



Site Condition Report - ZP3527SS

Union Park Data Centre

Date: November 2024

Issue: 1.0

Reference: 10276084

Status: First Issue

Issuing office: Glasgow

DOCUMENT CONTROL

Issue	Date	Status	HDR Author	HDR Approval	Notes
1.0	01/11/2024	Final	02/09/2024_KC	25/10/2024_NS	First Issue

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1.0 INTRODUCTION

This Site Condition Report (SCR) (or 'Site Baseline report') has been prepared by HDR Consulting Limited (HDR) on behalf of the operator, *Ark Data Centres Limited (Ark)* in support of the Environmental Permit (EP) application for the following installation:

**Union Park Data Centre
Bulls Bridge Industrial Estate
North Hyde Gardens,
Hayes, UB3 4DG,
Grid Ref: TQ 10436 79275**

This SCR is intended to provide the Environment Agency (EA) with a description of the baseline conditions prior to site operations commencing. The baseline data presented herein should be referred to upon surrender of the site's environmental permit (once issued) to demonstrate no deterioration of the land has occurred due to operations.

This is a multi-permit installation with part owned and operated by Ark, ZP3527SS, and an existing permit (DP3442QV) held by a separate legal operator. The installation boundaries are shown in Appendix A. This SCR has been prepared to cover the entire campus covered by Planning Application ref: 75111/APP/2020/1955 and 75111/APP/2022/1007. This approach has been taken as the site investigations and subsequent remediation works have been carried out across the whole campus prior to the decision that this would become a multi operator campus.

This report has been prepared based on the information made available and the conditions at the time of writing. This report is only valid to the extent that the information provided was accurate and complete.

This SCR has been prepared in accordance with the EAs guidance for Applicants (H5) – Site Condition Report document with Sections 2-4 submitted with the application for a permit.

Sections 5-8 are to be maintained during the life of the permit.

Sections 9-11 are to be completed if / when the permit is surrendered.

2.0 BACKGROUND

2.1 Site details

Applicant	Ark Data Centres Limited
Site Name	Union Park Data Centre
Installation address	North Hyde Gardens, Bulls Bridge Industrial Estate, Hayes UB3 4DG
National grid reference	TQ 10436 79275
Document reference and dates for Site Condition Report at permit application and surrender	Application submitted: tbc Permit reference: ZP3527SS Permit issued: tbc Permit surrendered: tbc
Document references for site plans (including location and boundaries)	Appendix A – Site Plan and Emissions Points

2.2 Site development plans

The Union Campus, when completed, will see a number of buildings constructed including x3 data centres (or 'data halls') which will house various IT equipment. These data halls will be primarily fed from the grid with emergency power provided by x3 energy centres (ECs) which house the Emergency Standby Generators (ESGs).

The legal operator of Energy Centre 3 (EC3) is Ark. EC3 will include 12 no. ESGs (Emergency Standby Generators) with associated fuel tanks and urea tanks that supply the selective catalytic reduction (SCR) systems on each generator. The locations and layouts can be seen in Appendix A.

2.3 Site activities

Under normal circumstances, electricity to the data centre will be provided directly from the National Grid North Hyde Electricity Substation at 66kV, via the Ark-owned 66/11kV Primary Substation on the Union Park site. Reliability of the electricity supply is critical to a data centre and, as such, current plans are to install 12 no. ESGs to provide standby power in the event of an outage/failure in the electricity supply. The ESGs are on site solely to support the data centre when the main electricity supply is not available and will run on Diesel / Hydrotreated Vegetable Oil (HVO).

The total rated thermal input of the 12 no. ESGs is approximately 96.11 MWth (refer to Thermal Schedule in supporting information). The location of the generators, fuel tanks, emissions points (flues/stacks) and surface water connections are shown in the site plan found in Appendix A. The installation boundary encompasses the listed activities only.

Further details can be found in the Environmental Risk Assessment (ERA) and Non-technical summary (NTS) that accompanied the application for an Environmental Permit.

