

Intended for:
Lincoln MGT

Date:
October 2023

Report Reference:
SHR-RMB-XX-XX-RP-C-91-000022

STATION HILL, PHASE 1 (SOUTH SITE) VERIFICATION REPORT

STATION HILL, PHASE 1 (SOUTH SITE) VERIFICATION REPORT

Report Ref. **SHR-RMB-XX-XX-RP-C-91-000022**

Issue No. **I02**

Date **20/10/2023**

Made by **Sophie Davies**

Checked by **Catherine Cooper**

Approved by **Siobhán McGeever**

Made by:



Checked/Approved by:



This report has been prepared by Ramboll UK Limited with all reasonable skill, care and diligence, and taking account of the Services and the Terms agreed between Ramboll UK Limited and the Client. This report is confidential to the Client, and Ramboll UK Limited accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known, unless formally agreed by Ramboll UK Limited beforehand. Any such party relies upon the report at their own risk. Ramboll UK Limited disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the services.

Version Control Log

Revision	Date	Made by	Checked by	Approved by	Document Ref.
P01	28/02/2023	SD	CC	SM	Issued for Information – Verification of soft landscaping to be added.
I02	20/10/2023	SD	CC	SM	Final Issue – Including soft landscaping verification information.

Ramboll
240 Blackfriars Road
London
SE1 8NW
United Kingdom
T +44 20 7808 1420
www.ramboll.co.uk

CONTENTS

1.	INTRODUCTION	1
1.1	Overview	1
1.2	Planning Context	1
1.3	Project Background	2
1.4	Proposed Development	2
1.5	Constraints and Limitations	3
2.	SITE CHARACTERISATION	5
2.1	Site Description	5
2.2	Site History	5
3.	GROUND INVESTIGATION SUMMARY	6
3.1	Geology	7
3.2	Hydrogeology	8
3.3	Hydrology	8
3.4	Ground Contamination Identified	8
3.5	Ground Gas Risk Assessment	9
3.6	Waste Management	9
4.	SITE SPECIFIC RISK MANAGEMENT STRATEGY	10
4.1	Risk Management Measures	10
5.	RISK MANAGEMENT STRATEGY IMPLEMENTATION	11
5.1	Unforeseen Contamination	12
5.2	Water Supply Pipes	12
5.3	Waste Classification and Audit Trail of Material Movement	12
5.4	Surface Water / Groundwater Management	13
5.5	Re-use / Import of Material On-Site	13
6.	CONCLUSIONS AND RECOMMENDATIONS	14
6.1	Conclusions	14
6.2	Recommendations	14

APPENDICES

Appendix 1

Figures

Appendix 2

Ramboll Watching Briefs

Appendix 3

Consignment Notes

Appendix 4

Waste Transfer Notes

Appendix 5

Soft Landscaping Verification

1. INTRODUCTION

1.1 Overview

Ramboll UK Limited (herein "Ramboll") was instructed by Lincoln MGT (the "Client") to produce a Verification Report for Phase 1 (South Site) of the Station Hill Development, located at Station Hill, Reading, RG1 1NR (the "Site").

This Verification Report has been produced based on information provided by the contractors on site, alongside a series of part-time environmental watching brief visits undertaken by Ramboll throughout the enabling works, earthworks and piling.

1.2 Planning Context

Reading Borough Council granted Outline Planning Permission for the proposed development subject to the conditions outlined in Planning Application Number 130436, dated 9th January 2015. Land contamination matters are dealt with under Condition 27.

A Remediation Strategy (Ref. SHR-RMB-XX-XX-RP-C-91-000021) was produced by Ramboll to satisfy part (c) of Condition 27, which states:

'The results of the site investigation and detailed risk assessment referred to in (b) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken. The strategy must include all works to be undertaken, proposed remediation objectives and remediation criteria, an appraisal of remedial options, and proposal of the preferred option(s), and a timetable of works and site management procedures. The strategy must ensure that the site will not qualify as contamination land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land under remediation.'

As part of the recommendations in the Remediation Strategy, it was stated that an Environmental Watching Brief and Verification Report would be produced in line with part (d) of Condition 27, which states:

'A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy (c) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.'

In addition to part (d), part (e), the final part of Condition 27 has also been covered in this Verification Report. Part (e) states:

In the event that contamination is found at any time when carrying out the approved development not previously identified, development must be halted on that part of the site, and it must be reported in writing to the Local Planning Authority. Following that an assessment of the nature and extent of contamination must be undertaken and where remediation is necessary a remediation scheme, together with a timetable for its implementation, must be submitted to and approved in writing by the Local Planning Authority.

The measures in the approved remediation scheme must then be implemented in accordance with the approved details in (a)-(e) above, as relevant, save to the extent that the Local Planning Authority approves any variation(s) to the approved details.

Reason: the submitted Environmental Statement requires an intrusive site investigation which is in part related to previous potential contaminative uses of the site which have the potential to pollute soils and groundwater.

1.3 Project Background

A Geotechnical and Geo-Environmental Desk Study¹ (DBA) for the wider Station Hill Development site was undertaken by Ramboll in 2018. The outcome of the DBA was used to inform the scoping of a ground investigation which was undertaken on the South Site in 2018. The findings of the ground investigation are presented within the Ground Investigation Report (GIR)² and are summarised in Section 3 of this report. A Remediation Strategy³ (RS) for the South Site was then produced by Ramboll in 2021, which details the following:

- Protocols for managing unforeseen contamination;
- Use of suitable buried water supply pipe materials; and,
- Clean imported materials for use within soft landscaping and green roof area.

This Verification Report has been prepared to document the successful completion of these works, with the exception of the validation of materials imported for proposed soft landscaped areas, which will happen at a later stage of the build and will require a separate Verification Letter Report or Addendum to this report upon completion.

1.4 Proposed Development

1.4.1 Master Plan

Station Hill is a transformational development for Reading and the Thames Valley. It will provide up to 1,300 new homes; 95,000 sq. ft of activated lifestyle-led retail, leisure, and amenity space; 625,000 sq. ft of office space; and 2 acres of public realm linking the Station and North Reading to the Town Centre. The Station Hill Development master plan is shown as Figure 1.1 below.



Figure 1.1: A Drawing of the Proposed Development (Source: MGT)

¹ Ramboll. (2018). *Station Hill – Geotechnical and Geo-Environmental Desk Study*. Ref. 1620004716-SHR-RAM-GE-001-Desk Study.

² Ramboll. (2020). *Station Hill, Reading – Ground Investigation Report*. Ref. SHR-RAM-SB-XX-RP-G-00016 (rev C03).

³ Ramboll. (2021). *Station Hill, Reading, Phase 1, South Site – Remediation Strategy*. Ref. SHR-RAM-SB-00-RP-G-RemStrat.

1.4.2 Phase 1 Proposed Development

The specific proposed development for Phase 1 included the demolition of existing buildings located on the site, and the construction of two residential apartment buildings, referred to as Blocks E and F.

These comprise a 6-12-storey building and a 11-12-storey building with a split single/double-storey basement and a podium to bridge the two buildings. The proposed basement covers the extent of the building footprints except for three residential units in the south of Block E and one residential unit in the south of Block F. Figure 1.2. below shows the proposed development plan for Phase 1. The red boundaries represent areas where residential units are to be constructed at ground level.



Figure 1.2: Proposed development plan for Phase 1 (South Site)

1.5 Constraints and Limitations

This report has been prepared by Ramboll exclusively for the intended use by the client in accordance with the Appointment Document, reference number 61033235, dated August 2014 between Ramboll and the client defining, among others, the purpose, the scope and the terms and conditions for the services. No other warranty, expressed or implied, is made as to the professional advice included in this report or in respect of any matters outside the agreed scope of the services or the purpose for which the report and the associated agreed scope were intended, or any other services provided by Ramboll.

In preparation of the report and performance of any other services, Ramboll has relied upon publicly available information, information provided by the client and information provided by third parties. Accordingly, the conclusions in this report are valid only to the extent that the information provided to Ramboll was accurate, complete and available to Ramboll within the reporting schedule. Ramboll are reliant on information provided by JRL Midgard and did not have input into the decision process of the waste disposal.

Ramboll's services are not intended as legal advice, nor an exhaustive review of site conditions and/or compliance. This report and accompanying documents are initial and intended solely for the use and benefit of the client for this purpose only and may not be used by or disclosed to, in whole or in part, any other person without the express written consent of Ramboll. Ramboll neither owes nor accepts any duty to any third party, unless formally agreed by Ramboll through that party entering into, at Ramboll's sole discretion, a written reliance agreement.

Unless otherwise stated in this report, the scope of services, assessment and conclusions made assume that the site will continue to be used for its current purpose and end-use without significant changes either on-site or off-site.

2. SITE CHARACTERISATION

2.1 Site Description

The Station Hill site is located to the south of Reading Train Station in Central Reading at RG1 1NR. The site is centred on National Grid Reference 471370, 173710. A red line boundary for the site is shown below as Figure 2.1. The site location is shown within Appendix 1.

Phase 1, known as the South Site, is bordered by Garrard Street to the north, beyond which is the Station Hill North Site; Merchants Place and various commercial buildings to the east; Friar Street to the south, beyond which is further commercial buildings; and commercial buildings and Greyfriars Road to the west. Prior to the commencement of the enabling works, the South Site was occupied by Telecoms House in the west, and the majority of the remainder of the site was occupied by Friars Walk Shopping Centre in the east. Demolition of these buildings was completed in 2019.



Figure 2.1: Station Hill South Site shown by Red Line Boundary

2.2 Site History

A detailed review of historical Ordnance Survey maps for the site is provided in Ramboll's Phase I Desk Study Report⁴. The site history can be summarised as below.

The earliest historical map dated 1879 showed the wider Station Hill development site to be occupied by terraced housing, a Malt House, Timber Yard and Coal Yard. The remaining northeast section of the site was shown as open fields and woodland. During the 1900s, the site became further developed with a large building occupying the centre of the site by 1931. A factory was marked in the northwest corner of the site in 1957, with the central building annotated as a garage. A number of depositories and warehouses were then built on the site, with a carpark present by the 1960s. By the late 1960s, a ballroom and bus station had been constructed on the western portion of the car park. A coal yard was present in the south of the site, and Western Tower and its adjoining office block had been built along the northern site boundary. The garage, houses and factory were demolished by 1980 to make way for a multi-storey car park in the centre, an office building in the west and Friar's Walk Shopping Centre in the south, which included a rooftop car park.

Enabling works on the South Site commenced in 2021 by JRL Midgard following the demolition of buildings on site by McGee Construction Limited (McGee) in 2019.

⁴ Ramboll. (2018). *Station Hill – Geotechnical and Geo-Environmental Desk Study*. Ref. 1620004716-SHR-RAM-GE-001-Desk Study.

3. GROUND INVESTIGATION SUMMARY

A combined Geo-Environmental and Geotechnical Ground Investigation⁵ was undertaken between 12th November and 3rd December 2018 by Geotechnical Engineering Limited (GEL), under part-time supervision by Ramboll.

The ground investigation comprised:

- Prior to intrusive works, GEL undertook below ground utility service clearance at exploratory hole locations. A preliminary unexploded ordinance (UXO) risk assessment undertaken by 1st Line Defence classified the risk level as 'minimal' therefore no further actions were undertaken with regards with UXO.
- Exploratory locations were hand-dug to 1.2 m below ground level (bgl) in advance of drilling.
- Three cable percussion boreholes with rotary follow on were advanced in the chalk. Originally four deep boreholes were proposed (BH301-304). BH302 could not be progressed due to access constraints within the car park.
- Sixteen windowless sample boreholes were advanced (WS301-WS316); ten of which reached depth and six of which refused on concrete.
- Nine 50 mm ground gas and groundwater monitoring standpipes were installed.
- Three 19 mm standpipe piezometer were installed.
- One round of groundwater monitoring was undertaken on 31st January 2019. Groundwater samples were obtained from BH301, BH303 and BH304.
- In-situ geotechnical testing was undertaken within the exploratory holes.
- Geotechnical and geo-environmental laboratory testing was carried out on geological strata.
- Targeted soil samples were taken from each exploratory location and screened on-site using a hand-held photo-ionisation detector (PID) for the presence of volatile organic compounds (VOCs).
- A total of 34 soil samples were submitted for laboratory chemical analysis. Selected soil samples were analysed for a predetermined suite of contaminants, designed to be reflective of the site's historical uses.
- Six subsequent rounds of ground gas monitoring were undertaken (at 9no. locations) between 10th December 2018 and 4th February 2019 using a portable gas analyser, in accordance with CIRIA C665, for a residential without plant uptake proposed end use. A hand-held PID was also used to measure VOCs in the monitoring wells during the monitoring round.

The findings of the ground investigation are summarised in the following sections.

⁵ Ramboll. (2020). *Station Hill, Reading – Ground Investigation Report*. Ref. SHR-RAM-SB-XX-RP-G-00016 (rev C03).

3.1 Geology

The stratigraphy encountered during the ground investigation is presented in Table 3.1 below.

Table 3.1: Sequence of Strata Encountered on Site			
Stratum	Level at Top of Stratum (m AOD)	Thickness Range (m)	Typical Description
Made Ground	+39.2 to +45.7	0.40 to 1.9	Concrete hardstanding is located across the entire site and is underlain by Made Ground which is variable but is generally described as dark bluish grey angular medium and coarse sandy crystalline gravel and light brown slightly silty sandy subangular to rounded fine and medium brick, concrete, flint, and chalk gravel. There are also clay units which have brick, chalk, and flint gravels.
Alluvium	+37.2 to +38.8	0.3 to 0.8	The Alluvium and Taplow Gravels are discontinuous across the site with the Alluvium only being encountered in 4no. exploratory holes with an average thickness of 0.5m. The Alluvium is generally described as stiff light brown slightly sandy gravelly silty clay, with gravel being subangular to rounded fine to coarse flint and chalk.
Taplow Gravels	+37.6 to +45.2	0.3 to 2.5	The Taplow Gravels are encountered in 6no. window samples. Each borehole also found a layer of silty gravelly chalk which due to the destructive nature of using shell and auger drilling techniques at this depth, could have included a layer of gravel which has been subsumed by the chalk. The Taplow Gravels have an average thickness of 0.7m and are generally described as orangish brown clayey sandy subangular to subrounded fine to coarse flint and rare chalk gravel.
Upper Chalk (Structureless)	+35.4 to +44.9	4.4 to 6.8	The structureless chalk has a CIRIA grade of Dm or Dc. With a typical description consisting of; structureless chalk composed of white slightly gravelly Silt. Gravel is subangular and subrounded fine to coarse very weak medium density white with frequent black specks chalk, rarely angular fine to coarse flint.
Upper Chalk (Structured)	+30.9 to +31.2	>16.6 (Unproven)	The structured chalk was only encountered in the boreholes (thickness unproven). The CIRIA grade of the chalk included B5, B4, B3, A5, A4, A3. Two fracture sets are present with one predominantly sub horizontal to 30°, and the second set between predominantly 45° and 70°. Thin layers (5mm) of cobbled sized black nodular flint were encountered. The typical description consists of very weak medium density white CHALK with frequent black specks and yellowish orange staining.
AOD - Above Ordnance Datum			

3.2 Hydrogeology

According to the Environment Agency (EA), the Alluvium and Taplow Gravel formations are classified as Secondary A Aquifers and the Upper Chalk Formation is classified as a Principal Aquifer (identified as a layer of rock or drift deposits which have a high intergranular permeability, and as such they usually provide a high level of water storage).

The site is not located within an EA designated Source Protection Zone. There are 12 licensed groundwater abstractions within 1 km of the site, the closest of which is located 0.16 km to the southwest which is in use for drinking, cooking, sanitary and washing (small garden) purposes.

Overall, the site is considered to be located within a low to moderate sensitivity setting with regards to groundwater receptors.

During the ground investigation, groundwater strikes were encountered within the Upper Chalk Formation at depths ranging between +36.05 m to +36.7 m AOD.

3.3 Hydrology

The nearest surface water feature is a drainage network located approximately 320 m northwest of the site, associated with the railway line. In the wider surrounds, the River Thames is located approximately 420 m northeast of the site, at its closest point. The River Kennet is located approximately 500 m southeast of the site; both rivers are considered to flow in an easterly direction.

Overall, the site is considered to be of low environmental sensitivity with regards to surface water receptors.

3.4 Ground Contamination Identified

The ground investigation identified minor residual impacts via potential complete pollutant linkages between contamination and sensitive receptors, which are summarised along with a summary of additional actions in Table 3.1 below.

Table 3.2: Significant Pollutant Linkages Identified	
Pollutant	Additional Actions Required
Asbestos	Low levels of asbestos were identified in shallow Made Ground soils at the site and due to the nature of asbestos, previously unidentified asbestos cannot be discounted. Risk management measures are therefore required to address potential risks to human health during construction including both worker health and safety aspects and public protection aspects. An asbestos management plan may be required.
Hydrocarbons	Exceedances of benzo(a)pyrene and heavy end aromatic total petroleum hydrocarbons were identified in shallow Made Ground soils in the northwest of the site. Risks to construction workers and future site users should be managed as per the risk assessment recommendations but principally in accordance with health and safety legislation. Precautions against underground services i.e., barrier pipe should also be considered for buried plastic water pipes. The development will comprise impermeable hard standing over the majority of the site thus reducing leaching potential further from the unsaturated soils. An assessment of water supply pipes suitable for ground contamination may be required by the Mains Water supplier in accordance with UKWIR report 10/WM/03/21 Guidance for the Selection of Water Supply Pipes to be used in brownfield sites, 2010.

Groundwater sampling and subsequent screening assessment undertaken as part of the GIR did not identify contaminants of concern in groundwater above the relevant assessment criteria.

It should be noted that the ground investigation was limited due to access restrictions and buildings and concrete slabs being in situ at the time of drilling (i.e., no access was granted in the northeast corner within the area of the former garage which was in use as a private car park at the time of the investigation).

3.5 Ground Gas Risk Assessment

Six rounds of ground gas monitoring were undertaken by Ramboll as part of the ground investigation. A detailed review of the ground gas monitoring and assessment is included within the Ground Investigation Report⁶.

In summary, on the basis of the conceptual site model and the ground gas monitoring results, the South Site has been classified in line with CIRIA C665 as Characteristic Situation 1 (CS1) (Very Low Risk), i.e., no ground gas protection measures are required for the proposed development.

3.6 Waste Management

The Phase 1 enabling works undertaken by Midgard involved breaking out of concrete hardstanding relating to the former development, followed by cut and fill excavations across the site to form the proposed foundations and basement underlying the majority of the proposed Block E and F building footprints.

Two loads of hazardous waste were produced during the enabling works relating to contaminated soils in the northwest of the site, corresponding to observations of hydrocarbon contamination in WS301 (0.2 m bgl) and BH301 (0.2m bgl) during the ground investigation. The contaminated soils were removed from site on 27th April 2021, as shown on the consignment notes provided in Appendix 3.

Soil arisings were later produced during subsequent piling works. This material was predominantly natural ground and removed as inert waste.

Except for some broken out concrete, which was crushed on site for reuse within the pile mat, all excavated materials were removed and disposed of off-site. All duty of care information was kept and managed by the contractor and provided to Ramboll for review. The majority of material was removed as inert waste.

A former underground storage tank infilled with concrete was encountered during excavations in the north of the site which was removed as non-hazardous waste after being inspected for contamination.

The information on Waste Classification, Waste Transfer Notes and total volumes were provided to Ramboll by JRL Midgard throughout the works and are summarised in Section 5.3. Verification of the audit trail of waste from site to disposal is discussed in further detail in Section 5.3. Consignment Notes relating to the Hazardous Waste loads are provided as Appendix 3, and Waste Transfer Notes relating to the remainder of the waste as Appendix 4.

⁶ Ramboll. (2020). *Station Hill, Reading – Ground Investigation Report*. Ref. SHR-RAM-SB-XX-RP-G-00016 (rev C03).

4. SITE SPECIFIC RISK MANAGEMENT STRATEGY

4.1 Risk Management Measures

Following the ground investigation and identification of plausible pollutant linkages, a Remediation Strategy was prepared to address residual contamination risks. A number of best practice measures were recommended which are summarised in Table 4.1 below. Verification details of how each of these has been managed are described in Section 5.

