted outside of the core working hours.

### **Additional working hours**

4.19.3 It may be necessary in exceptional circumstances to undertake certain activities outside of the construction core working hours. Any construction outside of the construction core working hours will be agreed by the Principal Contractor in advance with SBC and scheduling of such works shall have regard to nearby sensitive receptors. 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, SBC will be informed as soon as reasonably practicable of the reasons and likely duration and timing (outside of the core working hours).

### 4.20 Security

- 4.20.1 Security will be the responsibility of the Principal Contractor in consultation with the Client. The Principal Contractor will provide adequate security to prevent unauthorised entry to or from the site. The following measures may be used to prevent unauthorised access:
  - Install CCTV and security systems where required;
  - Consult with the Client and SBC on site security matters where required; and,
  - When there is no site activity, close and lock site gates and set appropriate site security provisions as required.
- 4.20.2 The site shall be kept secure at all times with signage indicating that it is a building site with associated dangers in accordance with the Health and Safety Authority Regulations.
- 4.20.3 The Principal Contractor shall provide all necessary security during the progress of the works and shall be responsible for any damage or injury arising from insufficient security.

### 4.21 Hoarding and Fencing

- 4.21.1 A site boundary in the form of hoarding or fencing will be established around each of the working areas before any significant construction activities commences in that working area.
- 4.21.2 The hoarding/fencing shall be a secure boundary to what can be a dangerous environment for those that have not received the proper training and are unfamiliar with construction operations.
- 4.21.3 Site hoarding also performs an important function in relation to minimising nuisance and effects including:
  - Noise emissions (by providing a buffer);
  - Visual impact (by screening the working areas, plant and equipment); and
  - Dust minimisation (by providing a buffer).

### 4.22 Services and Utility

- 4.22.1 Site services shall be installed as part of the works. Working areas will be powered by mains supplies or diesel generators where an electrical supply is not available.
- 4.22.2 The Principal Contractor will be responsible for undertaking their own service and utility review to establish the full extent of underground services prior to the commencement of construction to support any surveys already undertaken as part of early design work and statutory consent applications.
- 4.22.3 The Principal Contractor shall protect drains, manholes, gullies and fittings still in use and ensure they are kept free from debris at all times. The Principal Contractor shall make good any damage from any site clearing works and leave them clean and in working order.

### 4.23 Lighting

- 4.23.1 The following measures will be applied in relation to site lighting:
  - Lighting will be provided with a 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; and
  - Motion sensor lighting and low energy consumption fittings will be installed to reduce usage and energy consumption.

### 4.24 Reinstatement of Working Areas on Completion

- 4.24.1 The Principal Contractor will reinstate all working areas as work proceeds during construction. All plant, equipment, materials, temporary infrastructure and vehicles will be removed at the earliest opportunity and the surface of the ground restored as near as practicable to its original condition.
- 4.24.2 On completion of construction works the Principal Contractor will ensure that all waste and potentially polluting material is removed from the site and is disposed of using appropriately authorised contractors. The Principal Contractor shall, as appropriate, undertake rehabilitation of site compound and other areas no longer to be used by the Principal Contractor.
- 4.24.3 Following site clearance and rehabilitation the Employer or Employer's Representative will undertake a final inspection of the site. Any environmental issues identified during the final inspection will be raised with the Principal Contractor. Mitigation measures and timeframes for completion will be agreed between the Principal Contractor and the Employer's Representative in line with agreed procedures prior to final sign off.

### 4.25 Health and Safety

- 4.25.1 The Principal Contractor would be required to ensure all relevant health and safety, fire safety and security requirements are in place prior to the commencement of construction and in accordance with the relevant legislation requirements in addition to the specifications of SBC and site-specific requirements of the Client.
- 4.25.2 Relevant UK health and safety legislation would be complied with at all times by all construction staff and personnel during construction. Furthermore, the Principal Contractor and all subcontractors would also have to ensure that all aspects of their works comply with good industry practice and all necessary consents, licenses and authorisations have been put in place for the proposed development.
- 4.25.3 The Principal Contractor shall submit their Construction Health and Safety Plan for the project prior to commencement on site.