2.4 Site investigations

The following site investigations were completed as part of planning requirement for the development of the site. As such, the investigations were carried out in phases across the various areas that constitute the campus. Appendix B identifies the areas covered by the investigation reports listed below:

- Phase 1 Environmental Risk Assessment Report – BA, Vodaphone & Abellio (Paragon 2021) (Appendix E).
- Phase 2 Ground Investigation Report (Paragon 2021) – BA & Vodaphone (Appendix F).
- Phase 2 Ground Investigation Report (Paragon, 2021) – Abellio (Appendix F)

Supplementary reports to these have also been completed as follows:

- Block 3 and Abellio IED Assessment Letter (Colliers, 2024) – BA, Vodaphone and Abellio (Appendix C).
- Verification Report for Data Centre 1 and Visitor Centre (Paragon, 2023) – BA, Vodaphone & Abellio (Appendix D)
- Groundsure Reports (Appendix H).
- Detailed Quantitative Risk Assessment (Paragon, 2021) – BA & Vodaphone (Appendix I).
- Remediation Strategy (Paragon, 2021) – BA & Vodaphone (Appendix J).
- Groundwater Monitoring Report Final (Paragon, 2022) – BA & Vodaphone (Appendix K)
- Paragon Piling Works Risk Assessment (Paragon, 2021) – BA & Vodaphone (Appendix L)
- Paragon Piling Works Risk Assessment (Paragon, 2021) – Abellio (Appendix M)
- UXO Environment Letter Report Final (Paragon, 2022) – Abellio (Appendix N)

A Preliminary Risk Assessment Overview (Appendix C) has been produced to provide information about soil and groundwater quality covering the EC3 site, including the BA, Vodaphone and Abellio plots.

The Phase 1 and 2 reports for the former British Airways and Vodaphone plots of land were completed by Colliers (formerly Paragon) in 2019 for due diligence purposes and were updated and submitted to planning in 2021. These reports identified the presence of some degree of contamination associated with the historical land use. As such, recommendations were made for additional assessments prior to redevelopment.

Additional boreholes were completed by Colliers in 2020 (updated and submitted to planning in 2021). This identified that Detailed Quantitative Risk Assessment (DQRA) was required to understand the risks to the River Crane/Yeading Brook. A DQRA (Appendix I), Remediation Strategy (Appendix J), followed by the necessary Groundwater Monitoring (Appendix K) and Verification (Appendix D). Reports have been prepared. These demonstrate that the mitigation measures put in place to reduce the risks to human health and Controlled Waters have been successfully implemented and no further works are required, and that the site does not pose any significant risks to Controlled Waters (River Crane).

In addition to this, as agreed with the London Borough of Hillingdon, a Remediation Strategy was to be prepared to state the mitigation measures required to be put in place to reduce the risks to human health and Controlled Waters. This report was submitted to discharge multiple conditions associated with the planning application ref. 75111/APP/2020/1955. Monitoring associated with this planning condition has been completed and currently there is no further ground water monitoring required to discharge this condition.

A Groundwater Monitoring Report has been prepared by Colliers (Appendix K), to demonstrate that the construction activities have not impacted the River Crane. This report demonstrates that the demolition and groundworks have been carried out in accordance

with Planning requirements. A report was submitted to the LPA discharging Condition 33, thus demonstrating that the site is free from potentially hazardous contamination and that remediation was successful.

The Phase 1 and 2 investigation works for the Abellio Plot (containing the visitor centre) did not identify any contamination on this portion of the site. As a result, no DRQA, Remediation Strategy or Groundwater Monitoring was necessary. A Verification Report for the Abellio plot is therefore not required and no further mitigation measures or remediation works are warranted.

An anomaly was identified during an Unexploded Ordnance (UXO) spot-check of a borehole as part of the Ground Investigation by Colliers. The anomaly was excavated in February 2022 and an Environmental Letter was provided including a clearance letter of the UXO (Appendix N).