Table 4.1: Summary of Best Practice Measures

Category of Mitigation	Description of Mitigation Measures
Unforeseen Contamination	Should unforeseen contamination be encountered during piling and excavations, the construction manager will instruct specific investigations, advise the Local Authority and liaise on the remediation methodology as appropriate. <i>No significant unforeseen contamination was identified.</i>
Water supply pipes	Due to concentrations of hydrocarbons identified within the ground investigations, it is recommended that barrier pipe is used for the installation of buried plastic drinking water pipes. <i>The contractor confirmed that HDPE Protecta Line Barrier pipe was used. Water supply pipes were installed by Ark.</i>
Waste Management	Ensure waste disposal is undertaken in accordance with current legislative requirements. Duty of Care information is to be held on site for viewing. <i>A selection of Consignment Notes and Waste Transfer Notes are provided as Appendix 3 and 4.</i>
Re-use of materials on-site	No long-term re-use of material is proposed for the South Site, however, should Made Ground be re-used on-site, an MMP will be required, and site won materials are only suitable to be placed under areas of hardstanding due to the presence of asbestos. <i>Only crushed concrete has been used for temporary reuse within piling mats. Therefore, an MMP was not required.</i>
Surface water/ groundwater management	A strategy should be in place to ensure the pollution of groundwater is not an occurrence. Discharges made to drains will be done so in line with the appropriate discharge consents. <i>No significant volume of water was encountered in excavations during the groundworks requiring removal/discharging.</i>
Imported materials	Material imported to the site shall be analysed geotechnically and chemically to ensure it is suitable for use. Laboratory testing to prove chemical suitability and lack of asbestos should be undertaken prior to importing topsoil for use in proposed soft landscaped areas towards the end of the build. <i>Verification of imported topsoil / subsoil is included in Section 5.5.1.</i>
Environmental watching brief	An environmental watching brief has been maintained by Ramboll throughout the works outlined above and, in the event, that unexpected or gross contamination is encountered and to ensure that works are undertaken in accordance with the Remediation Strategy and Environmental Specification. <i>Environmental watching brief reports are provided as Appendix 2.</i>

5. RISK MANAGEMENT STRATEGY IMPLEMENTATION

The risk management measures that were recommended (summarised in Section 4.1) were implemented during the development works to manage potential ground contamination risks. Information pertaining to these works are discussed below.

Ramboll undertook a part time Environmental Watching Brief throughout the enabling works, excavations and piling and liaised with JRL Midgard (Principal Contractor) throughout. This involved discussions with JRL Midgard regarding the risk management strategies outlined in Section 4, reviewing the duty of care information held within the site offices and checking on the general environmental controls (e.g., the suitable use of drip trays under plant and over-ground storage tanks, dust suppression mitigation plans and general material management). Ramboll was reliant on JRL Midgard for recording information on site and considers this to have been well recorded.

Environmental Watching Brief visits were carried out by Ramboll Consultants on the following dates:

- 17th January 2021 – Archaeology trial pits being undertaken in the northeast corner (area previously inaccessible during the site investigation);
- 4th February 2021 – Archaeology trial pits being undertaken in the northeast corner (area previously inaccessible during the site investigation);
- 17th February 2021 – Observations of the site post demolition and archaeology trial pits being undertaken in the south;
- 9th March 2021 – Further earthworks and archaeology excavations;
- 1st April 2021 – Completion of archaeology excavations and ongoing earthworks;
- 15th April 2021 – Further earthworks including removal of concrete obstructions in the north/northwest;
- 12th May 2021 – Further excavations and removal of concrete slabs and obstructions in the centre and south, and inspection of underground storage tank removed during excavations in the north;
- 27th May 2021 – Further excavations and removal of concrete slabs and obstructions in the centre, south and west;
- 16th June 2021 – Piling being undertaken in the north of the proposed Block E footprint;
- 24th June 2021 – Piling being undertaken in the centre-north of the site and stockpiling of crushed concrete in the centre of the site;
- 20th July 2021 – Piling being undertaken on the eastern site boundary and construction of the tower crane bases for Block E in the northwest and west of the site;
- 26th August 2021 – Majority of site at formation level excluding in the southeast and northeast corners, ongoing piling in the south, and construction of Block E in the northwest;
- 8th September 2021 – Observing excavations in the northeast where the investigation was previously limited;
- 14th September 2021 – Ongoing construction of Block E in the northwest, ongoing piling in the west and the break-out and crushing of concrete in the northeast (former car park);
- 29th September 2021 – Ongoing construction of Block E, ongoing piling in the west, and emplacement of the piling mat in the northeast;
- 15th October 2021 – Removal of a concrete obstruction and emplacement of the piling mat in the northeast, ongoing piling in centre-west and ongoing construction of Block E;

- 14th December 2021 – Observing pile cap excavations in in the northeast and final piling works for Blocks E and F. Piling complete;
- 10th January 2023 – General visit to observe near completed site conditions. Remaining earthworks to include import of topsoil for soft landscaping (topsoil verification visit to be undertaken at a later date);
- 4th August 2023 – Topsoil/subsoil verification visit, approximately 50% of the soft landscaping works had been completed at the South Site, predominantly comprising raised planters and some areas of green roof: and
- 22nd September 2023 – Final visit to verify the soft landscaping. Imported subsoil and topsoil observed that will be used for the final raised planters and green roof areas.

Full details including photographic records are provided within the watching briefs reports, within Appendix 2.

5.1 Unforeseen Contamination

JRL Midgard confirmed that no visual or olfactory evidence of contamination was encountered throughout the earthworks and basement excavations on-site. No evidence of unforeseen contamination was observed by Ramboll.

A historical underground storage tank (UST) was encountered during excavations in the northwest of the site, observed by Ramboll during a visit on 12th May 2021. An inspection of the UST did not identify residual contamination and no visual or olfactory evidence of contamination was observed within the surrounding soils. The tank was temporarily stored on concrete hardstanding in the east of the site until it was removed from the site as non-hazardous waste.

Previously identified hydrocarbon contamination in BH301 and WS301 was removed as part of the enabling works. Two small loads of hazardous waste were removed from site, the consignment notes for which are provided in Appendix 3.

5.2 Water Supply Pipes

Ark, Midgard's M&E Contractor, has installed the final services and managed the connections. Ark completed the water supply pipe connections in approximately October 2022. It was confirmed that barrier pipe has been used for the installation of buried potable water pipes along with a surrounding sand bed.

5.3 Waste Classification and Audit Trail of Material Movement

The enabling works and excavations across the site were undertaken predominantly between January 2021 to December 2021, removing predominantly Concrete and Made Ground and the underlying natural strata comprising alluvium, gravels and chalk.

All excavated material being taken off site was managed by JRL Midgard, and a complete record of all waste carrier details, and waste facility locations have been recorded by JRL Midgard and copies provided to Ramboll for review.

Ramboll has reviewed the waste documents including the waste facilities and carriers and cross-checked these against the public register. The consignment notes for the loads removed from site as hazardous waste are included as Appendix 3. A selection of the waste transfer notes for the non-hazardous and inert material removed from site are included as Appendix 4.

It should be noted that waste from the Temporary Events Area (Phase 2) was being removed concurrent to Phase 1. It is not clear from the electronic register which loads relate to each part of the site however, JRL Midgard have confirmed that only inert and non-hazardous material was removed from the Temporary Events Area. Furthermore, Ramboll did not observe hazardous material within the Temporary Events Area during the watching brief visits.

5.4 Surface Water / Groundwater Management

No groundwater or surface water was encountered during excavations that required removal or discharge.

5.5 Re-use / Import of Material On-Site

A crusher was present from March 2021 to the end of demolition. Site won below ground concrete foundations relating to the former buildings were excavated and crushed on site into 6F2. This was used to raise site levels to formation level and to construct the pile mats and then taken off site.

No re-use of Made Ground or natural soils from excavations on site, or from the wider Station Hill site has been re-used on Phase 1.

Crushed demolition material stockpiled on Phase 3 was used within temporary piling mats on Phase 2. No material was from the stockpile was used on Phase 1.

JRL Midgard have confirmed the re-used concrete crush was free of visual and olfactory signs of contamination and with this material placed underneath hardstanding exposure to human health is eliminated. The concrete used within piling mats was temporary and removed from site at a late date. It is to be noted that Ramboll has not taken verification samples on the South Site.

5.5.1 Imported Topsoil and Subsoil

Areas of soft landscaping have been included at various levels of the South site development, from ground floor (raised planters / beds) up to Levels 11 and 12 (green roofs). Topsoil / subsoil verification was undertaken by Ramboll on two separate visits on 3rd August and 22nd September 2023 in line with the soft landscaping schedule. Ground level soft landscaping works are still to be undertaken along Garrard Street (due to be completed by December 2023). Given this will comprise one tree pit and several raised planters and will contain the verified topsoil / subsoil discussed below, an additional verification visit was not considered necessary.

The topsoil and subsoil were sourced from Bury Hill Landscape Supplies Ltd. and the delivery tickets were supplied to Ramboll (dated from 16th May to 27th July 2023). The topsoil and subsoil were observed to be visually clean and free from asbestos, metals, plastic, wood, glass, tarmac, paper and odours associated with contaminated soils.

Analysis of the imported material was previously undertaken by Tim O'Hare Associates and the Soil Analysis Reports were provided to Ramboll by JRL (available on request). According to JRL, the same materials will be used across the South Site development. The results of the analysis (contained within the Tim O'Hare reports) were screened against the 'chemical criteria for re-use and imported materials' specified in the Ramboll Remediation Strategy to give an indication of the soil suitability. All concentrations were below the relevant criteria.

A clause in the Tim O'Hare reports states that the analytical results for the imported soils cannot be used by third parties as a means of verification testing, especially after the soil has left the Bury Hill Horsham Yard. As such, JRL commissioned Terragen Environmental Consultants Ltd. to undertake soil sampling for on-site verification purposes. The sampling comprised two samples of topsoil and two samples of subsoil.

A report summarising the Validation Testing was produced by Terragen (dated 10th October 2023) and provided to Ramboll for review. Terragen screened the laboratory results against the chemical criteria specified in the Remediation Strategy and no exceedances were noted.

The full report (including the laboratory analytical reports) is presented in Appendix 5.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The contents of this Verification Report demonstrate that risks relating to contamination have been effectively managed throughout the demolition, enabling works, excavations and piling at Phase 1 of the Station Hill Development.

The Remediation Strategy identified several items of risk requiring management during the earthworks. Documentation of items verified in this report include:

- Management of potentially contaminated Made Ground;
- Management of limited surface waters;
- Management of imported materials (including those in soft landscaped areas) and re-used materials;
- Management and disposal of excess material;
- Protection of newly installed water supply pipes; and,
- General environmental controls including drip trays under plant, dust suppression measures and general material management.

Based on the information provided above, it is considered that the risks have been appropriately managed and that the ground conditions do not represent a significant residual contamination risk.

6.2 Recommendations

Ramboll therefore consider it appropriate for Planning Condition 27 to be discharged for the area known as Phase 1, South Site, Station Hill development.

APPENDIX 1

FIGURES

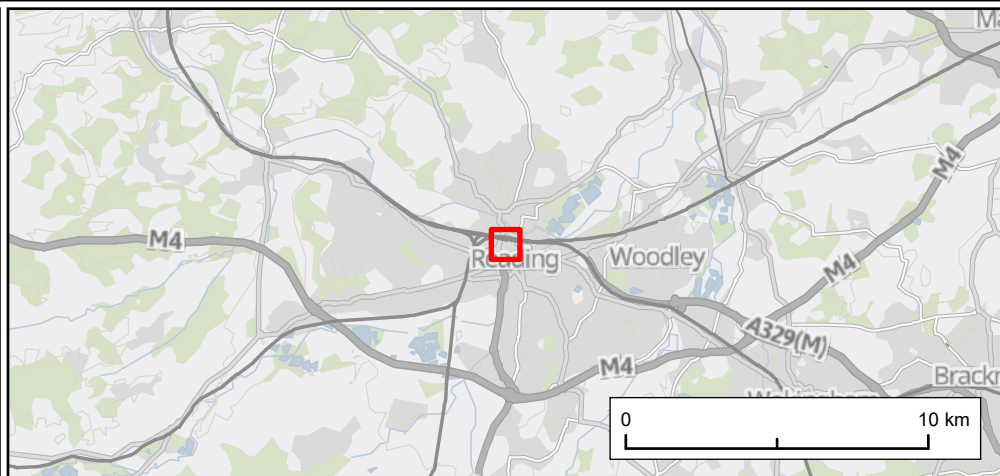
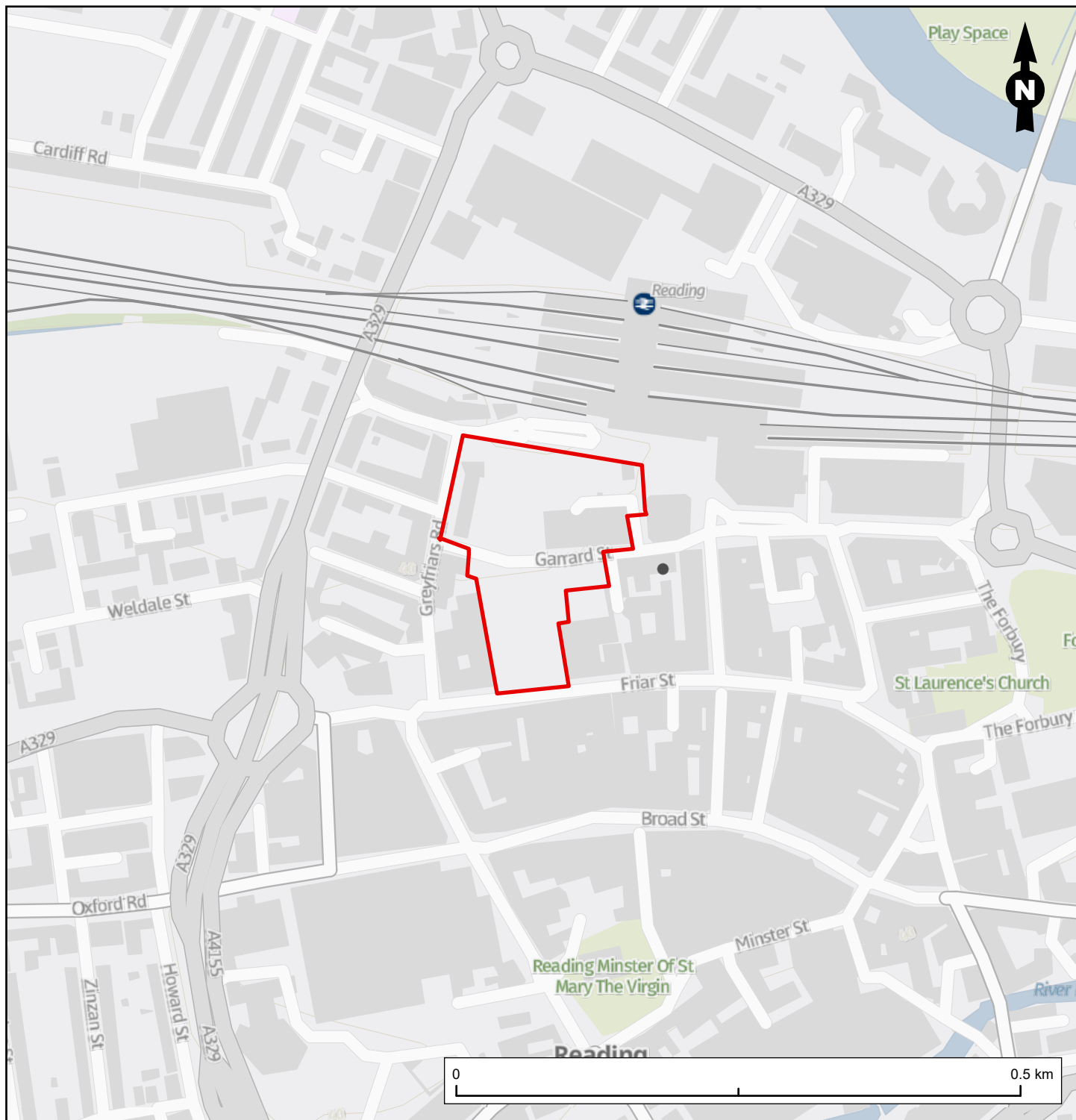


Figure Title Figure 1: Site Location	Project Name Station Hill Development Site	Date June 2022 Scale on Main Map 1:5,000	
Project Number 1620004716	Client Lincoln MGT	Issue 1 Prepared By CC	

APPENDIX 2

RAMBOLL WATCHING BRIEFS

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:30 to 14:00, 17 February 2021

Weather: Showers, 5°C

Visit to: Station Hill, Phase 1

by Siobhán McGeever and Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to the Station Hill, South Site, was undertaken on Wednesday 17th February 2021 by Siobhán McGeever and Catherine Cooper of Ramboll to undertake the first environmental watching brief visit.

This is following a pre-start call on Friday 12th February with CAST (Project Managers) and JRL Midgard, the Principal Contractor.

Denis Jianu is the Site Manager from JRL, covering both north and south sites at Station Hill. Denis inducted Ramboll personnel and escorted them around the site.

McGees undertook the main demolition works on the south site over a year ago. JRL Midgard have been undertaking remaining demolition works since McGees demobilised from the site in 2019. All buildings were demolished prior to Ramboll visit.



Photograph of the South Site post demolition

Site Observations

A piling rig is located in the centre of the site, which has to date installed test piles to a maximum depth of 20m bgl. The piling rig is positioned on a concrete foundation base (relating to the former shopping centre) and the ground beneath this is yet to be excavated. Ramboll will undertake a watching brief during this time and during future piling.

The retaining walls are exposed along the eastern boundary of the site.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

An archaeology watching brief and dig was underway in two areas of the south site at the time of Ramboll's visit; one in the south west corner of the site, at the level of Friar Street and one in the north west corner of the site, at a similar level to Garrard Street.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:30 to 14:00, 17 February 2021

Weather: Showers, 5°C

Visit to: Station Hill, Phase 1

by Siobhán McGeever and Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Programme and Areas of Interest

- Attend site at the time of the north east of the south site being excavated – this is to assess if there is any previously unforeseen contamination present in the ground. This area was previously inaccessible at the time the GI was undertaken as it was a privately owned car park and access was not granted. This corner of the south site lies over the road from BH204 on the north site, which identified hydrocarbons in the groundwater above the chalk and was in the location of a former garage.
- Observe the ground beneath the former BT House in the south west of the south site, to assess the ground beneath the building foundations.
- Assess whether a Thames Water Discharge Licence is held for the site.
- Assess how waste transfer notes and consignment notes are being recorded and ask to review a selection of these.

Proposed Development

The proposed development for the South Site comprises Buildings E in the west and F in the east. These are both proposed to be residential.

The two areas highlighted in red, show the areas where residential will be located at ground level, without a basement below. These areas will be assessed as part of the environmental watching brief.



Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:30 to 14:00, 17 February 2021

Weather: Showers, 5°C

Visit to: Station Hill, Phase 1

by Siobhán McGeever and Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Verification Reporting

One Verification Report will be produced to cover the South Site once all enabling works, piling, earthworks and basement excavations are complete.

Site Photographs



Photo 1 – View across the South Site from Xfinity House



Photo 2 – View across the site facing south east



Photo 3 – View across the south of the site – at a higher topography than remainder of site. Archaeology dig in the distance shown in south west corner of the site, along Friar Street.



Photo 4 – View of the archaeology excavation in the north west of the site

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:30 to 14:00, 17 February 2021

Weather: Showers, 5°C

Visit to: Station Hill, Phase 1

by Siobhán McGeever and Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 5 – Retaining wall along eastern boundary



Photo 6 – Retaining wall in north east of the site



Photo 7 – Concrete and rebar stockpile in north east corner of the site



Photo 8 – Northern boundary of the site

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:30 to 14:00, 17 February 2021

Weather: Showers, 5°C

Visit to: Station Hill, Phase 1

by Siobhán McGeever and Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 9 – Retaining wall along eastern boundary



Photo 10 – Retaining wall in north east of the site



Photo 11 – Concrete and rebar stockpile in north east corner of site



Photo 12 – Piling rig on concrete slab in the centre of the site

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 12:00 to 14:00, 9 March 2021

Weather: Blue sky, sunny, 8°C

Visit to: Station Hill, Phase 1

by Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to the Station Hill, South Site, was undertaken on Tuesday 9th March 2021 by Catherine Cooper of Ramboll to undertake the second environmental watching brief visit.

Denis Jianu is the Site Manager from JRL Midgard, covering both north and south sites at Station Hill. Denis escorted Ramboll personnel around the site.

McGees undertook the main demolition works on the south site over a year ago leaving concrete slabs across the site. Since JRL Midgard mobilised to site, works to date have included the break out of concrete in the south, west, north and centre west of the site, as indicated by numerous stockpiles.

Site Observations

JRL Midgard are currently undertaking underpinning works beneath the building occupied by Sainsburys along the western site boundary.

A piling rig is located in the centre of the site, which has to date installed test piles to a maximum depth of 20m bgl. The piling rig is positioned on a concrete foundation base (relating to the former shopping centre) and the ground beneath this is yet to be excavated. Ramboll will undertake a future watching brief during this time. Dates for piling have not yet been confirmed – currently in design stage.

