



ENVIRONMENTAL CONSULTING, SOFTWARE & TRAINING

CONTAMINATED LAND RISK ASSESSMENT

Phase 2 Environmental Site Investigation Report

Site

Former Fox & Hounds Pub
26-27 London Road
Northfleet
Gravesend
DA11 9JH

Client

Super Asset Management Ltd

Report Reference

PH2-2024-000021

Prepared by

STM Environmental Consultants Ltd

Date _____

11/06/2024



CONSULTING GEO-ENVIRONMENTAL ENGINEERS AND SCIENTISTS

Phase 1 Contaminated Land Desk Studies, Geo-Environmental Site Investigations, Environmental Due Diligence, Flood Risk Assessments, Surface Water Management Strategies (SuDS), Ecology, Noise and Air Quality Assessments, Environmental Management Systems, GIS & Data Management Systems

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1 DOCUMENT CONTROL



CONTAMINATED LAND RISK ASSESSMENT PHASE 2 ENVIRONMENTAL SITE INVESTIGATION REPORT



Site Address:	Former Fox & Hounds Pub 26-27 London Road Northfleet Gravesend DA11 9JH
Site Coordinates:	563255, 174050
Prepared for:	Super Asset Management Ltd
Report Reference:	PH2-2024-000021
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2 DISCLAIMERS

This report and any information or advice which it contains, is provided by STM Environmental Consultants Ltd (STM) and can only be used and relied upon by Super Asset Management Ltd (Client). Any party other than the Client using or placing reliance upon any information contained in this report, do so at their own risk.

STM has exercised such professional skill, care and diligence as may reasonably be expected of a properly qualified and competent consultant when undertaking works of this nature. However, STM gives no warranty, representation or assurance as to the accuracy or completeness of any information, assessments or evaluations presented within this report.

This report excludes consideration of potential hazards arising from any activities at the Site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities.

It should be noted that this report has been produced for environmental purposes only. It should not in any way be construed to be or used to replace a geotechnical survey, structural survey, asbestos survey, buried services survey, unexploded ordnance survey or invasive plant survey.

All coordinates and ground levels stated within the report are approximated based on OS mapping and LIDAR data. It is recommended that a topographic survey is undertaken if more accurate estimates are required.

3 EXECUTIVE SUMMARY

SECTION	SUMMARY
Site Location and Description	The site is located at Former Fox & Hounds Pub, 26-27 London Road, Northfleet, Gravesend, DA11 9JH. It is approximately centred at national grid reference 563255, 174050 and occupies an area of approximately 0.0873ha.
Proposed Development	The development proposal is for the <i>'erection of a 4-storey building attached to No.25 London Road to provide 2no. 2-bedroom and 7no. 1-bedroom flats; and, erection of a 2-storey detached block to provide 2no. 2-bedroom and 2no. 1-bedroom flats with associated parking, amenity space and waste storage'</i> It is understood that areas of communal soft landscaping are included in the proposed development.
Summary of Phase 1 Desk Study	A Phase 1 Desk Study was carried out by STM in June 2018. Although the site was found not to have been subject to and previous industrial uses, it had been used as a Public House, likely with associated car parking, indicating that there may be Made Ground on the site. A conceptual risk site model was constructed and a qualitative risk assessment carried out. This identified potentially significant Potential Pollutant Linkages with respect to human health, and property receptors. The Desk Study recommended that an intrusive site investigation be carried out with the objective of determining the presence and extent of any soil contamination at the site.
Summary of Site Investigation	Site investigation works were carried out on the 1st May 2024. A total of 3no. windowless sample boreholes (BH01 – BH03) were excavated to a maximum depth of 3mbgl for both geotechnical and environmental purposes. In addition to the above, 6no. trial pits (TP01-TP06) were excavated to a maximum depth of 1.6mbgl using an excavator for environmental purposes and 1no. cable percussion borehole (CP01) was undertaken to a depth of 15mbgl for geotechnical purposes. A total of 12no. soil samples were collected from depths ranging between 0.2 – 0.8mbgl and submitted to a UKAS/MCERTS accredited laboratory for analysis of Heavy Metals, TPH, BTEX, PAHs, SVOCs and Asbestos.
Summary of Findings	Made Ground consisting of chalky SILT/SAND with fragments of brick, concrete and tile was encountered to a maximum depth of 1.2mbgl. The Made Ground/SILT was generally underlain by CHALK to 15mbgl, the maximum depth of the boreholes. Topsoil was encountered to a maximum depth of 0.35mbgl within the trial pits,

SECTION	SUMMARY
	underlain by Chalk, Sand, Silt and Gravel to 1.6mbgl. Visual indications of contamination of the Made Ground were observed (i.e. brick, concrete and tile fragments) generally across the site. No significant odours or PID readings were recorded during the investigation.
Updated Risk Assessment	A Generic Quantitative Risk Assessment was carried out where the results of the soil sample analysis were compared to Generic Assessment Criteria (GAC) for a residential housing without home-grown produce land use scenario. Results of the soil sample analysis indicate that concentrations of PAHs (Benzo(a)anthracene, Benzo(a)pyrene, Dibenzo(ah)anthracene, Benzo(b)fluoranthene) and Heavy Metals (Arsenic and Lead) exceeded the chosen GAC in 2no. of the 9no. sampling locations. Asbestos Containing Material (ACM) was identified in a 3no. samples (BH01/1, BH01/2, BH02/2) at depths of 0.3mbgl, 0.8mbgl and 0.2mbgl respectively. The Asbestos was identified as Chrysotile. Quantification reported that the total percentage of Asbestos in the samples were less than 0.001%. The Conceptual Risk Model for the site was reassessed incorporating the results of the site investigation. Potentially Significant Potential Pollutant Linkages were considered to exist with respect to human health and property receptors. These are concerned with the risk of human health receptors (future occupiers) being exposed to the identified contamination while undertaking recreational activities in the communal soft landscaped areas.
Conclusions and Recommendations	Given the findings of the site investigation, it is recommended that remedial measures are undertaken in order to break the Potential Pollutant Linkages identified and to render the site suitable for the proposed residential end use. A formal remediation strategy will need to be submitted to the Local Planning Authority for approval. Once completed, the remedial works will need to be validated by a qualified Environmental Consultant and a remediation verification report submitted to the Local Planning Authority for approval prior to occupation of the development. A “watching brief” should be kept at all times during the development. Should any unexpected contamination be encountered then the discovery strategy outlined in this document should be followed. It is also recommended that standard Health and Safety measures as required by CDM regulations are implemented at all times in order to protect Construction Workers from any unexpected soil contamination.

4 INTRODUCTION

STM Environmental Consultants Limited were commissioned by Super Asset Management Ltd to undertake a preliminary risk assessment at Former Fox & Hounds Pub, 26-27 London Road, Northfleet, Gravesend, DA11 9JH (the site).

4.1 Development Proposal

The report was produced to support Condition 6(a) attached to the planning application 20220431 for the *'erection of a 4-storey building attached to No.25 London Road to provide 2no. 2-bedroom and 7no. 1-bedroom flats; and, erection of a 2-storey detached block to provide 2no. 2-bedroom and 2no. 1-bedroom flats with associated parking, amenity space and waste storage'*

It is understood that areas of communal soft landscaping are included in the proposed development.

The decision notice and proposed development plans are available in [Appendix 1](#).

4.2 Report Objectives

The main objectives of the study were to:

-  Provide information for a generic quantitative risk assessment (GQRA) to be undertaken;
-  Refine the Conceptual Site Risk Model using the findings of the GQRA;
-  Inform the need for and scope of any remedial works that may be required.

A summary of the findings of the site investigation and GQRA are detailed within this report.

This report should be read in conjunction with the Desk Study Report (Ref: PH1-2018-001017) produced for the site by STM Environmental Consultants in June 2018 which is summarised below.

5 SUMMARY OF DESK STUDY FINDINGS

5.1 Site Location

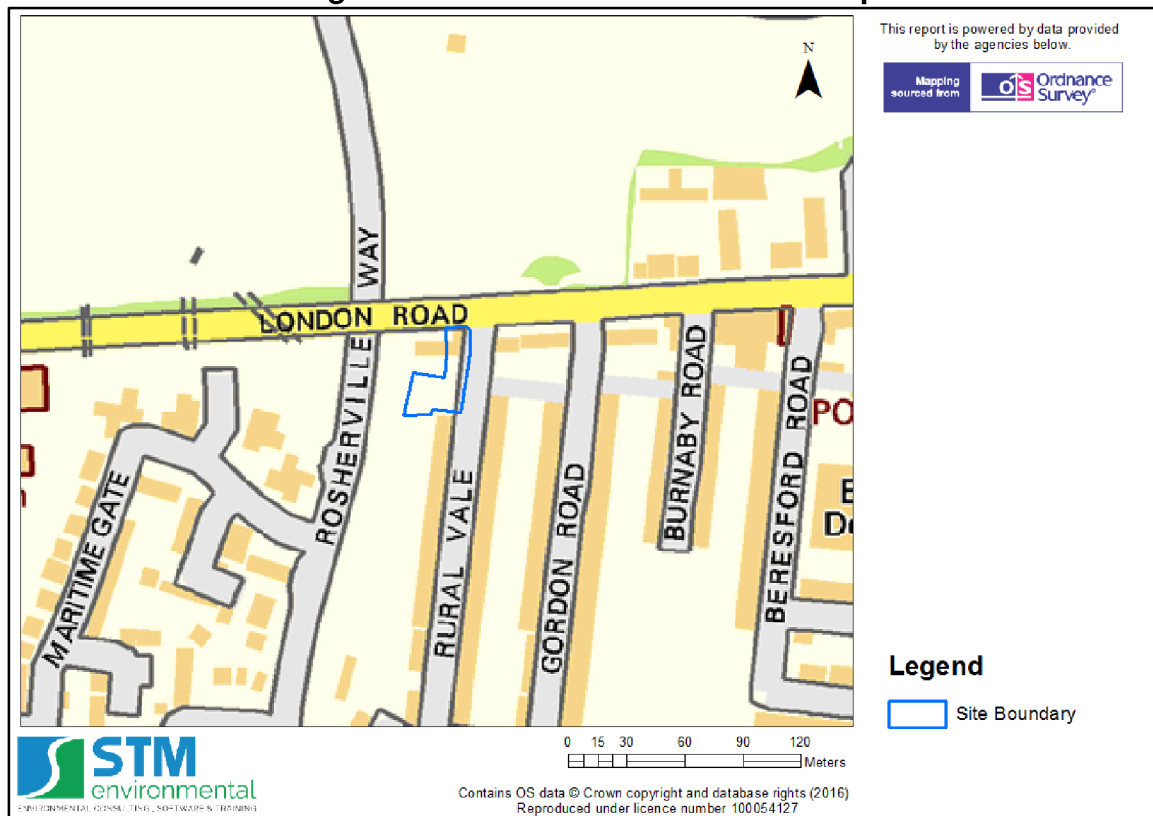
The site is located at Former Fox & Hounds Pub, 26-27 London Road, Northfleet, Gravesend, DA11 9JH. It is approximately centred at national grid reference 563255, 174050 and occupies an area of approximately 0.0873ha.

The site lies within the jurisdiction of Gravesham Borough Council in terms of the planning process. Maps showing the location of the site are shown in the figure below.

5.2 Current Site and Surrounding Land Uses

The site is currently vacant land surrounded by a fence. Immediate surrounding area is largely residential development. Mixed area of industrial/commercial/disused land N of the site where the Chalk Quarry/Industrial area was previously.

Figure 1: Site Location and Aerial Maps



5.3 Site History

Examination of Ordnance Survey historic maps revealed that the site was occupied by the Fox & Hounds Pub with associated smaller buildings and potential car park from c. 1896 until recently when it was demolished. Various residential terraced houses with gardens have also occupied the site between c.1876 to c.1972.

5.4 Previous Site Investigations

A search of relevant information on Gravesham Borough Council's planning did not identify any records of previous contaminated land site investigations undertaken at or in the vicinity of the site.

5.5 Qualitative Risk Assessment

A qualitative risk assessment was undertaken in order to assess the magnitude of the potential risks identified in the Phase 1 Report.

5.5.1 Potential Sources

Any Potentially Contaminative Land Uses (PCLUs) within a 50m radius of the site as well as any PCLUs with high pollution migration potential within 250m of the site were considered to be of concern and were included within the assessment.

A summary is provided in the table below.

Table 1: Summary of potential contamination sources, period of operation and distance from site.

Site Name	Industrial Profile	Approx. Year Use Established	Approx. Year Use Ended	Direction	Approx. Distance from Site (m)
Public House	Made ground	Unknown	Unknown	On site	0
Allotment Gardens	Plant Nursery	c. 1972	Unknown	Adjacent	2
Whiting Works	Mineral products non-metallic	c. 1897	c. 1960	NW	28
Works	Factory or works - use not specified	c. 1960	Unknown	NW	35
Chalk Quarry	Mining (pit or quarry)	c. 1876	c. 1960	NW	37
Works	Factory or works - use not specified	c. 1972	Unknown	W	45
Northfleet Power Station Inert Historic Landfill Site	Waste: Landfills and other waste treatment & disposal sites	c. 1977	c.1992	S	136

5.5.2 Potential Receptors

Potential human health receptors were considered to include future site users, construction workers and neighbours. Property receptors were considered to include onsite buildings and services.

Data from the BGS indicates that the bedrock consists of Seaford Chalk Formation and is classified as a Principal Aquifer and the site is located within Source Protection Zones 2 and 3. No superficial deposits were identified in the search.

No surface water receptors were identified onsite or within 250m of the site.

No designated ecological receptors were identified onsite or within 250m of the site.

5.5.3 Conceptual Site Risk Model

A preliminary conceptual site risk model (CSM) was constructed in order to assess potential pollutant linkages.

Potentially significant potential pollutant linkages (PPLs) were identified with respect to:

- Human health receptors (PPL1a)
- Property (PPL6a)

The desk study recommended that an intrusive site investigation be carried out to determine the presence and extent of any soil contamination at the site.

6 SITE INVESTIGATION

The site investigation works were carried out on the 1st May 2024 and were undertaken in general accordance with the following guidance:

- Land contamination risk management (LCRM) guidance - DEFRA;
- BS 10175 - Code of practice for the Investigation of potentially contaminated sites British Standard Institution;
- BS 10176:2020 - Taking soil samples for determination of volatile organic compounds (VOCs);
- BS5930:2015 Code of Practice for Ground Investigation
- BS 8485: 2015 - Code of practice for the Characterisation and remediation from Ground Gas in Affected Developments. British Standard Institution;
- BS8576:2013, Guidance on investigations for ground gas – Permanent gases and Volatile Organic Compounds (VOCs);
- C665, 2007 - Assessing Risks posed by Hazardous Ground Gases to Buildings CIRIA.

6.1.1 Sampling Strategy

A total of 3no. windowless sample boreholes (BH01 – BH03) were excavated to a maximum depth of 3mbgl for both geotechnical and environmental purposes. 6no. trial pits (TP01-TP06) were excavated to a maximum depth of 1.6mbgl using a hand augur for environmental purposes and 1no. cable percussion borehole (CP01) was undertaken to a depth of 15mbgl for geotechnical purposes.

A semi-targeted sampling strategy was used to select the locations of the exploratory positions, with boreholes being generally equally spaced out across the site, with efforts being made to ensure that samples were collected from the most sensitive areas (i.e. gardens) of the proposed development.

As the investigation was primarily focused on assessing the quality of near surface soils, samples were collected at depths between 0.2 – 0.8mbgl.

6.1.2 Boreholes and Trial Pits

A summary of the boreholes and trial pits undertaken as part of the investigation is given in the table below.

Table 2: Summary of boreholes and Trial Pits

Borehole/Trial Pit ID	Easting*	Northing*	Level at surface (mAOD)	Level at Base (mAOD)	Depth (m)
CP01	563252	174063	24.93	9.93	15.0
BH01	563255	174047	24.84	21.84	3.0
BH02	563245	174041	24.66	21.66	3.0
BH03	56325	174031	24.73	21.73	3.0
TP01	563249	174046	24.84	23.24	1.6
TP02	563236	174042	25.11	23.61	1.5
TP03	563234	174031	24.91	23.51	1.4
TP04	563231	174038	25.11	24.11	1.0
TP05	563242	174036	24.65	23.65	1.0
TP06	563248	174069	25.80	25.00	0.8

*Note: coordinates and levels are approximate based on OS mapping and LiDAR data

A map showing the locations of the borehole and trial pits is available in [Appendix 2](#). Soil logs are available in [Appendix 3](#).

6.1.3 On-site Screening of Volatile Organic Compounds

Soil from each borehole was screened on site for Volatile Organic Compounds (VOCs) using a hand held Minirae Photo-Ionisation Detector (PID) which has a detection limit of 0.1 parts per billion (ppb). The PID was calibrated in the field prior to use using a gas of known concentration (isobutylene gas – 100ppm).

Soil vapour readings were taken using the headspace method, which involved placing the soil sample into a sealed plastic bag and then taking a reading by placing the PID filter into the bag.

6.1.4 Sample Collection and Transport

All samples were put into sample containers (jars and tubs) that were tightly sealed with minimal headspace. The sample containers were put into a cooler box immediately on collection and kept cool until analysis was undertaken at the laboratory.

6.1.5 Laboratory Analysis

A total of 12no. soil samples were submitted to a UKAS\MCERTs accredited laboratory for analysis of the following:

- Heavy Metals – Arsenic, Boron, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Zinc;
- Petroleum Hydrocarbons (TPHCWG);
- Total Phenols - Total Phenols (Monohydric);
- Monoaromatics – Benzene, Toluene, Ethylbenzene, p & m-xylene, o-xylene, MTBE (Methyl Tertiary Butyl Ether);
- Speciated PAHs – Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene,

- Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(ghi)perylene;
-  Total PAHs - Speciated Total EPA-16 PAHs;
-  Asbestos Screening and Quantification;
-  Inorganics - pH – Automated, Total Cyanide, Water Soluble Sulphate, Sulphide, Total Organic Carbon (TOC);
-  SVOCs.

6.1.6 Groundwater, Ground Gas and Vapour Monitoring

Groundwater, ground gas or vapour monitoring was not carried out as part of the site investigation as no potential pollutant linkages in this respect were identified by the Desk Study. Additionally, observations (i.e. visual assessments of contamination and PID readings) and the findings of the site investigation did not indicate the need for ground gas or groundwater monitoring.

6.2 Site Investigation Findings

6.2.1 Ground Conditions

Made Ground consisting of chalky SILT/SAND with fragments of brick, concrete and tile was encountered to a maximum depth of 1.2mbgl. With the exception of BH03, the Made Ground/SILT was generally underlain by CHALK to 15mbgl, the maximum depth of the boreholes.

Topsoil was encountered to a maximum depth of 0.35mbgl within the trial pits, underlain by CHALK, SAND, SILT and GRAVEL to 1.6mbgl.

The borehole logs are shown in [Appendix 3](#) and photographs from some of the soils extracted from the boreholes are presented in [Appendix 4](#).

6.2.2 Groundwater

Groundwater was not encountered during the site investigation.

6.2.3 Visual and Olfactory Signs of Contamination

Visual indications of contamination of the Made Ground were observed (i.e. brick, concrete and tile fragments) generally across the site. No significant odours or PID readings were recorded during the investigation. The PID readings can be seen in the borehole logs shown in [Appendix 3](#).

6.3 Laboratory Sample Analysis Results

A total of 12no. soil samples were submitted for analysis. The full results of the laboratory sample analysis can be seen in [Appendix 5](#).

7 RISK ASSESSMENT

7.1 Generic Quantitative Risk Assessment (Human Health)

A Generic Quantitative Risk Assessment (GQRA) was conducted using the soil analytical results in order to further evaluate the significance of the potential pollutant linkages identified in the Preliminary Risk Assessment in the Desk Study.

7.1.1 Generic Assessment Criteria for Soils

The GAC used for the screening of the soils and their sources are outlined in the table in [Appendix 6](#). The GAC used are a combination of the DEFRA's Category 4 Screening Levels and the CIEH\LQM GAC for residential without homegrown produce land use scenario as the proposal includes communal amenity areas.

7.1.2 Soil Organic Matter Content

Sample results indicated that soils on the site have an average Total Organic Carbon (TOC) content of 2.09%, which based on a conversion factor of 1.72, indicates a Soil Organic Matter (SOM) of around 4.98%. Therefore, a soil organic matter content of 2.5% was assumed.

7.1.3 Contaminants Exceeding Generic Assessment Criteria

A summary of contaminants that were found to be present in concentrations that exceeded the GAC is shown Table 3 below.

Several contaminants were found to have concentrations that exceeded their relevant GACs. The elevated concentrations were identified in 3no. of the borehole locations, with the maximum concentration of each contaminant identified in BH03/1.

Table 3: Contaminants Exceeding GAC

Contaminant	GAC (mg/kg)	No. of Exceedances	Measured Concentrations (mg/kg)		Exceedance Borehole Locations
			Mean	Maximum	
Benzo(a)anthracene	14	1	2.12	21.5	BH03/1*
Benzo(a)pyrene	2.5	1	1.89	17.6	BH03/1*
Benzo(b)fluoranthene	4	1	2.56	24.1	BH03/1*
Dibenzo(ah)anthracene	0.32	2	0.26	2.58	BH01/1, BH03/1*
Arsenic	40	1	16.36	67.8	BH03/1*
Lead	310	3	284.5	1571	BH01/1, BH01/2, BH03/1*

*Maximum value location

7.1.4 Statistical Analysis

The results of statistical analysis are presented in [Appendix 7](#).

7.2 Asbestos

Asbestos Containing Material (ACM) was identified in a 3no. samples (BH01/1, BH01/2, BH02/2) at depths of 0.3mbgl, 0.8mbgl and 0.2mbgl respectively. The Asbestos was identified as Chrysotile. Quantification reported that the total percentage of Asbestos in the samples were less than 0.001%.