2.5 Proposed monitoring

The sole risk to soil and groundwater is regarded to be the use of liquid fuels such as Diesel / HVO. The installation of boreholes to facilitate ongoing soil and groundwater monitoring is going to increase the risk to the environment as it will present a potential pathway to ground for pollutants e.g. in the unlikely event of a spillage.

To mitigate the risks of spillages and fuel entering the environment, the site has primary, secondary and tertiary containment systems, with leak detection in place along with comprehensive spill control Site Operating Procedures (SOPs) and Emergency Operating Procedures (EOPs) in place, to prevent and contain pollution at source before it enters the environment.

Given the above we are proposing that there is no requirement to complete ongoing soil and groundwater monitoring unless there is a pollution incident that warrants further investigation e.g. significant spillage which has led to pollution of the environment.

3.0 CONDITION OF THE LAND AT PERMIT ISSUE

Table 3.1 – Environmental setting

Condition area	Description
<p>Geology</p> <p>Data source:</p> <ul style="list-style-type: none"> Appendix F and Appendix G – Phase 2 Ground Investigation Reports Appendix H – Groundsure Report Appendix C – Preliminary Assessment 	<p>The geology of the site is London Clay Formation, overlain by Lynch Hill Gravel, Alluvium and Langley Silt. Portions of the site are classified as made or infilled ground, although the rock description of these areas are unknown/unclassified. This information is taken from the Groundsure maps and the 2019 ground investigation report.</p> <p>Site investigations completed in 2019, which included 36 exploratory holes, found that the made ground comprised of black sandy gravel of fine to coarse, angular to sub-angular brick, flint and clinker to a depth of circa 5mbgl. The site investigation report (Appendix G) for the former Abellio plot (containing the visitor centre) found that the site geology is comprised of Lynch Hill gravel, Langley silt and London Clay. The Preliminary Assessment (Appendix C) states a Soil Organic Matter (SOM) content of 2.5% for the Made Ground ranged and 1% for the natural soil.</p> <p>Stability maps indicate that the site is very low risk for collapsible ground stability hazards, landslide ground stability hazards and negligible for ground dissolution stability hazards and running sand ground stability hazards.</p> <p>The site is low risk for running sand conditions and for shrinking or swelling ground stability hazards.</p> <p>The site is very low and moderate risk (moderate risk across most of the site) for compressible and uneven settlement hazards.</p>
<p>Hydrogeology</p> <p>Data source:</p> <ul style="list-style-type: none"> Appendix A – Site Plan and emission points Aquifer designation and Soilscape mapping available at www.magic.gov.uk Appendix C – Preliminary Assessment 	<p>The shallow superficial deposits (Lynch Hill Gravel, Alluvium and Langley Silt) are classified as Secondary and Principal Aquifers. These were formally known as minor and major aquifers respectively. The principal aquifer can provide a high level of water storage and can support water supply/river base flow strategically. The Secondary A aquifer is similar but capable of these tasks on a local level. The underlying London Clay Formation is an Unproductive Stratum and therefore is in an area of low permeability with negligible significance for water supply and river base flow. The DQRA (Appendix I) completed permeability testing which identified that the risks to the underlying aquifer are low.</p> <p>Due to the aquifers that the site sits upon, there is a high level of groundwater vulnerability, meaning pollutants are easily transmitted within the near surface groundwater. The soil can be described as high leaching with absence of low permeability superficial deposits. There is no soluble rock risk within this site.</p> <p>There are no sensitive potable abstraction points within 1km of the site. The site is not in a Source Protection Zone.</p> <p>The Department for Environment Food & Rural Affairs (DEFRA) “MAGIC map” tool shows that the soil scape has loamy soils with naturally high groundwater.</p>