The retaining walls are exposed along the eastern boundary of the site.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

Archaeology

An archaeology watching brief and dig was ongoing in the north west corner of the site (at the level of Garrard Street) during Ramboll's visit and the pit in the south west corner of the site (at the level of Friar Street) remained exposed.

According to the archaeologists, suspected asbestos containing material (ACM) was observed within the north west pit. As such, asbestos measures were put in place and archaeologists working in trenches were noted to be wearing asbestos suits and masks when excavating. The suspected ACM was segregated and bagged however, it was subsequently determined not to be asbestos and was not removed from site as hazardous waste.

No further potential contamination was reported by the archaeologists and Ramboll did not identify evidence of contamination within the pits during the visit. Both pits had been dug to approximately 1.2m bgl with visible concrete and brick obstructions present throughout.

According to JRL Midgard, several archaeology evaluation trenches were excavated in 2020 to determine the location of the current investigation pits.

A cherry picker was present on site at the time of Ramboll's visit, which was observed to be moving and stockpiling material from the archaeologist's dig.

Programme and Areas of Interest

- Attend site at the time of the north east of the south site being excavated – this is to assess if there is any previously unforeseen contamination present in the ground. This area was previously inaccessible at the time the GI was undertaken as it was a privately owned car park

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 12:00 to 14:00, 9 March 2021

Weather: Blue sky, sunny, 8°C

Visit to: Station Hill, Phase 1

by Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

and access was not granted. This corner of the south site lies over the road from BH204 on the north site, which identified hydrocarbons in the groundwater above the chalk and was in the location of a former garage.

- Observe the ground beneath the former BT House in the south west of the south site, to assess the ground beneath the building foundations.

Thames Water Discharge Licence

A Thames Water Discharge licence has not yet been obtained for the site. Should significant water ingress be observed during excavations then a licence will be required.

Waste Transfer Notes / Consignment Notes

According to JRL Midgard, all waste transfer notes and consignment notes are being recorded electronically. Ramboll has requested access to these.

Substations

No substations are present on the south site.

Tanks

No USTs have been identified to date on the south site.

Former Car Park in the NE of the Site

Only archaeology trial pits have been undertaken in the north east of the site, due to this area being restricted during the original ground investigation. No exploratory boreholes are therefore present in this area. The watching brief visits will ensure to focus on this area when the concrete slab is removed and excavation carried out in this area. Dates for the excavation works here have not yet been confirmed.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 12:00 to 14:00, 9 March 2021

Weather: Blue sky, sunny, 8°C

Visit to: Station Hill, Phase 1

by Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – View across site facing east (from north west corner) and north western archaeology pit



Photo 2 – View across site facing north west (from raised south boundary at Friar Street level)



Photo 3 – Archaeology dig in the south west corner, along Friar Street.



Photo 4 – View of stockpile containing broken out concrete in the south of the site – at higher topography than remainder of site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 12:00 to 14:00, 9 March 2021

Weather: Blue sky, sunny, 8°C

Visit to: Station Hill, Phase 1

by Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 5 – Retaining wall along eastern boundary



Photo 6 – Retaining wall in north east of the site



Photo 7 – Concrete and rebar stockpile in north east corner of the site



Photo 8 – Section of archaeology dig in north west corner with exposed brick structure.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 12:00 to 14:00, 1 April 2021

Weather: Sunny, 10°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Thursday 1st April 2021 by Catherine Cooper of Ramboll to undertake the third environmental watching brief visit.

Denis Jianu is the Site Manager from JRL Midgard (Principal Contractor), covering both north and south sites at Station Hill. Denis escorted Ramboll personnel around the site.

Since JRL Midgard mobilised to site, works to date have included the break-out of concrete in various areas in the south, west, north and centre west of the site, as indicated by numerous stockpiles.

Site Observations

Ramboll observed the latest activities to include the crushing of concrete and ongoing underpinning works beneath the Sainsburys building along the western site boundary. Archaeology works were also being completed at the time of the visit.

A piling rig is located in the centre of the site, which has to date installed test piles to a maximum depth of 20m bgl. The piling rig is positioned on a concrete foundation base (relating to the former shopping centre) and the ground beneath this is yet to be excavated. Ramboll will undertake a future watching brief during this time. Dates for piling have not yet been confirmed – currently in design stage.

The retaining walls are exposed along the eastern boundary of the site.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

Archaeology

An archaeology watching brief and dig was ongoing in the north west corner of the site (at the level of Garrard Street) during Ramboll's visit and the pit in the south west corner of the site (at the level of Friar Street) remained exposed. Based on discussions held on site the archaeology works were due to finish that day. No contamination was observed within the trial pits during Ramboll's visit.

Archaeologists working in trenches were noted to be wearing asbestos suits and masks when excavating.

Programme and Areas of Interest

- Attend site at the time of the north-east of the south site being excavated – this is to assess if there is any previously unforeseen contamination present in the ground. This area was previously inaccessible at the time the GI was undertaken as it was a privately owned car park and access was not granted. This corner of the south site lies over the road from BH204 on the north site, which identified hydrocarbons in the groundwater above the chalk and was in the location of a former garage.
- Observe the ground beneath the former BT House in the south west of the south site, to assess the ground beneath the building foundations.

Waste Transfer Notes / Consignment Notes

According to JRL, all waste transfer notes, and consignment notes are being recorded electronically. Ramboll has requested access to these.

Former Car Park in the NE of the Site

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 12:00 to 14:00, 1 April 2021

Weather: Sunny, 10°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Only trial pits have been undertaken to date in the north-eastern section of the site, due to limited access during the original GI. No WS or BH's are therefore present in this area. The watching brief visits will ensure to focus on this area when the concrete slab has been taken up. At the time of the visit, the concrete slab was still in place in this area. Dates for the excavation works here have not yet been confirmed.

Site Photographs



Photo 1 – View across site facing west observing the north western archaeology pit.



Photo 2 – View of concrete obstructions in the northern extent being broken out.



Photo 3 – Underpinning works being completed beneath the Sainsburys building located on the western site boundary.



Photo 4 – View facing south west from the centre of the site towards Friar Street (adjacent to the upper level).

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 12:00 to 14:00, 1 April 2021

Weather: Sunny, 10°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 5 – Stockpile of concrete crush located in the centre west of the site.



Photo 6 – View of piling rig in the centre of the site, which to date has undertaken approx. 20 test piles.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 13:00 to 15:00, 15 April 2021

Weather: Sunny, broken cloud, 10°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Thursday 15th April 2021 by Catherine Cooper of Ramboll to undertake the fourth environmental watching brief visit.

Denis Jianu is the Site Manager from JRL Midgard, covering both north and south sites at Station Hill. Denis escorted Ramboll personnel around the site.

McGees undertook the main demolition works on the south site over a year ago leaving concrete slabs across the site. Since JRL Midgard mobilised to site, works to date have included the break out of concrete in various areas in the south, west, north and centre west of the site indicated by numerous stockpiles and are currently undertaking underpinning works beneath the Sainsburys building along the western site boundary.

At the time of the visit, JRL Midgard were removing concrete slabs and obstructions in the north west corner of the site, including from within the north western archaeology pit.

The retaining walls are exposed along the eastern boundary of the site.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

Programme

- Attend site at the time of the north east of the south site being excavated – this is to assess if there is any previously unforeseen contamination present in the ground. This area was previously inaccessible at the time the GI was undertaken as it was a privately owned car park and access was not granted. This corner of the south site lies over the road from BH204 on the north site, which identified hydrocarbons in the groundwater above the chalk and was in the location of a former garage.
- Observe the ground beneath the former BT House in the south west of the south site, to assess the ground beneath the building foundations.

Thames Water Discharge Licence

A Thames Water Discharge licence has not yet been obtained for the site. This will be required prior to piling works commencing on site. According to JRL Midgard, piling works are likely to commence in early May, although this is not confirmed.

Waste

According to JRL, all waste transfer notes and consignment notes are being recorded electronically. Ramboll has requested access to these. To date, JRL Midgard have broken out concrete slabs and this material has been removed from site.

Piling

A piling rig is located in the centre of the site, which has to date installed 14 test piles to a maximum depth of 20m bgl. The piling rig is positioned on a concrete foundation base (relating to the former shopping centre) and the ground beneath this is yet to be excavated. Ramboll will undertake a future watching brief during this time. Dates for piling have not yet been confirmed.

Former Car Park in the NE of the Site

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 13:00 to 15:00, 15 April 2021

Weather: Sunny, broken cloud, 10°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Only trial pits have been undertaken to date in the north eastern section of the site, due to limited access during the original GI. No WS or BH's are therefore present in this area. The watching brief visits will ensure to focus on this area when the concrete slab has been taken up. At the time of the visit, the concrete slab was still in place in this area. Dates for the excavation works here have not yet been confirmed.

Noise

According to JRL Midgard, the site received a noise complaint by the adjacent Sainsbury's building (to the west) during concrete break out works.

Site Photographs



Photo 1 – View across site facing east (from north west corner) and north western archaeology pit (concrete and brick obstructions are being removed).



Photo 2 – Close up of north western pit. No evidence of contamination observed.



Photo 3 – View of piling rig set up (previously installed test piles only).



Photo 4 – View of stockpile from broken out concrete in the south of the site – at higher topography than remainder of site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 13:00 to 15:00, 15 April 2021

Weather: Sunny, broken cloud, 10°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 5 – Retaining wall along eastern boundary



Photo 6 – Retaining wall in north east of the site



Photo 7 – Concrete and rebar stockpile in north east corner of south site



Photo 8 – Stockpile of crushed concrete to be removed from site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 13:00, 12 May 2021

Weather: Blue sky, broken cloud, 8°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Wednesday 12th May by Catherine Cooper of Ramboll to undertake the fifth environmental watching brief visit. Denis Jianu, the Site Manager from JRL Midgard, escorted Ramboll personnel around the site.

Works to date have included the break out of concrete in various areas in the south, west, north and centre west of the site indicated by numerous stockpiles, and JRL Midgard have completed underpinning works beneath the building occupied by Sainsburys along the western site boundary. The concrete slabs in the north west of the site have been removed and this part of the site is now at formation level.

At the time of the visit, JRL Midgard were removing concrete slabs and obstructions in the centre and south of the site. Stockpiles of concrete crush were observed across these areas of the site.

The retaining walls are exposed along the eastern boundary of the site.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

Programme

- Attend site at the time of the north east of the south site being excavated – this is to assess if there is any previously unforeseen contamination present in the ground. This area was previously inaccessible at the time the GI was undertaken as it was a privately owned car park and access was not granted. This corner of the south site lies over the road from BH204 on the north site, which identified hydrocarbons in the groundwater above the chalk and was in the location of a former garage.
- Observe the ground beneath the former BT House in the south west of the south site, to assess the ground beneath the building foundations.

Piling

A piling rig is located in the centre of the site, which has to date installed 14 test piles to a maximum depth of 20m bgl (over a year ago). The piling rig is positioned on a concrete foundation base (relating to the former shopping centre) and the ground beneath this is yet to be excavated. Ramboll will undertake a future watching brief during this time. Piling was supposed to begin on 11th May 2021 but has been delayed by 2-3 weeks.

Thames Water Discharge Licence

A Thames Water Discharge licence has not yet been obtained for the site. This will be required prior to piling works commencing on site. According to JRL Midgard, piling works have been delayed and are likely to commence in late May/ early June, although this is not confirmed.

Waste

According to JRL Midgard, all waste transfer notes, and consignment notes are being recorded electronically. Ramboll has requested access to these. To date, JRL Midgard have broken out concrete slabs and most of this material has been removed from site, although it is being discussed that some concrete may be intended for re-use within temporary pile mats on site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 13:00, 12 May 2021

Weather: Blue sky, broken cloud, 8°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Tanks

Ramboll observed a historical tank which according to JRL Midgard, was encountered during excavations in the north west of the site. The tank was noted to be filled with concrete and no visual or olfactory evidence of contamination or residual contamination was noted. The tank is currently stored upon concrete hardstanding in the east of the site, awaiting removal and disposal off-site.

No other USTs or ASTs have been identified on site.

Former Car Park in the NE of the Site

Only trial pits have been undertaken to date in the north eastern section of the site, due to limited access during the original GI. No WS or BH's are therefore present in this area. The watching brief visits will ensure to focus on this area when the concrete slab has been taken up. At the time of the visit, the concrete slab was still in place in this area. Dates for the excavation works here have not yet been confirmed, although according to JRL Midgard this will not be undertaken for at least 12 weeks due to the need for enabling works in the eastern portion of the site.

Noise

According to JRL Midgard, the site received a noise complaint by the adjacent office building (to the west) during breaking out of the concrete.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 13:00, 12 May 2021

Weather: Blue sky, broken cloud, 8°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – Underpinning works complete beneath Sainsbury's building along the western site boundary.



Photo 2 – View across site from north west showing north western area at formation level.



Photo 3 – Stockpiles of concrete crush in the centre of the site.



Photo 4 – View of piling rig in the centre of the site. Piling has not yet commenced (test piles undertaken over a year ago).

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 13:00, 12 May 2021

Weather: Blue sky, broken cloud, 8°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 5 – Retaining wall along eastern boundary



Photo 6 – Retaining wall in north east of the site



Photo 7 – Concrete and rebar stockpile in north east corner of south site



Photo 8 – Concrete filled tank encountered in north-western excavations, currently stored upon concrete in the east of the site. No visual/olfactory evidence of contamination associated with the tank.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:30 to 14:00, 27 May 2021

Weather: Blue sky, sunny, 19°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Thursday 27th May by Catherine Cooper and Roger Harris of Ramboll to undertake the sixth environmental watching brief visit. Denis Jianu, the Site Manager from JRL Midgard, escorted Ramboll personnel around the site.

Works to date have included the breakout of concrete in various areas in the south, west, north and centre west of the site indicated by numerous stockpiles and have completed underpinning works beneath the building occupied by Sainsburys in the far west of the site. The concrete slabs in the north-west of the site have been removed and this part of the site is now at formation level.

At the time of the visit, the northwest section of the site was at formation (piling) level and JRL Midgard were removing concrete slabs and obstructions in the centre, west and south of the site. Stockpiles of concrete crush were observed across these areas of the site.

The retaining walls are exposed along the eastern boundary of the site.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

Programme

- Attend site at the time of the north east of the south site being excavated – this is to assess if there is any previously unforeseen contamination present in the ground. This area was previously inaccessible at the time the GI was undertaken as it was a privately owned car park and access was not granted. This corner of the south site lies over the road from BH204 on the north site, which identified hydrocarbons in the groundwater above the chalk and was in the location of a former garage.
- Observe the ground beneath the former BT House in the south west of the south site, to assess the ground beneath the building foundations.

Piling

A piling rig is located in the centre of the site, which has to date installed 14 test piles to a maximum depth of 20m bgl (over a year ago). The piling rig is positioned on a concrete foundation base (relating to the former shopping centre) and the ground beneath this is yet to be excavated. Piling is due to commence in the northwest of the site on 7th June 2021. Ramboll will undertake a watching brief during this time to observe the ground conditions during piling.

Waste

According to JRL Midgard, all waste transfer notes, and consignment notes are being recorded electronically. Ramboll has requested access to these. To date, JRL Midgard have broken out concrete slabs, most of which is being re-used on site, albeit some concrete has been disposed of off-site. All other Made Ground and natural chalk encountered during the excavations has been removed from site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:30 to 14:00, 27 May 2021

Weather: Blue sky, sunny, 19°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – View facing eastwards across the site showing the north western section now at formation level.



Photo 2 – View facing westwards across the north of the site showing north western section now at formation level.



Photo 3 –Concrete breakout and crushing activities being undertaken on site.



Photo 4 – Dampening down of stockpiles being undertaken during concrete breakout and crushing works.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:30 to 14:00, 27 May 2021

Weather: Blue sky, sunny, 19°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 5 – Stockpiles of concrete crush currently stored within the north east of the site.



Photo 6 – Retaining wall in north east of the site



Photo 7 – Piling rig and exposed test piles located in the centre of the site.



Photo 8 – Secured COSHH cabinet located in the south of the site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 12:00, 16 June 2021

Weather: Blue sky, sunny, 25°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Wednesday 16th June by Catherine Cooper and Roger Harris of Ramboll to undertake the seventh environmental watching brief visit. Denis Jianu, the Site Manager from JRL Midgard, escorted Ramboll personnel around the site.

Works to date have included the breakout of concrete in all areas of the site (excluding the north east, east and south east areas), indicated by numerous stockpiles located on site. Underpinning works beneath the building occupied by Sainsburys in the far west of the site have also been completed. The central north and north-west area of the site is at formation level. The retaining walls are exposed along the eastern boundary of the site.

At the time of the visit, the north west, centre west, and centre north of the site were at formation (piling) level. Numerous piles had been installed in the north west and a piling rig was observed to be piling within this area during Ramboll's visit. Concrete slabs and obstructions had been removed from the centre east of the site, and JRL Midgard had an excavator stockpiling the crushed material on site. Stockpiles of concrete crush were observed here.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

Programme

- Attend site at the time of the north east of the south site being excavated – this is to assess if there is any previously unforeseen contamination present in the ground. This area was previously inaccessible at the time the GI was undertaken as it was a privately owned car park and access was not granted. This corner of the south site lies over the road from BH204 on the north site, which identified hydrocarbons in the groundwater above the chalk and was in the location of a former garage.
- Observe the ground beneath the former BT House in the south west of the south site, to assess the ground beneath the building foundations.

Piling

Piling works commenced in the north west of the site on Tuesday 8th June 2021, according to JRL Midgard the piling rig has been averaging between 10 and 12 piles each day and there a total of 700 piles planned on the site. JRL Midgard has a piling programme in place and this has been requested by Ramboll.

A second piling rig was present on site at the time of Ramboll's visit. JRL Midgard informed Ramboll personnel that the rig would commence piling in the afternoon (Wednesday 16th June). With two piling rigs operational, the rate of installations and associated waste removal is due to increase.

According to JRL Midgard, piling works will continue for approximately 22 weeks.

Thames Water Discharge Licence

A Thames Water Discharge licence has not been obtained for the site and according to JRL Midgard, discharge of groundwater from the site is not anticipated. Piling works commenced on Tuesday 8th June 2021 and was observed to form a chalky 'slurry', where groundwater has mixed with the broken chalk at depth (see photos).

JRL Midgard are not expecting to encounter significant groundwater within future excavations (based on the sites geology and previous ground investigation). The planned bottom level for the excavation works on site is approximately 2m bgl (current formation level), groundwater is not expected at this depth. JRL

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 12:00, 16 June 2021

Weather: Blue sky, sunny, 25°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Midgard will obtain a discharge licence if significant groundwater (i.e., requiring pump and disposal) is encountered at any time during the works.

Waste

According to JRL Midgard, waste transfer notes and consignment notes are currently kept in paper form as well as an electronic register, of which Ramboll has requested access to. At present, there are no electronic scans of the waste transfer or consignment notes.

To date, JRL Midgard have broken out concrete slabs, most of which is being re-used on site, albeit some concrete has been disposed of off-site. All other Made Ground and natural chalk encountered during the excavations has been removed from site.

Since the piling works commenced on Tuesday 8th June 2021, between 10 and 20 loads of piling material (chalk) have been removed each day. This is expected to increase with the introduction of a second piling rig. Piling material is not being stockpiled on site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 12:00, 16 June 2021

Weather: Blue sky, sunny, 25°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – View facing westwards across the site showing the north western section now at formation level and a piling rig in progress.



Photo 2 – View facing westwards across the site.



Photo 3 – View facing south east across the central area of the site, showing excavators moving and stockpiling crushed material. Concrete slabs and obstructions are noted in the south of the site.

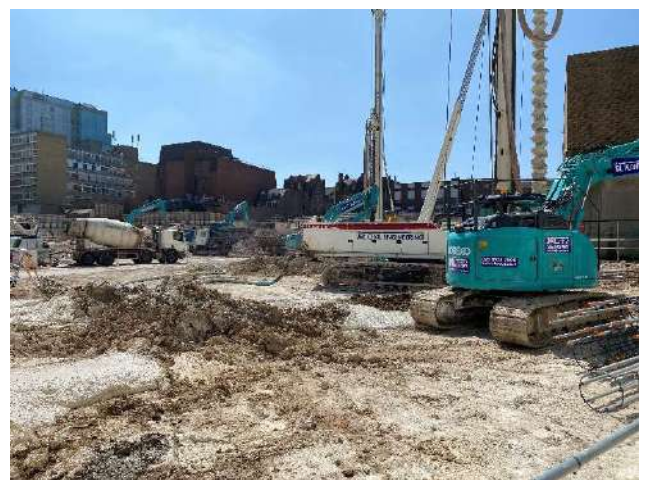


Photo 4 – View facing south east across the north west and central areas of the site (areas at formation level).