8 RE-ASSESSMENT OF POTENTIAL POLLUTANT LINKAGES

The Potential Pollutant Linkages (PPLs) identified as being plausible in the Desk Study are concerned with the following risks:

-  Risk of direct contact (ingestion and absorption) with and inhalation of contaminants to on-site human health receptors (PPL1a – Future Occupiers and PPL1c – Construction Workers);
-  Risk of injury/death of on-site human health receptors as a result of explosion due to accumulation of ground gas from on and off-site sources in confined spaces within on-site dwellings. (PPL1b – Future Occupiers and PPL1d - Construction Workers);
-  Risk of direct contact with (ingestion and absorption) and inhalation of contaminants to off-site human health receptors as a result of on-site contaminants migrating off-site (PPL2a);

- Risk of injury/death to off-site human health receptors as a result of explosion due to migration of on-site ground gas and subsequent accumulation in confined spaces in off-site buildings. (PPL2b);
- Risk of deterioration of groundwater quality resulting from the migration of on-site contaminants into the underlying aquifer (PPL3);
- Risk of deterioration of surface water quality resulting from the migration and entry of on-site contaminants into the surface water receptor (PPL4);
- Risk of deterioration of ecological quality resulting from the migration and entry of on-site contaminants to the ecological receptor during development and after completion (PPL5);
- Risk of damage to buildings and services from on and off-site contaminants (PPL6a);
- Risk of damage to property as a result of explosion due to accumulation of ground gas from on and off-site sources in confined spaces within buildings (PPL6b).

The Desk Study concluded that PPL1a and PPL6a had the potential to be significant. All of the PPLs were re-assessed considering the soil analytical results obtained from site investigation. The table below presents the results of the re-assessment.

A detailed explanation of the risk assessment methodology is available in [Appendix 8](#).

Table 4: Results of Qualitative Risk Assessment.

CRITERIA	POTENTIAL POLLUTANT LINKAGES										
	PPL1a	PPL1b	PPL1c	PPL1d	PPL2a	PPL2b	PPL3	PPL4	PPL5	PPL6a	PPL6b
POTENTIAL PATHWAY/ RECEPTOR	Contact/ Inhalation - Human Health (Future Occupiers)	Explosion - Human Health (Future Occupiers)	Contact/ Inhalation - Human Health (Construction Workers)	Explosion - Human Health (Construction Workers)	Contact/ Inhalation - Offsite Human Health Receptors	Explosion - Human Health Receptors	Contact - Groundwater	Contact - Surface Water	Contact - Ecology	Contact - On & Off-Site Property	Explosion - On & Off-Site Property
SEVERITY	Major (4)	Major (4)	Major (4)	Major (4)	Major (4)	Major (4)	Moderate (3)	Moderate (3)	Moderate (3)	Moderate (3)	Moderate (3)
LIKELIHOOD	Possible (3)	Improbable (1)	Improbable (1)	Improbable (1)	Improbable (1)	Improbable (1)	Improbable (1)	Improbable (1)	Improbable (1)	Possible (3)	Improbable (1)
RISK	Moderate (12)	Low (4)	Low (4)	Low (4)	Low (4)	Low (4)	Very Low (3)	Very Low (3)	Very Low (3)	Low to Moderate (9)	Very Low (3)
POTENTIALLY SIGNIFICANT?	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO

8.1 Potential Risks to On-Site Human Health

PPL1a and PPL1c are concerned with the risk of direct contact (ingestion and dermal absorption) with and inhalation of on and off-site contaminants by onsite human health receptors. PPL1a is considered to have the potential to be significant given the Heavy Metals and PAH contamination identified. As the proposal is to introduce residential dwellings with gardens, it is possible that human health receptors (i.e. occupiers of the dwellings) could be exposed to contamination while undertaking recreational activities in the gardens.

PPL1c is considered unlikely to be significant as it is considered that any potential risks to groundworkers can be adequately dealt with by ensuring that standard health and safety measures are implemented during the construction phase.

PPL1b and PPL1d are concerned with the risk of injury/death of on-site human health receptors as a result of explosion due to the potential accumulation of ground gases and vapours from on and off-site sources. PPL1b and PPL1d are considered unlikely to have the potential to be significant. Although potential sources of explosive ground gases were identified in the Desk Study, they were not considered to be of a sufficient scale to pose a risk to the site.

8.2 Potential Risks to Off-Site Human Health

PPL2a is concerned with the risk of direct contact and inhalation of contaminants originating from the site by off-site human health receptors. PPL2a is considered unlikely to have the potential to be significant. Although Heavy Metals and PAH contamination has been identified, given their immobility, the concentrations are not considered sufficient to impact offsite human health receptors.

PPL2b is concerned with the risk of injury/death of on-site human health receptors as a result of explosion due to accumulation of ground gases from on-site sources. PPL2b is considered unlikely to be significant for the same reasons as PPL1b.

8.3 Potential Risks to Groundwater Receptors

PPL3 is concerned with the risk of deterioration of groundwater quality resulting from the migration of on-site contaminants into the underlying aquifer. PPL3 is considered unlikely to have the potential to be significant. Although the underlying aquifer is classified as Principal, it is considered that any of the identified contaminants present at the site are unlikely to be of sufficient magnitude to significantly impact groundwater receptors.

8.4 Potential Risks to Surface Water Receptors

PPL4 is concerned with the risk of negative impacts on surface water quality resulting from the migration and entry of on-site contaminants into surface water receptors. PPL4 is considered unlikely to have the potential to be significant as no surface water bodies were identified within the vicinity of the site.

8.5 Potential Risks to Ecological Receptors

PPL5 is concerned with the risk of negative ecological impacts resulting from potential on-site contaminants. PPL5 is considered unlikely to have the potential to be significant given that no designated ecological receptors were identified onsite or within 250m of the site.

8.6 Potential Risks to Property Receptors

PPL6a is concerned with the risk of damage to on site buildings and services from on and off-site contaminants. If contaminated, the soil may contain aggressive chemicals (i.e. Sulphates, VOCs) that

can attack building materials and services. PPL6a is considered to have the potential to be significant. Given the elevated concentrations of aggressive contaminants (i.e. PAHs) identified in the soils tested, they could impact upon the buildings present on the site. Therefore, it is recommended that the statutory water undertaker should be consulted to confirm that there are no special requirements for any water services to be installed at the site.

PPL6b is concerned with the risk of damage to property as a result of explosion due to migration of on and off-site ground gases and vapours and their subsequent accumulation in confined spaces in on-site buildings. PPL6b is considered unlikely to be significant for the same reasons as PPL1b.

9 CONCLUSIONS

In response to the findings of the Desk Study carried out for the site by STM Environmental Consultants, an environmental site investigation was carried out on the 1st May 2024. The objective of the investigation was to determine the presence and extent of potential contamination at the site in order to further inform the risk assessment process.

A total of 3no. windowless sample boreholes (BH01 – BH03) were excavated to a maximum depth of 3mbgl for both geotechnical and environmental purposes. 6no. trial pits (TP01-TP06) were excavated to a maximum depth of 1.6mbgl using a hand augur for environmental purposes and 1no. cable percussion borehole (CP01) was undertaken to a depth of 15mbgl for geotechnical purposes.

12no. soil samples from all of the borehole and trial pit locations were taken from depths ranging from 0.2 – 0.8mbgl. The samples were submitted to a UKAS/MCERTS accredited laboratory for analysis of Heavy Metals, TPH, BTEX, PAHs, SVOCs and Asbestos.

A Generic Quantitative Risk Assessment was carried out where the results of the soil sample analysis were compared to Generic Assessment Criteria (GAC) for a residential without homegrown produce land use scenario.

Results of the soil sample analysis indicate that concentrations of PAHs (Benzo(a)anthracene, Benzo(a)pyrene, Dibenzo(ah)anthracene, and Benzo(b)fluoranthene) and Heavy Metals (Arsenic and Lead) exceeded their chosen GAC in 2no. of the 9no. sampling locations.

Asbestos Containing Material (ACM) was identified in a 3no. samples (BH01/1, BH01/2, BH02/2) at depths of 0.3mbgl, 0.8mbgl and 0.2mbgl respectively. The Asbestos was identified as Chrysotile. Quantification reported that the total percentage of Asbestos in the samples were less than 0.001%.

The Conceptual Risk Model for the site was reassessed incorporating the results of the site investigation. Potentially Significant Potential Pollutant linkages were considered to exist with respect to human health and property receptors. These are concerned with the risk of human health receptors (future occupiers) being exposed to the contamination identified while undertaking recreational activities in the communal soft landscaped areas.

The revised conceptual site risk model is summarised in Table 5 below.

Table 5: Summary of revised conceptual site risk model

Potential Receptor	Potential Pathway	Potential Hazard	PSPPL?	Risk
On-Site Human Health	Ingestion/Absorption Inhalation	Adverse health Injury/Death	Yes	Moderate

Potential Receptor	Potential Pathway	Potential Hazard	PSPPL?	Risk
(Future Occupiers)	Build-up of Methane/ VOCs in confined spaces	Explosion/ Fire Injury/Death	No	Low
On-Site Human Health (Groundworkers)	Ingestion/Absorption Inhalation	Adverse health Injury/Death	No	Low
	Build-up of Methane/ VOCs in confined spaces	Explosion/ Fire Injury/Death	No	Low
Off-Site Human Health	Ingestion/Absorption Inhalation	Adverse health Injury/Death	No	Low
	Build-up of Methane/ VOCs in confined spaces	Explosion/ Fire Injury/Death	No	Low
Groundwater	Percolation/Leaching	Adverse groundwater quality	No	Very Low
Surface Water	Lateral Migration Groundwater baseflow	Adverse Surface water quality	No	Very Low
Ecology	Ingestion/Absorption	Adverse health Injury/Death	No	Very Low
Property	Physical Contact/Absorption	Damage to building and services	Yes	Low to Moderate
	Build-up of Methane/ VOCs in confined spaces	Explosion/ Fire Damage to building	No	Very Low

10 RECOMMENDATIONS

10.1 Remedial Action

Given the findings of the site investigation, it is recommended that remedial measures are undertaken in order to break the Potential Pollutant Linkages identified and to render the site suitable for the proposed residential end use.

A formal remediation strategy will need to be submitted to the Local Planning Authority for approval. Once completed, the remedial works will need to be validated by a qualified Environmental Consultant and a remediation verification report submitted to the Local Planning Authority for approval prior to occupation of the development.

10.2 Watching Brief and Discovery Strategy

It is recommended that a “watching brief” is kept at all times during the development. Should any unexpected contamination be encountered then the discovery strategy outlined below should be followed.

- Works should be halted if any suspicious ground conditions are identified by groundworkers;
- The Contractor should assess the need for any immediate health and safety or environmental management control measures. If control measures are considered to be required, they should be implemented;
- The Contractor should notify the Client’s Environmental Consultant and the Local Planning Authority;

- The Environmental Consultant should attend the site to record the extent of 'contamination' and if necessary, to collect samples;
- If remedial action is considered necessary then the proposed works should be agreed with the Local Planning Authority prior to implementation;
- Once remediation is complete, the Environmental Consultant should collate evidence of work carried out for inclusion in a Remediation Verification Report which should be submitted to the Local Planning Authority.

10.3 Health and Safety

Given that contaminants were identified on the site, measures will be necessary to protect the health and safety of site workers during the site works. The following measures are suggested to provide a minimum level of protection.

- Provision of appropriate Personal Protective Equipment (PPE) including protective clothing, footwear, gloves and dust masks to all groundworkers on-site. These should not be removed from site, and advice should be given on when and how they are to be used;
- Great care should be taken to minimise the amount of dust and mud generated on-site;
- Good practices relating to personal hygiene (i.e. washing and changing procedures) should be adhered to on-site, i.e. food and drink should only be consumed within designated areas on the site and smoking should be prohibited in all working areas;
- Availability of site welfare;
- Daily safety briefings.

All site works should be carried out in accordance with Health and Safety Executive regulations and guidelines and the Contractor's Construction Health and Safety Plan. Particular should be made to the Health and Safety Executive (HSE) document "Protection of Workers and the General Public during the Development of Contaminated Land".

10.4 Waste Disposal

Groundworks at the site are likely to give rise to waste soils. These may require classification before removal from site to an appropriately licensed facility for treatment or final disposal. The Environment Agency's Hazardous Waste Technical Guidance document (WM3) outlines the methodology for classifying wastes.

The contractor will need to keep a full documentary record of the waste disposal works in line with Duty of Care requirements. The record will include waste transfer notes and details of the receiving site. Copies of all relevant documents should be provided to the Client's Environmental Consultant for inclusion in the remediation verification report.

10.5 Services

The Statutory Water Undertaker for the area should be contacted in relation to new services that are to be installed as part of the proposed development in order to determine their specification for the type of pipework/conduits that should be used on this site.

11 INFORMATION GAPS AND UNCERTAINTIES

Assumptions have been made regarding the nature and scale of the activities that took place on the site and the types of potential contaminants that may have resulted. There are therefore a number of uncertainties associated with the investigation which include, but are not limited to, the following:

- This report is based on data obtained from the chosen sampling locations only. Although efforts have been made to ensure adequate coverage of the site when designing the investigation, it is nonetheless possible that (as with any site investigation) there may be locations which were not sampled where localised pockets of contamination exist.
- The site investigation and risk assessment were designed to investigate only the most likely contaminants associated with the potential sources of contamination identified in the Desk Study. The presence of additional unknown contaminants cannot be discounted.

These uncertainties will need to be reviewed along with the Conceptual Site Risk Model should further information come to light in the future.

12 APPENDICES

12.1 Appendix 1 – Decision Notice & Proposed Development Plans

Application: 20220431

**TOWN AND COUNTRY PLANNING ACT 1990
THE TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE)
(ENGLAND) ORDER 2015 (AS AMENDED)**

NOTIFICATION OF GRANT OF PERMISSION TO DEVELOP LAND
--

To: **Mr Singh, Super Asset Management Ltd
C/O Miss Ebcin, Barron Edwards Ltd
Whitehall Place
47 The Terrace
Gravesend
DA12 2DL**

TAKE NOTICE that the **GRAVESHAM BOROUGH COUNCIL**, the Local Planning Authority under the Town and Country Planning Acts, has **GRANTED PERMISSION** for development of land situate at:

**Former Site Of Fox And Hounds PH
26 - 27 London Road
Northfleet
Gravesend
Kent**

and being **Erection of a 4-storey building attached to No.25 London Road to provide 2no. 2-bedroom and 7no. 1-bedroom flats; and, erection of a 2-storey detached block to provide 2no. 2-bedroom and 2no. 1-bedroom flats with associated parking, amenity space and waste storage at Fox and Hounds, 26-27 London Road, Gravesend DA11 9JH.** Your application dated 21st April 2022 is permitted subject to the following:-

Time Limit

1. The development to which this permission relates must be begun not later than the expiration of three years beginning with the date on which this permission is granted.

Reason: In pursuance of Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

Approved Plans

2. The development hereby approved shall be carried out in accordance with the following schedule of approved plans:

Application Form - dated 07/04/2022;
Supplementary Information - Lansett Consulting Noise Report reference LC-12-0091-RP1/March 2013;
Drawing no. 001 - Rev. A - Site Location Plan with Existing and Proposed Block Plans;
Drawing no. 003 - Rev. A - Proposed Block Plan;
Drawing no. LR1-19-P2 - Rev. 1 - Proposed Elevations and Floor Plans (Block A);
Drawing no. LR1-19-P3 - Proposed Sections, Detail, Block Plan and Waste Storage;

Reason: For the avoidance of doubt and in the interests of proper planning.

Pre-commencement condition(s)

Code of Construction

3. No development shall take place until a comprehensive Code of Construction Practice covering all environmental impacts of this development is provided by the applicant and submitted for approval to the Local Planning Authority. The approved scheme shall include details of hours of work during the construction period, delivery times for materials, parking of vehicles of site personnel and visitors, loading and unloading of plant and materials, storage of materials and wheel washing proposals; the development hereby permitted shall be carried out in accordance with the approved Code of Construction Practice.

Reason: To ensure the free flow of traffic on the highway and to minimise the impact on residential amenity and in accordance with adopted Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

Sustainable surface water drainage

4. No development shall be commenced until a scheme for sustainable surface water drainage has been submitted to and approved, in writing, by the Local Planning Authority. The detailed drainage scheme submitted shall
- (i) demonstrate that both the rate and volume of run-off leaving the site post-development will be restricted to that of the existing site during any rainfall event (up to and including the climate change adjusted 100yr critical storm),
 - (ii) demonstrate that the existing on-site surface water flow-routes and accumulation points will not be altered in such a way that the development places property at risk from flooding during any rainfall event, up to and including the climate change adjusted critical 100yr storm,
 - (iii) demonstrate that infiltration features are not located on parts of the site where contamination might be present,
 - (iv) include a timetable for its implementation, and
 - (v) include a management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage system throughout its lifetime.

The surface water drainage scheme shall thereafter be implemented in full prior to first residential occupation of the development and thereafter maintained and managed in accordance with the approved scheme.

Reason: To ensure that the principles of sustainable drainage are incorporated into this proposal; to ensure that the development does not contribute to, or is not put at risk from, or adversely affected by, unacceptable levels of water pollution caused by mobilised contaminants and to ensure ongoing efficacy of the drainage provisions, in accordance with Policies CS18 and CS19 of the Gravesham Local Plan Core Strategy (September 2014).

Diversion of Public Sewers

5. No development shall take place until details of the measures which will be undertaken to divert the public sewers is provided by the applicant and submitted for approval to the Local Planning Authority (In consultation with Southern Water). The development hereby permitted shall be carried out in accordance with the approved details.

Reason: To ensure that the existing sewer infrastructure is protected and in accordance with Policies CS18 and CS19 of the Gravesham Local Plan Core Strategy (September 2014).

Contaminated Land

6. No development approved by this permission shall be commenced prior to a contaminated land assessment (in accordance with the CLEA guidelines and CLR 11 methodology) and if necessary an associated remedial strategy, together with a timetable of works, being submitted to the Local Planning Authority for approval.
- a) The site investigation, including relevant soil, soil gas, surface and groundwater sampling, shall be carried out by a suitably qualified and accredited consultant/contractor in accordance with a Quality Assured sampling and analysis methodology.
- b) A site investigation report detailing all investigative works and sampling on site, together with the results of analysis, risk assessment to any receptors and a proposed remediation strategy shall be submitted to the Local Planning Authority. The Local Planning Authority shall approve such remedial works as required prior to any remediation commencing on site. The works shall be of such a nature so as to render harmless the identified contamination given the proposed end-use of the site and surrounding environment including any controlled waters.
- c) Approved remediation works shall be carried out in full on site under a quality assurance scheme to demonstrate compliance with the proposed methodology and best practice guidance). If during any works contamination is encountered which has not previously been identified then the additional contamination shall be fully assessed and an appropriate remediation scheme agreed with the Local Planning Authority.
- d) Upon completion of the works, this condition shall not be discharged until a closure report has been submitted to and approved by the Local Planning Authority. The closure report shall include details of the proposed remediation works and the quality assurance certificates to show that the works have been carried out in full in accordance with the approved methodology. Details of any post remediation sampling and analysis to show the site has reached the required clean-up criteria shall be included in the closure report together with the necessary documentation detailing what waste materials have been removed from the site.
- e) Where applicable, a monitoring and maintenance scheme to include monitoring the long-term effectiveness of the proposed remediation over an agreed period of time, and the provision of reports on the same, must be prepared and approved in writing by the Local Planning Authority.

Following completion of the measures identified in that scheme, and when the remediation objectives have been achieved, reports that demonstrate the effectiveness of the monitoring and maintenance carried out must be produced and submitted to the Local Planning Authority.

Reason: To ensure adequate assessment has been undertaken to confirm whether remediation is required to prevent any adverse effects of soil contamination to the public, environment and underlying groundwater.

Prior to above ground level Condition

Materials/samples

7. Prior to any above grounds works and notwithstanding the details shown on the approved plans and application form, additional details (and samples where requested by the Local Planning Authority) of all the external facing materials to be used in the construction of the development hereby permitted, including details of all windows, doors and other openings, shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be carried out in accordance with the approved details before the first occupation of the development.

Reason: To maintain the character and appearance of the area and to ensure a satisfactory visual relationship between the existing development and the wider area in accordance with adopted Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

Pre-occupation Condition(s)

Hard Landscaping Scheme

8. Prior to first occupation of any of the development details of the proposed hard landscaping to include the proposed surface and boundary treatments, security gates and means of demarcating the car parking spaces, shall be submitted to and approved in writing by the Local Planning Authority. The approved works shall be completed prior to first occupation of the development and thereafter retained in good order during the lifetime of the development.

Reason: To maintain the character and appearance of the site and to ensure a satisfactory visual relationship between the existing and new development in accordance with adopted Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

Soft Landscaping Scheme

9. Prior to first occupation of any of the development details of the proposed soft landscaping to include the provision of native planting and to be informed by the indicative details included on the approved plans, shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter accord with the approved details, and the proposed landscaping scheme shall be fully implemented within one year of first occupation of the building. The soft landscaping shall thereafter be maintained for a period of not less than five years and any trees, shrubs or grassed areas which die, are diseased or vandalised within this period shall be replaced within the next planting season.

Reason: To ensure that the landscaping is maintained in the long term in the interests of the visual amenity of the development, in accordance with adopted Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

Car parking spaces

10. Prior to first occupation of any of the development the car parking spaces indicated on the Drawing no. 001 - Rev. A shall be formed, surfaced and suitably demarcated (in accordance with the hard landscaping scheme to be approved pursuant to condition 8). Thereafter the parking spaces shall be kept available for such use and no development, whether or not permitted by the Town and Country Planning (General Permitted Development) (England) Order 2015 as amended (or any provision equivalent to that Class in any statutory instrument revoking and re-enacting that Order), shall be carried out that would preclude their use for car parking.

Reason: That the development without the provision for adequate accommodation for the parking or garaging of a private motor car or cars is likely to lead to car parking inconvenient to other road users and detrimental to amenity and in accordance with Saved Policy P3 of Gravesham Local Plan First Review (1994).