Condition area	Description
<p>Hydrology</p> <p>Data source:</p> <ul style="list-style-type: none"> • Appendix H - Groundsure Report • Environmental Agency Flood map for planning 	<p>The River Crane runs along the Eastern site boundary and the Grand Union Canal is located South of the industrial estate. The River Crane leads into the Yeading Brooke and contains water year-round in normal circumstances. The river achieves a chemical rating of 'Fail' and an overall rating of 'Moderate'. The risk of flooding from this source is reported as medium/high near the river source at the edge of the site boundary (1 in 30-year return), but non-existent within the permit boundary (greater than a 1 in 1000-year return).</p> <p>There have been 0 records of historical flood events within 250m of the river. The river is not thought to benefit from any flood defences and currently does not have any in place. In addition, the river is some 5m below the site level.</p> <p>There is a high risk of surface water (pluvial) flooding in some areas on site, with a 1 in 30-year return for 0.3-1.0m flooding. Extreme rainfall events can lead to this type of flooding. Surface water attenuation has been provided to accommodate all storms up to and including the 1 in 100-year return period with an allowance for 40% climate change.</p> <p>Flooding from groundwater is expected to be low across the full site with potential for moderate levels encroaching on the Western site boundary.</p>

Condition area	Description
<p>Ecological Designated Sites</p> <p>Data source:</p> <ul style="list-style-type: none"> Appendix H – Groundsure Report 	<p>There are no Sites of Special Scientific Interest (SSSI), Ramsar sites, Special Areas of Conservation (SAC), Special Protection Areas (SPA), National Nature Reserves (NNR), Local Nature Reserves (LNR), Designated Ancient Woodland, Biosphere Reserves, Forest Parks, Marine Conservation Zones, Nitrate Sensitive Areas, Nitrate Vulnerable Zones or proposed/potential Ramsar, SAC or SPA within 2000m of site.</p> <p>There are 10 Local Wildlife Sites (LWS) within 2000m from the site. These are:</p> <ul style="list-style-type: none"> London’s Canals Yeading Brook, Miner Country Park and Hitherbroom Park Crane Corridor Cranford Countryside Park and Open Space Hartlands Wood and Lower Park Farm Lake Farm Country Park Cranford Lane Gravel Workings Airlink Ponds Bolingbroke Way Sunken Pasture St Mary’s, Wood End <p>The closest SAC, SPA and Ramsar sites are within 10000m of the site. These are:</p> <ul style="list-style-type: none"> Richmond Park (SAC) Sotuh West London Waterbodies (SPA and Ramsar) <p>There are three non-statutory local planning authority designated conservation areas within 200m of the site. These are:</p> <ul style="list-style-type: none"> Botwell, Nestles (18m SW) (Hillingdon) Bulls Bridge (83m SE) (Hillingdon) Canalside (157m SE) (Ealing) <p>There are 15 areas of Green Belt within 2000m of the site. These areas are protected to prevent urban sprawl, meaning that the potential for future additional sensitive human receptors is unlikely. These Green Belts are located in Hounslow, Hillingdon and Ealing local authorities.</p>

Table 3.2 – Pollution history:

Condition area	Description
<p>Pollution incidents</p> <p>Data source:</p> <ul style="list-style-type: none"> Appendix H – Groundsure Report 	<p>According to Groundsure’s database there have been no historic pollution incidents on site.</p> <p>There are reports of 15 pollution incidents within 500m of the site. 14 of these have been classed as either No impact or Minor. The only Significant impact was in June 2020 and this was approximately 116m NE. This was pollution to water of an “unidentified oil”.</p> <p>There was a licensed pollutant release on site by British Airways. The operator held a Part B permit. The pollutant was released through Surface Cleaning. British Airways were also authorised to use Mercury and Cadmium within operations, with the receiving water noted as Thames Estuary. This occurred 150m South of the site.</p>
<p>Historical land-uses and associated contaminants</p> <p>Data source:</p> <ul style="list-style-type: none"> Appendix H – Groundsure Report 	<p>The earliest available map from 1865 shows the site as mostly vacant with a river running north to south along the eastern part of the site. This map also shows a railway and creosoting works in the northeast corner. By 1932, the creosoting works had extended into the site and a building was shown in the centre.</p> <p>Excavations and ground workings were noted onsite by 1963 to 1964. The creosoting works were no longer shown by 1973 and a power station with chimney was shown in the western part of the site by 1983. Around a similar time (c. 1982) the Abellio plot had been levelled but was undeveloped. By 2002, the power station was no longer shown and the British Airways building was shown. Vodafone and Abellio were formed in their current layouts by 2010.</p> <p>The surrounding area has supported various industrial (potentially contaminative) land uses, including factories (50m all directions), brick fields (200m northwest), mills (200m northwest), railway (10m north), electricity substation (100m south), creosoting works (1m east and northeast), and rubber works (200m east).</p>

