

Executive Summary

Site Use & Proposed Development	The Site comprises a vacant former vehicle body repair facility, with an associated former oil tank in the east, spray booths in the north, vehicle wash in the north, and remnant ancillary equipment. The proposed development for the Site comprises the demolition of the existing structures and the construction of a vehicle servicing facility including workshop areas, a MOT test bay, a tyre bay, parts storage area; customer reception and office area; and a drive through reception area.
Environmental Setting	Based on the available information, it is anticipated that the Site is likely underlain by a sequence of Made Ground; cohesive River Brickearth; granular and potentially cohesive Lynch Hill Gravel Member (Principal Aquifer); over London Clay (Unproductive Strata). The nearest surface water feature is the Grand Union Canal located approximately 230 m to the south of the Site and no sensitive water abstractions are listed within close proximity to the Site.
Contamination Potential	Historically, the Site remained largely undeveloped until 1965 mapping, where the Site is shown to be developed by an unspecified works, with a main unit in the centre of the Site and a smaller unit encroaching the north. By 1975 mapping, the Site is shown in its contemporary layout, which is denoted as an engineering works, and later as warehousing and works. Light industrial land use and landfilling has been identified in the surrounding area. Ground investigation of the wider area has identified relatively localised contamination.
Pollutant Linkage Assessment	Delta-Simons has completed a risk assessment based upon available information. Based on available information, the presence of localised contamination cannot be discounted. In the context of the proposed redevelopment, it is considered that the risk of significant possible pollutant linkages to exist at the Site is Low/Moderate.
Key Land Contamination Recommendations	It is recommended that a targeted environmental ground investigation is conducted in conjunction with a geotechnical investigation to verify design requirements for the proposed development. The identified asbestos containing materials within the current units should be removed from the Site prior to / during the demolition activities.
This is intended as a summary only. Further detail and limitations of the assessment is provided within the main body of the Report.	

Table of Contents

1.0 INTRODUCTION	1
1.1 Appointment.....	1
1.2 Context & Purpose	1
1.3 Scope of Works	1
1.4 Limitations.....	2
2.0 SITE CONTEXT & DATA REVIEW.....	3
2.1 Site information.....	3
2.2 Environmental Setting	4
2.3 Historical Use of the Site & Surrounding Area	5
2.4 Environmental Database Review	6
2.5 Planning Review / Regulatory Enquiries	7
2.6 Previous Reports	8
3.0 CONCEPTUAL SITE MODEL	10
3.1 Introduction	10
3.2 Potential Contamination Sources	10
3.3 Potential Receptors	10
3.4 Potential Pathways	11
4.0 CONCLUSIONS & RECOMMENDATIONS	14
4.1 Geo-Environmental Considerations	14

Figures

Figure 1 Site Features Plan

Appendices

Appendix A	Limitations
Appendix B	Risk Definitions
Appendix C	Proposed Development Plans
Appendix D	Site Photographs
Appendix E	Historical Maps
Appendix F	Landmark Envirocheck Report
Appendix G	Planning Information
Appendix H	Previous Reports

1.0 Introduction

1.1 Appointment

Delta-Simons Environmental Consultants Limited (“Delta-Simons”) was instructed by St James Place UK Plc c/o Orchard Street Investment Management LLP (the “Client”) to prepare a Preliminary Geo-Environmental Risk Assessment for vacant commercial properties located off Stone Close, West Drayton, UB7 8JU (the “Site”).

1.2 Context & Purpose

The aim of this report is to identify likely environmental issues associated with soil and groundwater conditions that may affect the proposed development of the Site. This report is designed in accordance with ‘the Model Procedures for the Management of Land Contamination (CLR 11)’ and the relevant Planning Practice Guidance (Land Affected by Contamination) <https://www.gov.uk/guidance/land-affected-by-contamination>.

The proposed development for the Site is the demolition of existing structures and the construction of a new vehicle servicing garage.

1.3 Scope of Works

- ▲ Review of the environmental setting of the Site, including the current use / status of the Site and surrounding area, and review of the geology, hydrogeology and hydrology;
- ▲ Review of regulatory information relating to the Site (A Landmark Envirocheck Report for the Site (Ref. 145679894_1_1), dated November 2017);
- ▲ Review of the historical activities of the Site and surrounding area from historical maps included as part of the Envirocheck Report;
- ▲ Review of the online planning records for the Site;
- ▲ Review Coal Authority (CA) online data;
- ▲ Consult and review information from the Local Authority in relation to Part 2A of the 1990 Environmental Protection Act;
- ▲ Complete a Site reconnaissance by undertaking a visual inspection of readily accessible areas of the Site;
- ▲ Review of provided relevant third-party reports relating to the Site or surrounding area;
- ▲ Develop an outline Conceptual Site Model and undertake a Preliminary Risk Assessment with respect to potential contamination focussed on the proposed land use; and
- ▲ Provide commentary on potential land contamination constraints in the context of the proposed development.