Dropped Kerb

11. Prior to first occupation of the development the applicant/developer shall, through agreement with the Local Highway Authority, carry out the following works in full:
- (i) Provision of a vehicular crossover to serve the development, as indicated on Drawing no. 001 - Rev. A; and
 - (ii) Re-instatement of the footway in place of the existing vehicular crossover on Rural Vale that will be redundant following redevelopment.

Reason: In order to consolidate the public highway to integrate the new development and in accordance with adopted Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

Noise mitigation measures

12. Prior to first occupation of the development the applicant/developer shall provide written confirmation to the Local Planning Authority that the mitigation measures laid out in section 5 of the Lansett Consulting Noise Report reference LC-12-0091-RP1/March 2013 have been implemented within the construction of the development.

Reason: In order to ensure acceptable living conditions for the future residents and in accordance with adopted Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

Security Measures

13. Prior to first occupation of the development details of security arrangements and means of access controls to the site and the individual buildings shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details and the approved measures shall be retained during the lifetime of the development.

Reason: In order to create a safe and accessible development by reducing opportunities for crime, in accordance with Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

External lighting

14. Prior to first occupation of the development details of any external lighting to the building, car park or grounds shall be submitted to and approved in writing by the Local Planning Authority. The lighting shall thereafter be carried out in accordance with the approved details before the first occupation of the development.

Reason: In the interest of amenity and in accordance with Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

Refuse Stores

15. Prior to the first occupation of the development hereby approved details of the refuse arrangements structure indicated Drawing no. 003 - Rev. A shall be submitted to and approved in writing by the Local Planning Authority. The approved refuse stores shall be provided prior to first occupation of the development and thereafter be retained for such purposes at all times. Thereafter no development, whether or not permitted by the Town and Country Planning (General Permitted Development) (England) Order 2015 as amended (or any provision equivalent to that Class in any statutory instrument revoking

and re-enacting that Order), shall be carried out that would preclude the use of these buildings for their intended purpose.

Reason: In order to ensure the development is served by a suitable refuse storage area in the interest of amenity and in accordance with adopted Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

Bicycle Storage

16. Prior to the first occupation of the development hereby approved details of the cycle storage racks indicated on Drawing no. 003 - Rev. A shall be submitted to and approved in writing by the Local Planning Authority. The approved cycle stores shall be provided prior to first occupation of the development and thereafter be retained for such purposes at all times. Thereafter no development, whether or not permitted by the Town and Country Planning (General Permitted Development) (England) Order 2015 as amended (or any provision equivalent to that Class in any statutory instrument revoking and re-enacting that Order), shall be carried out that would preclude the use of these buildings for their intended purpose.

Reason: In order to encourage options for sustainable travel in accordance with Policy CS19 Gravesham Local Plan: Core Strategy (September 2014) and Saved Policy P3 of Gravesham Local Plan First Review (1994).

Visibility Splays

17. Prior to the first occupation of the development hereby approved and notwithstanding the provisions of the Town and Country (General Permitted Development) (England) Order 2015 (or any order revoking and re-enacting that Order with or without modifications) the visibility splay(s) shown on the approved plans shall be cleared of all obstructions over 0.6m above the level of the adjoining highway, including the reduction in level of the land if necessary. Nothing over that height shall be permitted to remain, be placed, built, planted or grown within the area of the approved visibility splays.

Reason: In the interests of highway and pedestrian safety and in accordance with Policy CS11 of the adopted Gravesham Local Plan Core Strategy (September 2014), Saved Policy T5 of the Gravesham Local Plan First Review and paragraph 35 of the National Planning Policy Framework (2021).

Other/On-going conditions

Watching Brief

18. The applicant shall undertake a watching brief during construction in case any contamination is encountered during the groundwork phase. If during development any contamination is found, the Local Planning Authority should be informed as soon as practical and the work shall not continue until written agreement is provided by the Local Planning Authority as to the appropriate measures to be taken to resolve the matter and they are satisfied that those measures have been carried out.

Reason: To ensure no unacceptable risks to human health occur as a result of development.

External fixtures

19. No satellite antenna, apparatus, external pipe work or plant/services of shall be erected on the site or roof/wall of either building hereby approved.

Reason: In the interests of the visual amenity of the development and in accordance with Policy CS19 Gravesham Local Plan: Core Strategy (September 2014).

Gates

20. No gates shall be installed across the vehicular access driveway to the development site at any time.

Reason: In the interests of highway safety and to avoid vehicles waiting in the road while gates are opened or closed.

INFORMATIVES:-

1 STATEMENT OF POSITIVE AND PROACTIVE APPROACH TO DECISION-MAKING

In accordance with Article 35 (2) of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended), and paragraph 38 of the National Planning Policy Framework (NPPF) 2021, the Local Planning Authority has approached the assessment and determination of this application in a positive and creative way and, where appropriate, has worked pro-actively with the applicant to secure a development that is sustainable and that improves the economic, social and environmental conditions of the area, and that is in accordance with the Development Plan for the area.

2 BUILDING REGULATIONS AND PARTY WALL ACT

This decision DOES NOT imply any consent which may be required under the Building Regulations or under any other enactment or provision. Nor does it override any private rights which any person may have relating to the land affected by this decision, including the provisions of the Party Wall etc. Act 1996.

3 DEVIATION FROM APPROVED PLANS

It is possible that any proposed deviation from the approved plans could be classed as a 'material' change requiring a further application/permission. In the event that any change is proposed, applicants are advised to seek advice from the Local Planning Authority [as proceeding without the necessary permissions could nullify this permission].

4 FOR THE AVOIDANCE OF DOUBT - BLOCK PLAN ON DRAWING NO. LR1-19-P3

The Proposed Block Plan (scale - 1:200) as shown in Drawing no. LR1-19-P3 is incorrect and should not be considered an accurate representation of the redline boundary. Therefore, this is to be excluded from the approved plans and superseded by the Proposed Block Plan (scale - 1:200) shown in Drawing no. 003 - Rev. A.

5 KENT COUNTY COUNCIL HIGHWAYS AND TRANSPORTATION

It is the responsibility of the applicant to ensure, before the development hereby approved is commenced, that all necessary highway approvals and consents where required are obtained and that the limits of highway boundary are clearly established in order to avoid any enforcement action being taken by the Highway Authority.

Across the county there are pieces of land next to private homes and gardens that do not look like roads or pavements but are actually part of the road. This is called 'highway land'. Some of this land is owned by The Kent County Council (KCC) whilst some are owned by third party owners. Irrespective of the ownership, this land may have 'highway rights' over the topsoil.

Information about how to clarify the highway boundary can be found at <https://www.kent.gov.uk/roads-and-travel/what-we-look-after/highway-land/highway-boundary-enquiries>

The applicant must also ensure that the details shown on the approved plans agree in every aspect with those approved under such legislation and common law. It is therefore important for the applicant to contact KCC Highways and Transportation to progress this aspect of the works prior to commencement on site.

6 SUPERFAST FIBRE OPTIC BROADBAND

Kent County Council recommends that all developers work with a telecommunication partner or subcontractor in the early stages of planning for any new development to make sure that Next Generation Access Broadband is a fundamental part of the project. Access to superfast broadband should be thought of as an essential utility for all new homes and businesses and given the same importance as water or power in any development design. Please liaise with a telecom provider to decide the appropriate solution for this development and the availability of the nearest connection point to high speed broadband. We understand that major telecommunication providers are now offering Next Generation Access Broadband connections free of charge to the developer. For advice on how to proceed with providing access to superfast broadband please contact broadband@kent.gov.uk

7 SOUTHERN WATER

A formal application for connection to the public sewerage system is required in order to service this development, please contact Southern Water, Sparrowgrove House, Sparrowgrove, Otterbourne, Hampshire SO21 2SW (Tel: 0330 303 0119) or www.southernwater.co.uk

Please read their New Connections Services Charging Arrangements documents which has now been published and is available to read on their website via the following link <https://beta.southernwater.co.uk/infrastructure-charges>

Dated: 21 June 2023

Civic Centre
Windmill Street
Gravesend
Kent
DA12 1AU

Wendy Lane MRTPI
Assistant Director (Planning)
Planning Service

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### **NOTIFICATION TO APPLICANT**

#### **APPEALS TO THE SECRETARY OF STATE**

- If you are aggrieved by the decision of your Local Planning Authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under Section 78 of the Town and Country Planning Act 1990.
- If this is a **householder application\*** which has been refused and you want to appeal against your Local Planning Authority's decision then you must do so within **12 weeks of the date of this notice**.
- For all other applications, refused or permitted, if you want to appeal against your Local Planning Authority's decision then you must do so within 6 months of the date of this notice.

- **For further information regarding Appeals and to make an application please click the relevant link:**  
<https://www.gov.uk/appeal-householder-planning-decision>  
<https://www.gov.uk/appeal-planning-decision>
- The Secretary of State can allow a longer period for giving notice of an appeal, but he will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.
- The Secretary of State need not consider an appeal if it seems to him that the Local Planning Authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.
- In practice, the Secretary of State does not refuse to consider appeals solely because the Local Planning Authority based their decision on a direction given by him.

### **\*Householder applications**

These are:

- (a) applications for planning permission for development of an existing dwellinghouse, or development within the curtilage of such a dwellinghouse for any purpose incidental to the enjoyment of the dwellinghouse, or
- (b) an application for any consent, agreement or approval required by or under a planning permission, development order or local development order in relation to such development

but does **not** include –

- (i) an application for change of use;
- (ii) an application to change the number of dwellings in a building.

### **PURCHASE NOTICES**

If either the Local Planning Authority or the Secretary of State for the Environment refuses permission to develop land or grants it subject to conditions, the owner may claim that he/she can neither put the land to a reasonably beneficial use in its existing state nor can he/she render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances, the owner may serve a purchase notice on the Council (District Council, London Borough Council or Common Council of the City of London) in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.

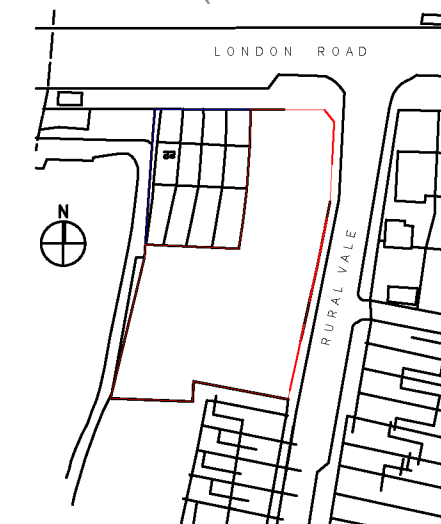


## SITE LAYOUT (Scale 1-200)



L O N D O N      R O A D

LOCATION PLAN (Scale 1-1250)



## MASS MODEL



1-1250



1-200



NOTE

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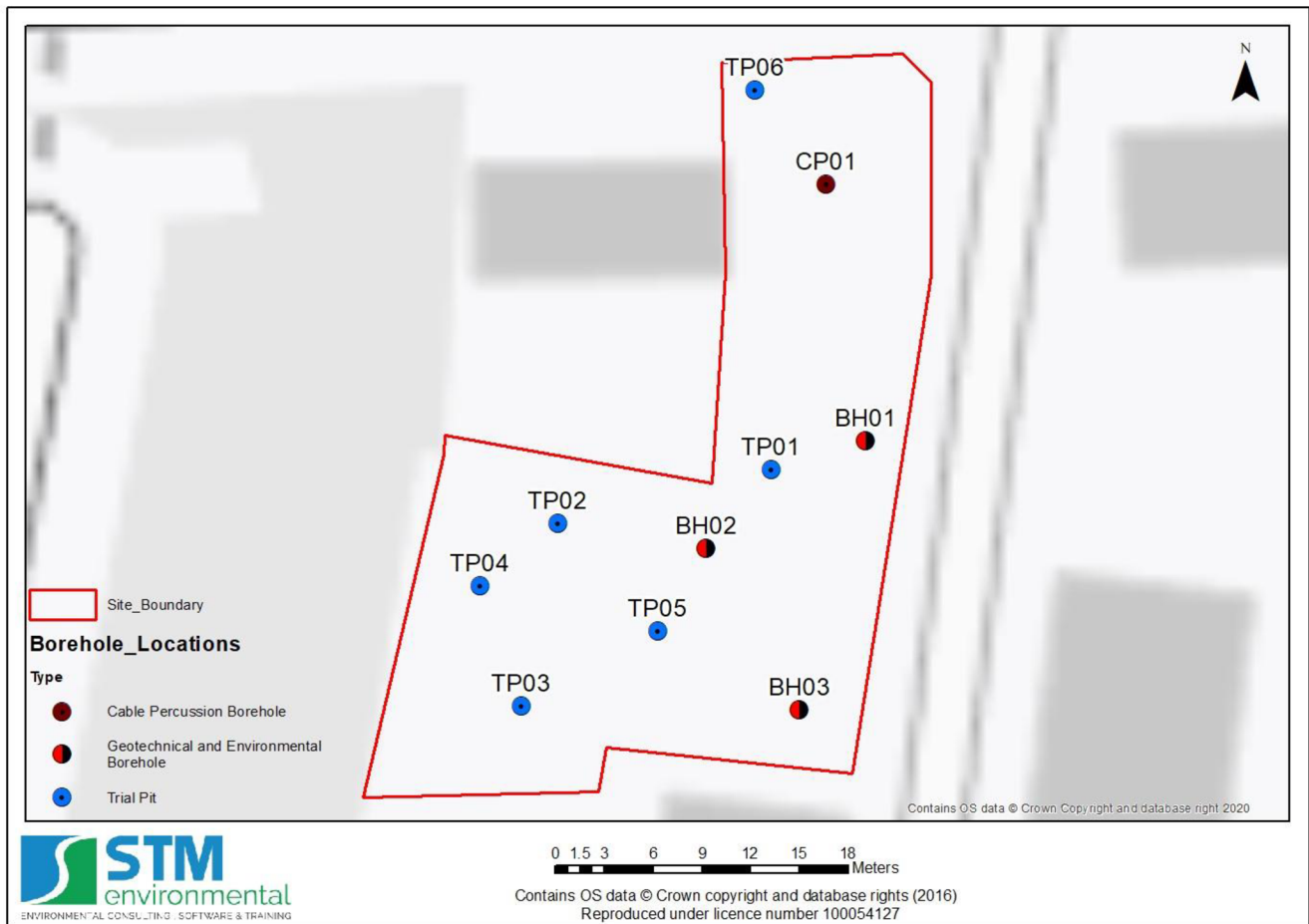
[illegible]

39 Wrotham Road.  
Gravesend, Kent DA11 0PN.

ti 01474 247787

**w** <http://barronedwards.co.uk>  
**e** [info@barronedwards.co.uk](mailto:info@barronedwards.co.uk)

## 12.2 Appendix 2 - Borehole Location Plan

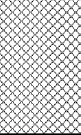


## 12.3 Appendix 3 - Borehole Logs

# Borehole Log

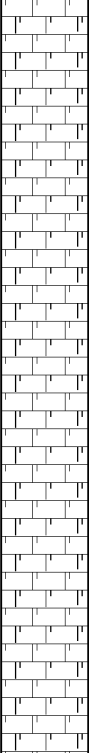
Borehole No.  
**CP01**  
Sheet 1 of 2

|               |                                                                                        |             |                |          |                         |           |                                        |
|---------------|----------------------------------------------------------------------------------------|-------------|----------------|----------|-------------------------|-----------|----------------------------------------|
| Project Name: | Former Fox and Hounds Public House                                                     | Project No. | GT-2024-000054 | Co-ords: | 563252.00 - 174063.00   | Hole Type | CP                                     |
| Location:     | Former Fox and Hounds Public House, 26-27 London Road, Northfleet, Gravesend, DA11 9JH |             |                | Level:   | 24.93                   | Scale     | 1:50                                   |
| Client:       | Super Asset Group                                                                      |             |                | Dates:   | 02/05/2024 - 02/05/2024 |           | Logged By<br>BH Drilling Services/ STM |

| Well | Water Strikes | Samples and In Situ Testing |      |                    | Depth (m) | Level (m) | Legend                                                                              | Stratum Description                                                                    |    |
|------|---------------|-----------------------------|------|--------------------|-----------|-----------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----|
|      |               | Depth (m)                   | Type | Results            |           |           |                                                                                     |                                                                                        |    |
|      |               |                             |      |                    | 0.90      | 24.03     |    | Made Ground - Brown SAND with an abundance of large brick, concrete and tile fragments |    |
|      |               |                             |      |                    | 1.20      | 23.73     |    | Made Ground - Yellowish brown chalky SILT with Chalk gravel and rare brick fragments   | 1  |
|      |               | 1.50                        |      | N=27 (3,4/4,9,7,7) | 1.50      | 23.43     |    | White structureless gravelly CHALK with rare Flints                                    |    |
|      |               |                             |      |                    |           |           |    | White structureless CHALK with Flint cobbles                                           |    |
|      |               | 2.00                        | D    |                    |           |           |    |                                                                                        | 2  |
|      |               | 2.50                        |      | N=21 (4,5/5,5,5,6) |           |           |    |                                                                                        |    |
|      |               |                             |      |                    |           |           |    |                                                                                        |    |
|      |               |                             |      |                    |           |           |    |                                                                                        |    |
|      |               | 3.50                        |      | N=14 (3,3/4,4,3,3) |           |           |    |                                                                                        | 3  |
|      |               |                             |      |                    |           |           |   |                                                                                        |    |
|      |               | 4.00                        | D    |                    |           |           |  |                                                                                        | 4  |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               | 4.50                        |      | N=14 (4,4/4,3,3,4) |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               | 5.50                        |      | N=15 (3,4/4,4,3,4) |           |           |  |                                                                                        | 5  |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               | 6.00                        | D    |                    |           |           |  |                                                                                        | 6  |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               | 7.00                        |      | N=14 (3,3/3,3,4,4) |           |           |  |                                                                                        | 7  |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               | 8.00                        | D    |                    |           |           |  |                                                                                        | 8  |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               | 8.50                        |      | N=15 (3,3/3,3,4,5) |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               |                             |      |                    |           |           |  |                                                                                        |    |
|      |               | 10.00                       | D    |                    |           |           |  |                                                                                        | 10 |
|      |               |                             |      |                    |           |           |                                                                                     | Continued on next sheet                                                                |    |

Remarks  
Borehole advanced to a maximum depth of 15mbgl. No groundwater encountered. Elevation levels and borehole location grid references are approximated based on LiDAR data.



|                                                                                                     |               |                             |      |                         | <h1>Borehole Log</h1>          |           |                                                                                    | Borehole No.<br><b>CP01</b><br>Sheet 2 of 2 |                                                                                       |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------|------|-------------------------|--------------------------------|-----------|------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------|----|
| Project Name: Former Fox and Hounds Public House                                                                                                                                    |               |                             |      |                         | Project No.<br>GT-2024-000054  |           | Co-ords: 563252.00 - 174063.00                                                     |                                             | Hole Type<br>CP                                                                       |    |
| Location: Former Fox and Hounds Public House, 26-27 London Road, Northfleet, Gravesend, DA11 9JH                                                                                    |               |                             |      |                         | Level: 24.93                   |           |                                                                                    | Scale<br>1:50                               |                                                                                       |    |
| Client: Super Asset Group                                                                                                                                                           |               |                             |      |                         | Dates: 02/05/2024 - 02/05/2024 |           |                                                                                    | Logged By<br>BH Drilling Services/ STM      |                                                                                       |    |
| Well                                                                                                                                                                                | Water Strikes | Samples and In Situ Testing |      |                         | Depth (m)                      | Level (m) | Legend                                                                             | Stratum Description                         |                                                                                       |    |
|                                                                                                                                                                                     |               | Depth (m)                   | Type | Results                 |                                |           |                                                                                    |                                             |                                                                                       |    |
|                                                                                                                                                                                     |               | 10.00                       | D    | N=21 (3,4/4,5,6,6)      | 15.00                          | 9.93      |  |                                             | 11                                                                                    |    |
|                                                                                                                                                                                     |               | 11.50                       |      | N=18 (3,3/4,4,5,5)      |                                |           |                                                                                    |                                             | 12                                                                                    |    |
|                                                                                                                                                                                     |               | 12.00                       |      |                         |                                |           |                                                                                    |                                             |                                                                                       |    |
|                                                                                                                                                                                     |               | 13.00                       | D    | N=50 (3,4/50 for 225mm) |                                |           |                                                                                    |                                             | 13                                                                                    |    |
|                                                                                                                                                                                     |               | 14.00                       |      |                         |                                |           |                                                                                    |                                             |                                                                                       | 14 |
|                                                                                                                                                                                     |               | 15.00                       |      | N=21 (3,4/4,5,6,6)      |                                |           |                                                                                    |                                             | 15                                                                                    |    |
| End of borehole at 15.00 m                                                                                                                                                          |               |                             |      |                         |                                |           |                                                                                    | 16                                          |                                                                                       |    |
|                                                                                                                                                                                     |               |                             |      |                         |                                |           |                                                                                    | 17                                          |                                                                                       |    |
|                                                                                                                                                                                     |               |                             |      |                         |                                |           |                                                                                    | 18                                          |                                                                                       |    |
|                                                                                                                                                                                     |               |                             |      |                         |                                |           |                                                                                    | 19                                          |                                                                                       |    |
|                                                                                                                                                                                     |               |                             |      |                         |                                |           |                                                                                    | 20                                          |                                                                                       |    |
| Remarks<br>Borehole advanced to a maximum depth of 15mbgl. No groundwater encountered. Elevation levels and borehole location grid references are approximated based on LiDAR data. |               |                             |      |                         |                                |           |                                                                                    |                                             |  |    |

# Borehole Log

Borehole No.