Condition area	Description
<p>Waste management facilities</p> <p>Data source:</p> <ul style="list-style-type: none"> Appendix H – Groundsure Report 	<p>Landfill Sites</p> <p>There are four Historical Landfill sites recorded within 500m of the site. Two of which were located on site. Details of these are shown below:</p> <ul style="list-style-type: none"> Unidentified Operator. Onsite. Inert, commercial, and household waste. Last recorded on 31/12/1936. Unidentified Operator. Onsite. Inert, commercial, and household waste. Last recorded on 31/12/1936. Unidentified Operator. 57m SE. Inert, industrial, commercial, household and special waste. Last recorded on 31/12/1949. Unidentified Operator. 116m NE. <p>No further details are provided on the above historic landfills. There are also no active landfill sites listed within 500m of the site.</p> <p>Licensed Waste Management Facilities</p> <p>There are nine Licensed Waste Management Facilities within 500m of the site:</p> <ul style="list-style-type: none"> 159m E, Operator: F M Conway Limited, Type of site: Physical treatment facility (>=75,000 tonnes), Annual tonnage: 304999 tonnes, License issued: 03/02/2015. 190m E, Operator: F M Conway Limited, Type of site: (>=75,000 tonnes), Annual tonnage: 270,000 tonnes, License issued: 03/02/2015. 219m N, Operator: Personal Hygiene Services Ltd, Type of site: Clinical waste transfer station (25,000 tonnes), Annual tonnage: 24,999 tonnes, License issued: 08/01/1999 and modified 13/09/2017. 227m N, Operator: Personal Hygiene Services Ltd, Type of site: Clinical waste transfer station (25,000 tonnes), Annual tonnage: 0 tonnes, License issued: 08/01/1999. 311m N, Operator: Rentokil Initial UK Ltd, Type of site: Special waste transfer station (25,000 tonnes), Annual tonnage: 0 tonnes, License issued: 27/09/1994 and modified 29/08/1997. 321m N, Operator: Rentokil Initial UK Ltd, Type of site: Special waste transfer station (25,000 tonnes), Annual tonnage: 0 tonnes, License issued: 27/09/1994 and surrendered 23/12/2008. 372m SE, Operator: Personal Hygiene Services Ltd, Type of site: Clinical waste transfer station (25,000 tonnes), Annual tonnage: 857 tonnes, License issued: 11/12/1991 and surrendered 31/07/2000. 428m E, Operator: J Simpson Waste Management Ltd, Type of site: Household, Commercial & Industrial waste transfer station (unknown tonnes), Annual tonnage: unknown, License issued: 08/04/2021. <p>Waste Exemptions</p> <p>There are 37 facilities within 500m of the site that have an exemption for waste activities such as storage, treatment, use or disposal of waste.</p>