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 12:00, 16 June 2021

Weather: Blue sky, sunny, 25°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 5 – Viewing facing eastwards, showing the concrete slab in place in the north western section of the site. Stockpiles of concrete crush are currently stored within the northeast of the site.



Photo 6 – Close-up view of the concrete slab in place in the north eastern section of the site.



Photo 7 – View of the north eastern area of the site, where the concrete slab is still in place.



Photo 8 – A close-up view of an installed pile on the northern boundary of the site. A sludge material can be seen on the ground surface.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 12:00, 16 June 2021

Weather: Blue sky, sunny, 25°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

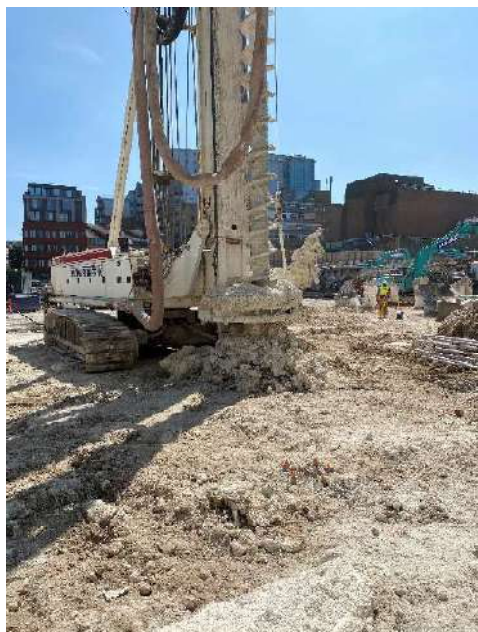


Photo 9 – Piling rig operational in the north west of the site.



Photo 10 – Close-up view of the material being removed during the drilling of piles.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 12:00, 24 June 2021

Weather: Overcast, 17°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Thursday 24th June by Catherine Cooper of Ramboll to undertake the eighth environmental watching brief visit. Denis Jianu, Site Manager from JRL Midgard, escorted Ramboll personnel around the site.

Works to date have included the breakout of concrete in all areas of the site (excluding the north east, east and south east corners), indicated by numerous stockpiles. Underpinning works beneath the building occupied by Sainsburys in the far west of the site have also been completed. The majority of the proposed Block E building footprint is at formation level and the majority of piling has now been completed within these areas. The retaining walls are exposed along the eastern boundary of the site.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

Site Observations

At the time of the visit, the north west, centre north, west and centre west of the site were at formation (piling) level and piling was almost complete within these areas. Piling was observed to be ongoing in the central north of the site at the time of Ramboll's visit. The second piling rig was not in action.

Concrete slabs and obstructions had been removed from the centre east of the site, and JRL Midgard had an excavator stockpiling the crushed material. Stockpiles of concrete crush were observed here during the visit. According to JRL Midgard, the second piling rig is to be moved to the centre east of the site next to undertake piling between the retaining wall posts. Approximately 150 piles have been undertaken since piling commenced on 8th June 2021. Piling in the south of the site (at the level of Friar Street) are planned to commence during week 10/11 of the piling programme (currently in week 3).

Waste

According to JRL Midgard, waste transfer notes (WTN's) and consignment notes are currently kept in paper form as well as an electronic register, of which Ramboll has requested access to. At present, there are no electronic scans of the waste transfer or consignment notes.

To date, JRL Midgard have broken out concrete slabs, most of which is being reused on site, albeit some concrete has been disposed of off-site. All other Made Ground and natural chalk encountered during the excavations has been removed from site.

Since the piling works commenced on Tuesday 8th June 2021, between 10 and 20 loads of piling material (chalk) have been removed each day. Piling material is not being stockpiled on site. According to JRL Midgard, no hazardous waste has been removed from the site.

Piling

Piling works commenced in the north west of the site on Tuesday 8th June 2021, according to JRL Midgard the piling rig has been averaging between 10 and 12 piles each day and there a total of 700 piles planned on the site. Approximately 150 piles have been undertaken since 8th June. JRL Midgard has a piling programme in place (currently on week 3 of 22) and this has been requested by Ramboll.

Two piling rigs were present on site at the time of Ramboll's visit, one in the central north (active) and one in the centre west (not active at the time of the visit) of the site. The second rig commenced on 16th June. With two piling rigs operational, the rate of installations and associated waste removal is higher.

According to JRL Midgard, piling works will continue for approximately 22 weeks in total.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 12:00, 24 June 2021

Weather: Overcast, 17°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – View of centre west of site at formation level with piling works complete.



Photo 2 – View facing south east across the site showing stockpiles of excavated material and concrete being broken out in the east.



Photo 3 – View facing south west across site showing second piling rig in central west.



Photo 4 – Piling being undertaken in central north of the site forming a chalky slurry.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 10:00 to 12:00, 24 June 2021

Weather: Overcast, 17°C

Visit to: Station Hill, Phase 1

by: Catherine Cooper (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 5 – North east of south site where concrete breakout and excavations have not yet commenced. Eastern boundary retaining wall is visible.



Photo 6 – Close up view of the concrete slab in place in the north eastern section of the site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 09:00 to 12:00, 20 July 2021

Weather: Sunny, 30°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Wednesday 20th July by Roger Harris of Ramboll to undertake the ninth environmental watching brief visit. Denis Jianu, the Site Manager from JRL Midgard, escorted Ramboll personnel around the site.

Since JRL Midgard mobilised to site, works to date have included the breakout of concrete in all areas of the site (excluding the north east and south east sections), indicated by numerous stockpiles. The north west, central north, central west and central east are at formation level and the piling has now been completed within these areas. The retaining walls are exposed along the eastern boundary of the site. No excavation has been undertaken to date in the north east of the site.

Piling works commenced in the north west of the site on Tuesday 8th June 2021 and a second rig was introduced in the centre west of the site on 16th June 2021. Piling works will follow a pre-defined programme (currently on week 7 of 22), moving next onto the southern areas of the site following demolition to formation level in the area. Piling is currently being undertaken in the temporary works area on the eastern boundary of the site.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

Waste

According to JRL Midgard, waste transfer notes (WTN's) and consignment notes are currently kept in paper form as well as an electronic register, of which Ramboll has access to. Ramboll personnel were also provided access to the original WTN's during the visit.

To date, JRL Midgard have broken out concrete slabs, most of which is being re-used on site, albeit some concrete has been disposed of off-site. All other Made Ground and natural chalk encountered during the excavations has been removed from site. Only a small number of hazardous waste loads have been removed from the site to date and the associated consignment notes have been reviewed.

Piling works commenced on Tuesday 8th June 2021, and between 10 and 20 loads of piling material (chalk) were being removed each day at the beginning. Piling material is not being stockpiled on site. Other waste being removed from site comprises the material associated with the excavation and breaking out of piles caps.

Piling

Piling works commenced in the north west of the site on Tuesday 8th June 2021 and a second rig was introduced in the centre west of the site on 16th June 2021. JRL Midgard has a piling programme in place (currently on week 7 of 22) and this has been requested by Ramboll.

At the time of the visit, the north west, central north, central west and central east of the site were at formation (piling) level and piling was complete within these areas. Piling was observed to be ongoing in the temporary works area along the eastern site boundary. Piles are being installed in between the retaining wall steel supports and once installed, new steel supports will be attached to the piles. The second piling rig was no longer present on site.

Piling in the south of the site (at the level of Friar Street) are planned to commence during week 10/11 of the piling programme.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 09:00 to 12:00, 20 July 2021

Weather: Sunny, 30°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Concrete Core Bases

There are to be a total of three tower cranes installed on the site, in the north west, centre north and south of the site. At the time of the visit, two of the three (TC01 + TC03) tower crane bases had been completed and the concrete poured. According to JRL Midgard, the tower cranes at these locations were due to be installed on 21st July 2021.

The concrete core bases had been progressed on site. At the time of the visit, the concrete core base in the north west of the site was almost complete and awaiting the concrete pour. According to JRL Midgard, the concrete pour was to be undertaken on 21st July 2021. In the west of the site, a second concrete core base was in progress. The area had been excavated and the pile caps were being broken out at the time of the visit. Rebar mesh grids are to be emplaced prior to the concrete pour.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 09:00 to 12:00, 20 July 2021

Weather: Sunny, 30°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – View facing south across the centre of the site (at formation level). Stockpiles of demolition crush present in the background.



Photo 2 – View facing east across the site.



Photo 3 – Concrete core base in progress in the north west of the site (awaiting concrete pour).



Photo 4 – View along the western site boundary. Excavations and breaking out of pile caps in progress.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 09:00 to 12:00, 20 July 2021

Weather: Sunny, 30°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 5 – Breaking out of pile caps within the concrete core base in the central west of the site.



Photo 6 – Piling rig in operation adjacent to the retaining wall on the eastern site boundary.



Photo 7 – Stockpile of demolition material comprising concrete slabs and rebar, crusher present in the background.



Photo 8 – Close-up view of the concrete slab in place in the north eastern section of the site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 09:00 to 12:00, 20 July 2021

Weather: Sunny, 30°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief



Photo 9 – Retaining wall on the eastern site boundary. Piles installed in between current steel supports.



Photo 10 – Concrete slab in place in the north eastern section of the site. The north east of the site is currently being used as a storage area of plant and material.



Photo 11 – View facing north east across the site.



Photo 12 – Concrete slab emplaced in the north west corner of the site. Services are to be installed here.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 16:00 – 17:00 26 August 2021

Weather: Sunny, 20°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (JRL Midgard)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Thursday 26th August by Roger Harris of Ramboll to undertake the eleventh environmental watching brief visit. Denis Jianu, the Site Manager from JRL Midgard, escorted Ramboll personnel around the site.

Waste

Ramboll have reviewed the waste transfer notes and consignment notes to date. The majority of waste has been removed as inert and non-hazardous waste. A small number of hazardous waste loads have been removed from the site and the associated consignment notes reviewed by Ramboll. This correspond to elevated hydrocarbons identified in BH301 and WS301 during the ground investigation. No further hazardous waste has been identified.

Piling works have been ongoing throughout June, July and August, and between 10 and 20 loads of piling material (chalk) were being removed each day at the beginning. Pile arisings are not being stockpiled on site. Other waste being removed from site comprises the material associated with the excavation and breaking out of piles caps. More recently, excavated material from beneath the concrete slab in the north east of the site has also been going off site.

Former Car Park in the NE of the Site

During the original ground investigation, only trial pits were undertaken in the north east corner of the site due to limited access to the area, therefore no window sample wells, or boreholes are present.

At the time of the visit, a small section of the concrete slab had been broken out (top 0.5 m) but the material was still in situ. According to JRL Midgard, these works commenced during w/c 16th August and are likely to be ongoing for at least six weeks. The concrete slab will go through the crusher to be used within the temporary pile mat material in the south east corner of the site.

Piling

Piling works commenced in the north west of the site on Tuesday 8th June 2021 and a second rig was introduced in the centre west of the site on 16th June 2021. The second rig was no longer present on site during the visit undertaken on 20th July 2021. JRL Midgard has a piling programme in place (currently on week 12 of 22) and this has been requested by Ramboll.

The ground level drops from that of Friar Street in the south, to a full level below in the southern third of the site, to a topographic level more in line with that of Garrard Street to the north.

At the time of the visit, the majority of the site was at formation (piling) level excluding the south east, east and north east of the site. The concrete slab was still in situ along the eastern flank and into the north east corner of the site. Piling works had been completed in the remaining areas. Piling works in the temporary works area along the eastern site boundary were complete at the time of the visit. New steel supports for the retaining wall had been installed and attached to the recently completed 'support' piles.

The piling rig was operational in the south of the site during the visit and according to Midgard, piling in the area would be completed by w/c 6th September 2021. The concrete slab and obstructions had been broken out in the south east corner of the site and an excavator was stockpiling the material from beneath the slab. Stockpiles of concrete obstructions waiting to be crushed were observed in the centre of the site.

The piling rig will move onto the south east corner of the site next; the pile mat will be formed using some material from the breaking out of the concrete slab in the north east of the site. Once all works on the

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 16:00 – 17:00 26 August 2021

Weather: Sunny, 20°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (JRL Midgard)

Purpose: Environmental Watching Brief

foundations are complete in the southern extent of the site (all significant waste material removed), the piling rig will then work along the eastern flank of the site.

Concrete Core Bases

There are to be a total of three tower cranes to be installed on the site, in the north west, central north and south of the site. At the time of the visit, two of the three tower cranes (TC01 + TC03) had been installed. According to Midgard, these were installed on 21st July 2021.

The concrete core bases had been progressed on site. At the time of the visit, the concrete core base in the north west of the site was complete and the core construction had started. In the west of the site, the second concrete core base was also complete, and the slip form was under construction at the time of the visit.

Adjacent to the core construction in the west of the site, excavations to expose pile caps had been completed and binding concrete poured.

Site Photographs



Photo 1 – View facing across the South Site from the staff welfare facility.



Photo 2 – View of the core construction in the north west of the site.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 16:00 – 17:00 26 August 2021

Weather: Sunny, 20°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (JRL Midgard)

Purpose: Environmental Watching Brief



Photo 3 – View of the concrete slab in the north west corner of the site. The new sub station and services to be installed here.



Photo 4 – View along the western site boundary. Concrete slab progressed.



Photo 5 – Slip form under construction on the core in the west of the site.



Photo 6 – Excavation to expose pile caps, binding concrete poured.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 16:00 – 17:00 26 August 2021

Weather: Sunny, 20°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (JRL Midgard)

Purpose: Environmental Watching Brief



Photo 7 – Southern extent of the site at formation level (excluding south east corner). Piling rig operational.



Photo 8 – View facing east across the central area of the site.



Photo 9 – View facing south across the site. Stockpiles of concrete obstructions observed in the central south of the site.



Photo 10 – View along the eastern site boundary, concrete slab yet to be broken out.

Project Title: Station Hill South

Project no. 1620004716

Date and Time: 16:00 – 17:00 26 August 2021

Weather: Sunny, 20°C

Visit to: Station Hill, Phase 1

by: Roger Harris (Ramboll)

Met: Denis Jianu (JRL Midgard)

Purpose: Environmental Watching Brief



Photo 11 – View of the retaining wall on the eastern site boundary. New steel supports emplaced upon support piles.



Photo 12 – Concrete slab yet to be removed along the eastern and north eastern extent of the site. Breaking out of the slab has started in the far north east corner of site (see photograph below).



Photo 13 – Concrete slab and obstructions broken out in the far north east of the site. Ground beneath yet to be exposed.



Photo 14 – View facing west across the site.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 13:00 to 16:00, 8 September 2021

Weather: Sunny, 31°C

Visit to: Station Hill, South Site, Phase 1

by: Siobhán McGeever and George Black

Met: Steve Walls (Ramboll) & John Watkinson (Midgard)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, known as Phase 1 of the redevelopment, was undertaken on Wednesday 8th September by Siobhán McGeever and George Black of Ramboll Environment team to undertake an environmental watching brief visit.

A summary of the works undertaken since the previous visit was provided by Steve Walls of Ramboll. At the time of the visit, excavations were being undertaken in the north east corner (former car park).

Former Car Park and Garage in the NE of the Site

Works have been progressing with breaking out the concrete slab in the north east corner. This area was previously inaccessible during the ground investigation and posed a potential contamination risk due to the unknown nature of the Made Ground.

The concrete appears to be relatively thick, approximately 250mm. The concrete slabs that are being broken out are being placed in the crusher located nearby and the material is intended to be reused within temporary pile mats in the east and north east of the site. No material has been removed from this north east area of the site to date.

A stockpile of rebar is present, likely to be removed from site at a later date as metal waste.

An area of Made Ground beneath the concrete slab had been exposed and appeared to comprise brown gravelly sand with cobbles of brick and concrete. No visual or olfactory contamination was observed at the time of the visit.

Waste

Ramboll have reviewed the waste transfer notes and consignment notes to date. The majority of waste has been removed as inert and non-hazardous waste. A small number of hazardous waste loads have been removed from the site and the associated consignment notes reviewed by Ramboll. This correspond to elevated hydrocarbons identified in BH301 and WS301 during the ground investigation. No further hazardous waste has been identified.

Piling works have been ongoing since June, and between 10 and 20 loads of pile arisings (mostly chalk) are reportedly being removed each day.

Piling Works

Piling works commenced in the north west of the site on Tuesday 8th June 2021 and a second rig was introduced in the centre west of the site on 16th June 2021. JRL Midgard has a piling programme in place and is reportedly on schedule, due to finish at the end of October. The pile mat is then likely to be removed from site before the end of the year.

The piling is being undertaken anticlockwise around the site, starting in the north west corner of the site and finishing in approximately the north west of the site.

The north west, central north, central west and central east of the site are at formation (piling) level and piling was complete within these areas.

At the time of the visit, CFA piling was being undertaken along the south of the site, at the highest topographical level, adjacent to and roughly level with Friar Street. This is in the location of the very south of proposed Block E. Eight more piles are to be undertaken at this level in the south, before the piling rig moves north onto the next set of piles.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 13:00 to 16:00, 8 September 2021

Weather: Sunny, 31°C

Visit to: Station Hill, South Site, Phase 1

by: Siobhán McGeever and George Black

Met: Steve Walls (Ramboll) & John Watkinson (Midgard)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – View facing east across the current excavation in the north east of the south site



Photo 2 – View facing south east across the excavation in the north east of the south site. Concrete slab overlying brown Made Ground.



Photo 3 – View of the north eastern boundary of the south site



Photo 4 – Cross section view of the northern boundary to the south site. Blue area shows current demolition works of the NCP car park on the north site in the background.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 13:00 to 16:00, 8 September 2021

Weather: Sunny, 31°C

Visit to: Station Hill, South Site, Phase 1

by: Siobhán McGeever and George Black

Met: Steve Walls (Ramboll) & John Watkinson (Midgard)

Purpose: Environmental Watching Brief



Photo 5 – View across the north east of the south site



Photo 6 – View across the south site from Xfinity House site offices

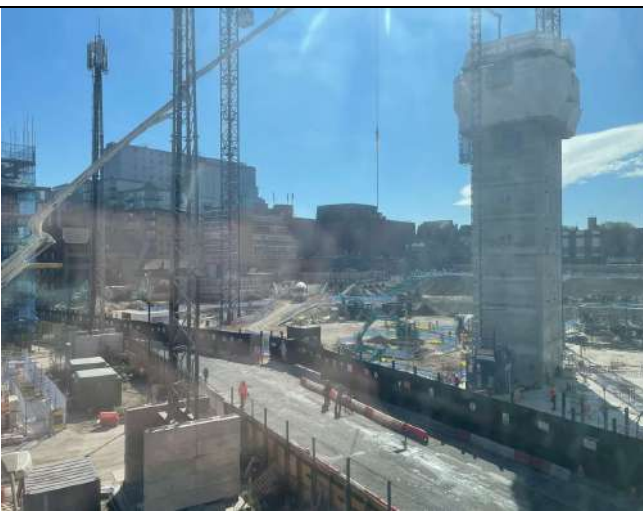


Photo 7 – View from Xfinity House site offices of the works and core going up on south site.



Photo 8 – View of the adjacent north site – demolition of the NCP car park being undertaken at the same time.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 13:00 to 15:00, 14 September 2021

Weather: Cloudy, rain, 18°C

Visit to: Station Hill, South Site, Phase 1

by: Catherine Cooper

Met: Denis Jianu (JRL Midgard)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, known as Phase 1 of the redevelopment, was undertaken on Tuesday 14th September 2021 by Catherine Cooper and George Black of Ramboll to undertake an Environmental Watching Brief visit.

The following activities were being undertaken at the time of the visit:

- Continuation of Block E construction in the northwest and centre-west;
- Piling at the intermediate level in the west;
- Break out and crushing of concrete in the northeast (former car park); and
- Offsite disposal of stockpiled structural material

Waste

Ramboll has reviewed the waste transfer notes and consignment notes to date. The majority of waste has been removed as inert and non-hazardous waste. A small number of hazardous waste loads have been removed from the site and the associated consignment notes reviewed by Ramboll. This correspond to elevated hydrocarbons identified in BH301 and WS301 during the ground investigation. No further hazardous waste has been identified.

Piling works have been ongoing since June, and between 10 and 20 loads of piling material (chalk) were reportedly being removed each day at the beginning. Piling material is being disposed of off-site daily is not being stockpiled on site.

According to JRL Midgard, the large stockpile of structural material located in the centre and centre-west of the site (used as a ramp to the southern level in line with Friars Road) is to be removed from site. At the time of Ramboll's visit, this material was being transported to the Station Hill North site (Phase 3) for temporary stockpiling, awaiting its removal from site, due to limited storage space on the South site.