### 4.26 Cumulative Effects

- 4.26.1 Impacts from the proposed development have the potential to create cumulative effects on receptors during the demolition and construction stages, both within the project and in combination with other developments. The interactions of individual impacts from the proposed development itself on receptors at or surrounding the site can occur during these works ('Intra-Project Cumulative Effects') due to the 'cross-boundary' and 'overlapping' nature of these impacts. An example of potential impact interactions includes the combined effects of noise and dust during the demolition and construction of the proposed development on a sensitive receptor.
- 4.26.2 Cumulative effects can also occur as inter-project (in-combination/in-addition) cumulative effects in conjunction with other proposed developments in the area ('Inter-Project Cumulative Effects'). For example, the effects of construction traffic from two developments being constructed simultaneously.
- 4.26.3 The Principal Contractor would include outline mitigation and management measures (Outline Management Plans 01 to 14) within the CEMP and implement these. This would reduce the potential impacts and any cumulative effects on sensitive receptors associated with the proposed development.

Outline Environmental Management Plan 35

### 4.27 Outline Management Plan Measures

This section sets out the mitigation and management measures that will be implemented during the construction phase of the proposed development. These measures are identified from environmental impact assessment reports, other supporting documentation in relation to the proposed development, standard best practice, consultation responses and relevant local policy. The principal contractor will need to ensure these measures are implemented during the construction phase of the proposed development, as well as any additional measures identified from consents, licences and conditions.

# **OUTLINE MANAGEMENT PLAN 01: AIR QUALITY (DUST)**

Potential Impacts: Dust from construction activities could impact people and the local environment by increasing PM<sub>10</sub> concentrations or settling on surfaces.

**Receptors** (Figure 1.1): Local residents, property and local environment.

**Monitoring**: Environmental manager to carry out weekly visual checks of materials stored on site and dust management measures recorded in Appendix 5 (increase the frequency of inspections during activities with high potential to create dust or during prolonged dry weather).

# **Mitigation and Management Measures** Develop and implement a stakeholder communications plan that includes community engagement before and during work on-site. 1 The dust mitigation and management measures to be adopted are those which are recommended by the Dust Risk Assessment submitted in support of the planning application, 2 subject to the approval of SBC. The following list of mitigation and management measures are anticipated to be required. 3 Display the name and contact details of persons accountable on the site boundary. Display the head or regional office information on the site boundary. 5 Develop and implement a dust management plan. Record all dust and air quality complaints, identify causes and take measures to reduce emissions. Record exceptional incidents and action taken to resolve the situation. 8 Carry out regular site inspections to monitor compliance with the dust management plan and record results. 9 Increase site inspection frequency during prolonged dry or windy conditions and when activities with high dust potential are being undertaken.

Outline Environmental Management Plan 36

Mitig	Mitigation and Management Measures		
10	Plan site layout so that machinery and dust causing activities are located away from receptors, as far as possible.		
11	Erect solid screens or barriers around dusty activities or the site boundary at least as high as any stockpile on site.		
12	Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.		
13	Avoid site run off of water or mud.		
14	Keep site fencing, barriers and scaffolding clean using wet methods.		
15	Remove potentially dusty materials from site as soon as possible.		
16	Cover, seed or fence stockpiles to prevent wind whipping.		
17	Ensure all vehicles comply with the NRMM standards, where applicable.		
18	Ensure all vehicles switch off engines when stationary.		
19	Avoid the use of diesel or petrol powered generators where possible.		
20	Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas.		
21	Only use cutting, grinding and sawing equipment with dust suppression equipment.		
22	Ensure an adequate supply of water on site for dust suppressant.		
23	Use enclosed chutes and conveyors and covered skips.		
24	Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use water sprays on such equipment where appropriate.		
25	Ensure equipment is readily available on site to clean up spillages of dry materials.		
26	No on-site bonfires and burning of waste materials on site.		
27	Ensure effective water suppression is used during demolition operations.		
28	Avoid explosive blasting, using appropriate manual or mechanical alternative.		

Mitig	Mitigation and Management Measures				
28	Bag and remove any biological debris or damp down such material before demolition.				
29	Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless required for a particular process.				
30	Use water assisted dust sweepers on the site access and local roads.				
31	Avoid dry sweeping of large areas.				
32	Ensure vehicles entering and leaving the site are covered to prevent escape of materials.				
33	Record inspection of on-site haul routes and any subsequent action, repairing as soon as reasonably practicable.				
34	Install hard surfaced haul routes which are regularly damped down.				
35	Install a wheel wash with a hard-surfaced road to the site exit where site layout permits.				

## **OUTLINE MANAGEMENT PLAN 02: AIR QUALITY (VEHICLE EMISSIONS)**

**Potential Impacts**: Vehicle emissions could impact people and the local environment by increasing pollutant concentrations.

**Receptors** (Figure 1.1): Local residents, local environment.

Monitoring: Environmental manager to carry out weekly checks of mitigation and management measures, recorded in Appendix 5.