**BH01**

Sheet 1 of 1

Project Name: Former Fox and Hounds Public House

Project No.  
GT-2024-000054

Co-ords: 563255.00 - 174047.00

Hole Type  
WLS

Location: Former Fox and Hounds Public House, 26-27 London Road, Northfleet, Gravesend, DA11 9JH

Level: 24.84

Scale  
1:50

Client: Super Asset Group

Dates: 01/05/2024 - 01/05/2024

Logged By  
M. Forshaw/ Z. Price

| Well | Water Strikes | Samples and In Situ Testing |      |                                      | Depth (m) | Level (m) | Legend | Stratum Description                                                                                                                                      |    |
|------|---------------|-----------------------------|------|--------------------------------------|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----|
|      |               | Depth (m)                   | Type | Results                              |           |           |        |                                                                                                                                                          |    |
|      |               | 0.30                        | ES   | PID=0                                |           |           |        | Made Ground - Dark brown, dark grey and white slightly gravelly chalky sandy SILT with an abundance of concrete fragments and occasional brick fragments |    |
|      |               | 0.80                        | ES   |                                      |           |           |        |                                                                                                                                                          |    |
|      |               | 1.00                        |      | N=22 (2,4/4,6,6,6)<br>PID=0<br>PID=0 | 1.00      | 23.84     |        | White inferred CIRIA Grade Dc/Dm CHALK                                                                                                                   | 1  |
|      |               | 2.00                        | D    |                                      |           |           |        |                                                                                                                                                          |    |
|      |               | 2.00                        |      | N=39<br>(7,9/10,10,10,9)             |           |           |        |                                                                                                                                                          | 2  |
|      |               | 3.00                        |      | N=17 (6,5/4,4,5,4)                   | 3.00      | 21.84     |        | End of borehole at 3.00 m                                                                                                                                | 3  |
|      |               |                             |      |                                      |           |           |        |                                                                                                                                                          | 4  |
|      |               |                             |      |                                      |           |           |        |                                                                                                                                                          | 5  |
|      |               |                             |      |                                      |           |           |        |                                                                                                                                                          | 6  |
|      |               |                             |      |                                      |           |           |        |                                                                                                                                                          | 7  |
|      |               |                             |      |                                      |           |           |        |                                                                                                                                                          | 8  |
|      |               |                             |      |                                      |           |           |        |                                                                                                                                                          | 9  |
|      |               |                             |      |                                      |           |           |        |                                                                                                                                                          | 10 |

Remarks

Borehole advanced to a maximum depth of 3mbgl. No groundwater encountered. Elevation levels and borehole location grid references are approximated based on LiDAR data.



# Borehole Log

Borehole No.

**BH02**

Sheet 1 of 1

Project Name: Former Fox and Hounds Public House

Project No.  
GT-2024-000054

Co-ords: 563245.00 - 174041.00

Hole Type  
WLS

Location: Former Fox and Hounds Public House, 26-27 London Road, Northfleet, Gravesend, DA11 9JH

Level: 24.66

Scale  
1:50

Client: Super Asset Group

Dates: 01/05/2024 - 01/05/2024

Logged By  
M. Forshaw/ Z. Price

| Well | Water Strikes | Samples and In Situ Testing |      |                      | Depth (m) | Level (m) | Legend | Stratum Description                                                                                               |    |
|------|---------------|-----------------------------|------|----------------------|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------|----|
|      |               | Depth (m)                   | Type | Results              |           |           |        |                                                                                                                   |    |
|      |               | 0.20                        | ES   | PID=0                |           |           |        | Made Ground - Dark brown, dark grey and white slightly gravelly chalky sandy SILT with occasional brick fragments |    |
|      |               | 0.90                        | ES   | PID=0                |           |           |        |                                                                                                                   |    |
|      |               | 1.00                        | D    |                      | 1.00      | 23.66     |        | White inferred CIRIA Grade Dc/Dm CHALK                                                                            | 1  |
|      |               | 1.00                        |      | N=38 (2,6/8,6,10,14) |           |           |        |                                                                                                                   |    |
|      |               | 1.50                        | B    |                      |           |           |        |                                                                                                                   |    |
|      |               | 1.50                        |      | N=27 (9,8/8,9,6,4)   |           |           |        |                                                                                                                   |    |
|      |               | 2.00                        |      | N=27 (6,5/7,6,7,7)   |           |           |        |                                                                                                                   | 2  |
|      |               | 3.00                        |      | N=31 (6,5/6,6,8,11)  | 3.00      | 21.66     |        | End of borehole at 3.00 m                                                                                         | 3  |
|      |               |                             |      |                      |           |           |        |                                                                                                                   | 4  |
|      |               |                             |      |                      |           |           |        |                                                                                                                   | 5  |
|      |               |                             |      |                      |           |           |        |                                                                                                                   | 6  |
|      |               |                             |      |                      |           |           |        |                                                                                                                   | 7  |
|      |               |                             |      |                      |           |           |        |                                                                                                                   | 8  |
|      |               |                             |      |                      |           |           |        |                                                                                                                   | 9  |
|      |               |                             |      |                      |           |           |        |                                                                                                                   | 10 |

Remarks

Borehole advanced to a maximum depth of 3mbgl. No groundwater encountered. Elevation levels and borehole location grid references are approximated based on LiDAR data.



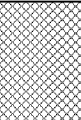
# Borehole Log

Borehole No.

**BH03**

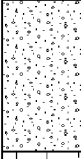
Sheet 1 of 1

|               |                                                                                        |             |                |          |                         |           |                                   |
|---------------|----------------------------------------------------------------------------------------|-------------|----------------|----------|-------------------------|-----------|-----------------------------------|
| Project Name: | Former Fox and Hounds Public House                                                     | Project No. | GT-2024-000054 | Co-ords: | 563251.00 - 174031.00   | Hole Type | WLS                               |
| Location:     | Former Fox and Hounds Public House, 26-27 London Road, Northfleet, Gravesend, DA11 9JH |             |                | Level:   | 24.73                   | Scale     | 1:50                              |
| Client:       | Super Asset Group                                                                      |             |                | Dates:   | 01/05/2024 - 01/05/2024 |           | Logged By<br>M. Forshaw/ Z. Price |

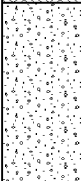
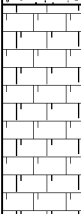
| Well | Water Strikes | Samples and In Situ Testing |      |                            | Depth (m) | Level (m) | Legend                                                                            | Stratum Description                                                                                         |    |
|------|---------------|-----------------------------|------|----------------------------|-----------|-----------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----|
|      |               | Depth (m)                   | Type | Results                    |           |           |                                                                                   |                                                                                                             |    |
|      |               | 0.30                        | ES   | PID=0                      |           |           |  | Made Ground - Black, dark grey and dark brown slightly clayey SILT with occasional brick fragments          |    |
|      |               | 1.00                        |      | PID=0<br>N=5 (1,1/2,1,1,1) | 0.80      | 23.93     |  | Mottled white, dark brown and dark yellow slightly gravelly clayey chalky SILT with occasional Chalk gravel | 1  |
|      |               | 2.00<br>2.00                | D    | N=26 (8,5/6,5,7,8)         | 1.70      | 23.03     |  | White inferred CIRIA Grade Dc/Dm CHALK                                                                      | 2  |
|      |               | 2.50                        | B    |                            |           |           |                                                                                   |                                                                                                             |    |
|      |               | 3.00                        |      | N=19 (5,4/4,5,4,6)         | 3.00      | 21.73     |  | End of borehole at 3.00 m                                                                                   | 3  |
|      |               |                             |      |                            |           |           |                                                                                   |                                                                                                             | 4  |
|      |               |                             |      |                            |           |           |                                                                                   |                                                                                                             | 5  |
|      |               |                             |      |                            |           |           |                                                                                   |                                                                                                             | 6  |
|      |               |                             |      |                            |           |           |                                                                                   |                                                                                                             | 7  |
|      |               |                             |      |                            |           |           |                                                                                   |                                                                                                             | 8  |
|      |               |                             |      |                            |           |           |                                                                                   |                                                                                                             | 9  |
|      |               |                             |      |                            |           |           |                                                                                   |                                                                                                             | 10 |

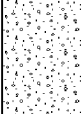
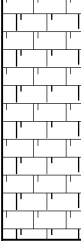
Remarks  
Borehole advanced to a maximum depth of 3mbgl. No groundwater encountered. Elevation levels and borehole location grid references are approximated based on LiDAR data.



|                                                                                                                                                                                    |                             |      |         |                               |              |                                                                                   |                                                                                   |                                               |       |                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------|---------|-------------------------------|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------|-------|----------------------|
|                                                                                                    |                             |      |         | <h1>Trial Pit Log</h1>        |              |                                                                                   | Trialpit No<br><b>TP01</b><br>Sheet 1 of 1                                        |                                               |       |                      |
| Project Name: Former Fox and Hounds Public House                                                                                                                                   |                             |      |         | Project No.<br>GT-2024-000054 |              | Co-ords: 563249.00 - 174046.00<br>Level: 24.84                                    |                                                                                   | Date<br>01/05/2024                            |       |                      |
| Location: Former Fox and Hounds Public House, 26-27 London Road, Northfleet, Gravesend, DA11 9JH                                                                                   |                             |      |         | Dimensions (m):<br>Depth 1.60 |              | 1.1<br><div><div></div></div>                                                     |                                                                                   | Scale<br>1:25<br>Logged<br>S. Alder/ Z. Price |       |                      |
| Water<br>Strike                                                                                                                                                                    | Samples and In Situ Testing |      |         | Depth<br>(m)                  | Level<br>(m) | Legend                                                                            | Stratum Description                                                               |                                               |       |                      |
|                                                                                                                                                                                    | Depth                       | Type | Results |                               |              |                                                                                   |                                                                                   |                                               |       |                      |
|                                                                                                                                                                                    | 0.30                        | ES   | PID=0   | 0.30                          | 24.54        |  | TOPSOIL                                                                           |                                               |       |                      |
|                                                                                                                                                                                    |                             |      |         | 0.80                          | 24.04        |  | Dark orange and brown SAND and GRAVEL                                             |                                               |       |                      |
|                                                                                                                                                                                    |                             |      |         |                               |              |                                                                                   |  | White and yellow gravelly CHALK               |       |                      |
|                                                                                                                                                                                    |                             |      |         |                               |              |                                                                                   |                                                                                   | 1.60                                          | 23.24 | End of pit at 1.60 m |
| <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>                                                                                                                   |                             |      |         |                               |              |                                                                                   |                                                                                   |                                               |       |                      |
| Remarks: Borehole advanced to a maximum depth of 1.6mbgl. No groundwater encountered. Elevation levels and borehole location grid references are approximated based on LiDAR data. |                             |      |         |                               |              |                                                                                   |                                                                                   |                                               |       |                      |
| Stability:                                                                                                                                                                         |                             |      |         |                               |              |                                                                                   |                                                                                   |                                               |       |                      |



|                                                                                                                                                                                                                     |                             |      |         |                                                 |              |                                                                                   |                                                                                   |                                                                                       |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------|---------|-------------------------------------------------|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------|
|                                                                                                                                     |                             |      |         | <h1>Trial Pit Log</h1>                          |              |                                                                                   | Trialpit No<br><b>TP02</b><br>Sheet 1 of 1                                        |                                                                                       |       |
| Project Name: Former Fox and Hounds Public House                                                                                                                                                                    |                             |      |         | Project No.<br>GT-2024-000054                   |              | Co-ords: 563236.00 - 174042.00<br>Level: 25.11                                    |                                                                                   | Date<br>01/05/2024                                                                    |       |
| Location: Former Fox and Hounds Public House, 26-27 London Road, Northfleet, Gravesend, DA11 9JH                                                                                                                    |                             |      |         | Dimensions (m):<br>Depth 1.50      0.5      1.1 |              |                                                                                   |                                                                                   | Scale<br>1:25                                                                         |       |
| Client: Super Asset Group                                                                                                                                                                                           |                             |      |         |                                                 |              |                                                                                   |                                                                                   | Logged<br>S. Alder/ Z. Price                                                          |       |
| Water<br>Strike                                                                                                                                                                                                     | Samples and In Situ Testing |      |         | Depth<br>(m)                                    | Level<br>(m) | Legend                                                                            | Stratum Description                                                               |                                                                                       |       |
|                                                                                                                                                                                                                     | Depth                       | Type | Results |                                                 |              |                                                                                   |                                                                                   |                                                                                       |       |
|                                                                                                                                                                                                                     | 0.40                        | ES   | PID=0   | 0.20                                            | 24.91        |  | Dark brown TOPSOIL                                                                |                                                                                       |       |
|                                                                                                                                                                                                                     |                             |      |         | 0.80                                            | 24.31        |  | Dark brown and orange SAND and GRAVEL with small Chalk fragments                  |                                                                                       |       |
|                                                                                                                                                                                                                     |                             |      |         |                                                 |              |                                                                                   |  | White and yellow gravelly CHALK                                                       |       |
|                                                                                                                                                                                                                     |                             |      |         |                                                 |              |                                                                                   |                                                                                   | 1.50                                                                                  | 23.61 |
| <div>Remarks: Borehole advanced to a maximum depth of 1.5mbgl. No groundwater encountered. Elevation levels and borehole location grid references are approximated based on LiDAR data.</div> <div>Stability:</div> |                             |      |         |                                                 |              |                                                                                   |                                                                                   |                                                                                       |       |
|                                                                                                                                                                                                                     |                             |      |         |                                                 |              |                                                                                   |                                                                                   |  |       |

|                                                                                                                                                                                    |                             |      |         |                                                                  |              |                                                                                   |                                                                                   |                                               |       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------|---------|------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------|-------|
|                                                                                                    |                             |      |         | <h1>Trial Pit Log</h1>                                           |              |                                                                                   | Trialpit No<br><b>TP03</b><br>Sheet 1 of 1                                        |                                               |       |
| Project Name: Former Fox and Hounds Public House                                                                                                                                   |                             |      |         | Project No.<br>GT-2024-000054                                    |              | Co-ords: 563234.00 - 174031.00<br>Level: 24.91                                    |                                                                                   | Date<br>01/05/2024                            |       |
| Location: Former Fox and Hounds Public House, 26-27 London Road, Northfleet, Gravesend, DA11 9JH                                                                                   |                             |      |         | Dimensions (m):<br>Depth 1.40      1.1<br><div><div></div></div> |              |                                                                                   |                                                                                   | Scale<br>1:25<br>Logged<br>S. Alder/ Z. Price |       |
| Water<br>Strike                                                                                                                                                                    | Samples and In Situ Testing |      |         | Depth<br>(m)                                                     | Level<br>(m) | Legend                                                                            | Stratum Description                                                               |                                               |       |
|                                                                                                                                                                                    | Depth                       | Type | Results |                                                                  |              |                                                                                   |                                                                                   |                                               |       |
|                                                                                                                                                                                    | 0.30                        | ES   | PID=0   | 0.20                                                             | 24.71        |  | Dark brown very fine TOPSOIL                                                      |                                               |       |
|                                                                                                                                                                                    |                             |      |         | 0.60                                                             | 24.31        |  | Dark orange and brown SAND and GRAVEL                                             |                                               |       |
|                                                                                                                                                                                    |                             |      |         |                                                                  |              |                                                                                   |  | White and yellow gravelly CHALK               |       |
|                                                                                                                                                                                    |                             |      |         |                                                                  |              |                                                                                   |                                                                                   | 1.40                                          | 23.51 |
|                                                                                                                                                                                    |                             |      |         |                                                                  |              |                                                                                   |                                                                                   | 1                                             |       |
|                                                                                                                                                                                    |                             |      |         |                                                                  |              |                                                                                   |                                                                                   | 2                                             |       |
|                                                                                                                                                                                    |                             |      |         |                                                                  |              |                                                                                   |                                                                                   | 3                                             |       |
|                                                                                                                                                                                    |                             |      |         |                                                                  |              |                                                                                   |                                                                                   | 4                                             |       |
|                                                                                                                                                                                    |                             |      |         |                                                                  |              |                                                                                   |                                                                                   | 5                                             |       |
| Remarks: Borehole advanced to a maximum depth of 1.4mbgl. No groundwater encountered. Elevation levels and borehole location grid references are approximated based on LiDAR data. |                             |      |         |                                                                  |              |                                                                                   |                                                                                   |                                               |       |
| Stability:                                                                                                                                                                         |                             |      |         |                                                                  |              |                                                                                   |                                                                                   |                                               |       |







|                                                                                                                                                                                      |               |                                                                                        |      |         |                                |           |                                                                                   |                                                                                           |                                                                                                                                    |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------|------|---------|--------------------------------|-----------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                      |               |                                                                                        |      |         | <h1>Borehole Log</h1>          |           |                                                                                   | Borehole No.<br><b>TP06</b><br>Sheet 1 of 1                                               |                                                                                                                                    |  |
| Project Name:                                                                                                                                                                        |               | Former Fox and Hounds Public House                                                     |      |         | Project No.<br>GT-2024-000054  |           | Co-ords: 563248.00 - 174069.00                                                    |                                                                                           | Hole Type<br>HA                                                                                                                    |  |
| Location:                                                                                                                                                                            |               | Former Fox and Hounds Public House, 26-27 London Road, Northfleet, Gravesend, DA11 9JH |      |         | Level: 25.80                   |           | Scale<br>1:50                                                                     |                                                                                           | Logged By<br>P. Bhatia/ Z. Price                                                                                                   |  |
| Client:                                                                                                                                                                              |               | Super Asset Group                                                                      |      |         | Dates: 02/05/2024 - 02/05/2024 |           |                                                                                   |                                                                                           |                                                                                                                                    |  |
| Well                                                                                                                                                                                 | Water Strikes | Samples and In Situ Testing                                                            |      |         | Depth (m)                      | Level (m) | Legend                                                                            | Stratum Description                                                                       |                                                                                                                                    |  |
|                                                                                                                                                                                      |               | Depth (m)                                                                              | Type | Results |                                |           |                                                                                   |                                                                                           |                                                                                                                                    |  |
|                                                                                                                                                                                      |               | 0.30                                                                                   | ES   |         | 0.35                           | 25.45     |  | Made Ground - Light and dark brown slightly gravelly SILT with occasional brick fragments | <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>10</div> |  |
|                                                                                                                                                                                      |               | 0.80                                                                                   | ES   |         | 0.80                           | 25.00     |  | Light brown slightly gravelly SILT with white Chalk at base                               |                                                                                                                                    |  |
|                                                                                                                                                                                      |               | -----<br>End of borehole at 0.80 m                                                     |      |         |                                |           |                                                                                   |                                                                                           |                                                                                                                                    |  |
| Remarks<br>Borehole advanced to a maximum depth of 0.8mbgl. No groundwater encountered. Elevation levels and borehole location grid references are approximated based on LiDAR data. |               |                                                                                        |      |         |                                |           |                                                                                   |                                                                                           |                                                                                                                                    |  |
|                                                                                                 |               |                                                                                        |      |         |                                |           |                                                                                   |                                                                                           |                                                                                                                                    |  |

## 12.4 Appendix 4 - Photographs



General overview of the site







Drilling Rig and soils encountered in BH01







Soils encountered in BH02 and BH03





## 12.5 Appendix 5 – Laboratory Certification

## Certificate of Analysis

**Client:** STM Environmental Consultants

**Project:** 24050904

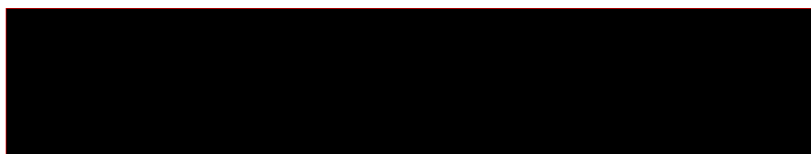
**Quote:** BEC240233964 V3.1

**Project Ref:** Former Fox and Hounds Public H

**Site:** Former Fox and Hounds Public House

**Contact:** Parminder Bhatia

**Address:** Unit 6, Crane Mews  
32 Gould Road  
Twickenham  
London  
TW2 6RS



**No. Samples Received:** 12

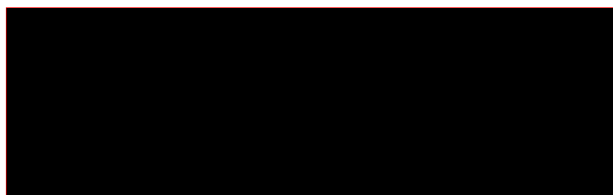
**Date Received:** 09/05/2024

**Analysis Completed:** 30/05/2024

**Date Issued:** 30/05/2024

**Report Type:** Version 01

This report supersedes any versions previously issued by the laboratory



Samantha Edwards  
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Samantha.Edwards@socotec.co.uk

**Project Number: 24050904****Client:** STM Environmental Consultants**Date Issued:** 30/05/2024**Project Name:** Former Fox and Hounds Public H - Former Fox and Hounds Public House**Samples Analysed**

| <b><u>Text ID</u></b> | <b><u>Sample Reference</u></b> | <b><u>Sampling Date</u></b> | <b><u>Sample Type</u></b> | <b><u>Sample Description</u></b> |
|-----------------------|--------------------------------|-----------------------------|---------------------------|----------------------------------|
| 24050904-001          | BH01/1-0-ES-0.30-0.30          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-002          | BH01/2-0-ES-0.80-0.80          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-003          | BH02/1-0-ES-0.20-0.20          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-004          | BH02/2-0-ES-0.90-0.90          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-005          | BH03/1-0-ES-0.30-0.30          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-006          | TP01/1-0-ES-0.30-0.30          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-007          | TP02/1-0-ES-0.40-0.40          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-008          | TP03/1-0-ES-0.30-0.30          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-009          | TP04/1-0-ES-0.70-0.70          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-010          | TP05/1-0-ES-0.40-0.40          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-011          | TP06/1-0-ES-0.30-0.30          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |
| 24050904-012          | TP06/2-0-ES-0.80-0.80          | 01/05/2024 10:00:00         | SOLID                     | Silt Sample                      |