Former Car Park and Garage in the NE of the Site

Break out of concrete and excavations within the north east corner were ongoing. This area was previously inaccessible during the ground investigation and posed a risk due to the unknown nature of the Made Ground and therefore the possibility for contamination to be present.

The concrete appears to be relatively thick, approximately 250 mm. At the time of the visit the concrete slabs that were being broken out were being placed in the crusher located near to the excavator in the northeast. The crushed material is being used for the pile mat in the east and northeast of the site. No material has been removed from this northeast area of the site to date.

A stockpile of rebar remains on site, to be removed from site at a later date as metal waste.

Ramboll inspected the exposed Made Ground beneath the concrete slab, which comprised brown gravelly sand with cobbles of brick and concrete. No visual or olfactory contamination was noted.

Piling

Piling works commenced in the northwest of the site on 08/06/2021 and a second rig was introduced in the centre-west of the site on 16/06/2021. JRL Midgard has a piling programme in place and is reportedly on schedule, due to finish at the end of October. According to the programme, the pile mat is to be removed from site before the end of the year. According to JRL Midgard, another crane base is to be installed in the southwest of the site at the end of the week once piling in this area is complete.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 13:00 to 15:00, 14 September 2021

Weather: Cloudy, rain, 18°C

Visit to: Station Hill, South Site, Phase 1

by: Catherine Cooper

Met: Denis Jianu (JRL Midgard)

Purpose: Environmental Watching Brief

The piling is being undertaken anticlockwise around the site, starting in the northwest corner of the site and finishing in the northeast.

At the time of the visit, CFA piling was being completed at intermediate level in the centre west of the site, following completion of piling along the south of the site, at the highest topographical level, adjacent to and roughly level with Friar Street. Another crane base for construction is due to be installed in the south of the site at the end of the week.

Site Photographs

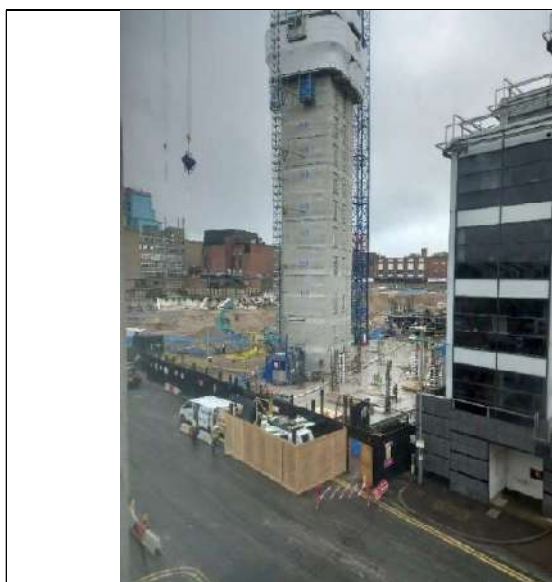


Photo 1 – View facing southwest across the site showing ongoing construction of Block E.



Photo 2 – View facing northwest showing ongoing construction of Block E.



Photo 3 – View of the centre west showing ongoing piling at intermediate platform level.



Photo 4 – Last remaining concrete slabs awaiting breaking out in northeast of the site.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 13:00 to 15:00, 14 September 2021

Weather: Cloudy, rain, 18°C

Visit to: Station Hill, South Site, Phase 1

by: Catherine Cooper

Met: Denis Jianu (JRL Midgard)

Purpose: Environmental Watching Brief



Photo 5 – Stockpile of metal rebar located in the northeast of site awaiting removal/disposal.



Photo 6 – View of broken out concrete slabs and exposed Made Ground in the northeast of site.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 10:00 to 12:00, 29 September 2021

Weather: Blue sky, sunny, 20°C

Visit to: Station Hill, South Site, Phase 1

by: Catherine Cooper

Met: Denis Jianu (Midgard)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, known as Phase 1 of the redevelopment, was undertaken on Wednesday 29th September 2021 by Catherine Cooper of Ramboll to undertake an Environmental Watching Brief visit.

The following activities were being undertaken at the time of the visit:

- Continuation of Block E construction in the northwest and centre-west;
- Excavation of the southern core for Block E;
- 3 cranes present on site;
- Piling at the intermediate level in the centre-west (Block E piling is 90% complete);
- Temporary relaying of broken out concrete in the northeast awaiting removal from area to be crushed for emplacement within the piling mat; and
- Off-side removal/disposal of concrete crush via loading lorries

Waste

Ramboll has reviewed the waste transfer notes and consignment notes to date. The majority of waste has been removed as inert and non-hazardous waste. A small number of hazardous waste loads have been removed from the site and the associated consignment notes reviewed by Ramboll. This correspond to elevated hydrocarbons identified in BH301 and WS301 during the ground investigation. No further hazardous waste has been identified.

Piling works have been ongoing since June and between 10 and 20 loads of piling material (chalk) were being removed each day at the beginning. Piling material is being removed daily and is not being stockpiled on site. Piling was being undertaken at intermediate level in the centre west at the time of Ramboll's latest visit. According to JRL Midgard, Block E piling is now 90% complete.

No material has been imported to site.

Former Car Park and Garage in the NE of the Site

At the time of the visit, the majority of the concrete hardstanding had been broken out of the north east corner (former car park previously inaccessible during the ground investigation) and Ramboll observed large boulders of concrete mixed with the underlying brown gravelly sand across the area. JRL Midgard stated that concrete with thicknesses up to 400 mm thick was observed in some areas. Chalk was reportedly encountered at approximately 3 m bgl in some places during previous excavations undertaken by the contractor. No evidence of contamination was reported or observed by Ramboll.

According to JRL Midgard, the broken-out material is being excavated and moved to a different area of the site this week to be crushed and will then be relocated back to the north east and eastern areas to be reused within the temporary pile mat for Block F. Some concrete slabs are still visible along the site boundary. It is estimated that approximately 95% of slab removal is now complete.

A stockpile of rebar remains on site, to be removed from site at a later date as metal waste.

Piling

Piling works commenced in the northwest of the site on 08/06/2021 and a second rig was introduced in the centre west of the site on 16/06/2021. JRL Midgard has a piling programme in place is due to finish at the end of October. Block F piling in the northeast and east is likely to begin in mid-October. The pile mat is then likely to be removed from site before the end of the year.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 10:00 to 12:00, 29 September 2021

Weather: Blue sky, sunny, 20°C

Visit to: Station Hill, South Site, Phase 1

by: Catherine Cooper

Met: Denis Jianu (Midgard)

Purpose: Environmental Watching Brief

At the time of the visit, the southern core for Block E was being excavated and a third crane base had been introduced in this area of the site.

Piling is being undertaken anticlockwise around the site, starting in the northwest corner of the site and finishing in the northeast.

Piling in the northwest, centre-north and centre-east of the site is now complete. Some piles were previously missed in the centre-west of the site and these were being completed at the time of Ramboll's visit. According to JRL Midgard approximately 90% of Block E piling is now complete.

Site Photographs



Photo 1 – View facing south west across the site showing construction of Block E.



Photo 2 – Ramp material in centre east of the site which will eventually be disposed of off-site.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 10:00 to 12:00, 29 September 2021

Weather: Blue sky, sunny, 20°C

Visit to: Station Hill, South Site, Phase 1

by: Catherine Cooper

Met: Denis Jianu (Midgard)

Purpose: Environmental Watching Brief



Photo 3 – View facing northwest across site showing Block E construction (north core)



Photo 4 – View facing north across site showing centre north crane base and demolition of NCP car park behind (on Phase 2)



Photo 5 – Concrete boulders and Made Ground in northeast of site awaiting removal for crushing and replacement as piling mat in the northeast and east (for Block F).



Photo 6 – Close up of concrete boulders in northeast corner of site awaiting removal for crushing.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 13:00 to 14:30, 10 October 2021

Weather: Blue sky with some broken cloud, 16°C

Visit to: Station Hill, South Site, Phase 1

by: Catherine Cooper

Met: John Watkinson (Midgard)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Friday 15th October by Catherine Cooper of Ramboll to undertake an Environmental Watching Brief visit.

The following activities were being undertaken at the time of the visit:

- Continuation of Block E construction in western portion of the site;
- 3 cranes present on site;
- Last of Block E piling in the centre-west (Block E piling is 95% complete);
- Excavation of concrete boulder obstruction in the northeast corner;
- Piling mat emplacement in northeast corner; and
- Off-side removal/disposal of concrete crush material via loading lorries.

Waste

Ramboll have reviewed the waste transfer notes and consignment notes to date. The majority of waste has been removed as inert and non-hazardous waste. Two loads of hazardous waste have been removed from the site (April 2021) and the associated consignment notes reviewed by Ramboll. This corresponds to elevated hydrocarbons identified in BH301 and WS301 during the ground investigation. No further hazardous waste has been identified.

Piling works have been ongoing since June and between 10 and 20 loads of piling material (chalk) were being removed each day at the beginning (varies between 5 and 30 loads daily more recently). Piling material is not being stockpiled on site. The last couple of piles were being completed at intermediate level in the centre west at the time of Ramboll's latest visit (Block E piling is 95% complete).

According to JRL Midgard, the large stockpile of structural material remaining in the centre and centre east of the site (used as a ramp to the southern level in line with Friars Road) is to be removed from site. According to JRL Midgard the number of loads of crushed material being taken off-site is 100s of loads daily.

No material has been imported to site.

Former Car Park and Garage in the NE of the Site

The concrete slab in the northeast corner of the south site has now been broken out and the majority of this area was observed to have the piling mat in place, except for a concrete obstruction along the eastern boundary which was awaiting excavation. This area was previously inaccessible during the ground investigation and posed a risk due to the unknown nature of the Made Ground and therefore the possibility for contamination to be present.

Midgard stated that up to 400mm thick concrete was observed in some areas and the previous excavation in this area had been taken to depths of up to 3 m bgl with chalk encountered in some places. No evidence of contamination was reported by Midgard or observed during Ramboll's visits.

A stockpile of rebar remains on site, to be removed from site at a later date as metal waste.

Piling Works

Piling works commenced in the northwest of the site on 08/06/2021 and a second rig was introduced in the centre west of the site on 16/06/2021. JRL Midgard has a piling programme in place is due to finish at the end of October. Block F piling in the northeast and east is likely to begin mid-October 2021. The pile mat is then expected to be removed from site before the end of the year.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 13:00 to 14:30, 10 October 2021

Weather: Blue sky with some broken cloud, 16°C

Visit to: Station Hill, South Site, Phase 1

by: Catherine Cooper

Met: John Watkinson (Midgard)

Purpose: Environmental Watching Brief

At the time of the visit, the southern core excavation for Block E was complete and a crane had been installed.

Piling is being undertaken anticlockwise around the site, starting in the northwest corner of the site and finishing in the northeast.

Piling in the northwest, centre-north and centre-east of the site is complete. Some piles had been missed in the centre-west of the site and these were being completed at the time of Ramboll's visit. According to Midgard approximately 95% of Block E piling was complete.

Site Photographs



Photo 1 – Block E southern core excavated and installed.



Photo 2 – Exposed piles within southwest of the site.



Photo 3 – Ramp material in centre east of the site which will eventually be disposed of off-site.



Photo 4 – Last remaining concrete obstruction within the northeast corner of site awaiting excavation.

Project Title: Station Hill, South Site / Phase 1

Project no. 1620004716

Date and Time: 13:00 to 14:30, 10 October 2021

Weather: Blue sky with some broken cloud, 16°C

Visit to: Station Hill, South Site, Phase 1

by: Catherine Cooper

Met: John Watkinson (Midgard)

Purpose: Environmental Watching Brief



Photo 5 – Majority of northeast corner of site awaiting piling (due to start 19th October)



Photo 6 – Block E construction plant appropriately stored on concrete hardstanding.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 10:30 – 11:30, 14 December 2021

Weather: Cloudy, dry, 12°C

Visit to: Station Hill, South Site, Phase 1

by: George Black (Ramboll)

Met: Steve Walls (Ramboll)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Tuesday 14th November 2021 by George Black of Ramboll to undertake an Environmental Watching Brief visit.

The following activities were being undertaken at the time of the visit:

- Continuation of Block E construction;
- Block E piling is now complete; and
- Excavation of concrete boulder in northeast corner around pile caps.

Waste

Ramboll have reviewed the waste transfer notes and consignment notes to date. The majority of waste has been removed as inert and non-hazardous waste. Two loads of hazardous waste have been removed from the site (April 2021) and the associated consignment notes reviewed by Ramboll. This corresponds to elevated hydrocarbons identified in BH301 and WS301 during the ground investigation. No further hazardous waste has been identified.

All crushed concrete was either re-used within temporary piling mats (to be removed from site at a later stage) or removed/disposed of off-site.

No material has been imported to site.

Former Car Park and Garage in the NE of the Site

The piles in the northeast corner are now complete and the pile caps were being broken out at the time of the visit.

This area was previously inaccessible during the ground investigation and posed a risk due to the unknown nature of the Made Ground and therefore the possibility for contamination to be present. No significant contamination has been identified in this area and the excavations around the pile caps were predominantly in the chalk. Pale blue chalky water was observed in the excavations. No significant volumes of water have been encountered requiring a discharge consent.

Piling

Piling works commenced in the northwest of the site on 08/06/2021 and were undertaken anticlockwise around the site. Piling was complete around late October/early November 2021.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 10:30 – 11:30, 14 December 2021

Weather: Cloudy, dry, 12°C

Visit to: Station Hill, South Site, Phase 1

by: George Black (Ramboll)

Met: Steve Walls (Ramboll)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – Northeast corner of site with pile caps installed



Photo 2 – Exposed piles adjacent to pile mat area in northeast corner.



Photo 3 – View looking south across site, with cranes and building cores visible.

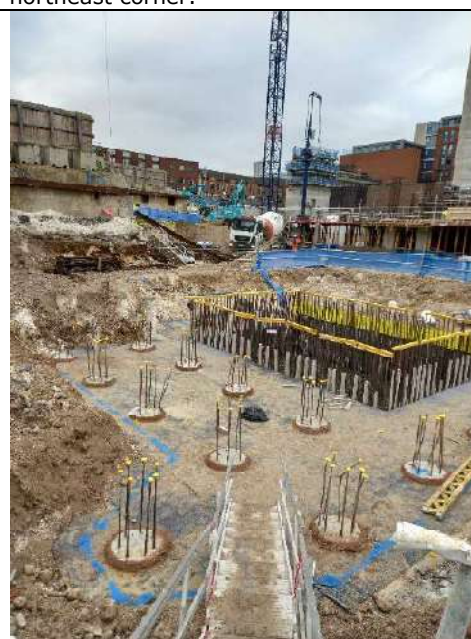


Photo 4 – View of eastern area with pile caps installed.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 10 January 2023, 09:00-11:00

Weather: Rainy, 6°C

Visit to: Station Hill, South Site, Phase 1

By: Sophie Davies (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Tuesday 10th January by Sophie Davies of Ramboll to verify works on Phase 1 and get an update on current works.

Upon arrival, Ramboll signed in at Xfanity House and met with Denis Jianu from JRL who accompanied the site walkover.

Site Activities

JRL confirmed that the attenuation tanks serving the building have been installed on-site. According to the Ramboll Structures team who are currently on-site, there are further attenuation tanks to be installed on the northern site boundary, associated with the soft landscaping (date to be confirmed).

According to JRL, upcoming earthworks are limited to the excavation of three pits to facilitate the planting of large trees at ground floor level, and the installation of permavoid for rainwater management.

Soft landscaping works are due to be undertaken in March / April 2023. Ramboll will attend site to verify the imported topsoil once it has been emplaced. JRL are aware that they will need to provide import tickets and associated laboratory chemical certificates for the imported topsoil.

JRL reported that the building frame will be complete in March 2023 while the finishing works are anticipated to be complete by 2024. Gas and water services have been installed but are not yet connected, and the electrics are due to be installed on 12th January. Drainage connections are due to be completed along Garrard Street in February 2023.

According to JRL, waste being removed from site is currently limited to skips of general construction waste comprising mixed waste, metal, plaster and timber etc.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 10 January 2023, 09:00-11:00

Weather: Rainy, 6°C

Visit to: Station Hill, South Site, Phase 1

By: Sophie Davies (Ramboll)

Met: Denis Jianu (Site Manager from JRL)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – View of Phase 1 from Phase 2.



Photo 2 – Garrard Street which runs along the northern site boundary.



Photo 3 – Combined storage area in Phase 2.



Photo 4 – Excavations of Garrard Street scheduled for February 2023.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 4th August 2023, 09:00-11:00

Weather: Cloudy, 17°C

Visit to: Station Hill, South Site, Phase 1

By: Sophie Davies (Ramboll)

Met: John Platt (Project Planner from JRL)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, was undertaken on Friday 4th August by Sophie Davies of Ramboll to verify the imported topsoil in line with requirements of the Remediation Strategy produced for the site (Ramboll 2023, Ref. SHR-RMB-XX-XX-RP-C-91-000021) and to get an update on current works.

Upon arrival, Ramboll signed in at Xfinity House and met with John Platt of JRL who accompanied the site walkover.

Topsoil Verification

At the time of Ramboll's visit, approximately 50% of the soft landscaping works had been completed at the South Site. Soft landscaping predominantly comprises raised planters and some areas of green roof. The green roofs will not be accessible to the residents.

The following areas of soft landscaping were viewed during the site visit:

- Four large planters along Friar Street, which marks the southern boundary of Phase 1.
- Raised planted beds and tree pits in the east of Friars Walk (south of Phase 1).
- Raised planters in the central courtyard (south) of Block E.
- Raised planters on the Level 1 south roof terrace.
- Level 6 green roof (south of Block E).

The following areas of soft landscaping are still to be completed:

- Raised planters in the central courtyard (north) of Block E.
- Raised planters on the Level 1 north roof terrace.
- Raised planters in the Level 7 roof terrace (Block E).
- Level 11 and Level 12 green roofs (middle of Block E).
- Ground floor soft landscaping along Garrard Street (comprising one tree pit and several raised planters). Due to be completed by December 2023.

Soft landscaping materials were observed to comprise topsoil and subsoil mixed with lightweight expanded clay aggregate (LECA). The materials were observed to be visually clean and free from asbestos, metals, plastic, wood, glass, tarmac, paper and odours associated with contaminated soils. Prior to the verification visit, JRL confirmed that they would provide the relevant material documentation discussed below. As such, verification sampling of the soil was not considered to be necessary at the South Site.

Following the visit, Soil Analysis Reports for the material (sourced from Tim O'Hare Associates and due to be used for the remaining works) were provided to Ramboll by JRL via email (dated 22nd August 2023). The results of analysis were screened against the chemical criteria specified in the Remediation Strategy to give an indication of soil suitability and all concentrations were below the relevant criteria. Import / delivery tickets were also supplied to Ramboll (dated from 16th May to 27th July 2023).

Given that The Tim O'Hare reports cannot be used by third parties as a means of verification testing (only confirm the condition of the landscaping material at the source), Ramboll advised JRL to undertake testing of the material once in-situ (email dated 23rd August 2023). This was carried out by Terragen Environmental Consultants Limited.

Site Activities / Programme of Works / Excavations and Services

According to JRL, attenuation tanks are to be installed on the northern site boundary (along Garrard Street), associated with the ground floor soft landscaping (around October/November 2023). No further earthworks are planned on-site.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 4th August 2023, 09:00-11:00

Weather: Cloudy, 17°C

Visit to: Station Hill, South Site, Phase 1

By: Sophie Davies (Ramboll)

Met: John Platt (Project Planner from JRL)

Purpose: Environmental Watching Brief

The building frames (Blocks E and F) are complete. The south and middle sections of block E are complete and due to be handed over to the client on 7th August 2023. Finishing works are still underway across the rest of the site, with the northern section of Block E due to be handed over in October 2023 and Block F due to be complete by December 2023.

Incident Information

A fire occurred on the roof of the middle section of Block E on 14th July 2023 due to insulation for the green roof being exposed in hot weather. According to JRL, the fire was extinguished quickly. The area has been observed by the Ramboll Structures team and limited damage was noted. The impacts were reportedly limited to Level 12 (rooftop) and no ash fell to the lower levels.

Site Photographs



Photo 1 – View of raised tree planters along Friar Street.



Photo 2 – Close up of topsoil in planters – observed to be visually clean.



Photo 3 – Soft landscaping in Friars Walk.



Photo 4 – Close up of topsoil – observed to be visually clean.