In completing this Assessment, Delta-Simons has utilised the following data sources and third-party information:

- ▲ British Geological Survey (BGS) data;
- ▲ Environment Agency (EA) online data;
- ▲ Information provided by the London Borough of Hillingdon Council; and
- ▲ Information provided by the Client team, including:
 - Phase I Environmental Assessment by WSP dated November 2010;
 - Phase II Environmental Assessment by WSP dated November 2010;
 - Amiantus Environmental Consultants Ltd. - Pre-Refurbishment & Demolition Asbestos Survey - Unit 501 (ref: J001056 dated April 2017); and
 - Amiantus Environmental Consultants Ltd. - Pre-Refurbishment & Demolition Asbestos Survey - Unit 504 (ref: J001057 dated April 2017).

1.4 Limitations

The standard limitations associated with this assessment are presented in Appendix A. In addition, there are the following specific limitations that apply to this assessment:

- ▲ The Consultant undertaking the Site inspection has observe for evidence of invasive species, particularly Japanese Knotweed. It should be noted however that the Consultant is not a trained ecologist and a separate survey undertaken by an experienced Ecologist should be completed to provide a robust assessment; and
- ▲ The report includes a preliminary assessment for the potential for radon gas hazards. A detailed radon assessment falls outside of the scope of this report, and the requirement for radon mitigation measures in the proposed development should be identified separately to the satisfaction of the London Borough of Hillingdon Council Building Control.

2.0 Site Context & Data Review

2.1 Site information

 Contains OS data ©, Crown Copyright and Database Right (2017) Contains Data from, © 2017 Landmark Information Group Ltd		 Contains Data from, © 2017 Getmapping Plc Contains Data from, © 2017 Landmark Information Group Ltd	
Site Location		Current Site Layout	
Co-ordinates	Centred approximately at National Grid Reference 506950, 180320.	Elevation	31 m AOD
		Area	0.47 Ha
Site Location	The Site is located off Stone Close, in the north of West Drayton.		
Proposed Development Description	The proposed development for the Site comprises the demolition of the existing structures and the construction of a vehicle servicing facility including workshop areas, a MOT test bay, a tyre bay, parts storage area; customer reception and office area; and a drive through reception area. The current development plan is provided as Appendix C.		
Current Site Use	Delta-Simons conducted a Site visit on 17th November 2017. A relevant Feature Plan is included as Figure 1 and a photographic log is presented as Appendix D. Pertinent information that was observed or reported on-Site is summarised as follows: ▲ The Site comprises two vacant light industrial units with integral office space, service yard; and limited soft landscaping. Anecdotal evidence and observations on Site indicate that the Site's former use was associated with vehicle body repairs; ▲ The Site was secured by metal fencing and barriers, preventing vehicle access to the Site. A manual entrance gate was present in the south-west of the Site providing access to the southern car park area; an inoperative motorised gate was present at the western boundary providing access to the central service yard; and locked bollards were present at the northern boundary providing access to the northern yard area. Concrete security blocks were placed at each access point, in addition, members of the public were noted to be parked around the whole western and northern boundaries of the Site preventing access from Stone Close; ▲ A compressor room was present on the northern elevation of the northern unit; ▲ A possible interceptor and suspected former plant housing (wooden enclosure on the northern elevation) was also present to the north of the northern unit;		

	▲ An oil tank was present at the eastern elevation of the southern unit. The tank was situated within a bund and no evidence of the loss of product was observed in the area. The tank fill point was present to at the northern elevation of the southern unit, with the pipework running above ground on the inside of the unit to the tank. Minor staining on the wall was observed at the fill point; ▲ Four spray booths were present in the south of the northern unit, ▲ A former vehicle wash was also present in the north-eastern area of the northern unit; ▲ No evidence of underground tanks such as vent pipes or former dispensing pumps were observed; and ▲ No obvious evidence of Japanese Knotweed was observed.	
Current Surrounding Area	North	Light industrial units.
	East	Light industrial units and residential housing.
	South	Residential housing.
	West	Light industrial units.