Mitigation and Management Measures			
1	Ensure all vehicles switch off engines when stationary for more than a minute.		
2	Designated managed site entrance and exit points.		
3	Consolidation of loads for delivery to site wherever possible.		
4	Management of deliveries to avoid peak times on weekdays, with restrictions on evenings and weekends.		
5	Provision of storage and marshalling yard for materials on site.		
6	Site plant will be well maintained to ensure engine efficiency. This includes regular servicing and appropriate records.		
7	HDVs to use a suitable holding area where applicable rather than queuing at the site entrance and wait to be called.		

## **OUTLINE MANAGEMENT PLAN 03: THE WATER ENVIRONMENT, CONTAMINANTS**

Potential Impacts: Accidental release of contaminants such as contaminated soils, dust, fuels, oils or liquids into the water environment.

**Receptors** (Figure 1.1): Groundwater and surface water quality.

**Monitoring**: Environmental manager to carry out weekly visual checks of materials stored on site recorded in Appendix 5. Further requirements for monitoring during construction will be confirmed following further investigation of potential contaminated land at the site.

Mitigation and Management Measures				
1	The Principal Contractor will implement a Water Management Plan in line with CIRIA 113 – Control of Ground Water for Temporary Works.			
2	Ensure that existing sewers and drainage systems are intact. Pre and post construction CCTV testing and surveys will be undertaken.			
3	Any site discharge to the existing public drainage system will be through existing sewers. Discharge to public sewers will be subject to Thames Water approval. Appropriate pollution mitigation measures will be provided via the proposed site SuDS, bypass separators and sump/catch-pit manholes, where appropriate.			
4	Minimise storage of hazardous chemicals on site and where storage is necessary, use anti-pollution measures such as bunded trays or leak proof containers.			
5	Any cleaning materials or chemicals used during construction are to be non-hazardous to the water environment.			
6	Any hazardous substances, including oil drums or containers on site, will be managed in accordance with the Control of Substances Hazardous to Health Regulations (COSHH).			
7	Storage of oil shall comply with the Control of Pollution (Oil Storage) Regulations 2001 (SI 2001/2954).			
8	No storage of potentially contaminating materials in areas liable to water inundation.			
9	Silt traps and oil interceptors should be placed on any drains at the site.			
10	Avoid re-fuelling near to water.			
11	Oil spill kits to be kept on site and staff trained in their use.			
12	GI should be undertaken to address areas of uncertainty associated with unknown ground conditions i.e. areas yet to be investigated, soil properties, and the groundwater regime at the site.			

#### **Mitigation and Management Measures**

If potentially contaminated land is confirmed at the site, identification and risk assessment to determine the action to be taken in line with the requirements of the remediation strategy.

#### **OUTLINE MANAGEMENT PLAN 04: ARCHAEOLOGY AND BUILT HERITAGE**

Potential Impacts: Disturbance of known and unknown archaeological material and disturbance or damage to built heritage assets.

**Receptors** (Figure 1.1): Below ground archaeology and built heritage (e.g. listed buildings, conservation areas and scheduled monuments).

**Monitoring**: Liaison with suitably qualified discipline specialist to record and appropriately manage archaeological finds if encountered. Environmental manager to record if archaeological finds have been made or not each week in Appendix 5.

#### **Mitigation and Management Measures**

- An archaeological field evaluation, required as a planning condition, will involve trenching focused on the north-eastern and eastern areas of the proposed development where archaeological potential remains. No groundworks will occur until this evaluation, governed by a Written Scheme of Investigation (WSI) from an accredited firm, is completed and approved by SBC. If significant archaeology is identified, further mitigation will be necessary, preventing groundworks in those areas until excavation is completed and signed off by SBC.
- Liaison with suitably qualified discipline specialist upon discovery of unexpected archaeological material. If any artefacts defined in the Treasure Act 1996 (e.g. human remains, finds of gold or silver) are discovered, the procedures of the Treasure Act 1996 will be followed.
- 3 Provide training to site workers on what to do if archaeological remains are discovered.
- 4 Contractors will be vigilant for archaeological deposits even if none are anticipated to be found.

#### **OUTLINE MANAGEMENT PLAN 05: CONSTRUCTION TRAFFIC**

**Potential Impacts**: Delays and disruption to traffic on local road network.

**Receptors** (Figure 1.1): Public transport users, pedestrians, cyclists and road users and local road network.

Monitoring: Environmental manager to carry out weekly checks of mitigation and management measures, recorded in Appendix 5.