## Analysis Results

| SOCOTEC Sample ID:   |                                             |            |                | 24050904-001          | 24050904-002          | 24050904-003          | 24050904-004          | 24050904-005          |
|----------------------|---------------------------------------------|------------|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sampling Date:       |                                             |            |                | 01/05/2024 10:00      | 01/05/2024 10:00      | 01/05/2024 10:00      | 01/05/2024 10:00      | 01/05/2024 10:00      |
| Customer ID:         |                                             |            |                | BH01/1-0-ES-0.30-0.30 | BH01/2-0-ES-0.80-0.80 | BH02/1-0-ES-0.20-0.20 | BH02/2-0-ES-0.90-0.90 | BH03/1-0-ES-0.30-0.30 |
| Method Code          | Analysis                                    | MDL        | Accred.        | 30                    | 80                    | 20                    | 90                    | 30                    |
| CLANDPREP            | Total Moisture at 35°C                      | 0.1 %      | N              | 15.0                  | 10.6                  | 15.0                  | 14.0                  | 18.8                  |
|                      | Major Constituents                          | -          | N              | SILT                  | SILT                  | SILT                  | SILT                  | SILT                  |
|                      | Minor Constituents                          | -          | N              | Gravel                | Gravel                | Gravel                | Gravel                | Gravel                |
|                      | Miscellaneous Constituents                  | -          | N              | Miscellaneous         | Miscellaneous         | Miscellaneous         | Miscellaneous         | Miscellaneous         |
|                      | Colour of Material                          | -          | N              | Brown                 | Brown                 | Brown                 | Brown                 | Brown                 |
| SUB002               | Asbestos Identification                     | -          | N              | AM                    | CH                    | NAIIS                 | CH                    | NAIIS                 |
| SUB002               | Asbestos Stage 2                            | 0.001 %    | N              | <0.001                | <0.001                |                       | <0.001                |                       |
| PHSOIL               | pH (2.5:1 extraction)                       | 1 pH units | M <sup>A</sup> | 8.6                   | 8.8                   | 9.3                   | 9.2                   | 8.6                   |
| WSLM59               | Total Organic Carbon                        | 0.02 % m/m | U <sup>A</sup> | 3.97                  | 1.95                  | 2.90                  | 2.83                  | 16.3                  |
| SFAPI                | Total Cyanide                               | 0.5 mg/kg  | M <sup>A</sup> | <0.6                  | <0.6                  | <0.6                  | <0.6                  | <0.6                  |
| SFAPI                | Phenol Index                                | 0.5 mg/kg  | U <sup>A</sup> | <0.6                  | <0.6                  | <0.6                  | <0.6                  | 0.7                   |
| SFAPI                | Sulphide as S                               | 0.5 mg/kg  | N <sup>A</sup> | <0.6                  | <0.6                  | <0.6                  | <0.6                  | <0.6                  |
| ICPACIDS             | Acid Soluble Sulphate as SO <sub>4</sub>    | 20 mg/kg   | M <sup>A</sup> | 1210                  | 954                   | 957                   | 792                   | 1500                  |
| ICPMSS               | Arsenic as As                               | 0.3 mg/kg  | M <sup>A</sup> | 16.3                  | 18.6                  | 16.3                  | 14.1                  | 67.8                  |
| ICPMSS               | Cadmium as Cd                               | 0.2 mg/kg  | M <sup>A</sup> | 0.9                   | 0.5                   | 0.8                   | 0.7                   | 1.0                   |
| ICPMSS               | Total Chromium as Cr                        | 1.2 mg/kg  | M <sup>A</sup> | 25.8                  | 21.8                  | 23.4                  | 24.5                  | 26.9                  |
| ICPMSS               | Copper as Cu                                | 1.6 mg/kg  | M <sup>A</sup> | 150.6                 | 41.9                  | 54.8                  | 36.6                  | 539.9                 |
| ICPMSS               | Lead as Pb                                  | 0.7 mg/kg  | M <sup>A</sup> | 686.3                 | 310.2                 | 222.5                 | 155.3                 | 1571                  |
| ICPMSS               | Mercury as Hg                               | 0.5 mg/kg  | M <sup>A</sup> | 0.6                   | 0.8                   | <0.5                  | <0.5                  | 1.5                   |
| ICPMSS               | Nickel as Ni                                | 2 mg/kg    | M <sup>A</sup> | 31.6                  | 34.2                  | 32.2                  | 31.3                  | 45.7                  |
| ICPMSS               | Selenium as Se                              | 0.5 mg/kg  | M <sup>A</sup> | <0.5                  | <0.5                  | <0.5                  | <0.5                  | <0.5                  |
| ICPMSS               | Zinc as Zn                                  | 16 mg/kg   | M <sup>A</sup> | 482.0                 | 147.8                 | 267.2                 | 211.0                 | 673.1                 |
| ICPBOR               | Boron as B                                  | 0.5 mg/kg  | M <sup>A</sup> | 1.2                   | 1.2                   | 2.8                   | 2.3                   | 1.1                   |
| BTXHSXSA             | Benzene (HS_1D_AR)                          | 10 µg/kg   | M <sup>A</sup> | <12                   |                       | <12                   |                       | <12                   |
|                      | Toluene (HS_1D_AR)                          | 10 µg/kg   | M <sup>A</sup> | <12                   |                       | <12                   |                       | <12                   |
|                      | Ethylbenzene (HS_1D_AR)                     | 10 µg/kg   | M <sup>A</sup> | <12                   |                       | <12                   |                       | <12                   |
|                      | m/p-Xylene (HS_1D_AR)                       | 20 µg/kg   | M <sup>A</sup> | <24                   |                       | <24                   |                       | <25                   |
|                      | o-Xylene (HS_1D_AR)                         | 10 µg/kg   | M <sup>A</sup> | <12                   |                       | <12                   |                       | <12                   |
| TPHFIDUS             | >C10-C40 (EH_1D_Total)                      | 10 mg/kg   | U <sup>A</sup> |                       | 101                   |                       | 207                   |                       |
| GROHSA/BTEXHSXSA     | Total GRO C5-C10 (HS_1D_Total)              | 0.2 mg/kg  | M <sup>A</sup> | <0.235                |                       | <0.235                |                       | <0.246                |
|                      | C5-C6 Aliphatic (HS_1D_AL)                  | 0.2 mg/kg  | M <sup>A</sup> | <0.235                |                       | <0.235                |                       | <0.246                |
|                      | >C6-C8 Aliphatic (HS_1D_AL)                 | 0.2 mg/kg  | M <sup>A</sup> | <0.235                |                       | <0.235                |                       | <0.246                |
|                      | >C8-C10 Aliphatic (HS_1D_AL)                | 0.2 mg/kg  | M <sup>A</sup> | <0.235                |                       | <0.235                |                       | <0.246                |
|                      | C5-C7 Aromatic (HS_1D_AR)                   | 0.01 mg/kg | M <sup>A</sup> | <0.012                |                       | <0.012                |                       | <0.012                |
|                      | >C7-C8 Aromatic (HS_1D_AR)                  | 0.01 mg/kg | M <sup>A</sup> | <0.012                |                       | <0.012                |                       | <0.012                |
|                      | >C8-C10 Aromatic (HS_1D_AR)                 | 0.04 mg/kg | M <sup>A</sup> | <0.048                |                       | <0.048                |                       | <0.049                |
| TPHFIDUS (Aliphatic) | Total TPH >C8-C40 (Aliphatic) (EH_CU_1D_AL) | 20 mg/kg   | U <sup>A</sup> | 44.0                  |                       | <23.5                 |                       | <24.6                 |
|                      | >C10-C12 (Aliphatic) (EH_CU_1D_AL)          | 4 mg/kg    | U <sup>A</sup> | <4.71                 |                       | <4.71                 |                       | <4.93                 |
|                      | >C12-C16 (Aliphatic) (EH_CU_1D_AL)          | 4 mg/kg    | U <sup>A</sup> | 4.71                  |                       | <4.71                 |                       | <4.93                 |
|                      | >C16-C21 (Aliphatic) (EH_CU_1D_AL)          | 4 mg/kg    | U <sup>A</sup> | 5.36* <sub>a</sub>    |                       | <4.71* <sub>a</sub>   |                       | 5.82* <sub>a</sub>    |
|                      | >C21-C35 (Aliphatic) (EH_CU_1D_AL)          | 10 mg/kg   | U <sup>A</sup> | 26.6                  |                       | <11.8                 |                       | <12.3                 |
|                      | >C35-C44 (Aliphatic) (EH_CU_1D_AL)          | 6 mg/kg    | N <sup>A</sup> | 10.2                  |                       | <7.06                 |                       | <7.39                 |
|                      | Total TPH >C8-C40 (Aromatic) (EH_CU_1D_AR)  | 20 mg/kg   | U <sup>A</sup> | 141                   |                       | 53.8                  |                       | 805                   |
| TPHFIDUS (Aromatic)  | >C10-C12 (Aromatic) (EH_CU_1D_AR)           | 4 mg/kg    | U <sup>A</sup> | 10.4                  |                       | 8.50                  |                       | 9.79                  |
|                      | >C12-C16 (Aromatic) (EH_CU_1D_AR)           | 4 mg/kg    | U <sup>A</sup> | 20.7                  |                       | 17.2                  |                       | 34.1                  |
|                      | >C16-C21 (Aromatic) (EH_CU_1D_AR)           | 4 mg/kg    | U <sup>A</sup> | 18.2                  |                       | 12.5                  |                       | 190                   |
|                      | >C21-C35 (Aromatic) (EH_CU_1D_AR)           | 10 mg/kg   | U <sup>A</sup> | 88.9                  |                       | 15.4                  |                       | 558                   |
|                      | >C35-C44 (Aromatic) (EH_CU_1D_AR)           | 6 mg/kg    | N <sup>A</sup> | <7.06                 |                       | <7.06                 |                       | 17.9                  |
|                      | Acenaphthene                                | 0.08 mg/kg | M <sup>A</sup> | 0.10                  | <0.09                 | <0.09                 | 0.26                  | 0.62                  |
|                      | Acenaphthylene                              | 0.08 mg/kg | U <sup>A</sup> | 0.16                  | <0.09                 | <0.09                 | 0.11                  | 1.88                  |
| PAHMSUS              | Anthracene                                  | 0.08 mg/kg | U <sup>A</sup> | 0.32                  | 0.11                  | <0.09                 | 0.49                  | 5.27                  |
|                      | Benzo[a]anthracene                          | 0.08 mg/kg | M <sup>A</sup> | 2.08                  | 0.64                  | 0.17                  | 1.87                  | 21.5                  |
|                      | Benzo[a]pyrene                              | 0.08 mg/kg | M <sup>A</sup> | 2.36                  | 0.74                  | 0.21                  | 2.08                  | 17.6                  |
|                      | Benzo[b]fluoranthene                        | 0.08 mg/kg | M <sup>A</sup> | 3.21                  | 0.98                  | 0.29                  | 2.65                  | 24.1                  |
|                      | Benzo[g,h,i]perylene                        | 0.08 mg/kg | M <sup>A</sup> | 1.31                  | 0.45                  | 0.14                  | 1.22                  | 7.06                  |
|                      | Benzo[k]fluoranthene                        | 0.08 mg/kg | M <sup>A</sup> | 1.18                  | 0.39                  | 0.11                  | 0.99                  | 9.17                  |
|                      | Chrysene                                    | 0.08 mg/kg | M <sup>A</sup> | 1.91                  | 0.67                  | 0.20                  | 1.71                  | 18.4                  |
|                      | Dibenzo[a,h]anthracene                      | 0.08 mg/kg | M <sup>A</sup> | 0.34                  | 0.12                  | <0.09                 | 0.30                  | 2.58                  |
|                      | Fluoranthene                                | 0.08 mg/kg | M <sup>A</sup> | 4.53                  | 1.42                  | 0.37                  | 4.47                  | 57.9                  |
|                      | Fluorene                                    | 0.08 mg/kg | M <sup>A</sup> | <0.09                 | <0.09                 | <0.09                 | 0.15                  | 2.79                  |
|                      | Indeno[1,2,3-cd]pyrene                      | 0.08 mg/kg | M <sup>A</sup> | 1.41                  | 0.48                  | 0.15                  | 1.31                  | 8.55                  |
|                      | Naphthalene                                 | 0.08 mg/kg | M <sup>A</sup> | 0.19                  | <0.09                 | <0.09                 | 0.17                  | 0.64                  |
|                      | Phenanthrene                                | 0.08 mg/kg | M <sup>A</sup> | 1.89                  | 0.63                  | 0.19                  | 2.40                  | 46.3                  |
|                      | Pyrene                                      | 0.08 mg/kg | M <sup>A</sup> | 3.63                  | 1.13                  | 0.31                  | 3.71                  | 46.5                  |
|                      | Total PAH 16                                | 1.28 mg/kg | U <sup>A</sup> | 24.7                  | 8.12                  | 2.70                  | 23.9                  | 277                   |
| SVOCSW               | 1,2,4-Trichlorobenzene                      | 0.1 mg/kg  | N <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 1,2-Dichlorobenzene                         | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 1,3-Dichlorobenzene                         | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 1,4-Dichlorobenzene                         | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 1-Methylnaphthalene                         | 0.1 mg/kg  | U <sup>A</sup> | 0.2                   |                       |                       |                       |                       |
|                      | 2,4,5-Trichlorophenol                       | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 2,4,6-Trichlorophenol                       | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 2,4-Dichlorophenol                          | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 2,4-Dimethylphenol                          | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 2,4-Dinitrophenol                           | 0.5 mg/kg  | N <sup>A</sup> | <0.6                  |                       |                       |                       |                       |
|                      | 2,4-Dinitrotoluene                          | 0.2 mg/kg  | U <sup>A</sup> | <0.2                  |                       |                       |                       |                       |
|                      | 2,6-Dinitrotoluene                          | 0.5 mg/kg  | U <sup>A</sup> | <0.6                  |                       |                       |                       |                       |
|                      | 2-Chloronaphthalene                         | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 2-Chlorophenol                              | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 2-Methylnaphthalene                         | 0.1 mg/kg  | U <sup>A</sup> | 0.2                   |                       |                       |                       |                       |
|                      | 2-Methylphenol                              | 0.1 mg/kg  | U <sup>A</sup> | <0.1                  |                       |                       |                       |                       |
|                      | 2-Nitroaniline                              | 0.5 mg/kg  | N <sup>A</sup> | <0.6                  |                       |                       |                       |                       |

## Analysis Results

| SOCOTEC Sample ID: | 24050904-001        | 24050904-002        | 24050904-003        | 24050904-004        | 24050904-005        |
|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Sampling Date:     | 01/05/2024 10:00    | 01/05/2024 10:00    | 01/05/2024 10:00    | 01/05/2024 10:00    | 01/05/2024 10:00    |
| Customer ID:       | BH01/1-0-ES-0.30-0. | BH01/2-0-ES-0.80-0. | BH02/1-0-ES-0.20-0. | BH02/2-0-ES-0.90-0. | BH03/1-0-ES-0.30-0. |
| MDL                | 30                  | 80                  | 20                  | 90                  | 30                  |
| Accred.            | U <sup>A</sup>      | U <sup>A</sup>      | U <sup>A</sup>      | U <sup>A</sup>      | U <sup>A</sup>      |

| Method Code | Analysis                    | MDL       | Accred.        | 24050904-001 | 24050904-002 | 24050904-003 | 24050904-004 | 24050904-005 |
|-------------|-----------------------------|-----------|----------------|--------------|--------------|--------------|--------------|--------------|
| SVOCSW      | 2-Nitrophenol               | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | 3- & 4-Methylphenol         | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | 3-Nitroaniline              | 0.5 mg/kg | N <sup>A</sup> | <0.6         |              |              |              |              |
|             | 4,6-Dinitro-2-methylphenol  | 0.2 mg/kg | N <sup>A</sup> | <0.2         |              |              |              |              |
|             | 4-Bromophenyl-phenylether   | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | 4-Chloro-3-methylphenol     | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | 4-Chloroaniline             | 0.5 mg/kg | N <sup>A</sup> | <0.6         |              |              |              |              |
|             | 4-Chlorophenol              | 0.5 mg/kg | U <sup>A</sup> | <0.6         |              |              |              |              |
|             | 4-Chlorophenyl-phenylether  | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | 4-Nitroaniline              | 0.6 mg/kg | N <sup>A</sup> | <0.7         |              |              |              |              |
|             | 4-Nitrophenol               | 0.5 mg/kg | N <sup>A</sup> | <0.6         |              |              |              |              |
|             | Acenaphthene                | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Acenaphthylene              | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Anthracene                  | 0.1 mg/kg | U <sup>A</sup> | 0.2          |              |              |              |              |
|             | Azobenzene                  | 0.3 mg/kg | N <sup>A</sup> | <0.4         |              |              |              |              |
|             | Benzo[a]anthracene          | 0.2 mg/kg | U <sup>A</sup> | 1.1          |              |              |              |              |
|             | Benzo[a]pyrene              | 0.2 mg/kg | U <sup>A</sup> | 1.1          |              |              |              |              |
|             | Benzo[b]fluoranthene        | 0.2 mg/kg | U <sup>A</sup> | 1.5          |              |              |              |              |
|             | Benzo[g,h,i]perylene        | 0.5 mg/kg | U <sup>A</sup> | 0.7          |              |              |              |              |
|             | Benzo[k]fluoranthene        | 0.2 mg/kg | U <sup>A</sup> | 0.5          |              |              |              |              |
|             | Benzoic Acid                | 0.5 mg/kg | N <sup>A</sup> | <0.6         |              |              |              |              |
|             | Benzyl alcohol              | 0.5 mg/kg | U <sup>A</sup> | <0.6         |              |              |              |              |
|             | Biphenyl                    | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | bis(2-Chloroethoxy)methane  | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | bis(2-Chloroethyl)ether     | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | bis(2-Chloroisopropyl)ether | 0.5 mg/kg | U <sup>A</sup> | <0.6         |              |              |              |              |
|             | bis(2-Ethylhexyl)phthalate  | 0.2 mg/kg | U <sup>A</sup> | <0.2         |              |              |              |              |
|             | Butylbenzylphthalate        | 0.2 mg/kg | U <sup>A</sup> | <0.2         |              |              |              |              |
|             | Carbazole                   | 0.3 mg/kg | N <sup>A</sup> | <0.4         |              |              |              |              |
|             | Chrysene                    | 0.2 mg/kg | U <sup>A</sup> | 1.1          |              |              |              |              |
|             | Coronene                    | 0.3 mg/kg | N <sup>A</sup> | <0.4         |              |              |              |              |
|             | Dibenzo[a,h]anthracene      | 0.5 mg/kg | U <sup>A</sup> | <0.6         |              |              |              |              |
|             | Dibenzofuran                | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Diethylphthalate            | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Dimethylphthalate           | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Di-n-butylphthalate         | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Di-n-octylphthalate         | 0.2 mg/kg | U <sup>A</sup> | <0.2         |              |              |              |              |
|             | Diphenyl ether              | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Fluoranthene                | 0.2 mg/kg | U <sup>A</sup> | 1.9          |              |              |              |              |
|             | Fluorene                    | 0.2 mg/kg | U <sup>A</sup> | <0.2         |              |              |              |              |
|             | Hexachlorobenzene           | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Hexachlorobutadiene         | 0.1 mg/kg | N <sup>A</sup> | <0.1         |              |              |              |              |
|             | Hexachlorocyclopentadiene   | 0.1 mg/kg | N <sup>A</sup> | <0.1         |              |              |              |              |
|             | Hexachloroethane            | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Indeno[1,2,3-cd]pyrene      | 0.5 mg/kg | U <sup>A</sup> | 0.9          |              |              |              |              |
|             | Isophorone                  | 0.1 mg/kg | N <sup>A</sup> | <0.1         |              |              |              |              |
|             | Naphthalene                 | 0.1 mg/kg | U <sup>A</sup> | 0.2          |              |              |              |              |
|             | Nitrobenzene                | 0.5 mg/kg | U <sup>A</sup> | <0.6         |              |              |              |              |
|             | N-Nitroso-di-n-propylamine  | 0.9 mg/kg | N <sup>A</sup> | <1.1         |              |              |              |              |
|             | N-Nitrosodiphenylamine      | 0.1 mg/kg | N <sup>A</sup> | <0.1         |              |              |              |              |
|             | Pentachlorophenol           | 0.5 mg/kg | N <sup>A</sup> | <0.6         |              |              |              |              |
|             | Phenanthrene                | 0.1 mg/kg | U <sup>A</sup> | 0.8          |              |              |              |              |
|             | Phenol                      | 0.1 mg/kg | U <sup>A</sup> | <0.1         |              |              |              |              |
|             | Pyrene                      | 0.2 mg/kg | U <sup>A</sup> | 1.3          |              |              |              |              |