2.2 Environmental Setting

Published Geology	From the British Geological Survey (BGS) mapping provided as part of the Envirocheck® Report, the Site is indicated as being underlain superficial Lynch Hill Gravel Member (sand and gravel) over the solid geology of the London Clay (clay, silt and sand). The London clay is anticipated to be underlain by Reading Beds and Chalk at depth. The Site and wider area is shown to be situated upon Made Ground.
Specific Ground Conditions	A previous ground investigation report produced by WSP in 2010 for a wider area (discussed in Section 2.6) indicates the following geological sequence: ▲ Made Ground, comprising variable granular and cohesive materials with inclusions of brick, concrete, wood, flint, clinker, coal and ash; to depths of between 0.8 and 5.65 m bgl (proven to 2.4 m on Site); ▲ Discontinuous River Brickearth comprising clayey silt ranging in thicknesses of between 0.8 and 1.0 m; ▲ Sandy and gravels and gravelly clays (with cohesive materials identified in the borehole on Site); and ▲ London Clay was encountered in two boreholes off Site at 6.0 to 6.2 m bgl. It is noted that London Clay was not encountered within the drill depth of 4.2 m in the borehole on Site. BGS borehole record TQ08SE235 located 83 m to the south-west of the Site indicates that the London Clay is present to 34 m bgl, with the Reading Beds present to 57 m bgl.
Hydrogeology	The EA classify the superficial deposits (Lynch Hill Gravel Member) as a Principal Aquifer and the bedrock (London Clay) as Unproductive Strata.

	The Chalk at depth beneath the Site are understood to be classified as a Principal Aquifer, however, this is not considered to be at risk of impact from contamination at the Site given the thickness of the low permeability London Clay. The EA data also indicates that the Site is not in a designated groundwater Source Protection Zone. According to the Envirocheck® Report, the closest groundwater abstraction to the Site is listed 478 m to the east of the Site associated with 'make-up or top up water' at a business park. A previous ground investigation report produced by WSP in 2010 for the wider area, indicates that groundwater was recorded at depths ranging from 1.31 m to 4.91 m bgl.
Hydrology	The nearest surface water feature is the Grand Union Canal located approximately 230 m to the south of the Site (which is likely to be lined). An unnamed stream / drainage ditch is also listed approximately 470 m to the east. According to the Envirocheck Report, there are no licensed abstraction records from surface water located within 500 m of the Site. There are no discharge consents or pollution incidents to controlled waters listed within 250 m of the Site.
Coal Mining	Reference to the Coal Authority on-line viewer indicates that the Site is not with a Coal Mining Reporting Area, and is not within a Development High Risk Area. Consequently, a Coal Mining Risk Assessment (CMRA) is unlikely to be required under the planning regime.
Radon Gas	The Site lies within an area where less than 1% of homes are above the National Radiological Protection Board (NRPB) recommended "action level" for radon. The BGS National Geoscience Information Service indicates that no radon protective measures are necessary in the construction of new buildings at the Site.

2.3 Historical Use of the Site & Surrounding Area

Approach	The historical development of the Site and surrounding area has been assessed through a review of available historical OS maps and Google Earth historical satellite imagery. A summary of the key historical Site uses and developments in the surrounding area is presented below. Copies of pertinent historical maps are included as Appendix E.
Historical Features On-Site	The Site appears to have been in agricultural use until 1960 mapping where a wider unspecified feature encroaches the west of the Site. By 1965 mapping, the Site is shown to be developed by an unspecified works, with a main unit in the centre of the Site and a smaller unit encroaching the north. A potential tank feature is shown it the south-west of the Site. By 1975 mapping, the Site is shown in its contemporary layout, which is denoted as an engineering works, and later as warehousing and works on 1978/1979 mapping. A review of aerial imagery provided by Google Earth between 1999 and 2017 shows the Site in its contemporary layout with no discernible changed identified.
Potentially Contaminative Historical Features Off-Site	Potential sources of contamination identified within 100 m of the Site include: ▲ A brick field shown 80 m to the south of the Site from 1864 to 1878 mapping (likely infilled post this period); ▲ Gravel pits with associated rail sidings shown 90 m to the east of the Site from 1895 to 1960 mapping (likely infilled post this period);