Mit	Mitigation and Management Measures				
1	Works shall be designed and carried out in such a way as to minimise disruptions to traffic flows causing inconvenience to the public and without jeopardising the safety of road users.				
2	Designated managed site entrance and exit points.				
3	Construction traffic vehicle operators to be given clear directions and to be considerate of other road users and the local community. Drivers to take extreme care through residential areas, minimising engine noise and keeping speeds to a minimum. Banksmen will be present during reversing manoeuvres within the site.				
4	The arrival and departure of lorries managed to avoid disruption to peak hour traffic, wherever possible.				
5	Appropriate signage employed to give adequate warning to other road users, especially cyclists and pedestrians.				
6	Consolidation of loads for delivery to site wherever possible. Use of off-site consolidation centres to be considered by the Principal Contractor.				
7	Provision of storage and marshalling yard for materials on site to avoid vehicles reversing onto highway.				
8	All those working on site will ensure, as far as reasonably practicable, that existing public access routes and rights-of-way are maintained during construction. If this is not achievable, a suitable alternative route will be provided and signposted.				
9	Designated construction traffic routes will be used as directed by the Principal Contractor, Highway Authority and the Police, as required by the Highway Authority. Prohibited routes for HGV traffic will be determined by the Principal Contractor.				
10	Encourage construction workers to car-share and use sustainable modes of transport (bus, cycle and/or walking) wherever possible to reduce impact of road traffic on local communities in the region.				
11	Wheel and chassis underside washing facilities to be provided on site to ensure that mud and debris is not spread onto the adjacent public highway.				
12	Protection of contractors working adjacent to the highway and protection of carriageway and footway users at all times during construction.				

#### **Mitigation and Management Measures**

13 Location of on-site/off-site parking areas for contractors' site operatives and visitor's to be considered by the Principal Contractor.

#### **OUTLINE MANAGEMENT PLAN 06: NOISE AND VIBRATION**

**Potential Impacts**: Disturbance of local community and environment.

Receptors (Figure 1.1): Local residents, construction workers and local environment

Monitoring: Carry out regular inspections of noise and vibration mitigation measures to ensure integrity is maintained at all times, recorded in Appendix 5.

## **Mitigation and Management Measures** All works to be carried out in accordance with BS 5228:2009+A1:2014 Code of Practice for noise and vibration control on construction and open sites. All mitigation must refer to this standard in order to minimise noise. Construction works will only be undertaken during agreed day time hours Monday to Friday 08:00 to 18:00 and Saturday 08:00 hrs to 13:00 hrs. Communication with residents and nearby businesses as to the timings of any particularly noisy construction activities. This will include details of the nature of construction, expected duration of activities and predicted noise levels. Contact details will be made available to local residents for consultation regarding construction noise levels. Use of site boundary acoustic barriers/hoarding around the entire site to screen neighbouring receptors. Any damage to this hoarding shall be repaired as soon as possible. Barriers such as soil mounds, site huts, acoustic sheds or partitions will be used to deflect noise away from noise sensitive areas wherever practicable. Gates in hoardings will be positioned - as far as practicable - to minimise noise transmission to near-by noise sensitive buildings. This will take into account noise emerging directly from the construction site and noise from plant entering or leaving the site. Where reasonably practicable, adopt quiet working methods, using plant which generate lower noise and vibration levels. Where reasonably practicable, electrically powered fixed plant will be chosen preferentially over diesel or petrol driven plant to reduce noise. 10 Locate plant away from noise and vibration sensitive receptors. 11 Vehicle and mechanical plant will be fitted with exhaust silencers, and be well maintained. 12 All compressors will be "sound reduced". Models fitted with properly lined and sealed acoustic covers will be kept closed whenever machines are in use. 13 Pneumatic percussive tools will be fitted with a muffler or silencer.

Mit	Mitigation and Management Measures				
14	Equipment that breaks concrete by bending rather than percussion, or any other such equipment as approved by SBC, will be used as far as reasonably practicable.				
15	Avoid unnecessary revving of engines.				
16	Use rubber linings for chutes and dumpers to reduce impact noise.				
17	Switch off equipment when not required, or throttled down to a minimum.				
18	Minimise drop height of materials, taking care when loading or unloading vehicles, dismantling scaffolding or moving materials to reduce impact noise.				
19	Start-up plant and vehicles sequentially rather than all together.				
20	Manage plant movement to take account of surrounding noise sensitive receptors, as far as is reasonably practicable.				
21	Use acoustic enclosures/barriers in accordance with BS 5228 for static items of plant.				
22	Avoidance of shouting.				
23	Noise mitigation measures will design in consultation with Natural England and a suitability qualified ecologist to address noise impacts on the Wraysbury Reservoir SSSI. This will include, but not limited to restriction on noisy activities during the particularly sensitive periods of time in the early morning and early evening.				