## Analysis Results

| SOCOTEC Sample ID: | 24050904-006          | 24050904-007          | 24050904-008          | 24050904-009          | 24050904-010          |
|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sampling Date:     | 01/05/2024 10:00      | 01/05/2024 10:00      | 01/05/2024 10:00      | 01/05/2024 10:00      | 01/05/2024 10:00      |
| Customer ID:       | TP01/1-0-ES-0.30-0.30 | TP02/1-0-ES-0.40-0.40 | TP03/1-0-ES-0.30-0.30 | TP04/1-0-ES-0.70-0.70 | TP05/1-0-ES-0.40-0.40 |

| Method Code          | Analysis                                    | MDL        | Accred.        | 24050904-006         | 24050904-007         | 24050904-008         | 24050904-009 | 24050904-010         |
|----------------------|---------------------------------------------|------------|----------------|----------------------|----------------------|----------------------|--------------|----------------------|
| CLANDPREP            | Total Moisture at 35°C                      | 0.1 %      | N              | 11.5                 | 9.5                  | 12.0                 | 12.0         | 9.7                  |
|                      | Major Constituents                          | -          | N              | SILT                 | SILT                 | SILT                 | SILT         | SILT                 |
|                      | Minor Constituents                          | -          | N              | Gravel               | Gravel               | Gravel               | Gravel       | Gravel               |
|                      | Miscellaneous Constituents                  | -          | N              | n/a                  | n/a                  | n/a                  | n/a          | n/a                  |
|                      | Colour of Material                          | -          | N              | Brown                | Brown                | Brown                | Brown        | Brown                |
| SUB002               | Asbestos Identification                     | -          | N              | NAIIS                | NAIIS                | NAIIS                | NAIIS        | NAIIS                |
| PHSOIL               | pH (2.5:1 extraction)                       | 1 pH units | M <sup>A</sup> | 8.5                  | 8.8                  | 8.4                  | 8.5          | 8.3                  |
| WSLM59               | Total Organic Carbon                        | 0.02 % m/m | U <sup>A</sup> | 0.71                 | 0.87                 | 1.32                 | 0.84         | 1.02                 |
| SFAPI                | Total Cyanide                               | 0.5 mg/kg  | M <sup>A</sup> | <0.6                 | <0.6                 | <0.6                 | <0.6         | <0.6                 |
| SFAPI                | Phenol Index                                | 0.5 mg/kg  | U <sup>A</sup> | <0.6                 | <0.6                 | <0.6                 | <0.6         | <0.6                 |
| SFAPI                | Sulphide as S                               | 0.5 mg/kg  | N <sup>A</sup> | <0.6                 | <0.6                 | <0.6                 | <0.6         | <0.6                 |
| ICPACIDS             | Acid Soluble Sulphate as SO <sub>4</sub>    | 20 mg/kg   | M <sup>A</sup> | 593                  | 621                  | 688                  | 683          | 1270                 |
| ICPMSS               | Arsenic as As                               | 0.3 mg/kg  | M <sup>A</sup> | 12.9                 | 10.0                 | 8.8                  | 4.8          | 12.3                 |
| ICPMSS               | Cadmium as Cd                               | 0.2 mg/kg  | M <sup>A</sup> | 0.4                  | 0.5                  | 0.6                  | 0.8          | 0.5                  |
| ICPMSS               | Total Chromium as Cr                        | 1.2 mg/kg  | M <sup>A</sup> | 41.8                 | 26.8                 | 23.7                 | 18.3         | 25.1                 |
| ICPMSS               | Copper as Cu                                | 1.6 mg/kg  | M <sup>A</sup> | 27.1                 | 22.2                 | 23.0                 | 21.9         | 22.6                 |
| ICPMSS               | Lead as Pb                                  | 0.7 mg/kg  | M <sup>A</sup> | 57.9                 | 45.3                 | 78.9                 | 53.2         | 86.5                 |
| ICPMSS               | Mercury as Hg                               | 0.5 mg/kg  | M <sup>A</sup> | <0.5                 | <0.5                 | <0.5                 | <0.5         | <0.5                 |
| ICPMSS               | Nickel as Ni                                | 2 mg/kg    | M <sup>A</sup> | 36.0                 | 30.3                 | 25.3                 | 30.8         | 31.2                 |
| ICPMSS               | Selenium as Se                              | 0.5 mg/kg  | M <sup>A</sup> | <0.5                 | <0.5                 | <0.5                 | <0.5         | <0.5                 |
| ICPMSS               | Zinc as Zn                                  | 16 mg/kg   | M <sup>A</sup> | 89.2                 | 75.6                 | 99.2                 | 87.6         | 75.8                 |
| ICPBOR               | Boron as B                                  | 0.5 mg/kg  | M <sup>A</sup> | 2.2                  | 1.7                  | 1.8                  | 1.1          | 2.5                  |
| BTXHSA               | Benzene (HS_1D_AR)                          | 10 µg/kg   | M <sup>A</sup> | <11* <sub>B</sub>    | <11* <sub>B</sub>    | <11* <sub>B</sub>    |              | <11* <sub>B</sub>    |
|                      | Toluene (HS_1D_AR)                          | 10 µg/kg   | M <sup>A</sup> | <11                  | <11                  | <11                  |              | <11                  |
|                      | Ethylbenzene (HS_1D_AR)                     | 10 µg/kg   | M <sup>A</sup> | <11                  | <11                  | <11                  |              | <11                  |
|                      | m/p-Xylene (HS_1D_AR)                       | 20 µg/kg   | M <sup>A</sup> | <23                  | <22                  | <23                  |              | <22                  |
|                      | o-Xylene (HS_1D_AR)                         | 10 µg/kg   | M <sup>A</sup> | <11                  | <11                  | <11                  |              | <11                  |
| TPHFIDUS             | >C10-C40 (EH_1D_Total)                      | 10 mg/kg   | U <sup>A</sup> |                      |                      |                      | 172          |                      |
| GROHSA/BTEXHSA       | Total GRO C5-C10 (HS_1D_Total)              | 0.2 mg/kg  | M <sup>A</sup> | <0.226               | <0.221               | <0.227               |              | <0.221               |
|                      | C5-C6 Aliphatic (HS_1D_AL)                  | 0.2 mg/kg  | M <sup>A</sup> | <0.226               | <0.221               | <0.227               |              | <0.221               |
|                      | >C6-C8 Aliphatic (HS_1D_AL)                 | 0.2 mg/kg  | M <sup>A</sup> | <0.226* <sub>B</sub> | <0.221* <sub>B</sub> | <0.227* <sub>B</sub> |              | <0.221* <sub>B</sub> |
|                      | >C8-C10 Aliphatic (HS_1D_AL)                | 0.2 mg/kg  | M <sup>A</sup> | <0.226               | <0.221               | <0.227               |              | <0.221               |
|                      | C5-C7 Aromatic (HS_1D_AR)                   | 0.01 mg/kg | M <sup>A</sup> | <0.011* <sub>B</sub> | <0.011* <sub>B</sub> | <0.011* <sub>B</sub> |              | <0.011* <sub>B</sub> |
|                      | >C7-C8 Aromatic (HS_1D_AR)                  | 0.01 mg/kg | M <sup>A</sup> | <0.011               | <0.011               | <0.011               |              | <0.011               |
| TPHFIDUS (Aliphatic) | >C8-C10 Aromatic (HS_1D_AR)                 | 0.04 mg/kg | M <sup>A</sup> | <0.045               | <0.044               | <0.046               |              | <0.044               |
|                      | Total TPH >C8-C40 (Aliphatic) (EH_CU_1D_AL) | 20 mg/kg   | U <sup>A</sup> | <22.6                | <22.1                | <22.7                |              | 129                  |
|                      | >C10-C12 (Aliphatic) (EH_CU_1D_AL)          | 4 mg/kg    | U <sup>A</sup> | <4.52                | <4.42                | <4.55                |              | <4.43                |
|                      | >C12-C16 (Aliphatic) (EH_CU_1D_AL)          | 4 mg/kg    | U <sup>A</sup> | <4.52                | <4.42                | <4.55                |              | <4.43                |
|                      | >C16-C21 (Aliphatic) (EH_CU_1D_AL)          | 4 mg/kg    | U <sup>A</sup> | <4.52* <sub>B</sub>  | <4.42* <sub>B</sub>  | <4.55* <sub>B</sub>  |              | 4.84* <sub>B</sub>   |
|                      | >C21-C35 (Aliphatic) (EH_CU_1D_AL)          | 10 mg/kg   | U <sup>A</sup> | <11.3                | <11.0                | <11.4                |              | 89.7                 |
|                      | >C35-C44 (Aliphatic) (EH_CU_1D_AL)          | 6 mg/kg    | N <sup>A</sup> | <6.78                | <6.63                | <6.82                |              | 38.3                 |
| TPHFIDUS (Aromatic)  | Total TPH >C8-C40 (Aromatic) (EH_CU_1D_AR)  | 20 mg/kg   | U <sup>A</sup> | 38.7                 | 28.5                 | 31.3                 |              | 59.6                 |
|                      | >C10-C12 (Aromatic) (EH_CU_1D_AR)           | 4 mg/kg    | U <sup>A</sup> | 7.10                 | 6.67                 | 6.00                 |              | 4.51                 |
|                      | >C12-C16 (Aromatic) (EH_CU_1D_AR)           | 4 mg/kg    | U <sup>A</sup> | 11.8                 | 8.08                 | 7.69                 |              | 8.15                 |
|                      | >C16-C21 (Aromatic) (EH_CU_1D_AR)           | 4 mg/kg    | U <sup>A</sup> | 8.82                 | 6.03                 | 7.07                 |              | <4.43                |
|                      | >C21-C35 (Aromatic) (EH_CU_1D_AR)           | 10 mg/kg   | U <sup>A</sup> | <11.3                | <11.0                | <11.4                |              | 42.5                 |
|                      | >C35-C44 (Aromatic) (EH_CU_1D_AR)           | 6 mg/kg    | N <sup>A</sup> | <6.78                | 7.52                 | 7.20                 |              | <6.64                |
|                      | Acenaphthene                                | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 0.32         | <0.09                |
| PAHMSUS              | Acenaphthylene                              | 0.08 mg/kg | U <sup>A</sup> | <0.09                | <0.09                | <0.09                | <0.09        | <0.09                |
|                      | Anthracene                                  | 0.08 mg/kg | U <sup>A</sup> | <0.09                | <0.09                | <0.09                | 0.61         | <0.09                |
|                      | Benzo[a]anthracene                          | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 1.84         | 0.30                 |
|                      | Benzo[a]pyrene                              | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 1.91         | 0.34                 |
|                      | Benzo[b]fluoranthene                        | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 2.42         | 0.47                 |
|                      | Benzo[g,h,i]perylene                        | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 1.09         | 0.24                 |
|                      | Benzo[k]fluoranthene                        | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 0.95         | 0.19                 |
|                      | Chrysene                                    | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 1.70         | 0.33                 |
|                      | Dibenzo[a,h]anthracene                      | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 0.27         | <0.09                |
|                      | Fluoranthene                                | 0.08 mg/kg | M <sup>A</sup> | 0.10                 | <0.09                | <0.09                | 4.60         | 0.67                 |
|                      | Fluorene                                    | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 0.17         | <0.09                |
|                      | Indeno[1,2,3-cd]pyrene                      | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 1.15         | 0.21                 |
|                      | Naphthalene                                 | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 0.11         | <0.09                |
|                      | Phenanthrene                                | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 2.77         | 0.36                 |
|                      | Pyrene                                      | 0.08 mg/kg | M <sup>A</sup> | <0.09                | <0.09                | <0.09                | 3.75         | 0.53                 |
|                      | Total PAH 16                                | 1.28 mg/kg | U <sup>A</sup> | 1.46                 | <1.41                | <1.45                | 23.7         | 4.18                 |
| SVOCSW               | 1,2,4-Trichlorobenzene                      | 0.1 mg/kg  | N <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 1,2-Dichlorobenzene                         | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 1,3-Dichlorobenzene                         | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 1,4-Dichlorobenzene                         | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 1-Methylnaphthalene                         | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 2,4,5-Trichlorophenol                       | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 2,4,6-Trichlorophenol                       | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 2,4-Dichlorophenol                          | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 2,4-Dimethylphenol                          | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 2,4-Dinitrophenol                           | 0.5 mg/kg  | N <sup>A</sup> |                      |                      | <0.6                 |              |                      |
|                      | 2,4-Dinitrotoluene                          | 0.2 mg/kg  | U <sup>A</sup> |                      |                      | <0.2                 |              |                      |
|                      | 2,6-Dinitrotoluene                          | 0.5 mg/kg  | U <sup>A</sup> |                      |                      | <0.6                 |              |                      |
|                      | 2-Chloronaphthalene                         | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 2-Chlorophenol                              | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 2-Methylnaphthalene                         | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 2-Methylphenol                              | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |
|                      | 2-Nitroaniline                              | 0.5 mg/kg  | N <sup>A</sup> |                      |                      | <0.6                 |              |                      |
|                      | 2-Nitrophenol                               | 0.1 mg/kg  | U <sup>A</sup> |                      |                      | <0.1                 |              |                      |



### Analysis Results

|                    |                     |                     |                     |                     |                     |
|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| SOCOTEC Sample ID: | 24050904-006        | 24050904-007        | 24050904-008        | 24050904-009        | 24050904-010        |
| Sampling Date:     | 01/05/2024 10:00    | 01/05/2024 10:00    | 01/05/2024 10:00    | 01/05/2024 10:00    | 01/05/2024 10:00    |
| Customer ID:       | TP01/1-0-ES-0.30-0. | TP02/1-0-ES-0.40-0. | TP03/1-0-ES-0.30-0. | TP04/1-0-ES-0.70-0. | TP05/1-0-ES-0.40-0. |
|                    | 30                  | 40                  | 30                  | 70                  | 40                  |

| Method Code | Analysis                    | MDL       | Accred.        |  |  |      |  |  |
|-------------|-----------------------------|-----------|----------------|--|--|------|--|--|
| SVOCSW      | 3- & 4-Methylphenol         | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | 3-Nitroaniline              | 0.5 mg/kg | N <sup>A</sup> |  |  | <0.6 |  |  |
|             | 4,6-Dinitro-2-methylphenol  | 0.2 mg/kg | N <sup>A</sup> |  |  | <0.2 |  |  |
|             | 4-Bromophenyl-phenylether   | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | 4-Chloro-3-methylphenol     | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | 4-Chloroaniline             | 0.5 mg/kg | N <sup>A</sup> |  |  | <0.6 |  |  |
|             | 4-Chlorophenol              | 0.5 mg/kg | U <sup>A</sup> |  |  | <0.6 |  |  |
|             | 4-Chlorophenyl-phenylether  | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | 4-Nitroaniline              | 0.6 mg/kg | N <sup>A</sup> |  |  | <0.7 |  |  |
|             | 4-Nitrophenol               | 0.5 mg/kg | N <sup>A</sup> |  |  | <0.6 |  |  |
|             | Acenaphthene                | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Acenaphthylene              | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Anthracene                  | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Azobenzene                  | 0.3 mg/kg | N <sup>A</sup> |  |  | <0.3 |  |  |
|             | Benzo[a]anthracene          | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Benzo[a]pyrene              | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Benzo[b]fluoranthene        | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Benzo[g,h,i]perylene        | 0.5 mg/kg | U <sup>A</sup> |  |  | <0.6 |  |  |
|             | Benzo[k]fluoranthene        | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Benzoic Acid                | 0.5 mg/kg | N <sup>A</sup> |  |  | <0.6 |  |  |
|             | Benzyl alcohol              | 0.5 mg/kg | U <sup>A</sup> |  |  | <0.6 |  |  |
|             | Biphenyl                    | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | bis(2-Chloroethoxy)methane  | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | bis(2-Chloroethyl)ether     | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | bis(2-Chloroisopropyl)ether | 0.5 mg/kg | U <sup>A</sup> |  |  | <0.6 |  |  |
|             | bis(2-Ethylhexyl)phthalate  | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Butylbenzylphthalate        | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Carbazole                   | 0.3 mg/kg | N <sup>A</sup> |  |  | <0.3 |  |  |
|             | Chrysene                    | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Coronene                    | 0.3 mg/kg | N <sup>A</sup> |  |  | <0.3 |  |  |
|             | Dibenzo[a,h]anthracene      | 0.5 mg/kg | U <sup>A</sup> |  |  | <0.6 |  |  |
|             | Dibenzofuran                | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Diethylphthalate            | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Dimethylphthalate           | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Di-n-butylphthalate         | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Di-n-octylphthalate         | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Diphenyl ether              | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Fluoranthene                | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Fluorene                    | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |
|             | Hexachlorobenzene           | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Hexachlorobutadiene         | 0.1 mg/kg | N <sup>A</sup> |  |  | <0.1 |  |  |
|             | Hexachlorocyclopentadiene   | 0.1 mg/kg | N <sup>A</sup> |  |  | <0.1 |  |  |
|             | Hexachloroethane            | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Indeno[1,2,3-cd]pyrene      | 0.5 mg/kg | U <sup>A</sup> |  |  | <0.6 |  |  |
|             | Isophorone                  | 0.1 mg/kg | N <sup>A</sup> |  |  | <0.1 |  |  |
|             | Naphthalene                 | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Nitrobenzene                | 0.5 mg/kg | U <sup>A</sup> |  |  | <0.6 |  |  |
|             | N-Nitroso-di-n-propylamine  | 0.9 mg/kg | N <sup>A</sup> |  |  | <1.0 |  |  |
|             | N-Nitrosodiphenylamine      | 0.1 mg/kg | N <sup>A</sup> |  |  | <0.1 |  |  |
|             | Pentachlorophenol           | 0.5 mg/kg | N <sup>A</sup> |  |  | <0.6 |  |  |
|             | Phenanthrene                | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Phenol                      | 0.1 mg/kg | U <sup>A</sup> |  |  | <0.1 |  |  |
|             | Pyrene                      | 0.2 mg/kg | U <sup>A</sup> |  |  | <0.2 |  |  |

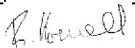
### Analysis Results

SOCOTEC Sample ID: 24050904-011 24050904-012

Sampling Date: 01/05/2024 10:00 01/05/2024 10:00

Customer ID: TP06/1-0-ES-0.30-0. TP06/2-0-ES-0.80-0.

| Method Code          | Analysis                                    | MDL        | Accred.        | 24050904-011         | 24050904-012 |
|----------------------|---------------------------------------------|------------|----------------|----------------------|--------------|
| CLANDPREP            | Total Moisture at 35°C                      | 0.1 %      | N              | 16.0                 | 14.1         |
|                      | Major Constituents                          | -          | N              | SILT                 | SILT         |
|                      | Minor Constituents                          | -          | N              | Gravel               | Gravel       |
|                      | Miscellaneous Constituents                  | -          | N              | n/a                  | n/a          |
|                      | Colour of Material                          | -          | N              | Brown                | Brown        |
| SUB002               | Asbestos Identification                     | -          | N              | NAIIS                | NAIIS        |
| PHSOIL               | pH (2.5:1 extraction)                       | 1 pH units | M <sup>A</sup> | 8.6                  | 8.7          |
| WSLM59               | Total Organic Carbon                        | 0.02 % m/m | U <sup>A</sup> | 1.23                 | 0.81         |
| SFAPI                | Total Cyanide                               | 0.5 mg/kg  | M <sup>A</sup> | <0.6                 | <0.6         |
| SFAPI                | Phenol Index                                | 0.5 mg/kg  | U <sup>A</sup> | <0.6                 | <0.6         |
| SFAPI                | Sulphide as S                               | 0.5 mg/kg  | N <sup>A</sup> | <0.6                 | <0.6         |
| ICPACIDS             | Acid Soluble Sulphate as SO <sub>4</sub>    | 20 mg/kg   | M <sup>A</sup> | 643                  | 540          |
| ICPMSS               | Arsenic as As                               | 0.3 mg/kg  | M <sup>A</sup> | 8.1                  | 6.3          |
| ICPMSS               | Cadmium as Cd                               | 0.2 mg/kg  | M <sup>A</sup> | 0.6                  | 0.6          |
| ICPMSS               | Total Chromium as Cr                        | 1.2 mg/kg  | M <sup>A</sup> | 23.1                 | 28.7         |
| ICPMSS               | Copper as Cu                                | 1.6 mg/kg  | M <sup>A</sup> | 25.2                 | 14.9         |
| ICPMSS               | Lead as Pb                                  | 0.7 mg/kg  | M <sup>A</sup> | 127.1                | 19.8         |
| ICPMSS               | Mercury as Hg                               | 0.5 mg/kg  | M <sup>A</sup> | <0.5                 | <0.5         |
| ICPMSS               | Nickel as Ni                                | 2 mg/kg    | M <sup>A</sup> | 25.6                 | 29.3         |
| ICPMSS               | Selenium as Se                              | 0.5 mg/kg  | M <sup>A</sup> | <0.5                 | <0.5         |
| ICPMSS               | Zinc as Zn                                  | 16 mg/kg   | M <sup>A</sup> | 74.0                 | 63.2         |
| ICPBOR               | Boron as B                                  | 0.5 mg/kg  | M <sup>A</sup> | 0.9                  | 1.1          |
| BTXHXSA              | Benzene (HS_1D_AR)                          | 10 µg/kg   | M <sup>A</sup> | <12* <sub>B</sub>    |              |
|                      | Toluene (HS_1D_AR)                          | 10 µg/kg   | M <sup>A</sup> | <12                  |              |
|                      | Ethylbenzene (HS_1D_AR)                     | 10 µg/kg   | M <sup>A</sup> | <12                  |              |
|                      | m/p-Xylene (HS_1D_AR)                       | 20 µg/kg   | M <sup>A</sup> | <24                  |              |
|                      | o-Xylene (HS_1D_AR)                         | 10 µg/kg   | M <sup>A</sup> | <12                  |              |
| TPHFIDUS             | >C10-C40 (EH_1D_Total)                      | 10 mg/kg   | U <sup>A</sup> |                      | 24.6         |
| GROHSA/BTEXHSA       | Total GRO C5-C10 (HS_1D_Total)              | 0.2 mg/kg  | M <sup>A</sup> | <0.238               |              |
|                      | C5-C6 Aliphatic (HS_1D_AL)                  | 0.2 mg/kg  | M <sup>A</sup> | <0.238               |              |
|                      | >C6-C8 Aliphatic (HS_1D_AL)                 | 0.2 mg/kg  | M <sup>A</sup> | <0.238* <sub>B</sub> |              |
|                      | >C8-C10 Aliphatic (HS_1D_AL)                | 0.2 mg/kg  | M <sup>A</sup> | <0.238               |              |
|                      | C5-C7 Aromatic (HS_1D_AR)                   | 0.01 mg/kg | M <sup>A</sup> | <0.012* <sub>B</sub> |              |
|                      | >C7-C8 Aromatic (HS_1D_AR)                  | 0.01 mg/kg | M <sup>A</sup> | <0.012               |              |
| TPHFIDUS (Aliphatic) | >C8-C10 Aromatic (HS_1D_AR)                 | 0.04 mg/kg | M <sup>A</sup> | <0.048               |              |
|                      | Total TPH >C8-C40 (Aliphatic) (EH_CU_1D_AL) | 20 mg/kg   | U <sup>A</sup> | 25.2                 |              |
|                      | >C10-C12 (Aliphatic) (EH_CU_1D_AL)          | 4 mg/kg    | U <sup>A</sup> | <4.76                |              |
|                      | >C12-C16 (Aliphatic) (EH_CU_1D_AL)          | 4 mg/kg    | U <sup>A</sup> | 8.75                 |              |
|                      | >C16-C21 (Aliphatic) (EH_CU_1D_AL)          | 4 mg/kg    | U <sup>A</sup> | <4.76* <sub>B</sub>  |              |
|                      | >C21-C35 (Aliphatic) (EH_CU_1D_AL)          | 10 mg/kg   | U <sup>A</sup> | <11.9                |              |
| TPHFIDUS (Aromatic)  | >C35-C44 (Aliphatic) (EH_CU_1D_AL)          | 6 mg/kg    | N <sup>A</sup> | <7.14                |              |
|                      | Total TPH >C8-C40 (Aromatic) (EH_CU_1D_AR)  | 20 mg/kg   | U <sup>A</sup> | 32.4                 |              |
|                      | >C10-C12 (Aromatic) (EH_CU_1D_AR)           | 4 mg/kg    | U <sup>A</sup> | <4.76                |              |
|                      | >C12-C16 (Aromatic) (EH_CU_1D_AR)           | 4 mg/kg    | U <sup>A</sup> | 9.24                 |              |
|                      | >C16-C21 (Aromatic) (EH_CU_1D_AR)           | 4 mg/kg    | U <sup>A</sup> | 5.82                 |              |
|                      | >C21-C35 (Aromatic) (EH_CU_1D_AR)           | 10 mg/kg   | U <sup>A</sup> | 13.2                 |              |
| PAHMSUS              | >C35-C44 (Aromatic) (EH_CU_1D_AR)           | 6 mg/kg    | N <sup>A</sup> | 8.72                 |              |
|                      | Acenaphthene                                | 0.08 mg/kg | M <sup>A</sup> | <0.10                | <0.09        |
|                      | Acenaphthylene                              | 0.08 mg/kg | U <sup>A</sup> | <0.10                | <0.09        |
|                      | Anthracene                                  | 0.08 mg/kg | U <sup>A</sup> | <0.10                | <0.09        |
|                      | Benzo[a]anthracene                          | 0.08 mg/kg | M <sup>A</sup> | 0.15                 | <0.09        |
|                      | Benzo[a]pyrene                              | 0.08 mg/kg | M <sup>A</sup> | 0.15                 | <0.09        |
|                      | Benzo[b]fluoranthene                        | 0.08 mg/kg | M <sup>A</sup> | 0.21                 | <0.09        |
|                      | Benzo[g,h,i]perylene                        | 0.08 mg/kg | M <sup>A</sup> | <0.10                | <0.09        |
|                      | Benzo[k]fluoranthene                        | 0.08 mg/kg | M <sup>A</sup> | <0.10                | <0.09        |
|                      | Chrysene                                    | 0.08 mg/kg | M <sup>A</sup> | 0.15                 | <0.09        |
|                      | Dibenzo[a,h]anthracene                      | 0.08 mg/kg | M <sup>A</sup> | <0.10                | <0.09        |
|                      | Fluoranthene                                | 0.08 mg/kg | M <sup>A</sup> | 0.28                 | <0.09        |
|                      | Fluorene                                    | 0.08 mg/kg | M <sup>A</sup> | <0.10                | <0.09        |
|                      | Indeno[1,2,3-cd]pyrene                      | 0.08 mg/kg | M <sup>A</sup> | <0.10                | <0.09        |
|                      | Naphthalene                                 | 0.08 mg/kg | M <sup>A</sup> | <0.10                | <0.09        |
|                      | Phenanthrene                                | 0.08 mg/kg | M <sup>A</sup> | 0.11                 | <0.09        |
|                      | Pyrene                                      | 0.08 mg/kg | M <sup>A</sup> | 0.23                 | <0.09        |
|                      | Total PAH 16                                | 1.28 mg/kg | U <sup>A</sup> | 2.14                 | <1.49        |