	▲ A tramway and associated sheds shown 80 m to the east from 1935 to 1960 mapping; ▲ A regulator and instrument works shown 90 m to the west from 1935 to 1960 mapping; ▲ A concrete works shown 40 m to the south from 1935 to 1975 mapping; ▲ A barge repair works shown 95 m to the south of the Site from 1935 to 1960 mapping; ▲ Several unspecified works units from adjacent to the east and north from 1965 to current mapping (which have been redeveloped for similar uses over the period); ▲ A depot shown 40 m to the east from 1965 to current mapping; ▲ A works shown 60 m to the east from 1965 to current mapping; ▲ Unspecified works units shown to the 40 m to the south from 1965 to current mapping; ▲ Warehousing shown adjacent to the east from 1975 to current mapping; and ▲ Several light industrial units shown 50 m to the south west from 1979 to current mapping.
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2.4 Environmental Database Review

Approach	The Landmark Envirocheck® Report provides a database of environmental information held by various statutory bodies including the EA, Local Authority (LA), Health & Safety Executive (HSE) and HPA amongst others. A full copy of the Envirocheck® Report is provided in Appendix F and the most relevant information is summarised below.
Features On-Site	The Landmark Envirocheck® Report lists an area of potentially infilled land to encroach the south-west of the Site associated with an unknown pit/quarry. It is noted that this feature is not identifiable on available historical mapping. While listed 20 m to the north-east of the Site, a Local Authority air pollution control permit for the respraying of road vehicles is listed for the Simpson Group (former tenant). With the exception of the historical works (as identified in the historical mapping review), there are no further pertinent entries relating to the Site.
Potentially Contaminative Features Off-Site	Pertinent entries included within the Landmark Envirocheck® Report located within 250 m from the Site include: ▲ A Water Industry Act referral listed 101 m to the south east for the discharge of Special Category effluents under the Trade Effluents (Prescribed Processes and Substances) Regulations. The entry is listed as 'not yet authorised'; ▲ A BGS recorded landfill is listed 150 m to the east of the Site, known as Stockley Road Tip. No further information is available; ▲ Two historical landfills are listed 110 m to the east (Stockley Park West) and 111 m to the south-east (Stockley Trident). Stockley Park West is listed to have accepted inert, industrial, commercial, household, special waste, and liquid sludge between December 1921 and March 1993. Stockley Trident is reported to have accepted inert waste between December 1928 and August 1993; ▲ Three former BGS recorded mineral sites are listed 105 m to the south (common clay and shale opencast); 177 to the north); and 225 to the north-east (sand and gravel open cast);

	▲ 66 contemporary trade directory entries, with entries within 100 m including door manufacturers; care body repairs; car customisation & conversion specialists; freight forwarders; electronic engineers; airfreight services; precision engineers; ventilators & ventilation systems; car dealers; air conditioning & refrigeration contractors; printers; garage services; and pharmaceutical manufacturers & distributors; and ▲ Several areas of potentially infilled land are also listed.
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2.5 Planning Review/Regulatory Enquiries

On-line Planning Portal	London Borough of Hillingdon	Date Accessed	15/11/2017
Findings	<u>54822/APP/2000/424</u> - Erection of a maximum of 10,000 square metres of industrial and warehouse accommodation (use classes b1(b) research and development, b1(c) light industry, b2 general industrial and b8 storage or distribution) and associated vehicle parking for 160 cars (involving demolition of existing buildings) (outline application). The application was granted consent March 2003. No supporting information is available to view. <u>54822/APP/2003/718</u> - Erection of 3 buildings and associated car parking for use as a car dealership, including car sales showroom, storage, car service workshop, pre-delivery inspection and valeting accommodation. The application was granted consent in February 2004. No contaminated land conditions were set. A copy of the consent is reproduced as Appendix G.		
Part 2A of the Environmental Protection Act (EPA) 1990	The Contaminated Land Officer (CLO) at Hillingdon Borough Council has been contacted with regards to the status of the Site with respect to Part 2A of the EPA. At the time of writing a response was awaited. Given the known Site history, it is considered likely that the Site has been identified as potentially contaminated land; however, given the low sensitivity use, considered unlikely to be a high priority for inspection. It would be expected that the Council would use the planning process as a tool for determination and apply contaminated land investigation conditions to any planning consent for redevelopment of the Site.		
Historical Local Authority Consultation	The WSP 2010 Desk study makes reference to a previous enquiry with the Local Authority for a wider area. Pertinent points are summarised below: ▲ Two recorded landfill sites in the vicinity of the Site were remediated as part of the Stockley Park Development. The contaminated fill was removed from the area of the office developments proposed for the southern landfill area and placed under the golf course to the north, with the worst of the fill landfilled offsite. Inert fill material was imported to fill in the excavations to the south. ▲ Remediation works at Stockley Park included leachate and gas collection including the use of a gas flare for the area containing the more biodegradable wastes below Stockley Golf Course. Most recent monitoring reports for the golf course suggest that although there are still high levels of gas, the flow rates are too low for the continued use of the gas flare. ▲ There are likely to be contamination issues at the Site and surrounding area due to its industrial history. Generally, site investigations in other industrial sites in the area have indicated Made Ground some of which has been contaminated or there have been instances of hydrocarbon contamination where fuel oil stored had leaked.		