#### **OUTLINE MANAGEMENT PLAN 07: LIGHTING**

**Potential Impacts**: Disturbance of local community and environment

**Receptors** (Figure 1.1): Local residents and local environment

Monitoring: No specific monitoring required

#### Mitigation and Management Measures

- Site lighting will be positioned and directed so as not to unnecessarily intrude on adjacent buildings, habitats and other land uses, or to cause distraction or confusion to passing traffic.
- Design of external lighting should be mindful of the requirements to ensure that lights are not dangerous, confusing or dazzling to pilots on approach or taking off from aerodromes.
- Lighting will be designed in accordance with the relevant guidance (BS5489 Code of Practice for the Design of Road Lighting, Guidance Notes for the Reduction of Light Pollution GN01 2005).
- 4 The construction lighting will need to be designed with a suitably qualified ecologist to ensure appropriate bat mitigation measures are implemented.

#### **OUTLINE MANAGEMENT PLAN 08: CONTAMINATED LAND**

**Potential Impacts**: Risk of harm to human health or pollution of the environment

**Receptors** (Figure 1.1): Construction Workers, the local community and the local environment

**Monitoring**: Requirements for monitoring during construction will be confirmed following further investigation of potential contaminated land at the site.

Mitigation and Management Measures				
1	GI should be undertaken to address areas of uncertainty associated with unknown ground conditions i.e. areas yet to be investigated, soil properties, and the groundwater regime at the site.			
2	Review and compliance with the requirements set out in the Outline Remediation Strategy.			
3	If contaminated land is confirmed at the site: Implementation of agreed and approved unexpected finds strategy to address issues surrounding identified contamination.			
4	Use of standard Personal Protection Equipment, such as gloves, overalls and dust masks where necessary. See the remediation strategy for further comment including the requirements to address risks from asbestos in soils.			
	(This OCEMP does not cover Health and Safety requirements. Health and Safety procedures should be documented separately as appropriate)			
5	Tool box talks will be given to workers to make them aware of potential risks associated with contaminated soils.			
6	If UXO is uncovered during works, the Police will be informed immediately, and action taken as directed by them.			
7	On-going boundary monitoring on a regular basis to verify the controls are appropriate and preventing fugitive emissions of dust, odour, vapour and asbestos. Development of an Asbestos Management Plan and ensuring minimisation of asbestos risks.			
8	Stockpile management plans to segregate and handle materials according to their characteristics, implemented to avoid cross-contamination during earthworks.			
9	Implementation of damping down procedures to control dust emissions during excavation and handling of Made Ground/landfill materials. Controlled excavations to minimise dust, odour, vapour and asbestos fugitive emissions being generated.			
10	Segregation and transfer of pile arisings that comprise landfill waste to covered stockpiles to limit fugitive emissions of dust and odours.			
11	Mitigation of surface water run-off and management of groundwater within excavations.			
12	Establishment of temporary measures to collect and dispose of water from excavations (if required), either via tanker or discharge to sewer with appropriate consents.			

Mitiga	Mitigation and Management Measures				
13	Use of spill mats and absorbency granules for equipment to prevent fuel and oil leaks from plant.				
14	Ensuring vehicle cleanliness to avoid tracking mud or contaminated soils off-site.				
15	Measures to minimise odours from fill materials e.g. controlled excavation, allowing strong odours to dissipate locally prior to transfer of material, covering materials prior to transfer, storing malodourous soils in covered stockpiles or skips.				
16	Ground gas monitoring prior to and during works in excavations given the significant potential for landfill gas accumulation and asphyxiation risk				
17	Ongoing groundwater and surface water monitoring proposed to evaluate potential redistribution of contaminants during enabling works including piling.				
18	Identification of appropriate off-site disposal routes for materials unable to be reused, with landfill as a last resort. Laboratory analysis for waste classification and compliance with Duty of Care Regulations for off-site material movements.				

#### **OUTLINE MANAGEMENT PLAN 09: ECOLOGY**

**Potential Impacts**: Disturbance or loss of habitats and invasive species

Receptors (Figure 1.1): Local habitats and species, including protected species

**Monitoring**: No specific monitoring required

#### Mitigation and Management Measures

Implementation of construction mitigations provided in the Habitat Regulations Assessment (as required).