Condition area	Description
	<p>Licensed Industrial Activities (Part A(1)) There are 9 records of Part A(1) installations regulated by the Environmental Permitting (England and Wales) Regulations 2016 within 500m of the site.</p> <ul style="list-style-type: none"> • 142m W, Nestle UK Ltd, Combustion (any fuel >= 50MW), Permit no.: VP3332ST, Status: Surrendered • 343m SW, FM Conway Ltd, Temporary storage of hazardous waste not under S5.2 pending activities listed in S5.1, 5.2, 5.3 and paragraph (b) of this section with a total capacity > 50 tonnes, excl. temporary storage where generated, Permit no.: TP3503LL, Status: Effective • 343m SW, FM Conway Ltd, Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes/day involving recycling or reclamation of inorganic materials other than metals or metal compounds, Permit no.: VP3630WE, Status: Superseded • 343m SW, FM Conway Ltd, Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes/day involving recycling or reclamation of inorganic materials other than metals or metal compounds, Permit no.: TP3503LL, Status: Effective • 343m SW, FM Conway Ltd, Associated process, Permit no.: VP3630WE, Status: Superseded • 343m SW, FM Conway Ltd, Associated process, Permit no.: TP3503LL, Status: Effective • 343m SW, FM Conway Ltd, Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment, Permit no.: VP3630WE, Status: Determination (not issued yet) • 343m SW, FM Conway Ltd, Temporary storage of hazardous waste not under S5.2 pending activities listed in S5.1, 5.2, 5.3 and paragraph (b) of this section with a total capacity > 50 tonnes, excl. temporary storage where generated, Permit no.: VP3630WE, Status: Superseded <p>Licensed Pollutant Release (Part A (2)/B) There are 14 records of Part A (2)/B installations regulated by the Environmental Permitting (England and Wales) Regulations 2016 within 500m of the site. One of these was located within the site boundary: <i>British Airway, Surface Cleaning, Part B Permit, No enforcement</i></p> <p>Licensed Discharges to Controlled Waters There are 3 sites within 500m that have a permit issued under the Water Resources Act 1991 for discharges to controlled waters.</p> <p>Pollutant Release to Public Sewer There are 3 records of discharges of special category effluents to public sewers within 500m of the site.</p> <p>List 1 Dangerous Substances There is 1 record of discharge of a List 1 Dangerous Substance within 500m of the site. The authorised substances were Mercury and Cadmium and were received by the Thames Estuary.</p>

Table 3.3 – Evidence of historical contamination

Condition area	Description
<p>Evidence of Historical Contamination</p> <p>Data Source:</p> <ul style="list-style-type: none"> • Appendix F and Appendix G – Phase 2 Ground Investigation Reports • Appendix H – Groundsure Report 	<p>In addition to the Groundsure reports, windowless sample boreholes and trial pits were completed across the site in June and July 2019 (See Appendix H). Extensive laboratory testing of the soils recovered from the intrusive locations identified Chrysotile asbestos fibre bundles within made ground, alongside exceedances for some metals, Polycyclic Aromatic Hydrocarbons (PAH) and Total Petroleum Hydrocarbons (TPH). It was recommended that the asbestos was removed or encapsulated. In addition, groundwater and Leachate testing identified various contaminants that existed above the limit of detection. Furthermore, low concentrations of heavy metals, PAH and petroleum derivatives were discovered in both the groundwater and leachate testing. The report stated that the presence of cyanide found in the groundwater is thought to be from an off-site source as it is not present within soil or leachate testing. Due to the site previously operating as a landfill site, the presence of heavy metals such as arsenic and hydrocarbons such as PAH, TPH, and benzene, are not unusual.</p> <p>A remediation strategy (Appendix J) was prepared to state the mitigation measures required to reduce the risks to human health and Controlled Waters. The report was also produced to comply with Planning Condition 31(1c) & 33 (Planning application ref: 5111/APP/2020/1955).</p> <p>As per Appendix E, H & I, concentrations of PAH and TPH within the groundwater samples exceeded the Environmental Quality Standard (EQS) with respect to impacts on the River Crane. In addition, the Ammonia concentrations were also elevated. However, following the preparation of a DQRA (Appendix I), the risks to the River Crane were low. Furthermore, the conclusions of the report stated that remediation would not provide quantifiable benefits to Controlled Waters, particularly for Ammonia, as the concentrations within the river were already elevated. In addition, it was concluded that the levels of hydrocarbons present in soil and groundwater on this site would be unlikely to require remediation as the concentrations found within the River samples were low.</p> <p>Gas monitoring was also undertaken on site, which identified elevated levels of carbon dioxide (CO₂) and methane (CH₄). In addition, naphthalene was highlighted as a concern in relation to the SoBRA vapour assessment for the site. Nevertheless, the site is to be capped with hardstanding and gas and vapour resistant membranes are to be installed (see Appendix F, Appendix G).</p>