| ASBESTOS ANALYSIS RESULTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |  |  | Detection limit of Method SCI-ASB-020 is 0.001%<br><br>Sampling has been carried out by a third party |  |   |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------|------------|-------------------------------------------------------------------|------------------------------|---------------------------------------------------------------|-----------------------|--------------------------------------------|------------------|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|
| SOCOTEC Asbestos Limited Certificate of Analysis for Asbestos in Soils, Sediments and Aggregates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  | 1089                                                                                |  |                                                                                                       |  |                                                                                      |  |
| Client:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                                         |            | SOCOTEC Environmental Chemistry                                   |                              |                                                               |                       |                                            |                  | Page 1 of 1                                                                         |  |                                                                                                       |  |                                                                                      |  |
| Address:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |                                         |            | Etwall House, Bretby Business Park, Ashby Road, Burton upon Trent |                              |                                                               |                       |                                            |                  | Report No:                                                                          |  | ANO-0503-29840                                                                                        |  |                                                                                      |  |
| For the attention of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |                                         |            | SOCOTEC Environmental Chemistry                                   |                              |                                                               |                       |                                            |                  | Report Date:                                                                        |  | 15/05/2024                                                                                            |  |                                                                                      |  |
| Site Address:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |                                         |            | Former Fox and Hounds Public House                                |                              |                                                               |                       |                                            |                  | Project Number:                                                                     |  | 24050904                                                                                              |  |                                                                                      |  |
| Sample Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Sample Date | Sample Location & Matrix                | Test Date  | Total Sample Dry Weight (g)                                       | Weight of <10mm Fraction (g) | Asbestos(g) in >10mm                                          | Asbestos(g) In < 10mm | % Asbestos by weight of Total Dried Sample | Moisture Content | Asbestos Fibre Types Identified                                                     |  |                                                                                                       |  |                                                                                      |  |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/05/24    | BH01/1-0-ES-0.30-0.30 Soils             | 15/05/2024 | 367.3                                                             | 324.0                        | 0.00000                                                       | 0.00154               | <0.001                                     |                  | NADIS >10mm, Amosite (Free Fibres) <10mm Stage 2                                    |  |                                                                                                       |  |                                                                                      |  |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/05/24    | BH01/2-0-ES-0.80-0.80 Soils             | 15/05/2024 | 388.1                                                             | 372.1                        | 0.00000                                                       | 0.00183               | <0.001                                     |                  | NADIS >10mm, Chrysotile (Free Fibres) <10mm Stage 2                                 |  |                                                                                                       |  |                                                                                      |  |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/05/24    | BH02/1-0-ES-0.20-0.20 Soils             | 15/05/2024 | 424.2                                                             | 360.9                        | 0.00000                                                       | 0.00000               |                                            |                  | NADIS Stage 1                                                                       |  |                                                                                                       |  |                                                                                      |  |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/05/24    | BH02/2-0-ES-0.90-0.90 Soils             | 15/05/2024 | 433.3                                                             | 402.7                        | 0.00000                                                       | 0.00164               | <0.001                                     |                  | NADIS >10mm, Chrysotile (Free Fibres) <10mm Stage 2                                 |  |                                                                                                       |  |                                                                                      |  |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/05/24    | BH03/1-0-ES-0.30-0.30 Soils             | 15/05/2024 | 584.9                                                             | 539.8                        | 0.00000                                                       | 0.00000               |                                            |                  | NADIS Stage 1                                                                       |  |                                                                                                       |  |                                                                                      |  |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/05/24    | TP01/1-0-ES-0.30-0.30 Soils             | 15/05/2024 | 280.9                                                             | 237.4                        | 0.00000                                                       | 0.00000               |                                            |                  | NADIS Stage 1                                                                       |  |                                                                                                       |  |                                                                                      |  |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/05/24    | TP02/1-0-ES-0.40-0.40 Soils             | 15/05/2024 | 565.6                                                             | 565.6                        |                                                               | 0.00000               |                                            |                  | NADIS Stage 1                                                                       |  |                                                                                                       |  |                                                                                      |  |
| 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/05/24    | TP03/1-0-ES-0.30-0.30 Soils             | 15/05/2024 | 343.5                                                             | 343.5                        |                                                               | 0.00000               |                                            |                  | NADIS Stage 1                                                                       |  |                                                                                                       |  |                                                                                      |  |
| 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/05/24    | TP04/1-0-ES-0.70-0.70 Soils             | 15/05/2024 | 559.4                                                             | 544.1                        | 0.00000                                                       | 0.00000               |                                            |                  | NADIS Stage 1                                                                       |  |                                                                                                       |  |                                                                                      |  |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 01/05/24    | TP05/1-0-ES-0.40-0.40 Soils             | 15/05/2024 | 322.6                                                             | 322.6                        |                                                               | 0.00000               |                                            |                  | NADIS Stage 1                                                                       |  |                                                                                                       |  |                                                                                      |  |
| 11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 01/05/24    | TP06/1-0-ES-0.30-0.30 Soils             | 15/05/2024 | 401.5                                                             | 370.3                        | 0.00000                                                       | 0.00000               |                                            |                  | NADIS Stage 1                                                                       |  |                                                                                                       |  |                                                                                      |  |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 01/05/24    | TP06/2-0-ES-0.80-0.80 Soils             | 15/05/2024 | 545.9                                                             | 533.9                        | 0.00000                                                       | 0.00000               |                                            |                  | NADIS Stage 1                                                                       |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |
| Keys                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             | NAACR = Not Analysed at Clients Request |            |                                                                   |                              | NAIS = No Asbestos Identified in Sample (Identification Only) |                       |                                            |                  | Name:                                                                               |  | Rachel Howell                                                                                         |  | Authorised Signatory:                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             | * visible to naked eye                  |            |                                                                   |                              | NADIS = No Asbestos Detected in Sample (ID & Quant Only)      |                       |                                            |                  | Position:                                                                           |  | Lab Analyst                                                                                           |  |  |  |
| The sample analysis for the above results was carried out using the procedures detailed in SOCOTEC Asbestos Limited in house method (SCI-ASB-020) based on EA document Quantification of asbestos in soil and associated materials - Draft 2017. Fibre identification was carried out using SOCOTEC Asbestos Limited in house method of transmitted/polarised light microscopy and centre stop dispersion staining (SCI-ASB-007), and fibre counting during sedimentation test, where applicable, was carried out using SOCOTEC Asbestos Ltd in house method (SCI/ASB/003) based on HSE's HSG 248. The sedimentation test does not discriminate non-asbestos fibres. Uncertainty of Measurement (UoM) estimate is +/- 29% for full quantitative analysis based on reproducibility analysis at 0.1%. Sampling is outside the UoM estimate. Recommended sample weight is 1kg-2kg, samples less than 1kg are classified as deviating samples. Any opinions or interpretations are outside the scope of our UKAS accreditation. |             |                                         |            |                                                                   |                              |                                                               |                       |                                            |                  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |

## Deviating Sample Report

| <u>Sample Reference</u> | <u>Text ID</u> | <u>Method Code</u> | Incorrect Container | Incorrect Label | Headspace | Incorrect/No Preservative | No Sampling Date | Holding Time |
|-------------------------|----------------|--------------------|---------------------|-----------------|-----------|---------------------------|------------------|--------------|
| BH01/1-0-ES-0.30-0.30   | 24050904-001   | BTEXHSA            |                     |                 |           |                           |                  | ✓            |
| BH01/1-0-ES-0.30-0.30   | 24050904-001   | GROHSA/BTEXHSA     |                     |                 |           |                           |                  | ✓            |
| BH01/1-0-ES-0.30-0.30   | 24050904-001   | SVOCSW             |                     |                 |           |                           |                  | ✓            |
| BH02/1-0-ES-0.20-0.20   | 24050904-003   | BTEXHSA            |                     |                 |           |                           |                  | ✓            |
| BH02/1-0-ES-0.20-0.20   | 24050904-003   | GROHSA/BTEXHSA     |                     |                 |           |                           |                  | ✓            |
| BH03/1-0-ES-0.30-0.30   | 24050904-005   | BTEXHSA            |                     |                 |           |                           |                  | ✓            |
| BH03/1-0-ES-0.30-0.30   | 24050904-005   | GROHSA/BTEXHSA     |                     |                 |           |                           |                  | ✓            |
| TP03/1-0-ES-0.30-0.30   | 24050904-008   | SVOCSW             |                     |                 |           |                           |                  | ✓            |

## Analysis Method

| <u>Method Code</u>   | <u>Method Description</u>                        | <u>Analysis Method</u> |
|----------------------|--------------------------------------------------|------------------------|
| BTEXHSA              | BTEX by GCFID                                    | As Received            |
| CLANDPREP            | CLand Prep and Dry Weight Correction to 35°C     | As Received            |
| CLANDPREP            | Solid Material Description                       | As Received            |
| GROHSA/BTEXHSA       | GRO CWG UK (C5-C10) Ali/Aro Split                | As Received            |
| ICPACIDS             | Sulphate as SO4 (Acid Soluble)                   | Air Dried & Ground     |
| ICPBOR               | Boron (Water Soluble) by ICPOES                  | Air Dried & Ground     |
| ICPMSS               | Arsenic in Solids by ICPMS                       | Air Dried & Ground     |
| ICPMSS               | Cadmium in Solids by ICPMS                       | Air Dried & Ground     |
| ICPMSS               | Chromium in Solids by ICPMS                      | Air Dried & Ground     |
| ICPMSS               | Copper in Solids by ICPMS                        | Air Dried & Ground     |
| ICPMSS               | Lead in Solids by ICPMS                          | Air Dried & Ground     |
| ICPMSS               | Mercury in Solids by ICPMS                       | Air Dried & Ground     |
| ICPMSS               | Nickel in Solids by ICPMS                        | Air Dried & Ground     |
| ICPMSS               | Selenium in Solids by ICPMS                      | Air Dried & Ground     |
| ICPMSS               | Zinc in Solids by ICPMS                          | Air Dried & Ground     |
| PAHMSUS              | 16 PAHs by GCMS                                  | As Received            |
| PHSOIL               | pH (2.5:1)                                       | As Received            |
| SFAPI                | Cyanide (Total) by SFA                           | As Received            |
| SFAPI                | Phenol Index (Total) by SFA                      | As Received            |
| SFAPI                | Sulphide by SFA                                  | As Received            |
| SUB002               | Asbestos Stage 1 (with Stage 2 Trigger)          |                        |
| SUB002               | Asbestos Stage 2: Quantification                 |                        |
| SVOCSW               | SVOCs (Target List) by GCMS                      | As Received            |
| TPHFIDUS             | TPH (>C10-C40) Total                             | As Received            |
| TPHFIDUS (Aliphatic) | TPH (CWG UK) Aliphatic Split with Carbon Banding | As Received            |
| TPHFIDUS (Aromatic)  | TPH (CWG UK) Aromatic Split with Carbon Banding  | As Received            |
| WSLM59               | TOC: Total Organic Carbon                        | Air Dried & Ground     |



**Project Number:** [24050904](#)

**Client:** STM Environmental Consultants

**Date Issued:** 30/05/2024

**Project Name:** Former Fox and Hounds Public H - Former Fox and Hounds Public House

### [Result Report Notes](#)

Letters alongside results signify that the result has associated report notes.

The report notes are as follows:

#### [Letter](#)

#### [Note](#)

- |   |                                                                                                                                                                                                                                                                                                                              |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A | Due to the matrix of the sample the laboratory has had to deviate from our standard protocols to be able to process the sample and provide a result. Where applicable the accreditation has been removed and this should be taken into consideration when utilising the data.                                                |
| B | The QC associated with this result has not wholly met the QMS requirements, the accreditation has therefore been removed. However, the Laboratory has confidence in the performance of the method as a whole and that the integrity of the data has not been significantly compromised.                                      |
| C | Due to matrix interference, the internal standard and/or surrogate has not met the QMS requirements. This should be taken into consideration when utilising the data.                                                                                                                                                        |
| D | A non-standard volume or mass has been used for this test which has resulted in a raised detection limit.                                                                                                                                                                                                                    |
| E | Due to the parameter value being beyond our calibration range (and following the maximum size of dilution allowed, where applicable), the result cannot be quantified and as such the result will appear as a greater than symbol (>) with the accreditation removed. This data should be used for indicative purposes only. |
| F | Based on the sample history, appearance and smell a dilution was applied prior to testing. Unfortunately, the result is either above (>) or below (<) our calibration range. Results above our calibration range have accreditation removed. The data should be used for indicative purposes only.                           |
| G | The day 5 oxygen reading was below the capability of the instrument to detect, and therefore the calculated BOD has been reported unaccredited for guidance purposes only.                                                                                                                                                   |

### [HWOL Acronym Key](#)

#### [Acronym](#)

#### [Description](#)

|       |                                                                       |
|-------|-----------------------------------------------------------------------|
| HS    | Headspace Analysis                                                    |
| EH    | Extractable Hydrocarbons - i.e everything extracted by the solvent(s) |
| CU    | Clean up - e.g. by florisil, silica gel                               |
| 1D    | GC - Single coil gas chromatography                                   |
| Total | Aliphatics & Aromatics                                                |
| AL    | Aliphatics only                                                       |
| AR    | Aromatics only                                                        |
| +     | Operator to indicate cumulative e.g. EH_CU+HS_1D_Total                |

### [SVOCSW - N-Nitrosodiphenylamine](#)

N-Nitrosodiphenylamine decomposes in the GC inlet and cannot be separated from diphenylamine. For this reason we will report a combined result for N-Nitrosodiphenylamine and Diphenylamine.



**Project Number:** [24050904](#)

**Client:** STM Environmental Consultants

**Date Issued:** 30/05/2024

**Project Name:** Former Fox and Hounds Public H - Former Fox and Hounds Public House

#### Additional Information

This report refers to samples as received. SOCOTEC UK Ltd takes no responsibility for accuracy or competence of sampling by others.

Results within this report relate only to the samples tested.

The accreditation codes are as follows:

U = UKAS accredited analysis  
M = MCERT accredited analysis  
N = Unaccredited analysis

Any accreditation marked with ^ signify results are reported on a dry weight basis of 35 °c.

All Air Dried and Ground Samples (ADG) are oven dried at less than 35 °c.

This report shall not be reproduced except in full, without written approval of the laboratory.

Opinions and interpretations given are outside the scope of our UKAS accreditation.

Any results marked with \* are not covered by our scope of UKAS accreditation. If applicable, further report notes have been added.

Any solid samples where the Major Constituents are not one of the following (Sand, Silt, Clay, Made Ground) are not one of our accredited matrix types.

Any samples marked with a tick in the deviant table is deviant for the specific reason.

Any samples reported as IS, NA, ND mean the following:

IS = Insufficient Sample to complete analysis  
NA = Sample is not amenable for the required analysis  
ND = Results cannot be determined

Items listed with a 'SUB' method code prefix have been carried out by another SOCOTEC department or by an external subcontracted laboratory.

Our deviating sample report does not include deviancy information for Subcontracted analysis. Please see the report from the subcontracted lab for information regarding any deviancies for this analysis.

Summaries of analysis methods are available upon request.