Prior to the commencement of development, a Habitat Management and Monitoring Plan (HMMP) will be prepared to ensure the long-term management of the proposed habitat enhancements, including proposed tree, hedge, shrub, and grassland planting. The Principal Contractor shall implement mitigation set out within the HMMP and that presented within the Ecological Impact Assessment (EcIA) (Report Reference: TG Report No.16194 R03 GW, Dated 26th November 2024). This will include, but not limited to:

- Provision of bat roost boxes; and
- Provision of bird nest boxes.

Prior to the commencement of any demolition and construction on site, as the site is situated within a SSSI Impact Risk Zone, consultation with Natural England will be undertaken via their Discretionary Advice Service (DAS) to address potential impacts on this designated area. To minimise any adverse effects on the SSSI and other nearby non-statutory ecological sites during construction, robust mitigation measures will be developed and enforced by the Principal Contractor. This plan will include:

- Implementation of sensitive lighting strategies to avoid disturbance to protected species (i.e. bats);
- Adoption of noise management strategies to reduce acoustic impacts on the Wraysbury Reservoir SSSI; and
- Additional site-specific measures to address risks identified during the DAS consultation process and ecological assessments.
- If a protected species is found or suspected to have been found or if there are any queries regarding ecology and working method, Principal Contractor to contact suitably qualified ecologist
- The Principal Contractor will ensure compliance with relevant statutory provisions in respect of the protection of areas of nature conservation interest and protected species.

A watching brief for nesting birds must be carried out by a suitably qualified ecologist during vegetation removal within the nesting bird season (March to September). A preworks check by a suitably qualified ecologist is required to confirm the presence or absence of active nests. Although the nesting season is generally considered to fall between March and September, birds may nest outside this period.

6

3

All wild birds, their nests, and their eggs are protected by law. It is an offence to:

- Intentionally kill, injure, or take any wild bird;
- Intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built;

#### Mitigation and Management Measures • Intentionally take or destroy the eggs of any wild bird. To comply with legislation, the clearance of suitable nesting habitats (including buildings, trees, and hedgerows) should be scheduled outside the nesting bird season where possible. If any clearance of nesting habitats is required during the nesting season, pre-removal checks for nesting birds must be conducted by a suitably qualified and experienced ecologist no more than 48 hours before works commence. 7 If any nesting birds are identified, an appropriate buffer zone will be established. No works will be permitted within this buffer zone for the duration of the breeding attempt. Active nests must remain undisturbed until a suitably qualified ecologist confirms that the chicks have fledged and the nest is no longer active. If more than 12 months elapse between the date of the emergence bat survey (conducted 25 July 2024) and the commencement of demolition on-site, a repeat bat survey will be required. The demolition of buildings will be carried out in the presence of a suitably qualified ecologist. Any section of a building containing potential roosting features must be inspected by a licensed ecologist at least 48 hours prior to the start of demolition activities. The Principal Contractor will provide measures to ensure that invasive species are not spread across the site or allowed to spread further to the surrounding environment. 10 Measures shall also be put in place to inform site staff of the risks of harmful plants and allow plants that present a risk to safe working to be identified and managed. It is recommended that expert advice from a suitably qualified invasive weed control specialist is sought prior to attempting control of these species.

#### **OUTLINE MANAGEMENT PLAN 10: CONSTRUCTION WASTE**

Potential Impacts: Waste generation from construction activities, harm to environment and nuisance to local community

**Receptors** (Figure 1.1): Materials, resources and habitats

Monitoring: Principal Contractor to document waste disposal

Mit	Mitigation and Management Measures				
1	Provision of waste storage for the segregation of waste into recyclable waste streams and general waste with appropriate direction and signage.				
2	All waste storage containers and areas should be designed to prevent waste being blown away by wind or being taken by animals to prevent litter entering the environment.				
3	Provision of bins for the collection of litter produced on site by construction workers and site visitors.				
4	Suitable disposal of invasive plant species if encountered.				
5	Avoiding over-purchasing and implement 'Just-in-Time' methods by arranging accurate delivery times.				
6	Consideration of materials end of life; use of re-usable or recyclable materials where possible.				
7	Packaging will be reduced as much as possible, such as by selecting suppliers that use minimal packaging or take back reusable packaging.				
8	Waste will be disposed of at a facility that is licenced to accept such waste, following the proximity principle where possible.				
9	Waste will be transported off-site only by vehicles with a waste carrier's registration.				
10	Food waste and other material attractive to pests will be removed frequently to minimise the risk of infestation by pests or vermin. If infestation occurs the Principal Contractor must ensure that action is taken as required by SBC EHO.				
11	Fly-tipping on site will be strictly prohibited. The Principal Contractor will ensure that fly-tipping by others does not occur on site by ensuring adequate site security.				
12	If there are any contaminated land waste arisings: Implementation of agreed and approved strategy to address issues surrounding identified contamination.				
13	Segregation of Hazardous and Non-Hazardous Waste.				