Project Title: Station Hill	Project no. 1620004716
Date and Time: 4 th August 2023, 09:00-11:00	Weather: Cloudy, 17°C
Visit to: Station Hill, South Site, Phase 1	By: Sophie Davies (Ramboll)
Met: John Platt (Project Planner from JRL)	Purpose: Environmental Watching Brief



Photo 5 – View of green roof on top of level 6 (south of Block E)



Photo 6 – View of soft landscaping in Block E courtyard south.



Photo 7 – Close up of topsoil material.



Photo 8 – Area due to form a green roof on level 12 of Block E.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 4th August 2023, 09:00-11:00

Weather: Cloudy, 17°C

Visit to: Station Hill, South Site, Phase 1

By: Sophie Davies (Ramboll)

Met: John Platt (Project Planner from JRL)

Purpose: Environmental Watching Brief

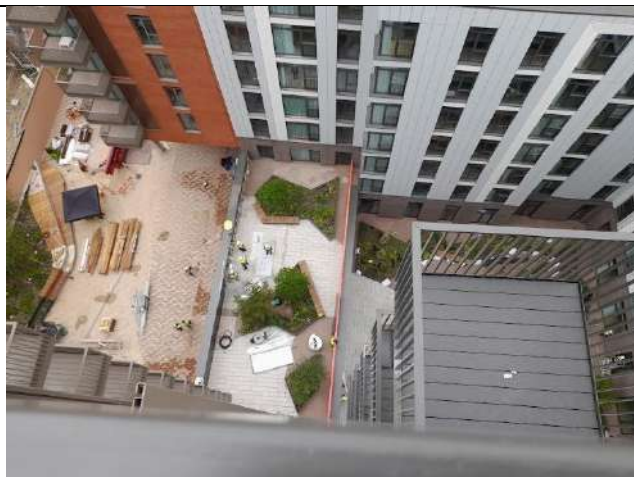


Photo 9 – View of soft landscaping in Level 1 south terrace from level 12 above.



Photo 10 – View of Level 7 planters.



Photo 11 – Fire damage on Level 12 of Block E.



Photo 12 – Fire damage on Level 12 of Block E.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 22nd September 2023, 11:00

Weather: Overcast, 18°C

Visit to: Station Hill, South Site, Phase 1

By: Siobhán McGeever (Ramboll)

Met: Andy Permain (JRL Midgard)

Purpose: Environmental Watching Brief

Overview

A site visit to Station Hill, South Site, known as Phase 1 of the development, was undertaken on Friday 22nd September by Siobhán McGeever of Ramboll to verify the final loads of imported topsoil in line with requirements of the Remediation Strategy produced for the site (Ramboll 2023, Ref. SHR-RMB-XX-XX-RP-C-91-000021) and to get an update on current works.

Upon arrival, Ramboll signed in at Xfanity House and met with Andy Permain of JRL who provided a site walkover.

Site Activities

According to JRL, attenuation tanks are to be installed on the northern site boundary (along Garrard Street), associated with the ground floor soft landscaping (around October/November 2023). No further earthworks are planned on-site.

Blocks E and F which comprise the two main buildings on South Site / Phase 1 of the development are almost complete. Some apartments in the south are now lived in and others are just being finalised.

Flats in the northern section of Block E were observed on the walkover and are due to be handed over in October 2023, with Block F due to be complete by December 2023.

Soft Landscaping Verification

Soft landscaping materials were imported and being stored on Phase 3 North Site. The material was observed to comprise brown organic rich topsoil, and subsoil comprising orange sand mixed with lightweight expanded clay aggregate (LECA). The materials were observed to be visually clean and free from asbestos, metals, plastic, wood, glass, ash, paper and odours associated with contaminated soils. Prior to the verification visit, JRL confirmed that they would provide the relevant material documentation discussed below.

The soft landscaping on Phase 1 predominantly comprises raised planters and areas of green roof. The green roofs will not be accessible to the residents.

The raised planters in the courtyards and on roof terraces are almost complete.

Ground level soft landscaping along Garrard Street will be the last to be undertaken and is due to be completed by December 2023.

Terragen Soil Sampling

Soil sampling for on-site verification purposes is being undertaken by Terragen Environmental Consultants Limited. They were on site and had taken samples of the material earlier in the day. The results are due back next week, and copies will be provided to Ramboll.

A report summarising the Validation Testing (Imported Topsoil and Subsoil), written by Terragen Environmental Consultants was written on 10th October 2023 and provided to Ramboll for review.

Terragen have screened the results from the samples, which were taken on the day of this visit, against the chemical criteria specified in the Remediation Strategy and no exceedances were noted.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 22nd September 2023, 11:00

Weather: Overcast, 18°C

Visit to: Station Hill, South Site, Phase 1

By: Siobhán McGeever (Ramboll)

Met: Andy Permain (JRL Midgard)

Purpose: Environmental Watching Brief

Site Photographs



Photo 1 – Imported subbase.



Photo 2 – Subbase soil close up.



Photo 3 – Imported topsoil.



Photo 4 – Close up of topsoil.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 22nd September 2023, 11:00

Weather: Overcast, 18°C

Visit to: Station Hill, South Site, Phase 1

By: Siobhán McGeever (Ramboll)

Met: Andy Permain (JRL Midgard)

Purpose: Environmental Watching Brief



Photo 5 – View of green roof on Level 7.



Photo 6 – Bark on top of subsoil and topsoil.



Photo 7 – Completed planters on Level 7.

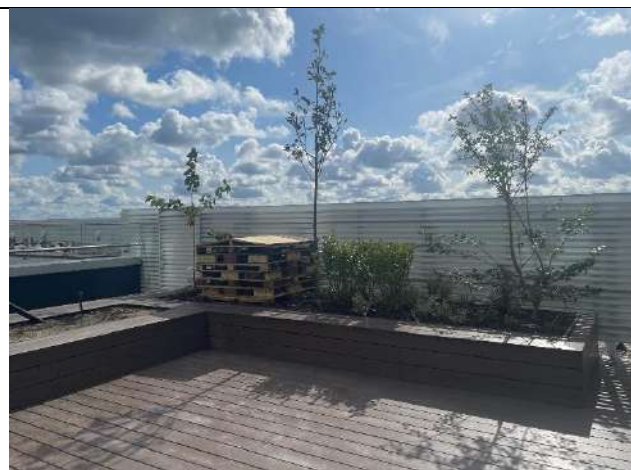


Photo 8 – Biodiversity area - Bee and bug garden.

Project Title: Station Hill

Project no. 1620004716

Date and Time: 22nd September 2023, 11:00

Weather: Overcast, 18°C

Visit to: Station Hill, South Site, Phase 1

By: Siobhán McGeever (Ramboll)

Met: Andy Permain (JRL Midgard)

Purpose: Environmental Watching Brief



Photo 9 – View of communal area completed soft landscaping.



Photo 10 – New walkway over Garrard Street.



Photo 11 – View of new building to the east of North Site.



Photo 12 – View of Phase 2.

APPENDIX 3

CONSIGNMENT NOTES



St Andrew's House
Portsmouth Road
Esher
Surrey
KT10 9TA
T: 020 7643 1000
F: 020 7643 1001

Customer / Collection Point:

Stokmu Hill
Leaving
2G1 1AT

Ticket No. 92070

Goods In ☒ Goods Out ☐

Gross: 41.160 kg
Tare: 15.000 kg
Net: 18.160 kg

Description of Material (Waste & Code):

179505 HORE
Soil + Stones

Vehicle Registration:

KX18 WUJ

Conveyance Note / Ticket No.:

7REDD1 / 34002

Date:

28/11/21

How Contained:

Loose ☒

Skip ☐

Drum ☐

Haulier:

JEL

Place of Delivery:

Mohawk Wharf
Bradfield Road
Silvertown
London
E16 2AX

Driver's Name (Print):

Garry

Driver's Signature:

Site Licence No(s):

EA/EPR/FP3092LH

The waste hierarchy has been considered in deciding the most appropriate waste management option SIC Code:

Weighbridge Operator Signature:

[Signature]



St Andrew's House
Portsmouth Road
Esher
Surrey
KT10 9TA
T: 020 7643 1000
F: 020 7643 1001

Customer / Collection Point:

Seahill Hill
Leadeney
2611AT

Description of Material (Waste & Code):

1745054018m³ Shales

Conveyance Note / Ticket No.:

725001 / 511002

How Contained:

Loose ☒

Skip ☐

Drum ☐

Place of Delivery:

Mohawk Wharf
Bradfield Road
Silvertown
London
E16 2AX

Site Licence No(s):

EA/EPR/FP3092LH

The waste hierarchy has been considered in deciding the most appropriate waste management option SIC Code:

Ticket No. 92070

Goods In ☒

Goods Out ☐

Gross: 41.160 kg
Tare: 15.000 kg
Net: 18.160 kg

Vehicle Registration:

KX18 WUJ

Date:

12/11/11

Haulier:

DEL

Driver's Name (Print):

Manning

Driver's Signature:

Weighbridge Operator Signature:

162

Waste Soil Movement Sheet

Consignor's/Carrier's/Consignee's Copy (Delete as Appropriate)

Part A Notification details

1 Consignment note code: **J R E D D I / S H 0 0 2**

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):
**J. Reddington Ltd.,
 Station Hill, Reading, RG1 1AT**

4 The waste will be taken to (name, address and postcode):
**Keltbray Environmental Ltd.,
 Mohawk Wharf, Bradfield Road, Silvertown, London, E16 2AX**

5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

Part B Description of the Waste

1 The process giving rise to the waste(s) was: Development of building projects 2 SIC for the process giving rise to the waste **4 1 . 1 0 . 0**

3. Waste Details (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of Waste	List of wastes (EWC code) (6 digits)	Packing Group(s)	Quantity (KG)	The chemical/biological components of the waste and their concentrations are:	Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard Code
Contaminated Soil	170503		20,000	See Report: 1620004716	SOLID	HP7, HP14

Part C Carrier's details

(If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here. ☐)

1. Carrier Name:
 On behalf of **JRL Environmental Ltd.,**
 4 Elstree Way, Borehamwood, Herts, WD6 1RN

2. Carrier registration no./reason for exemption:
 CBDU86520

3. Vehicle Registration No. (or mode of transport, if not road):

KX18 WUJ

Signature

Date **27/04/2021** Time **11:50**

Part D Consignor's details

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.
 I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the waste (England & Wales) regulations 2011

1. Consignor Name:
 On behalf of **J. Reddington Ltd.,**
 4 Elstree Way, Borehamwood, Herts, WD6 1RN

MATERIAL FROM BOREHAMWOOD WS 301

Signature

Date **27/04/2021** Time **14:45**

Part E Consignee's details (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received (kg)	Quantity of each EWC code received (kg)	EWC Code accepted/rejected	Waste management operation (R or D code)
170503	R.163	accepted	R5

1. I received this waste at the address given in A4 on:

Date **27/04/2021** Time **11:50**

2. Vehicle Registration No. (or mode of transport if not road):

KX18 WUJ

Name:

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Keltbray Environmental Ltd.,
 St Andrews House, Portsmouth Road, Esher, Surrey, KT10 9TA**

3. Where waste is rejected please provide details:

I certify that waste management licence/permit/authorised exemption no(s).

EA/EPR/FP3092LH

authorises the management of the waste described in B at the address given in A4.

Signature

Date **27/04/2021** Time **11:50**

keltbray Environmental

St Andrew's House
Portsmouth Road
Esher
Surrey
KT10 9TA
T: 020 7643 1000
F: 020 7643 1001

Ticket No. 92069

Goods In



Goods Out



Customer / Collection Point:

Station Hill

Reading

RGI 1AT

Gross: 52.460 kg

Tare: 12.900 kg

Net: 19.560 kg

Description of Material (Waste & Code):

170503 Hare
Smith Stones

Vehicle Registration:

KX12 WUK

Conveyance Note / Ticket No.:

JREDDI / SH001

Date:

28/4/21

How Contained:

Loose



Skip



Drum



Haulier:

JRL

Place of Delivery:

Mohawk Wharf
Bradfield Road
Silvertown
London
E16 2AX

Driver's Name (Print):

Andy

Driver's Signature:

Site Licence No(s):

EA/EPR/FP3092LH

The waste hierarchy has been considered in
deciding the most appropriate waste
management option SIC Code:

Weighbridge Operator Signature:

Peter

C. P.

keltbray Environmental

St Andrew's House
Portsmouth Road
Esher
Surrey
KT10 9TA
T: 020 7643 1000
F: 020 7643 1001

Ticket No. 92069

Goods In ☒Goods Out ☐

Customer / Collection Point:

Station Hill

Reading

RGW 1AT

Gross: 22.460 kg

Tare: 12.900 kg

Net: 19.560 kg

Description of Material (Waste & Code):

170005 Hoz
Sm. Boxes

Vehicle Registration:

KXIP WUK

Conveyance Note / Ticket No.:

JREDD / 51001

Date:

22/4/21

How Contained:

Loose ☒Skip ☐Drum ☐

Haulier:

JRL

Place of Delivery:

Mohawk Wharf
Bradfield Road
Silvertown
London
E16 2AX

Site Licence No(s):

EA/EPR/FP3092LH

The waste hierarchy has been considered in
deciding the most appropriate waste
management option SIC Code:

Driver's Name (Print):

Andy

Driver's Signature:

Weighbridge Operator Signature:

Pew C D

Waste Soil Movement Sheet

Consignor's/Carrier's/Consignee's Copy (Delete as Appropriate)

Part A Notification details

1 Consignment note code:

J R E D D I / S H 0 0 1

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):

J. Reddington Ltd.,
Station Hill, Reading, RG1 1AT

4 The waste will be taken to (name, address and postcode):

Keltbray Environmental Ltd.,
Mohawk Wharf, Bradfield Road, Silvertown, London, E16 2AX

5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

Part B Description of the Waste

1 The process giving rise to the waste(s) was: Development of building projects 2 SIC for the process giving rise to the waste 4 1 . 1 0 . 0

3. Waste Details (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of Waste	List of wastes (EWC code) (6 digits)	Packing Group(s)	Quantity (KG)	The chemical/biological components of the waste and their concentrations are:	Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard Code
Contaminated Soil	170503		20,000	See Report: 1620004716	SOLID	HP7, HP14

Part C Carrier's details

(If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here. ☐)

1. Carrier Name:

On behalf of JRL Environmental Ltd.,
4 Elstree Way, Borehamwood, Herts, WD6 1RN

2. Carrier registration no./reason for exemption:
CBDU86520

3. Vehicle Registration No. (or mode of transport, if not road):

KX18 WUK Amy Rees

Signature

Date 27/04/2021 Time

Part D Consignor's details

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the waste (England & Wales) regulations 2011

1. Consignor Name:

On behalf of J. Reddington Ltd.,
4 Elstree Way, Borehamwood, Herts, WD6 1RN

MATERIAL FROM BOREHAMWOOD BA301

Signature

Date 27/04/2021 Time 14:20

Part E Consignee's details (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received (kg)	Quantity of each EWC code received (kg)	EWC Code accepted/rejected	Waste management operation (R or D code)
170503	19,560	accepted	R5

1. I received this waste at the address given in A4 on:

Date 28/04/2021 Time 09:04

2. Vehicle Registration No. (or mode of transport if not road):

KX18 WUK

Name:

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

Keltbray Environmental Ltd.,
St Andrews House, Portsmouth Road, Esher, Surrey, KT10 9TA

3. Where waste is rejected please provide details:

I certify that waste management licence/permit/authorised exemption no(s).

EA/EPR/FP3092LH

authorises the management of the waste described in B at the address given in A4.

Signature

Date 28/04/2021 Time 09:04

APPENDIX 4

WASTE TRANSFER NOTES

4 Elstree Way, Borehamwood, Herts. WD6 1RN
Tel: 0208 953 7800 Fax: 0208 953 7774

COMBINED CONVEYANCE NOTE & WASTE TRANSFER NOTE
ENVIRONMENTAL PROTECTION ACT 1990 WEIGHTS & MEASURES ACT, 1985 SCHEDULE 4, PARAGRAPH 7
WASTE CARRIERS LICENCE NO: CBDU86520
JRL ENVIRONMENTAL LTD CONDITIONS APPLY (SEE WEBSITE)

HAULIER JRL	VEHICLE REG. KX18 WCF
SITE ADDRESS JRL READING STATION full	DATE 23-4-2024
TIP ADDRESS J. MOUND BORET'S LANE	TIME 08³⁰-0845
WIF No.	

MATERIAL CLASSIFICATION	
☒ 17.05.04 SOIL & STONE FROM CONSTRUCTION	
☐ 17.01.01 CONCRETE	
☐ 17.01.07 MIXED HARDCORE FROM SITE	
☐ 17.02.01 TIMBER	
☐ 17.04.07 MIXED METAL	
☐ 17.09.04 MIXED CONSTRUCTION & WASTE	
☒ OTHER (give details)	SCREENABLE

QUANTITY	DESCRIPTION OF MATERIAL
Heard	SOIL & STONES SCREENABLE
SIC CODE: 43.120	

N.B To customers, authorised agents, representatives, or responsible persons signing this delivery ticket. This is in your interest. Please read this ticket carefully and inspect material, agreeing quantity, quality and that everything is to your satisfaction before finally signing this receipt note. We regret we cannot, under any circumstances, entertain any claims concerning quantity or quality once the vehicle has left the site and a clear signature has been given.

Customers ordering vehicles off the public road do so entirely on their own responsibility. We cannot accept responsibility for damage caused by our vehicles while delivering to your site. All materials delivered to site remain the property of the vendor until paid for in full.

Certified that the above particulars are true and relate to the aggregates, sub-based materials and arising materials being conveyed or disposed of in pursuance of the sale. Waste Hierarchy applies.

MATERIALS RELEASED BY:

PRINT NAME

SIGNATURE

S. VALENTIN

MATERIALS RECEIVED BY:

PRINT NAME

SIGNATURE

GOSAY

WHITE COPY: HAULIER GREEN COPY: TIP PINK COPY: YELLOW COPY: RETAIN IN BOOK

ALL WHITE COPIES AND RELEVANT TIP TICKETS MUST BE SENT BACK TO JRL HEAD OFFICE WITH INVOICE
PLEASE NOTE THAT ONLY ORIGINAL WHITE TICKETS WILL BE ACCEPTED WITH INVOICES

A&J WASTE SERVICES LTD

Unit 1, Quarry Way Business Park, Waterlip,
Shepton Mallett, Somerset BA4 4RN
Tel: 01749 880051 / 07471 930450 / 07711 907076
Email: transport@ajws.co.uk

Registered Waste Carrier CB/DU168644
Co. Reg. No. 10644192 VAT No. 263 970 773

**WASTE SERVICES LTD****NO: 187207**

Customer/Producer JRL Environmen Date 23.04.21
Address Redingtons C/O JRL Time 10:45
STATION Hill Reading DAYWORK ☐ NIGHTWORK ☐
LOADWORK ☒

Vehicle Reg VX 18 WUX
Waiting Time: Start 10:30 Finish 10:45 Reason _____
Current holder of the waste As Above SIC code 41202

By signing below I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) Regulations 2011 Yes ☒

LOAD CAPACITY: 4 WHEEL ☐ 6 WHEEL ☐ 8 WHEEL ☒ (TICK ONE)

AGGREGATE DETAILS		MUCK AWAY DETAILS DESCRIPTION OF LOAD (TICK OFF)		
GROSS		TOPSOIL 17 05 04	SUBSOIL 17 05 04 ☒	HARDCORE 17 05 04 ☐ 17 01 07
TARE		BITUMINOUS MIXTURES NOT CONTAINING COAL TAR 17 03 02 ☐		
NET		OTHERS (describe) ☐		
W/BIDGE No.		TIP NAME		
MATERIAL TYPE				

This material meets the requirements of the Landfill Tax (qualifying material) order 2011

Drivers Signature [Signature] Print Name STANCO
Customer Signature [Signature] Print Name S

TRANSFER FROM A & J WASTE SERVICES LTD TO DISPOSAL SITE OPERATOR

Name and address of Operator J Moula Reading Quert Bldg
Lane Burgfield Bringe Reading
Tip Licence No. EP2/JS3132AD Issued by EAI Date of Transfer 23.04.

The undersigned confirms that the details given are correct and the person signing on behalf of the Operator has read the conditions on the reverse.

Signed for Tip

Signed for A & J Waste Services Ltd

JRL

JRL ENVIRONMENTAL

556669

4 Elstree Way, Borehamwood, Herts. WD6 1RN
 Tel: 0208 953 7800 Fax: 0208 953 7774

COMBINED CONVEYANCE NOTE & WASTE TRANSFER NOTE
 ENVIRONMENTAL PROTECTION ACT 1990 WEIGHTS & MEASURES ACT, 1985 SCHEDULE 4, PARAGRAPH 7
 WASTE CARRIERS LICENCE NO: CBDU86520

JRL ENVIRONMENTAL LTD CONDITIONS APPLY (SEE WEBSITE)

HAULIER JRL	VEHICLE REG. KU 69XWJ
SITE ADDRESS JRL - GERARDS STREET READING	DATE 22.03.2021
ADDRESS LAYHATCH, READING, RG4 9QN	TIME 12:58 / 13:10
WIF No.	