### **End of Certificate of Analysis**



## 12.6 Appendix 6 – Chosen Generic Assessment Criteria

### 12.6.1 Soils Criteria

| Contaminant            | Concentration (mg/kg) | GAC Literature Source                                                 |
|------------------------|-----------------------|-----------------------------------------------------------------------|
| Arsenic                | 40                    | Category 4 Screening Levels - Residential (without homegrown produce) |
| Cadmium                | 85                    | LQM SULs - RWOPU                                                      |
| Chromium               | 910                   | LQM SULs - RWOPU                                                      |
| Chromium - Hexavalent  | 6                     | LQM SULs - RWOPU                                                      |
| Copper                 | 7100                  | LQM SULs - RWOPU                                                      |
| Lead                   | 310                   | LQM SULs - RWOPU                                                      |
| Mercury                | 56                    | LQM SULs - RWOPU                                                      |
| Nickel                 | 180                   | LQM SULs - RWOPU                                                      |
| Selenium               | 430                   | LQM SULs - RWOPU                                                      |
| Zinc                   | 40000                 | LQM SULs - RWOPU                                                      |
| Toluene                | 1800                  | LQM SULs - RWOPU (1% OM)                                              |
| Benzene                | 0.7                   | LQM SULs - RWOPU (1% OM)                                              |
| Ethylbenzene           | 190                   | LQM SULs - RWOPU (1% OM)                                              |
| m,p xylenes            | 180                   | LQM SULs - RWOPU (1% OM)                                              |
| Acenaphthylene         | 4600                  | LQM SULs - RWOPU (1% OM)                                              |
| Acenaphthene           | 4700                  | LQM SULs - RWOPU (1% OM)                                              |
| Fluorene               | 3800                  | LQM SULs - RWOPU (1% OM)                                              |
| Phenanthrene           | 1500                  | LQM SULs - RWOPU (1% OM)                                              |
| Anthracene             | 35000                 | LQM SULs - RWOPU (1% OM)                                              |
| Fluoranthene           | 1600                  | LQM SULs - RWOPU (1% OM)                                              |
| Pyrene                 | 3800                  | LQM SULs - RWOPU (1% OM)                                              |
| Benzo(a)anthracene     | 14                    | LQM SULs - RWOPU (1% OM)                                              |
| Chrysene               | 31                    | LQM SULs - RWOPU (1% OM)                                              |
| Benzo (b) fluoranthene | 4                     | LQM SULs - RWOPU (1% OM)                                              |
| Benzo(k)fluoranthene   | 110                   | LQM SULs - RWOPU (1% OM)                                              |
| Benzo(a)pyrene         | 2.5                   | LQM SULs - RWOPU (1% OM)                                              |
| Dibenz-a-h-anthracene  | 0.32                  | LQM SULs - RWOPU (1% OM)                                              |
| Indeno(1,2,3-cd)pyrene | 46                    | LQM SULs - RWOPU (1% OM)                                              |
| Benzo (g,h,i) perylene | 360                   | LQM SULs - RWOPU (1% OM)                                              |
| Aliphatics >C5-6       | 78                    | LQM SULs - RWOPU (1% OM)                                              |
| Aliphatics >C6-8       | 230                   | LQM SULs - RWOPU (1% OM)                                              |
| Aliphatics >C8-10      | 65                    | LQM SULs - RWOPU (1% OM)                                              |
| Aliphatics >C10-12     | 330                   | LQM SULs - RWOPU (1% OM)                                              |
| Aliphatics >C12-16     | 2400                  | LQM SULs - RWOPU (1% OM)                                              |
| Aliphatics >C16-C35    | 92000                 | LQM SULs - RWOPU (1% OM)                                              |
| Aliphatics >C35-44     | 92000                 | LQM SULs - RWOPU (1% OM)                                              |

| Contaminant                 | Concentration<br>(mg/kg) | GAC Literature Source    |
|-----------------------------|--------------------------|--------------------------|
| <b>Aromatics &gt;C5-7</b>   | 690                      | LQM SULs - RWOPU (1% OM) |
| <b>Aromatics &gt;C7-8</b>   | 1800                     | LQM SULs - RWOPU (1% OM) |
| <b>Aromatics &gt;C8-10</b>  | 110                      | LQM SULs - RWOPU (1% OM) |
| <b>Aromatics &gt;C10-12</b> | 590                      | LQM SULs - RWOPU (1% OM) |
| <b>Aromatics &gt;C12-16</b> | 2300                     | LQM SULs - RWOPU (1% OM) |
| <b>Aromatics &gt;C16-21</b> | 1900                     | LQM SULs - RWOPU (1% OM) |
| <b>Aromatics &gt;C35-44</b> | 1900                     | LQM SULs - RWOPU (1% OM) |
| <b>Napthalene</b>           | 5.6                      | LQM SULs - RWOPU (1% OM) |
| <b>Phenol</b>               | 690                      | LQM SULs - RWOPU (1% OM) |

LQM SULs – RWOPU: LQM Suitable for Use Levels - Residential (Without Plant Uptake – 2.5% Organic Matter)  
 LQM SULs - RWOPU (1% OM): LQM Suitable for Use Levels - Residential (Without Plant Uptake – 2.5% Organic Matter)

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## 12.7 Appendix 7 – Exceedances and Statistical Analysis Summary

| Contaminants          | Sample ID | Sample Depth<br>(mbgl) | Maximum Concentrations<br>(mg/ kg) | GAC Value (mg/ kg) | GAC Source                                                                             |
|-----------------------|-----------|------------------------|------------------------------------|--------------------|----------------------------------------------------------------------------------------|
| Lead                  | BH01/1    | 0.3                    | 686.3                              | 310                | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       |
| Lead                  | BH01/2    | 0.8                    | 310.2                              | 310                | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       |
| Lead                  | BH03/1    | 0.3                    | 1571                               | 310                | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       |
| Arsenic               | BH03/1    | 0.3                    | 67.8                               | 40                 | Category 4 Screening Levels - Residential (without homegrown produce)                  |
| Benzo(a)anthracene    | BH03/1    | 0.3                    | 21.5                               | 14                 | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) |
| Benzo(a)pyrene        | BH03/1    | 0.3                    | 17.6                               | 2.5                | Category 4 Screening Levels - Residential (without homegrown produce)                  |
| Benzo(b)fluoranthene  | BH03/1    | 0.3                    | 24.1                               | 4                  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) |
| Dibenz-a-h-anthracene | BH01/1    | 0.3                    | 0.34                               | 0.32               | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) |
| Dibenz-a-h-anthracene | BH03/1    | 0.3                    | 2.58                               | 0.32               | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) |

| Parameter              | GAC   | GAC Source                                                                             | No. Samples | Mean   | Maximum | Outliers Excluded | Max. Value Location | Mean Exceedence | Std. Deviation | Non-Detected | W. Shapiro-Wilk | W. Critical | Distribution | T-Statistic | Upper 95th Percentile (US95) | Mean Value Test Result | Max Value Test Result  | One Sample T Test - Th | One Sample T Test Result | One Sample T Test - Evidence Level (%) | Kort-Chelzychev | LIQ35-Chelzychev | KD-Chelzychev | Chelzychev Test Result | Chelzychev - Evidence Level  | Samples Exceeding GAC |                        |
|------------------------|-------|----------------------------------------------------------------------------------------|-------------|--------|---------|-------------------|---------------------|-----------------|----------------|--------------|-----------------|-------------|--------------|-------------|------------------------------|------------------------|------------------------|------------------------|--------------------------|----------------------------------------|-----------------|------------------|---------------|------------------------|------------------------------|-----------------------|------------------------|
| Aliphatics>Q8-8        | 230   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.9617          | 0.748       | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -830.918547   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Aliphatics>Q8-10       | 85    | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.9617          | 0.748       | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -830.918547   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Aromatics>Q8-10        | 110   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.9617          | 0.748       | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -830.918547   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Aliphatics>Q8-6        | 78    | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.9617          | 0.748       | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -830.918547   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Aromatics>Q8-7         | 890   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.9617          | 0.748       | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -830.918547   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Arsenic                | 40    | Category 4 Screening Levels - Residential (without homegrown produce)                  | 12          | 16.36  | 67.8    | 0                 | EH03/1              | No              | 16.75          | 0            | 0.5754          | 0.869       | Non-Normal   | 1.796       | 26.0413                      | PASSED                 | Max. Value is Outlier  | -4.89                  | -1.782                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 37.4373465    | -4.8900513             | Reject H0 (x0 < kont)        | 96                    | EH03/1                 |
| Cadmium                | 85    | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       | 12          | 0.66   | 1       | 0                 | EH03/1              | No              | 0.18           | 0            | 0.941           | 0.869       | Normal       | 1.796       | 0.7533                       | PASSED                 | Max. Value NOT Outlier | -1594.843              | -1.782                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 0.88890756    | -1594.84289            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Copper                 | 7105  | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       | 12          | 81.73  | 539.9   | 0                 | EH03/1              | No              | 148.85         | 0            | 0.4816          | 0.869       | Non-Normal   | 1.796       | 158.999                      | PASSED                 | Max. Value is Outlier  | -183.33                | -1.782                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 269.073803    | -183.329989            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Lead                   | 310   | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       | 12          | 284.5  | 1571    | 0                 | EH03/1              | No              | 444.78         | 0            | 0.6166          | 0.869       | Non-Normal   | 1.796       | 516.0999                     | FAILED                 | Max. Value is Outlier  | -0.199                 | -1.782                   | DO NOT reject H0 (0 < t(n-1, 0.95)     | 60              | 4.36             | 844.308153    | -0.19900375            | DO NOT reject H0 (x0 < kont) | 0                     | EH01/1, EH01/2, EH03/1 |
| Mercury                | 58    | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       | 12          | 0.24   | 1.5     | 0                 | EH03/1              | No              | 0.48           | 9            | 0.5929          | 0.869       | Non-Normal   | 1.796       | 0.4913                       | PASSED                 | Max. Value is Outlier  | -401.234               | -1.782                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 0.84756344    | -401.233914            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Nickel                 | 180   | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       | 12          | 31.98  | 45.7    | 0                 | EH03/1              | No              | 5.29           | 0            | 0.8511          | 0.869       | Non-Normal   | 1.796       | 34.6987                      | PASSED                 | Max. Value is Outlier  | -97.025                | -1.782                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 38.5108701    | -97.0248933            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Selenium               | 430   | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       | 12          | 0      | 0       | 0                 | N/A                 | No              | 0              | 12           | 0.8511          | 0.869       | N/A          | 1.796       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -97.0248933   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Chromium               | 910   | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       | 12          | 25.83  | 41.8    | 0                 | TP01/1              | No              | 5.71           | 0            | 0.7892          | 0.869       | Non-Normal   | 1.796       | 28.7948                      | PASSED                 | Max. Value is Outlier  | -536.512               | -1.782                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 33.0103118    | -536.511583            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Zinc                   | 40000 | LQM Suitable for Use Levels - Residential (Without Plant Uptake)                       | 12          | 195.48 | 673.1   | 0                 | EH03/1              | No              | 193.3          | 0            | 0.7159          | 0.869       | Non-Normal   | 1.796       | 295.6949                     | PASSED                 | Max. Value is Outlier  | -713.321               | -1.782                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 438.770512    | -713.320716            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Benzene                | 0.7   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.8835          | 0.869       | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -713.320716   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Ethylbenzene           | 190   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.8835          | 0.869       | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -713.320716   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| m,p xylenes            | 180   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.8835          | 0.869       | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -713.320716   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Toluene                | 1800  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.8835          | 0.869       | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -713.320716   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Acephenanthrene        | 4700  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 0.09   | 0.62    | 0                 | EH03/1              | No              | 0.18           | 10           | 0.5948          | 0.874       | Non-Normal   | 1.771       | 0.1803                       | PASSED                 | Max. Value is Outlier  | -95189.106             | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 0.30812662    | -95189.1062            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Acephenanthrylene      | 4600  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 0.15   | 1.88    | 0                 | EH03/1              | No              | 0.5            | 11           | 0.3513          | 0.874       | Non-Normal   | 1.771       | 0.3899                       | PASSED                 | Max. Value is Outlier  | -34464.98              | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 0.70547638    | -34464.9604            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Anthracene             | 35000 | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 0.5    | 5.27    | 0                 | EH03/1              | No              | 1.39           | 8            | 0.4039          | 0.874       | Non-Normal   | 1.771       | 1.1569                       | PASSED                 | Max. Value is Outlier  | -94369.111             | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 2.11720282    | -94369.111             | Reject H0 (x0 < kont)        | 99                    | None                   |
| Benzo(a)anthracene     | 14    | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 2.12   | 21.5    | 0                 | EH03/1              | No              | 5.63           | 5            | 0.4063          | 0.874       | Non-Normal   | 1.771       | 4.7838                       | PASSED                 | Max. Value is Outlier  | -7.893                 | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 6.88117619    | -7.89328426            | Reject H0 (x0 < kont)        | 98                    | EH03/1                 |
| Benzo(a)pyrene         | 2.5   | Category 4 Screening Levels - Residential (without homegrown produce)                  | 14          | 1.89   | 17.6    | 0                 | EH03/1              | No              | 4.6            | 5            | 0.4447          | 0.874       | Non-Normal   | 1.771       | 4.0696                       | FAILED                 | Max. Value is Outlier  | -0.494                 | -1.761                   | DO NOT reject H0 (0 < t(n-1, 0.95)     | 70              | 4.36             | 7.25273412    | -0.49439642            | DO NOT reject H0 (x0 < kont) | 12                    | EH03/1                 |
| Benzo(b)fluoranthene   | 4     | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 2.56   | 24.1    | 0                 | EH03/1              | No              | 6.3            | 5            | 0.4392          | 0.874       | Non-Normal   | 1.771       | 5.5400                       | FAILED                 | Max. Value is Outlier  | -0.856                 | -1.761                   | DO NOT reject H0 (0 < t(n-1, 0.95)     | 80              | 4.36             | 9.99959722    | -0.85576599            | DO NOT reject H0 (x0 < kont) | 39                    | EH03/1                 |
| Benzo(g,h,i) perylene  | 360   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 0.87   | 7.06    | 0                 | EH03/1              | No              | 1.85           | 6            | 0.5108          | 0.874       | Non-Normal   | 1.771       | 1.7485                       | PASSED                 | Max. Value is Outlier  | -727.451               | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 3.02456781    | -727.45064             | Reject H0 (x0 < kont)        | 99                    | None                   |
| Benzo(k)fluoranthene   | 110   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 0.96   | 9.17    | 0                 | EH03/1              | No              | 2.4            | 6            | 0.4361          | 0.874       | Non-Normal   | 1.771       | 2.0985                       | PASSED                 | Max. Value is Outlier  | -170.043               | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 3.75883619    | -170.042745            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Chrysene               | 31    | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 1.87   | 18.4    | 0                 | EH03/1              | No              | 4.81           | 5            | 0.4167          | 0.874       | Non-Normal   | 1.771       | 4.1466                       | PASSED                 | Max. Value is Outlier  | -22.854                | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 7.47570639    | -22.8543554            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Dibenz(a,h)anthracene  | 0.32  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 0.26   | 2.68    | 0                 | EH03/1              | No              | 0.68           | 9            | 0.4278          | 0.874       | Non-Normal   | 1.771       | 0.5799                       | FAILED                 | Max. Value is Outlier  | -0.342                 | -1.761                   | DO NOT reject H0 (0 < t(n-1, 0.95)     | 60              | 4.36             | 1.06071032    | -0.34173167            | DO NOT reject H0 (x0 < kont) | 0                     | EH01/1, EH03/1         |
| Fluoranthene           | 1600  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 5.45   | 57.9    | 0                 | EH03/1              | No              | 15.2           | 4            | 0.3882          | 0.874       | Non-Normal   | 1.771       | 12.9422                      | PASSED                 | Max. Value is Outlier  | -392.409               | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 23.162578     | -392.408934            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Fluorene               | 3800  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 0.22   | 2.79    | 0                 | EH03/1              | No              | 0.74           | 11           | 0.3398          | 0.874       | Non-Normal   | 1.771       | 0.573                        | PASSED                 | Max. Value is Outlier  | -19178.024             | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 1.08997984    | -19178.0239            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Indeno(1,2,3-cd)pyrene | 46    | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 1.01   | 8.55    | 0                 | EH03/1              | No              | 2.23           | 6            | 0.489           | 0.874       | Non-Normal   | 1.771       | 2.0891                       | PASSED                 | Max. Value is Outlier  | -75.33                 | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 3.81531012    | -75.3299126            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Naphthalene            | 5.6   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 0.09   | 0.64    | 0                 | EH03/1              | No              | 0.18           | 9            | 0.6024          | 0.874       | Non-Normal   | 1.771       | 0.177                        | PASSED                 | Max. Value is Outlier  | -116.858               | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 0.29902171    | -116.855893            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Phenanthrene           | 1500  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 3.96   | 46.3    | 0                 | EH03/1              | No              | 12.22          | 5            | 0.3561          | 0.874       | Non-Normal   | 1.771       | 9.7462                       | PASSED                 | Max. Value is Outlier  | -457.954               | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 18.2039158    | -457.954012            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Pyrene                 | 880   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 14          | 4.38   | 46.5    | 0                 | EH03/1              | No              | 12.22          | 5            | 0.3885          | 0.874       | Non-Normal   | 1.771       | 10.1458                      | PASSED                 | Max. Value is Outlier  | -1182.547              | -1.761                   | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 18.5986734    | -1182.54938            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Phenol                 | 3900  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 2           | 0      | 0       | 0                 | N/A                 | No              | 0              | 2            | 0.9997          | 0           | N/A          | 6.314       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -1182.54938   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Aliphatics>C10-12      | 330   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 0      | 0       | 0                 | N/A                 | No              | 0              | 8            | 0.9997          | 0           | N/A          | 1.895       | 0                            | N/A                    | N/A                    | N/A                    | N/A                      | 99.5                                   | 4.36            | 0                | -1182.54938   | Reject H0 (x0 < kont)  | 99                           | None                  |                        |
| Aliphatics>C12-16      | 2400  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 1.88   | 8.75    | 0                 | TP09/1              | No              | 3.3            | 6            | 0.6044          | 0.818       | Non-Normal   | 1.895       | 3.8916                       | PASSED                 | Max. Value is Outlier  | -2057.349              | -1.86                    | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 6.78509181    | -2057.34893            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Aliphatics>C26-44      | 90000 | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 6.08   | 38.3    | 0                 | TP05/1              | No              | 13.51          | 6            | 0.5456          | 0.818       | Non-Normal   | 1.895       | 15.1114                      | PASSED                 | Max. Value is Outlier  | -19265.265             | -1.86                    | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 26.8820197    | -19265.2651            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Aromatics>C10-12       | 590   | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 6.82   | 10.4    | 0                 | EH01/1              | No              | 3.31           | 1            | 0.9234          | 0.818       | Normal       | 1.895       | 8.8399                       | PASSED                 | Max. Value NOT Outlier | -498.268               | -1.86                    | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 11.7890118    | -498.268413            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Aromatics>C12-16       | 2300  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 14.82  | 34.1    | 0                 | EH03/1              | No              | 9.2            | 0            | 0.7934          | 0.818       | Non-Normal   | 1.895       | 20.7847                      | PASSED                 | Max. Value is Outlier  | -702.513               | -1.86                    | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 28.8037899    | -702.512894            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Aromatics>C16-21       | 1900  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 31.06  | 190     | 0                 | EH03/1              | No              | 64.44          | 1            | 0.4961          | 0.818       | Non-Normal   | 1.895       | 74.2307                      | PASSED                 | Max. Value is Outlier  | -82.029                | -1.86                    | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 130.393239    | -82.0288385            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Aromatics>C21-36       | 1900  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 89.75  | 558     | 0                 | EH03/1              | No              | 191.83         | 3            | 0.5418          | 0.818       | Non-Normal   | 1.895       | 218.1385                     | PASSED                 | Max. Value is Outlier  | -28.72                 | -1.86                    | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 385.140494    | -26.7195125            | Reject H0 (x0 < kont)        | 99                    | None                   |
| Aromatics>C36-44       | 1900  | LQM Suitable for Use Levels - Residential (Without Plant Uptake - 2.5% Organic Matter) | 8           | 5.17   | 17.9    | 0                 | EH03/1              | No              | 6.45           | 4            | 0.8035          | 0.818       | Non-Normal   | 1.895       | 9.4889                       | PASSED                 | Max. Value is Outlier  | -830.919               | -1.86                    | Reject H0 (0 < t(n-1, 0.95)            | 99.5            | 4.36             | 15.1          |                        |                              |                       |                        |

## 12.8 Appendix 8 - Assessment Methodology

- Severity considers the potential impact of the linkage on the receptors if the linkage was active. Categories range from slight/superficial to fatal.
- Likelihood considers the chances of the linkage occurring and is classified into categories from improbable to frequent.

By assigning scores with each of the above categories, the risk assessment can be undertaken using the formula:

$$\text{RISK} = \text{LIKELIHOOD} \times \text{SEVERITY}$$

The matrix given in Table 6 provides a means of calculating the overall risk; while Table 7 provides the qualitative assessment based on the risk score.

Table 6: Contamination Risk Matrix

|                        |                 | Potential Severity |                |                |                |             |
|------------------------|-----------------|--------------------|----------------|----------------|----------------|-------------|
|                        |                 | Fatal<br>5         | Major<br>4     | Moderate<br>3  | Minor<br>2     | Slight<br>1 |
| Probable<br>Likelihood | Frequent<br>5   | Very High          | High           | Moderate       | Low - Moderate | Low         |
|                        | Probable<br>4   | High               | High           | Moderate       | Low - Moderate | Low         |
|                        | Possible<br>3   | Moderate           | Moderate       | Low - Moderate | Low - Moderate | Very Low    |
|                        | Remote<br>2     | Low - Moderate     | Low - Moderate | Low - Moderate | Low            | Very Low    |
|                        | Improbable<br>1 | Low                | Low            | Very Low       | Very Low       | Very Low    |

Table 7: Assessment description for risk scores

| Risk Score | Risk Assessment |
|------------|-----------------|
| 1-3        | Very Low        |
| 4-5        | Low             |
| 6-10       | Low to Moderate |
| 11-15      | Moderate        |
| 16-20      | High            |
| 21-25      | Very High       |

Table 8: Risk Classification System

| Risk Term              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Very Low</b>        | The presence of an identified hazard does not give rise to the potential to cause significant harm to groundwater, surface water, ecological and/or property receptors. In the event of such harm being realized, it is not likely to be Severe.                                                                                                                                                                                               |
| <b>Low</b>             | The presence of an identified hazard does not give rise to the potential to cause significant harm to human health receptors. In the event of such harm being realized, it is not likely to be Severe.                                                                                                                                                                                                                                         |
| <b>Low to Moderate</b> | It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realized, would at worst normally be mild.                                                                                                                                                                                                                                                                        |
| <b>Moderate</b>        | It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term. |
| <b>High</b>            | Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remedial action. Investigation is required and remedial works may be necessary in the short term and are likely over the longer term.                                                                                                                                                                                               |
| <b>Very High</b>       | There is a high probability that severe harm could arise to a designated receptor from an identified hazard, or, there is an evidence that severe harm to a designated receptor is currently happening. Urgent investigation and remediation are likely to be required.                                                                                                                                                                        |



## 13 ABBREVIATIONS

| Abbreviation | Description                                         |
|--------------|-----------------------------------------------------|
| BTEX         | Benzene, Tolulene, Ethylene and Xylene              |
| c.           | Circa                                               |
| CLRA         | Contaminated Land Risk Assessment                   |
| CSM          | Conceptual Site Risk Model                          |
| EA           | Environment Agency                                  |
| GAC          | Generic Assessment Criteria                         |
| IPC          | Integrated Pollution Control                        |
| LAPC         | Local Authority Pollution Control                   |
| LQM S4ULs    | Land Quality Management Suitable for Use Levels     |
| NPPF         | National Planning Policy Framework                  |
| OS           | Ordnance Survey                                     |
| PAHs         | Polycyclic aromatic hydrocarbons                    |
| Part IIA     | Part IIA of the Environmental Protection. Act 1990  |
| PID          | Photoionization Detector                            |
| PCB          | Polychlorinated Biphenyl                            |
| PCLU         | Potentially Contaminative Land Use                  |
| PPL          | Potential Pollutant Linkage                         |
| PRA          | Preliminary Risk Assessment                         |
| PSPPL        | Potentially Significant Potential Pollutant Linkage |
| RWHP         | Residential with Home-grown Produce                 |
| SI           | Site Investigation                                  |
| SOM          | Soil Organic Matter                                 |
| SPOSH        | Significant Possibility of Significant Harm         |
| TOC          | Total Organic Carbon                                |
| TPH          | Total Petroleum Hydrocarbons                        |
| TPHCWG       | Total Petroleum Hydrocarbon Criteria Working Group  |
| UXO          | Unexploded Ordnance                                 |

## 14 REFERENCES

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