#### **OUTLINE MANAGEMENT PLAN 11: ARBORICULTURE**

Potential Impacts: Disturbance and damage of on-site trees and hedges

**Receptors** (Figure 1.1 and Table 1.1): On-site trees and hedges.

Monitoring: No specific monitoring required

#### **Mitigation and Management Measures**

Root Protection Areas maintained for all retained trees. Some disturbance of the Root Protection Area may be acceptable but must be kept to a minimum. Construction methods should be adopted that are sympathetic to root requirements.

2 Further arboricultural advice should be sought if underground services are to pass within Root Protection Areas.

A full site-specific Arboricultural Method Statement will be required to ensure that trees are protected during the construction phase. The methodology of the Arboricultural Method Statement would include:

- A schedule and specification of tree removal and pruning works;
- Specifications for tree protection barriers and ground protection;
- Procedures for any specialist construction techniques or any supervised excavations within root protection areas;
- Phasing of work;

3

- Site monitoring (where required); and
- A tree protection plan.
- 4 The Principal Contractor will ensure that retained hedgerows are protected using appropriate protection measures provided by an arborist, in accordance with British Standards.

#### **OUTLINE MANAGEMENT PLAN 12: SOCIO-ECONOMICS**

**Potential Impacts**: Increase employment opportunities during the construction

**Receptors** (Figure 1.1 and Table 1.1): Local economy and community.

Monitoring: No specific monitoring required

N.B. Mitigation of potential impacts on socio-economic receptors have been considered throughout this OCEMP. See Air Quality, Noise, Contamination sections for further information.

#### **Mitigation and Management Measures**

The Principal Contractor would seek to work with local education and training centres, and industry bodies, to provide apprenticeships and training opportunities, particularly for those in the NEET category (Not in employment, education or training).

#### **OUTLINE MANAGEMENT PLAN 14: AVIATION**

Potential Impacts: Impact on the flight path to Heathrow during the construction

**Receptors** London Heathrow Airport and RAF Northolt Aerodrome

Monitoring: No specific monitoring is required

#### **Mitigation and Management Measures**

- The Principal Contractor needs to ensure all structures including construction cranes for the proposed data centre, comply with height limits set by Heathrow's take-off climb surface (TOCS) and other Obstacle Limitation Surfaces (OLS).
- Prior to the commencement of construction on site, the Principal Contractor needs to ensure ongoing consultation to confirm compliance with both London Heathrow Airport and RAF Northolt Aerodrome airports' requirements and agree a construction methodology.

Prior to commencement of construction on site, it is necessary that construction plans ensure cranes comply with the aviation constraints at this location. For the construction crane usage:

- Plan crane operations carefully to avoid violating Heathrow's OLS limits and aviation constraints;
  - Ensure headroom for cranes, as required for saddle jib tower cranes; and
  - Coordinate crane heights and movements with Heathrow for final approval through consultation.
- Prior to commencement of construction on site, London Heathrow Airport will need to review the crane plans. If required, an assessment will required to assess the potential impact of construction cranes on flight operations, ensuring an Instrument Flight Procedure (IFP) check by the Approved Procedure Design organization (APDO) as mandated by the aerodrome due to the site's sensitivity beneath flight paths before construction may be requested.
- Develop a bird hazard management strategy by a suitably qualified ecologist to minimise the attraction of birds due to the potential impact on aircraft, encompassing the management of food, water, and shelter sources that could attract birds. Management of water accumulations that may otherwise attract birds may be required during site preparation and construction activities.
- 7 Ensure external lighting complies with aviation safety standards to avoid glare or confusion for pilots and air traffic control (ATC).
- If PVs form part of the design, the Principal Contractor will ensure the installing of PV with anti-reflective coating and use mounted frames to minimise any potential glare impacts.