MATERIAL CLASSIFICATION

- ☐ 17.05.04 SOIL & STONE FROM CONSTRUCTION
☐ 17.01.01 CONCRETE
☐ 17.01.07 MIXED HARDCORE FROM SITE
☐ 17.02.01 TIMBER
☐ 17.04.07 MIXED METAL
☐ 17.09.04 MIXED CONSTRUCTION & WASTE
☒ OTHER (give details)

QUANTITY	DESCRIPTION OF MATERIAL
1 LOAD	TARMAK
SIC CODE: 43.120	

We, the customers, authorised agents, representatives, or responsible persons signing this delivery ticket. This is in your interest. Please read this ticket carefully and inspect material, agreeing quantity, quality and that everything is to your satisfaction before finally signing this receipt note. We regret we cannot, under any circumstances, entertain any claims concerning quantity or quality once the vehicle has left the site and a clear signature has been given.

Customers ordering vehicles off the public road do so entirely on their own responsibility. We cannot accept responsibility for damage caused by our vehicles while delivering to your site. All materials delivered to site remain the property of the vendor until paid for in full.

Certified that the above particulars are true and relate to the aggregates, sub-based materials and arising materials being conveyed or disposed of in pursuance of the sale.
 Waste Hierarchy applies.

MATERIALS RELEASED BY:**MATERIALS RECEIVED BY:**

PRINT NAME

GABRIEL Nestor

PRINT NAME

SIGNATURE



SIGNATURE

WHITE COPY: HAULIER GREEN COPY: TIP PINK COPY: YELLOW COPY: RETAIN IN BOOK

ALL WHITE COPIES AND RELEVANT TIP TICKETS MUST BE SENT BACK TO JRL HEAD OFFICE WITH INVOICE
 PLEASE NOTE THAT ONLY ORIGINAL WHITE TICKETS WILL BE ACCEPTED WITH INVOICES

JRL

JRL ENVIRONMENTAL 543672

4 Elstree Way, Borehamwood, Herts. WD6 1RN
 Tel: 0208 953 7800 Fax: 0208 953 7774

COMBINED CONVEYANCE NOTE & WASTE TRANSFER NOTE
 ENVIRONMENTAL PROTECTION ACT 1990 WEIGHTS & MEASURES ACT, 1985 SCHEDULE 4, PARAGRAPH 7
 WASTE CARRIERS LICENCE NO: CBDU86520

JRL ENVIRONMENTAL LTD CONDITIONS APPLY (SEE WEBSITE)

HAULIER JRL	VEHICLE REG. KU20XJL
SITE ADDRESS Station hill, Leeding	DATE 26-3-21
TIP ADDRESS	TIME 12-45 9-05 1-05
WIF No.	

MATERIAL CLASSIFICATION	
☐	17.05.04 SOIL & STONE FROM CONSTRUCTION
☐	17.01.01 CONCRETE
☐	17.01.07 MIXED HARDCORE FROM SITE
☐	17.02.01 TIMBER
☒	17.04.07 MIXED METAL
☐	17.09.04 MIXED CONSTRUCTION & WASTE
☐	OTHER (give details)

QUANTITY	DESCRIPTION OF MATERIAL
40 yrd	metal waste + load
SIC CODE: 43.120	

N.B To customers, authorised agents, representatives, or responsible persons signing this delivery ticket. This is in your interest. Please read this ticket carefully and inspect material, agreeing quantity, quality and that everything is to your satisfaction before finally signing this receipt note. We regret we cannot, under any circumstances, entertain any claims concerning quantity or quality once the vehicle has left the site and a clear signature has been given.

Customers ordering vehicles off the public road do so entirely on their own responsibility. We cannot accept responsibility for damage caused by our vehicles while delivering to your site. All materials delivered to site remain the property of the vendor until paid for in full.

Certified that the above particulars are true and relate to the aggregates, sub-based materials and arising materials being conveyed or disposed of in pursuance of the sale.
 Waste Hierarchy applies.

MATERIALS RELEASED BY:

PRINT NAME

SIGNATURE

MATERIALS RECEIVED BY:

PRINT NAME

SIGNATURE

WHITE COPY: HAULIER GREEN COPY: TIP PINK COPY: YELLOW COPY: RETAIN IN BOOK

ALL WHITE COPIES AND RELEVANT TIP TICKETS MUST BE SENT BACK TO JRL HEAD OFFICE WITH INVOICE
 PLEASE NOTE THAT ONLY ORIGINAL WHITE TICKETS WILL BE ACCEPTED WITH INVOICES

JRL

JRL ENVIRONMENTAL 5436864 Elstree Way, Borehamwood, Herts. WD6 1RN
Tel: 0208 953 7800 Fax: 0208 953 7774**COMBINED CONVEYANCE NOTE & WASTE TRANSFER NOTE**
ENVIRONMENTAL PROTECTION ACT 1990 WEIGHTS & MEASURES ACT, 1985 SCHEDULE 4, PARAGRAPH 7
WASTE CARRIERS LICENCE NO: CBDU86520

JRL ENVIRONMENTAL LTD CONDITIONS APPLY (SEE WEBSITE)

HAULIER JRL	VEHICLE REG. K420 XJL
SITE ADDRESS Station hill, feeding	DATE 10-3-21
TIP ADDRESS	TIME 9-15-10-05
WIF No.	

MATERIAL CLASSIFICATION	
☐ 17.05.04 SOIL & STONE FROM CONSTRUCTION	PLEASE !!
☐ 17.01.01 CONCRETE	
☐ 17.01.07 MIXED HARDCORE FROM SITE	
☐ 17.02.01 TIMBER	
☐ 17.04.07 MIXED METAL	
☐ 17.09.04 MIXED CONSTRUCTION & WASTE	
☒ OTHER (give details)	green waste

QUANTITY	DESCRIPTION OF MATERIAL
40 yrd	green waste wait + load
SIC CODE: 43.120	

N.B To customers, authorised agents, representatives, or responsible persons signing this delivery ticket. This is in your interest. Please read this ticket carefully and inspect material, agreeing quantity, quality and that everything is to your satisfaction before finally signing this receipt note. We regret we cannot, under any circumstances, entertain any claims concerning quantity or quality once the vehicle has left the site and a clear signature has been given.

Customers ordering vehicles off the public road do so entirely on their own responsibility. We cannot accept responsibility for damage caused by our vehicles while delivering to your site. All materials delivered to site remain the property of the vendor until paid for in full.

Certified that the above particulars are true and relate to the aggregates, sub-based materials and arising materials being conveyed or disposed of in pursuance of the sale. Waste Hierarchy applies.

MATERIALS RELEASED BY:	MATERIALS RECEIVED BY:
PRINT NAME Valentine	PRINT NAME Tom
SIGNATURE [Signature]	SIGNATURE [Signature]

WHITE COPY: HAULIER GREEN COPY: TIP PINK COPY: YELLOW COPY: RETAIN IN BOOK

ALL WHITE COPIES AND RELEVANT TIP TICKETS MUST BE SENT BACK TO JRL HEAD OFFICE WITH INVOICE
PLEASE NOTE THAT ONLY ORIGINAL WHITE TICKETS WILL BE ACCEPTED WITH INVOICES

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. WA 779736

Date 19/13/12

Arrival Time 10.00

Departure Time 10.10

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

DUTY OF CARE WASTE TRANSFER NOTE

Customer/Waste Producer JRL	Reg No. U123EAR
Address station hill reading	Drivers Name Andrew A
Order No	Disposed at: Permit Ref:
Description of Waste:	Alton Road..... ☐ EPR/AB3802KG EPR/GB3101KY
17.05.04 Clean Inert/Soils, Stone, Clay ☒	Bassett Down..... ☐ EPR/AB3804CL
17.01.01 Concrete ☐	Shellingford..... ☒ EPR/BP3095EU EPR/EB3839AA
17.01.02 Bricks ☐	Shipton..... ☐ EPR/GB3431AD EPR/AB3805KZ
17.03.02 Tarmac ☐	Chitterne..... ☐ EPR/BB3305KM EPR/EB3309FH
17.01.07 Mixture of Concrete, Brick, Tile & Ceramics, Inert ☐	Thruston..... ☐ EPR/FB3736AF
Container Size/Type ☒ 8x4 Tipper ☐ Other	Hatford..... ☐ EPR/JB3509TT
Other site	Day Work
Additional Info RG1 1AT	Travelling
	Waiting Time
	Total Hours
	Signed on behalf of disposal site
	Signed on behalf of:
	Earthline A. Alganon
	Signed on behalf of waste producer/transferee
Landfill and transfer note for controlled waste WASTE CARRIERS LICENCE No. CBDU92556	Declaration:
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	"I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the Waste (England & Wales) Regulations 2011"
	Producer Valentise
	Please print name
Comments	SIC Code:

4 Elstree Way, Borehamwood, Herts. WD6 1RN
Tel: 0208 953 7800 Fax: 0208 953 7774

COMBINED CONVEYANCE NOTE & WASTE TRANSFER NOTE
ENVIRONMENTAL PROTECTION ACT 1990 WEIGHTS & MEASURES ACT, 1985 SCHEDULE 4, PARAGRAPH 7
WASTE CARRIERS LICENCE NO: CBDU86520

JRL ENVIRONMENTAL LTD CONDITIONS APPLY (SEE WEBSITE)

HAULIER JRL	VEHICLE REG. KU6 FGBK
SITE ADDRESS JRL Reading Todor Rd	DATE 26.3.21
TIP ADDRESS JRL Stewtown	TIME 1:25 - 1:40
WIF No.	

MATERIAL CLASSIFICATION

- ☐ 17.05.04 SOIL & STONE FROM CONSTRUCTION
☒ 17.01.01 CONCRETE
☐ 17.01.07 MIXED HARDCORE FROM SITE
☐ 17.02.01 TIMBER
☐ 17.04.07 MIXED METAL
☐ 17.09.04 MIXED CONSTRUCTION & WASTE
☐ OTHER (give details)

QUANTITY	DESCRIPTION OF MATERIAL
20T 1X6AD	concrete
SIC CODE: 43.120	

N.B To customers, authorised agents, representatives, or responsible persons signing this delivery ticket. This is in your interest. Please read this ticket carefully and inspect material, agreeing quantity, quality and that everything is to your satisfaction before finally signing this receipt note. We regret we cannot, under any circumstances, entertain any claims concerning quantity or quality once the vehicle has left the site and a clear signature has been given.

Customers ordering vehicles off the public road do so entirely on their own responsibility. We cannot accept responsibility for damage caused by our vehicles while delivering to your site. All materials delivered to site remain the property of the vendor until paid for in full.

Certified that the above particulars are true and relate to the aggregates, sub-based materials and arising materials being conveyed or disposed of in pursuance of the sale.
Waste Hierarchy applies.

MATERIALS RELEASED BY:

PRINT NAME

D.A. BALEHUN

SIGNATURE

[Signature]

MATERIALS RECEIVED BY:

PRINT NAME

18mole

SIGNATURE

[Signature]

WHITE COPY: HAULIER GREEN COPY: TIP PINK COPY: YELLOW COPY: RETAIN IN BOOK

ALL WHITE COPIES AND RELEVANT TIP TICKETS MUST BE SENT BACK TO JRL HEAD OFFICE WITH INVOICE
PLEASE NOTE THAT ONLY **ORIGINAL** WHITE TICKETS WILL BE ACCEPTED WITH INVOICES

JRL

JRL ENVIRONMENTAL 564178

4 Elstree Way, Borehamwood, Herts. WD6 1RN
 Tel: 0208 953 7800 Fax: 0208 953 7774

COMBINED CONVEYANCE NOTE & WASTE TRANSFER NOTE
 ENVIRONMENTAL PROTECTION ACT 1990 WEIGHTS & MEASURES ACT, 1985 SCHEDULE 4, PARAGRAPH 7
 WASTE CARRIERS LICENCE NO: CBDU86520
 JRL ENVIRONMENTAL LTD CONDITIONS APPLY (SEE WEBSITE)

HAULIER JRL	VEHICLE REG. W067X HF
--------------------	------------------------------

SITE ADDRESS STATION HILL READING	DATE 18.03.21
ADDRESS SMOULDS READING	TIME
WIF No.	

MATERIAL CLASSIFICATION	
☐	17.05.04 SOIL & STONE FROM CONSTRUCTION
☐	17.01.01 CONCRETE
☐	17.01.07 MIXED HARDCORE FROM SITE
☐	17.02.01 TIMBER
☐	17.04.07 MIXED METAL
☐	17.09.04 MIXED CONSTRUCTION & WASTE
☒	OTHER (give details) TARMAC

QUANTITY	DESCRIPTION OF MATERIAL
1 LOAD TIPPER	TARMAC
SIC CODE: 43.120	

N.B. Customers, authorised agents, representatives, or responsible persons signing this delivery ticket. This is in your interest. Please read this ticket carefully and inspect material, agreeing quantity, quality and that everything is to your satisfaction before finally signing this receipt note. We regret we cannot, under any circumstances, entertain any claims concerning quantity or quality once the vehicle has left the site and a clear signature has been given.

Customers ordering vehicles off the public road do so entirely on their own responsibility. We cannot accept responsibility for damage caused by our vehicles while delivering to your site. All materials delivered to site remain the property of the vendor until paid for in full.

Certified that the above particulars are true and relate to the aggregates, sub-based materials and arising materials being conveyed or disposed of in pursuance of the sale.
 Waste Hierarchy applies.

MATERIALS RELEASED BY:

PRINT NAME **S. VALENTIN**SIGNATURE 

MATERIALS RECEIVED BY:

PRINT NAME **JOSEF. MORAN**SIGNATURE 

WHITE COPY: HAULIER GREEN COPY: TIP PINK COPY: YELLOW COPY: RETAIN IN BOOK

ALL WHITE COPIES AND RELEVANT TIP TICKETS MUST BE SENT BACK TO JRL HEAD OFFICE WITH INVOICE
 PLEASE NOTE THAT ONLY **ORIGINAL** WHITE TICKETS WILL BE ACCEPTED WITH INVOICES

4 Elstree Way, Borehamwood, Herts. WD6 1RN
Tel: 0208 953 7800 Fax: 0208 953 7774

COMBINED CONVEYANCE NOTE & WASTE TRANSFER NOTE
ENVIRONMENTAL PROTECTION ACT 1990 WEIGHTS & MEASURES ACT, 1985 SCHEDULE 4, PARAGRAPH 7
WASTE CARRIERS LICENCE NO: CBDU86520

JRL ENVIRONMENTAL LTD CONDITIONS APPLY (SEE WEBSITE)

HAULIER JRL	VEHICLE REG. KU68 GSO
SITE ADDRESS JRL Reading	DATE 26.3.21
TIP ADDRESS Silverdown	TIME 1455
WIF No.	

MATERIAL CLASSIFICATION	
☒ 17.05.04 SOIL & STONE FROM CONSTRUCTION	
☐ 17.01.01 CONCRETE	
☐ 17.01.07 MIXED HARDCORE FROM SITE	
☐ 17.02.01 TIMBER	
☐ 17.04.07 MIXED METAL	
☐ 17.09.04 MIXED CONSTRUCTION & WASTE	
☐ OTHER (give details)	

QUANTITY	DESCRIPTION OF MATERIAL
1 load	Soil & stone
SIC CODE: 43.120	

N.B To customers, authorised agents, representatives, or responsible persons signing this delivery ticket. This is in your interest. Please read this ticket carefully and inspect material, agreeing quantity, quality and that everything is to your satisfaction before finally signing this receipt note. We regret we cannot, under any circumstances, entertain any claims concerning quantity or quality once the vehicle has left the site and a clear signature has been given.

Customers ordering vehicles off the public road do so entirely on their own responsibility. We cannot accept responsibility for damage caused by our vehicles while delivering to your site. All materials delivered to site remain the property of the vendor until paid for in full.

Certified that the above particulars are true and relate to the aggregates, sub-based materials and arising materials being conveyed or disposed of in pursuance of the sale.
Waste Hierarchy applies.

MATERIALS RELEASED BY:

MATERIALS RECEIVED BY:

PRINT NAME

O A. DILFANU

PRINT NAME

Lee

SIGNATURE

[Signature]

SIGNATURE

[Signature]

WHITE COPY: HAULIER GREEN COPY: TIP PINK COPY: YELLOW COPY: RETAIN IN BOOK

ALL WHITE COPIES AND RELEVANT TIP TICKETS MUST BE SENT BACK TO JRL HEAD OFFICE WITH INVOICE
PLEASE NOTE THAT ONLY ORIGINAL WHITE TICKETS WILL BE ACCEPTED WITH INVOICES

A&J WASTE SERVICES LTD

Unit 1, Quarry Way Business Park, Waterlip,
Shepton Mallett, Somerset BA4 4RN
Tel: 01749 880051 / 07471 930450 / 07711 907076
Email: transport@ajws.co.uk

Registered Waste Carrier CB/DU168644
Co. Reg. No. 10644192 VAT No. 263 970 773

**A&J WASTE SERVICES LTD****NO: 187217**

Customer/Producer JRL Environmental Date 17.04.2021
Address Readingtons CIO JRL Time 14.00
Station Hill Reading
RG 11TA
Vehicle Reg KX 18 WUL
Waiting Time: Start 13.55 Finish 14.00 Reason _____
Current holder of the waste AS ABOVE SIC code 41202

By signing below I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) Regulations 2011 Yes ☒

LOAD CAPACITY: 4 WHEEL ☐ 6 WHEEL ☐ 8 WHEEL ☒ (TICK ONE)

AGGREGATE DETAILS	
GROSS	_____
TARE	_____
NET	_____
W/BIDGE No.	_____
MATERIAL TYPE	_____

MUCK AWAY DETAILS		
DESCRIPTION OF LOAD (TICK OFF)		
TOPSOIL 17 05 04	SUBSOIL 17 05 04	HARDCORE 17 05 04 17 01 07
BITUMINOUS MIXTURES NOT CONTAINING COAL TAR 17 03 02		☐
OTHERS (describe) ☒ <u>17.05.04 Natural Sub</u>		
TIP NAME <u>Tarmac Sonning</u>		

This material meets the requirements of the Landfill Tax (qualifying material) order 2011

Drivers Signature [Signature] Print Name STANCHO
Customer Signature [Signature] Print Name S. VALENTIN

TRANSFER FROM A & J WASTE SERVICES LTD TO DISPOSAL SITE OPERATOR

Name and address of Operator Tarmac Trading Ltd Sonning
Quarry Park Hatch Sonning RG 4 9 RB
Tip Licence No. CB3307TA Issued by EA Date of Transfer 17.04

The undersigned confirms that the details given are correct and the person signing on behalf of the Operator has read the conditions on the reverse.

Signed for Tip

Signed for A & J Waste Services Ltd

A&J WASTE SERVICES LTD

Unit 1, Quarry Way Business Park, Waterlip,
Shepton Mallett, Somerset BA4 4RN
Tel: 01749 880051 / 07471 930450 / 07711 907076
Email: transport@ajws.co.uk
Registered Waste Carrier CB/DU168644
Co. Reg. No. 10644192 VAT No. 263 970 773

**A&J WASTE SERVICES LTD****NO: 187009**

Customer/Producer JRL Date 26-04-21
Address Station Hill Time _____
Reading DAYWORK ☐ NIGHTWORK ☐
LOADWORK ☒

Vehicle Reg KX18WZL
Waiting Time: Start _____ Finish _____ Reason _____
Current holder of the waste _____ SIC code 41202

By signing below I confirm that I have fulfilled my duty to apply the waste hierarchy
as required by Regulation 12 of the Waste (England & Wales) Regulations 2011 Yes ☒

LOAD CAPACITY: 4 WHEEL ☐ 6 WHEEL ☐ 8 WHEEL ☒ (TICK ONE)

AGGREGATE DETAILS		MUCK AWAY DETAILS DESCRIPTION OF LOAD (TICK OFF)		
GROSS		TOPSOIL	SUBSOIL	HARDCORE
TARE		17 05 04	17 05 04	17 05 04
NET			☒	17 01 07
W/BRIDGE No		BITUMINOUS MIXTURES NOT CONTAINING COAL TAR 17 03 02		
MATERIAL TYPE		OTHERS (describe) ☐		
		TIP NAME <u>J mould</u>		

This material meets the requirements of the Landfill Tax (qualifying material) order 2011

Drivers Signature John It Print Name John It

Customer Signature _____ Print Name _____

TRANSFER FROM A & J WASTE SERVICES LTD TO DISPOSAL SITE OPERATOR

Name and address of Operator J mould
Reading Quarry Benny's Lane
Tip Licence No. EPR153121 Issued by EA Date of Transfer 26/4/21

The undersigned confirms that the details given are correct and the person signing on
behalf of the Operator has read the conditions on the reverse.