	▲ The former Sipson Coach Works (on Site), had an authorisation for the respraying of road vehicles (PG6/34b(06)), and to the south east of the wider site was Hansons, which had authorisations for a roadstone coating process (PG13a(04)) and Blending, Packing, Loading, Unloading and Use of Bulk Cement (PG3/01(04)).
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2.6 Previous Reports

List of Reports	Delta-Simons has obtained the following reports relating to the Site: ▲ Phase I Environmental Assessment by WSP dated November 2010; ▲ Phase II Environmental Assessment by WSP dated November 2010; ▲ Amiantus Environmental Consultants Ltd. - Pre-Refurbishment & Demolition Asbestos Survey - Unit 501 (ref: J001056 dated April 2017); and ▲ Amiantus Environmental Consultants Ltd. - Pre-Refurbishment & Demolition Asbestos Survey - Unit 504 (ref: J001057 dated April 2017). Copies of these reports are appended as Appendix H.
WSP Phase I (2010)	The assessment relates to a wider area including land off Site to the north, east and west. The report also includes a review of the following documents (not seen by Delta-Simons): ▲ WSP Environmental Ltd. (May 1999). Phase I Environmental Audit; Stone Close / Horton Road, West Drayton. Ref. 90422L. ▲ WSP Environmental Ltd. (June 2006). Post Construction Environmental Audit BMW, Stone Close, West Drayton, Middlesex, Slough Estates International. Ref. 12040287/002. ▲ WSP Risk Management Services. (March 2004). Pre-demolition Hazardous Materials Survey, Units 489, 490, 499, 507 & 512/513 Stone Close, West Drayton. Ref: 35050879; ▲ WSP Environmental Ltd. (January 2004). Phase II Geotechnical and Environmental Investigation. Ref: 12040287/001; and, ▲ R. Collard Ltd. (October 2005). Waste consignment notes. The units associated with the Site are referred to as Unit 501 and 504. Pertinent information from the assessment is summarised below. ▲ A bunded diesel above ground tank (AST), was located to the rear of unit 0501 (southern unit), no surface staining was reported; ▲ Four 'Junair' vehicle respraying units were observed in unit 0504 (the northern unit on Site); ▲ Two unbunded motor oil storage tanks were observed in the car parking area of unit 2004 (off Site to the north-east), one of which appeared to be leaking; ▲ Unit 508 (adjacent to the east of the Site) was formerly occupied by a light engineering company. A diesel tank to the rear of the unit showed signs of staining; and reportedly the tank had rusted through resulting in a loss in diesel fuel. A chemical storage shed for Metaclean Solvo, a degreaser, was also located to the rear of the unit; ▲ Unit 502 (adjacent to the north-east of the Site) was occupied by Henderson Bostwick, manufacturers of garage doors. A car park to the rear of the unit contained an above ground tank for the storage of diesel fuel. Reportedly the tank had rusted through resulting in a loss of diesel fuel;