3

# APPENDIX 1 RISK ASPECTS AND IMPACTS TEMPLATE

[To be filled in and made site and stage appropriate]

Ref	Receptor	Objective	Action (including any monitoring required)	Achievement criteria and reporting requirements (if applicable)	Responsible party	Opened by	Actioned by	Closed by
[Insert]	[Insert]	[Insert]	[Insert]	[Insert]	[Insert]	[Insert]	[Insert]	[Insert]

## APPENDIX 2 CONSTRUCTION METHOD STATEMENTS

To be appended by Principal Contractor when available

# APPENDIX 3 ROLES AND RESPONSIBILITIES

# SITE ENVIRONMENTAL MANAGEMENT ROLES AND RESPONSIBILITIES

This table is to be completed and displayed at the site office.

Role	Responsibilities			
All site workers/contractors / sub-contractors and persons working on site	All site personnel will be required to be familiar with the requirements of the CEMP. Attend site induction with site manager to be briefed on the environmental sensitivities of the site and the requirements of this CEMP.			
Site manager Name: [Insert] Tel: [Insert]	Accountable for the overall performance of the CEMP and adherence to environmental commitments. Responsible on-site for the day to day management of the construction project and practical implementation of the CEMP.			
Environmental manager Name: [Insert] Tel: [Insert]	Responsible for the overall environmental performance.  To develop the CEMP document and environmental management systems and maintain it as a working document, undertaking reviews and updates as required.  Responsible for ensuring compliance with the relevant environmental legislation, regulations and standards.  Responsible for obtaining environmental specialist support as and when required.  Responsible for advising on activities that have a potential impact on the environment and undertaking of monitoring as where appropriate.  Responsible for ensuring mitigation measures are implemented correctly across the			
	site and implementing any required remediation measures.  Manage any environmental incidents which may occur in line with the requirements in the CEMP Emergency Responses.			
Public liaison officer  Name: [Insert]  Tel: [Insert]	Responsible for facilitating communication with the public and businesses during construction. Contact details will be made available for consultation regarding construction impacts such as noise.			
Logistics manager Name: [Insert] Tel: [Insert]	Responsible for all lorries delivering to, or exiting from, the worksite. Responsible for the Construction Traffic Management Plan, to maintain it as a working document, undertaking reviews and updates as required. Ensures that delivery drivers meet the requirements of the CEMP.			
Environmental specialists  Name: [Insert if Required]	In the event that environmental specialists are required, the environmental manager will provide these services or identify and obtain suitable persons (e.g. ecologist).  Responsible for specific environmental aspects and management of construction			
Tel: [Insert if Required]	activities that could have an impact on the specialist area.			

# APPENDIX 4 COMPLAINTS LOG

## **COMPLAINTS LOG**

Reference	Date	Nature of Complaint	Cause of Complaint	Remedial Action Taken	Follow Up
[Insert]	[Insert]	[Insert]	[Insert]	[Insert]	[Insert]

# APPENDIX 5 MONITORING RECORDS

## **MONITORING RECORDS**

Date	Name, Role and Signature	Comments, Issues and Actions Taken			
	Weekly Review of Mitigation and Management Measures  Review the mitigation and management measures are ensure they are being implemented				
Week 1 XX/XX/XX	[Insert]	[Insert]			
	Checks of Material Storage on Sention of dust generation and the s				
Week 1 XX/XX/XX	[Insert]	[Insert]			

Outline Construction E	nvironmental	Manager	nent Plar
------------------------	--------------	---------	-----------

APPENDIX 6
REGISTER OF NON-COMPLIANCE, CORRECTIVE AND PREVENTATIVE ACTIONS

# REGISTER OF ENVIRONMENTAL ISSUES, NON-COMPLIANCES, ACCIDENTS, CORRECTIVE AND PREVENTATIVE ACTIONS

	Issued Raised by (Name/Organisation)	Environmental Issue, Non- compliance Incident and Accidents	Corrective and Preventative Actions Taken
1	[Insert]	[Insert]	[Insert]
2			
3			
4			
5			
6			
7			
8			
9			
10			

# APPENDIX 7 EMERGENCY PROCEDURES

To be appended by Principal Contractor when available

Outline Construction Environmental Management Plan

APPENDIX 8
REGISTER OF CONSENTS, LICENCES AND PERMISSIONS

## **REGISTER OF CONSENTS, LICENCES AND PERMISSIONS**

Type and Reference	Required by (Date)	Current Status	Comments
[Insert]	[Insert]	[Insert]	[Insert]
[Insert]	[Insert]	[Insert]	[Insert]
[Insert]	[Insert]	[Insert]	[Insert]
[Insert]	[Insert]	[Insert]	[Insert]
[Insert]	[Insert]	[Insert]	[Insert]
[Insert]	[Insert]	[Insert]	[Insert]
[Insert]	[Insert]	[Insert]	[Insert]