Table 3.4 - Baseline soil and groundwater reference data

Condition area	Description
<p>Baseline soil and groundwater reference data</p> <p>Data Source:</p> <ul style="list-style-type: none"> • Appendix F and Appendix G – Phase 2 Ground Investigation Reports • Appendix C – Preliminary Assessment 	<p>Extensive baseline soil and groundwater reference data has been obtained from the previously completed site investigation reports (See Appendices).</p> <p>In relation to the permissible activities, only hydrocarbons associated with the use and storage of Diesel / HVO and Urea are considered to be 'relevant hazardous substances' which will be in use at the site. These will be used to fuel the backup generators and the selective catalytic reduction technology and also will include any associated lubricant oil used during maintenance of the generators.</p> <p>The results of the soil and groundwater analysis completed by Paragon as part of the Preliminary Assessment (Appendix C) for the Environmental Permit identified the concentrations of ammoniacal nitrogen, TPH and vegetable oil. The results of the soil analysis for Ammoniacal Nitrogen and TPH were below relevant GAC and the results of the water samples are below the SSAC (TPH) or within the same order of magnitude as the results presented in the DQRA (ammoniacal nitrogen), which concluded the risks to the River Crane from the site were low. With reference to Vegetable Oil, there are no GAC or EQS values. Furthermore, it should be noted that although the analytical method might cover any vegetable oil present in the sample, we cannot say that there are not any other fats, oils or greases that have influenced the results. The results provided might be indicative of the presence of vegetable oil but do not exclusively show the quantity of vegetable oil that is present. Nevertheless, the concentrations identified are not considered to be significant.</p> <p>Appendix G results conclude that chemical tests for contaminants within the Made Ground and natural soil on the former Abellio plot were below the GAC for commercial land use. The results of groundwater analysis found marginal exceedance of the Environmental Quality Standards for PAH and Heavy Metals, however, exceedances were marginal and no gross contamination was encountered.</p>

Table 3.5 - Supporting information sources

Condition area	Description
Supporting information and sources	<p>Please see the following folders / documents that accompany the EPR application:</p> <ul style="list-style-type: none"> • HAYES, Bulls Bridge - Phase 1 Environmental Risk Assessment REV D (Paragon, 2021) – BA, Vodaphone & Abellio • HAYES, Bulls Bridge - Phase 2 Ground Investigation Report Rev D (Paragon, 2021) – BA & Vodaphone • HAYES, Bulls Bridge – Phase 2 Ground Investigation Report Abellio Bus Garage (Paragon, 2021) - Abellio • HAYES, Bulls Bridge - Remediation Strategy - Rev E (Paragon, 2021) – BA & Vodaphone • HAYES, Bulls Bridge - Paragon DQRA Report FINAL Rev C (Paragon, 2021) – BA & Vodaphone • Hayes, Union Park – Paragon Preliminary Assessment FINAL (Paragon, 2022) • HAYES, Project Union - Paragon Piling Works Risk Assessment (Paragon, 2021) – BA & Vodaphone • HAYES, Bulls Bridge – Paragon Piling Works Risk Assessment (Paragon, 2022) – Abellio • North Hyde Gardens, UXO Abellio – Paragon Environmental Letter Report (Paragon, 2022) – Abellio • HAYES, Union Park – Phase 1 Verification Report (Colliers, 2023) – BA & Vodaphone • HAYES, Union Park – Block 3 and Abellio IED Assessment Letter (Colliers, 2024) – BA, Vodaphone and Abellio. • Site Plan and Emission Points • Groundsure Insights • Publicly available online geological mapping at www.bgs.ac.uk • Aquifer designations available at www.magic.gov.uk • Environmental Agency Flood map for planning • EA Pre-application Conservation Screening Report (19092024)