Signed for Tip

Signed for A & J Waste Services Ltd

APPENDIX 5

SOFT LANDSCAPING VERIFICATION

Our Ref. TJ3517ER1

Midgard Limited
4 Elstree Way
Borehamwood
Hertfordshire
WD6 1RN

10th October 2023

FAO: Alice Dear

Station Hill, Reading RG1 1NR – Validation Testing (Imported Topsoil and Subsoil)

Please find attached the results of testing carried out on four soil samples (two topsoil and two subsoil) from Station Hill, Reading RG1 1NR (the site). The samples were recovered by a geo-environmental engineer from Terragen Environmental Consultants Limited (TGEN) to represent soils imported onto the site.

1.0 BACKGROUND INFORMATION

The site is located off Garrard Street in central Reading, to the S of Reading train station. The site is bounded by Garrard Street to the N, Merchants Place to the E, Friars Street to the S, and Greyfriars Road to the W and is centered on NGR 471370, 173710.

The proposed development consists of the demolition of the existing buildings at the site, and the construction of two residential buildings (Plots E and F); a 6-12-storey building and a 11-12-storey building with a split single/ double-storey basement and a podium to bridge the two buildings.

The proposed buildings comprise primarily residential accommodation, with a combination of residential, retail, amenity spaces and bicycle parking at podium level. Below podium level there is a split-level car park of 1-2 storeys, which also houses plant rooms, cycle parking, water tanks and storage. The roof is split across the several levels and houses plant, amenity space and green roof areas. The proposed basement covers the extent of the building footprints with the exception of three residential units in the south of Block E and one residential unit in the south of Block F.

Reading Borough Council (the local authority) granted Outline Planning Permission (ref. 130436 dated 09/01/2015) for the proposed development subject to a series of conditions. Land contamination matters are dealt with under Condition 27 of the Planning Consent including condition 27(c):

“The results of the site investigation and detailed risk assessment referred to in (b) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken. The strategy must include all works to be undertaken, proposed remediation objectives and remediation criteria, an appraisal of remedial options, and proposal of the preferred option(s), and a timetable of works and site management procedures. The strategy must ensure that the site will not qualify as contamination land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land under remediation.”

A Remediation Strategy (ref. SHR-RMB-XX-XX-RP-C-91-000021 dated February 2023) was prepared by Ramboll Environment and Health UK Limited (Ramboll) to address the matters reserved by Condition 27(c) of the planning permission.

The remediation strategy noted that as part of the proposed development, soft landscaping will comprise raised planters at ground level with imported topsoil and some areas of sedum roof. As detailed in the remediation strategy, imported soils for use in areas of soft landscaping are required to be tested at a rate of one sample per 500m³ and tested in accordance with the chemical criteria for reuse and imported materials as detailed in Appendix 2 of the remediation strategy.



2.0 SITE SAMPLING

A geo-environmental engineer from TGEN visited the site on 22/09/2023 to recover representative samples of the imported topsoil and subsoil that were being placed in areas of soft landscape planting at the site as part of the development. A photographic record is presented in Appendix A. A representative from Midgard Limited indicated where onsite the various soils were being placed. During the visit, the soils were inspected and sampled, which included:

- ✦ A physical description of the arisings.
- ✦ An assessment of visual and olfactory evidence of contamination.
- ✦ The recovery of representative samples.
- ✦ The submission of samples to a UKAS/MCERTS accredited laboratory for analysis.

During the sampling, dedicated amber jars; vials; and plastic tubs provided by the laboratory were used for the collection of samples. To minimise the potential for cross contamination, disposable gloves were changed for each sample collected and equipment used was cleaned between each sampling event. Loss of volatile compounds through desorption and volatilisation from the samples was limited by filling and tightly enclosing the samples in dedicated amber jars, thus ensuring minimal headspace, and storing at a low temperature (i.e., a refrigerated cool box), which further minimised biodegradation of organic compounds. Samples were transported to the laboratory in dedicated containers maintained at a low temperature. All samples and analytical requests were recorded on the laboratory chain of custody form prior to dispatching for analysis. The laboratory testing was undertaken promptly and within the holding times of the tests specified.

The samples were submitted to a UKAS/MCERTS accredited laboratory for testing in accordance with the requirements of the remediation strategy. Copies of the laboratory test reports are presented in Appendix B.

3.0 MATERIALS ASSESSMENT

The soils were described as follows:

Topsoil Grey/brown, loose, silty sand with rare gravel and frequent partially decomposed organic matter.

Subsoil Orange and yellow/brown, loose, silty sand with rare partially decomposed organic matter.

There was no visual or olfactory evidence of contamination in either the topsoil or subsoil inspected onsite.

A summary table of the results in comparison to the chemical criteria for imported material to be used within the brown/green roof area is presented in Appendix C.

Topsoil

Two samples of imported topsoil have been submitted for testing and we would summarise the results as follows:

- ✦ No asbestos observed or detected.
- ✦ All samples have returned low concentrations of potential contaminants, including heavy metals, PAH, TPH etc, many of which are below the laboratory limit of detection.
- ✦ All concentrations were below their respective chemical criteria for imported material to be placed within the brown/green roof area.

Subsoil

Two samples of imported subsoil have been submitted for testing and we would summarise the results as follows:

- ✦ No asbestos observed or detected.
- ✦ All samples have returned low concentrations of potential contaminants, including heavy metals, PAH, TPH etc, many of which are below the laboratory limit of detection.
- ✦ All concentrations were below their respective chemical criteria for imported material to be placed within the brown/green roof area.

Summary

Overall, no asbestos has been observed or detected in any of the imported topsoil or subsoil. The samples have all returned low concentrations of potential contaminants, including heavy metals, TPH and PAH, which are all below the respective thresholds and therefore conform to the chemical requirements as outlined in the remediation strategy.



If you require further information or clarification on any of the above, please do not hesitate to contact the undersigned. Thank you for approaching TGEN with this project and we look forward to hearing from you in due course.



Paul Brewer
BSc (Hons), MSc, MI Soil Sci, CSci
Senior Environmental Consultant



Dr Barry Powell
BSc (Hons), PhD, MCIWM
Principal Consultant

(for and on behalf of Terragen Environmental Consultants Limited)



4.0 LIMITATIONS AND USE OF THE REPORT

IMPORTANT: This section should be read before reliance is placed on any of the opinions, advice, recommendations or conclusions set out in this report.

- a) This report has been prepared for the purpose of providing interpretation on analytical results supplied by the Client pursuant to its appointment of Terragen Environmental Consultants Limited to act as a Consultant.
- b) These comments are given in good faith on the basis of the results provided. Terragen Environmental Consultants Limited can bear no responsibility for any inaccuracies that may arise from the laboratory testing.
- c) This report does not constitute a qualitative risk assessment of the site or the soils and is not based upon a conceptual site model as we have been provided with insufficient information to establish the existence of potential sources of contamination, plausible pathways, or sensitive receptors and therefore assumes that they exist.
- d) The report is unable to comment on the potential risks to controlled waters (groundwater or surface water), although where contaminant concentrations are below relevant threshold criteria in most circumstances it may be considered that the risk is low.
- e) We have assumed that the results are representative of the area sampled. This does not imply that they may be considered representative of the site itself. Terragen Environmental Consultants Limited can accept no responsibility for the integrity of the sampling regime.
- f) Save for the Client no duty is undertaken or warranty or representation made to any party in respect of the opinions, advice, recommendations or conclusions herein set out.
- g) All work carried out in preparing this report has used, and is based upon, our professional knowledge and understanding of the current relevant English and European Community standards, approved codes of practice, technology and legislation.
Changes in the above may cause the opinion, advice, recommendations or conclusions set out in this report to become inappropriate or incorrect. However, in giving its opinions, advice, recommendations and conclusions, Terragen Environmental Consultants Limited has considered pending changes to environmental legislation and regulations of which it is currently aware. Following delivery of this report, we will have no obligation to advise the Client of any such changes, or of their repercussions.
- h) Terragen Environmental Consultants Limited acknowledges that it is being retained, in part, because of its knowledge and experience with respect to environmental matters. Terragen Environmental Consultants Limited will consider and analyse all information provided to it in the context of our knowledge and experience and all other relevant information known to us. To the extent that the information provided to us is not inconsistent or incompatible therewith, Terragen Environmental Consultants Limited shall be entitled to rely upon and assume, without independent verification, the accuracy and completeness of such information.
- i) The content of this report represents the professional opinion of experienced environmental consultants. Terragen Environmental Consultants Limited does not provide specialist legal advice and the advice of lawyers may be required.
- j) In the Summary and Recommendations sections of this report, Terragen Environmental Consultants Limited has set out our key findings and provided a summary and overview of our advice, opinions and recommendations. However, other parts of this report will often indicate the limitations of the information obtained by Terragen Environmental Consultants Limited and therefore any advice, opinions or recommendations set out in the Executive Summary, Summary and Recommendations sections ought not to be relied upon unless they are considered in the context of the whole report.
- k) The lack of evidence of the presence of hazardous or harmful materials at the subject property does not guarantee the absence of such materials; rather it indicates only that none were found as a result of the services provided. The services described in this report were performed in accordance with the general practices and procedures accepted in the consulting field.



Appendix A Photographic Record.



Photographic Record



Photograph 01
Bulk bag of topsoil delivered to the site.



Photograph 02
Bulk bag of subsoil delivered to the site.



Photograph 03
Soft landscape planting bed.



Photograph 03
Landscape planters.



Photograph 05
Landscape planters.



Photograph 06
Landscape planters.



Appendix B Laboratory Test Reports.

Paul Brewer
Terragen Environmental Consultants Limited
The Ridings
4 Village Close
Sherington
Buckinghamshire
MK16 9PZ

e: paul@tgen.co.uk

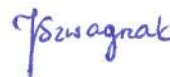
i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 23-58551

Project / Site name:	Station Hill Reading RG1 1NR (JRLE)	Samples received on:	22/09/2023
Your job number:	TJ3517E01	Samples instructed on/ Analysis started on:	26/09/2023
Your order number:	TJ3517E01	Analysis completed by:	02/10/2023
Report Issue Number:	1	Report issued on:	02/10/2023
Samples Analysed:	4 soil samples		

Signed:



Joanna Szwagrak
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 23-58551
 Project / Site name: Station Hill Reading RG1 1NR (JRLE)
 Your Order No: TJ3517E01

Lab Sample Number				2823185	2823186	2823187	2823188
Sample Reference				Topsoil-1	Topsoil-2	Subsoil-1	Subsoil-2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/09/2023	22/09/2023	22/09/2023	22/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	17	4	3.8
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.8	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO	PDO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9	9.1	8.9	8.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	160	210	58	56
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	30	34	3.3	3.5
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0149	0.0168	0.0016	0.0018
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	14.9	16.8	1.6	1.8
Sulphide	mg/kg	1	MCERTS	79	2.7	< 1.0	< 1.0
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2	2.2	0.1	< 0.1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.1	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.08	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.07	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80
-----------------------------	-------	-----	-----------	--------	--------	--------	--------

Analytical Report Number: 23-58551
Project / Site name: Station Hill Reading RG1 1NR (JRLE)
Your Order No: TJ3517E01

Lab Sample Number	2823185	2823186	2823187	2823188
Sample Reference	Topsoil-1	Topsoil-2	Subsoil-1	Subsoil-2
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	22/09/2023	22/09/2023	22/09/2023	22/09/2023
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	1.2	1.7	< 1.0	1.1
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.5	3.4	3.1	3.4
Barium (aqua regia extractable)	mg/kg	1	MCERTS	21	21	3.5	3.9
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.19	0.16	0.1	0.11
Boron (water soluble)	mg/kg	0.2	MCERTS	1.9	1.5	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	10	10	5.2	5.6
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	11	4.3	4.8
Lead (aqua regia extractable)	mg/kg	1	MCERTS	13	13	1.5	< 1.0
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	< 0.25	< 0.25	< 0.25	< 0.25
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	5.5	4.8	3.6	4.1
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	11	9.9	12	13
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	27	28	6.4	5.9

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 _{HS, ID, AL}	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 _{HS, ID, AL}	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 _{HS, ID, AL}	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 _{EH, CU, ID, AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 _{EH, CU, ID, AL}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 _{EH, CU, ID, AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 _{EH, CU, ID, AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44 _{EH, CU, ID, AL}	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35) _{EH, CU+HS, ID, AL}	mg/kg	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44) _{EH, CU+HS, ID, AL}	mg/kg	10	NONE	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7 _{HS, ID, AR}	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 _{HS, ID, AR}	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 _{HS, ID, AR}	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 _{EH, CU, ID, AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 _{EH, CU, ID, AR}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 _{EH, CU, ID, AR}	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 _{EH, CU, ID, AR}	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44 _{EH, CU, ID, AR}	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35) _{EH, CU+HS, ID, AR}	mg/kg	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44) _{EH, CU+HS, ID, AR}	mg/kg	10	NONE	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 23-58551

Project / Site name: Station Hill Reading RG1 1NR (JRLE)

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2823185	Topsoil-1	None Supplied	None Supplied	Brown loam and sand with gravel.
2823186	Topsoil-2	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2823187	Subsoil-1	None Supplied	None Supplied	Brown sand with gravel.
2823188	Subsoil-2	None Supplied	None Supplied	Brown sand with gravel.

Analytical Report Number : 23-58551

Project / Site name: Station Hill Reading RG1 1NR (JRLE)

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS

Analytical Report Number : 23-58551

Project / Site name: Station Hill Reading RG1 1NR (JRLE)

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil	Determination of water soluble sulphate by TCP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total



Appendix C Summary Table.

Project / Site name: Station Hill Reading RG1 1NR (JRLE)

Sample Reference		Topsoil-1	Topsoil-2	Subsoil-1	Subsoil-2	Chemical Criteria for imported material to be used within the brown/green roof area
Date Sampled		22/09/2023	22/09/2023	22/09/2023	22/09/2023	
Parameter	Units					
Stone Content	%	0.10	0.10	0.10	0.10	-
Moisture Content	%	17	17	4.0	3.8	-
Total mass of sample received	kg	0.90	0.90	0.80	0.90	-

Asbestos						
Asbestos in Soil	Type	Not-detected	Not-detected	Not-detected	Not-detected	Absent
Asbestos Analyst ID	N/A	PDO	PDO	PDO	PDO	-

General Inorganics						
pH - Automated	pH Units	9.0	9.1	8.9	8.7	-
Total Cyanide	mg/kg	1.0	1.0	1.0	1.0	-
Free Cyanide	mg/kg	1.0	1.0	1.0	1.0	49
Total Sulphate as SO4	mg/kg	160	210	58	56	-
Water Soluble Sulphate as SO4 (2:1)	mg/kg	30	34	3.3	3.5	-
Water Soluble SO4 (2:1 Leachate Equivalent)	g/l	0.015	0.017	0.002	0.002	-
Water Soluble SO4 (2:1 Leachate Equivalent)	mg/l	15	17	1.6	1.8	-
Sulphide	mg/kg	79	2.7	1.0	1.0	-
Total Organic Carbon (TOC) - Automated	%	2.0	2.2	0.10	0.10	-

Total Phenols						
Total Phenols (monohydric)	mg/kg	1.0	1.0	1.0	1.0	-

Speciated PAHs						
Naphthalene	mg/kg	0.05	0.05	0.05	0.05	0.99
Acenaphthylene	mg/kg	0.05	0.05	0.05	0.05	2000
Acenaphthene	mg/kg	0.05	0.05	0.05	0.05	2000
Fluorene	mg/kg	0.05	0.05	0.05	0.05	2200
Phenanthrene	mg/kg	0.05	0.05	0.05	0.05	1300
Anthracene	mg/kg	0.05	0.05	0.05	0.05	30000
Fluoranthene	mg/kg	0.10	0.05	0.05	0.05	1500
Pyrene	mg/kg	0.08	0.05	0.05	0.05	3700
Benzo(a)anthracene	mg/kg	0.05	0.05	0.05	0.05	12
Chrysene	mg/kg	0.05	0.05	0.05	0.05	30
Benzo(b)fluoranthene	mg/kg	0.07	0.05	0.05	0.05	4.0
Benzo(k)fluoranthene	mg/kg	0.05	0.05	0.05	0.05	110
Benzo(a)pyrene	mg/kg	0.05	0.05	0.05	0.05	5.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	0.05	0.05	0.05	45
Dibenz(a,h)anthracene	mg/kg	0.05	0.05	0.05	0.05	0.31
Benzo(ghi)perylene	mg/kg	0.05	0.05	0.05	0.05	360

Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.80	0.80	0.80	0.80	-

Heavy Metals / Metalloids						
Antimony (aqua regia extractable)	mg/kg	1.2	1.7	1.0	1.1	-
Arsenic (aqua regia extractable)	mg/kg	3.5	3.4	3.1	3.4	40
Barium (aqua regia extractable)	mg/kg	21	21	3.5	3.9	-
Beryllium (aqua regia extractable)	mg/kg	0.19	0.16	0.10	0.11	-
Boron (water soluble)	mg/kg	1.9	1.5	0.20	0.20	-
Cadmium (aqua regia extractable)	mg/kg	0.20	0.20	0.20	0.20	150
Chromium (hexavalent)	mg/kg	1.8	1.8	1.8	1.8	21
Chromium (aqua regia extractable)	mg/kg	10	10	5.2	5.6	910
Copper (aqua regia extractable)	mg/kg	12	11	4.3	4.8	7100
Lead (aqua regia extractable)	mg/kg	13	13	1.5	1.0	310
Mercury (aqua regia extractable)	mg/kg	0.30	0.30	0.30	0.30	56
Molybdenum (aqua regia extractable)	mg/kg	0.25	0.25	0.25	0.25	-
Nickel (aqua regia extractable)	mg/kg	5.5	4.8	3.6	4.1	180
Selenium (aqua regia extractable)	mg/kg	1.0	1.0	1.0	1.0	430
Vanadium (aqua regia extractable)	mg/kg	11	10	12	13	1200
Zinc (aqua regia extractable)	mg/kg	27	28	6.4	5.9	40000

Monoaromatics & Oxygenates						
Benzene	mg/kg	0.005	0.005	0.005	0.005	0.37
Toluene	mg/kg	0.005	0.005	0.005	0.005	370
Ethylbenzene	mg/kg	0.005	0.005	0.005	0.005	34
p & m-xylene	mg/kg	0.005	0.005	0.005	0.005	33
o-xylene	mg/kg	0.005	0.005	0.005	0.005	37
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	0.005	0.005	0.005	0.005	-

Petroleum Hydrocarbons						
TPH-CWG - Aliphatic >EC5 - EC6 HS_ID_AL	mg/kg	0.10	0.10	0.10	0.10	24
TPH-CWG - Aliphatic >EC6 - EC8 HS_ID_AL	mg/kg	0.10	0.10	0.10	0.10	53
TPH-CWG - Aliphatic >EC8 - EC10 HS_ID_AL	mg/kg	0.10	0.10	0.10	0.10	13
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_ID_AL	mg/kg	1.0	1.0	1.0	1.0	62
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_ID_AL	mg/kg	2.0	2.0	2.0	2.0	510
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_ID_AL	mg/kg	8.0	8.0	8.0	8.0	42000
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_ID_AL	mg/kg	8.0	8.0	8.0	8.0	
TPH-CWG - Aliphatic > EC35 - EC44 EH_CU_ID_AL	mg/kg	8.4	8.4	8.4	8.4	42000
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_ID_AL	mg/kg	10	10	10	10	-
TPH-CWG - Aliphatic (EC5 - EC44) EH_CU+HS_ID_AL	mg/kg	10	10	10	10	-
TPH-CWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.10	0.10	0.10	0.10	370
TPH-CWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.10	0.10	0.10	0.10	860
TPH-CWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.10	0.10	0.10	0.10	22
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_ID_AR	mg/kg	1.0	1.0	1.0	1.0	120
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_ID_AR	mg/kg	2.0	2.0	2.0	2.0	1100
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_ID_AR	mg/kg	10	10	10	10	1900
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_ID_AR	mg/kg	10	10	10	10	1900
TPH-CWG - Aromatic > EC35 - EC44 EH_CU_ID_AR	mg/kg	8.4	8.4	8.4	8.4	1900
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_ID_AR	mg/kg	10	10	10	10	-
TPH-CWG - Aromatic (EC5 - EC44) EH_CU+HS_ID_AR	mg/kg	10	10	10	10	-

Notes
Below Laboratory Detection Limit