4.0 PERMITTED ACTIVITIES

Table 4.1 - Permitted activities

Permitted activities	<p>Schedule 1 ref 1.1 Part A (1) a) (i) combustion plant >50 MWth.</p> <p>Operation of 12 no emergency back-up generators totalling 96.11 MWth, with Directly Associated Activities (DAA) including Diesel / HVO fuel storage, urea storage and surface drainage system.</p>
Non-permitted activities undertaken	<p>The installation boundary is limited to the permitted activities. The internal data halls and office space are not part of the permitted activities. In normal conditions these will operate using electricity provided by the National Grid.</p>
Document references for: <ul style="list-style-type: none"> • plan showing activity layout; and • environmental risk assessment. 	<ul style="list-style-type: none"> • Site Plan and Emissions Points • Environmental Risk Assessment v1 • Drainage plan v1 • HAYES, Bulls Bridge - Phase 1 Enviro Risk Assessment (Appendix E)

5.0 CHANGES TO THE ACTIVITY

Have there been any changes to the activity boundary?	n/a - To be completed if there are changes to the activity / on decommissioning. decommissioning.
Have there been any changes to the permitted activities?	n/a - To be completed if there are changes to the activity / on decommissioning. completed on decommissioning.
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	n/a - To be completed if there are changes to the activity / on decommissioning.
Checklist of supporting information	n/a - To be completed if there are changes to the activity / on decommissioning. completed on decommissioning.

6.0 MEASURES TAKEN TO PROTECT LAND

Checklist of supporting information	n/a - To be completed on decommissioning and permit surrender.
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7.0 POLLUTION INCIDENTS AND REMEDIATION

Checklist of supporting information	n/a - To be completed on decommissioning and permit surrender.
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8.0 SOIL GAS AND WATER QUALITY MONITORING

Checklist of supporting information	n/a - To be completed on decommissioning and permit surrender.
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9.0 DECOMMISSIONING AND REMOVAL OF POLLUTION RISK

Checklist of supporting information	n/a - To be completed on decommissioning and permit surrender.
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10.0 REFERENCE DATA AND REMEDIATION

Checklist of supporting information	n/a - To be completed on decommissioning and permit surrender.
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11.0 STATEMENT OF SITE CONDITION

n/a - To be completed on decommissioning and permit surrender.

APPENDIX A
SITE PLAN AND EMISSIONS POINTS

APPENDIX B
PARAGON SITE PLAN AREAS

APPENDIX C

PRELIMINARY RISK ASSESSMENT OVERVIEW (BA, VODAPHONE & ABELLIO)

APPENDIX D

VERIFICATION REPORT FOR DATA CENTRE 1 (BA AND VODAPHONE)

APPENDIX E

PHASE 1 ENVIRONMENTAL RISK ASSESSMENT (BA, VODAPHONE & ABELLIO)

APPENDIX F

PHASE 2 GROUND INVESTIGATION REPORT (BA & VODAPHONE)

APPENDIX G
PHASE 2 GROUND INVESTIGATION REPORT (ABELLIO)

APPENDIX H

GROUNDSURE REPORT (BA, VODAPHONE, ABELLIO)

APPENDIX I
DETAILED QUANTITATIVE RISK ASSESSMENT (BA & VODAPHONE)

APPENDIX J
REMEDIATION STRATEGY (BA & VODAPHONE)

APPENDIX K
GROUNDWATER MONITORING REPORT FINAL (BA & VODAPHONE)

APPENDIX L

PARAGON PILING WORKS RISK ASSESSMENT FINAL (BA & VODAPHONE)

APPENDIX M
PARAGON PILING WORKS ASSESSMENT FINAL (ABELLIO)

APPENDIX N

UXO ENVIRONMENTAL LETTER REPORT FINAL (ABELLIO)

APPENDIX O

EA PRE-APPLICATION CONSERVATION SCREENING REPORT