	▲ Unit 0488 (off Site to the north-east) was occupied by Hookes Wholesale. Three above ground storage tanks were located adjacent to the eastern side of the unit; ▲ Unit 0507 (off Site to the north-east) was occupied by Robins Motors, a garage mechanics for repair and respraying of motor vehicles. An un-bunded storage tank with associated hydrocarbon stains was observed in the forecourt area of the unit; ▲ Ground investigation off-Site to the west (at Units 505, 506 and 507) identified elevated hydrocarbons and asbestos in localised shallow soils. Gas monitoring of this area off Site recorded gas concentrations and flow rates representative of CIRIA Characteristic Situation 1; and ▲ During redevelopment of some of the surrounding units, 409 tonnes of Japanese Knotweed impacted soils; 1,211 tonnes of asbestos containing concrete; and 2,000 gallons of oil and water was disposed of off Site.
WSP Phase II (2010)	The report provides information on a ground investigation conducted in the wider area to support the divestment of the associated plots. The investigation comprised the drilling of eight dynamic sampling boreholes to a maximum depth of 7.5 m bgl (one of which was located on Site); and a return visit for gas and groundwater monitoring. <i>It is noted that the on-Site monitoring well appears to have been destroyed as this was not identified during the recent Site visit.</i> Pertinent information from the report is summarised below: ▲ While no visual or olfactory evidence of contamination was identified on Site, evidence of hydrocarbon impact was identified in boreholes to the north and north-east; ▲ With the exception of lead and 1,1-dichloroethane in one location off Site, none of the contaminant concentrations exceeded the human health screening values adopted by WSP; ▲ Elevated dissolved phase PAH and trichloroethene (TCE) were identified in groundwater in the wider area; and elevated ammonia was recorded across the wider area when compared to the adopted screening value of 1,000 µg/l (ranging in concentrations of 840 µg/l to 17,920 µg/l, with 685 µg/l recorded on Site); ▲ Ground gas monitoring recorded generally low concentrations of ground gas, with a maximum methane concentration of 0.1 % by volume and a maximum carbon dioxide concentration of 6.9 % by volume (0.1 % by volume on Site). No recordable flow rates were reported. It is noted that the atmospheric pressure was 1010mb during the single monitoring visit. The WSP report concluded a low overall risk with regards to ground contamination and associated environmental liabilities. However, WSP state that should there be any future development or a change in land use, an additional ground investigation with continued groundwater and ground gas monitoring is likely to be required by the regulatory bodies.
Amiantus Asbestos Surveys (2017)	The reports relate to surveys conducted at both units in 2017. In summary, several low risk items were identified which were recommended to be removed as part of the demolition works. However, the following medium risk items were identified: ▲ Insulation board to the fire door at Unit 501; ▲ Cement debris external to the rear of Unit 501; ▲ Insulation board at the rear wall of the warehouse Unit 504; and ▲ Insulation board in the ceiling of the store room in the Unit 504.

3.0 Conceptual Site Model

3.1 Introduction

A Conceptual Site Model (CSM) represents the relationships between contaminant sources, pathways and receptors, to support the identification and assessment of Possible Pollutant Linkages (PPL).

3.2 Potential Contamination Sources

Potential sources of contamination identified as part of the desktop review are presented in the following table:

Ref	Source	Location	Dates Present	Potential Associated Key Contaminants of Concern
S1	Potential Made Ground.	Site-wide	1960s to present	Asbestos, heavy metals, hydrocarbons, PAHs and ground gas
S2	Remnant oil tank and former fill point.	Eastern elevation and northern elevation of southern unit	1970s to present	Hydrocarbons and PAH
S3	Potential historical oil / fuel tank.	West of the Site	1960s	Hydrocarbons and PAH
S4	Former spray booths.	Southern area of the northern unit	Assumed 1980s to present	VOC's
S5	Compressor units and assumed interceptor.	Northern elevation of the northern unit.	Assumed 1970's present	Hydrocarbons and PAH
S6	Vehicle wash	In the north of the northern unit.	Assumed 1980s to present	Hydrocarbons
S7	Potential filled ground.	South-west of the Site	1960s to present	Asbestos, heavy metals, hydrocarbons, PAHs
S7	Surrounding industrial uses and former land fill	All compass directions (industrial land use) and east (landfills)	1960s to present	Heavy metals, hydrocarbons, PAHs, VOC's and ground gas.

* Based on UK Department of the Environment Industry Profiles

3.3 Potential Receptors

Relevant potential receptors are considered to include:

- ▲ R1 - Construction workers.
- ▲ R2 - Third parties during construction (adjacent Site users and adjacent residents).
- ▲ R3 - Future Site users and maintenance workers.
- ▲ R4 - The underlying gravel aquifer.

▲ R5 - The Built Environment (new buildings and infrastructure / utilities).

The Grand Union Canal located approximately 230 m to the south of the Site is not considered to be a plausible receptor given distance from the Site.

3.4 Potential Pathways

The potential pathways are considered to be as follows:

- ▲ P1 - Direct contact, ingestion or inhalation of soil bound contaminants / dust during or following redevelopment.
- ▲ P2 - Inhalation of organic vapours associated with contamination.
- ▲ P3 - Migration of ground gas / vapours into on-site buildings causing asphyxiation or risk of explosion.
- ▲ P4 - Leaching of contamination into groundwater followed by migration of groundwater to the wider groundwater environment or discharge to surface waters.
- ▲ P5 - Direct contact between aggressive ground conditions and new infrastructure.

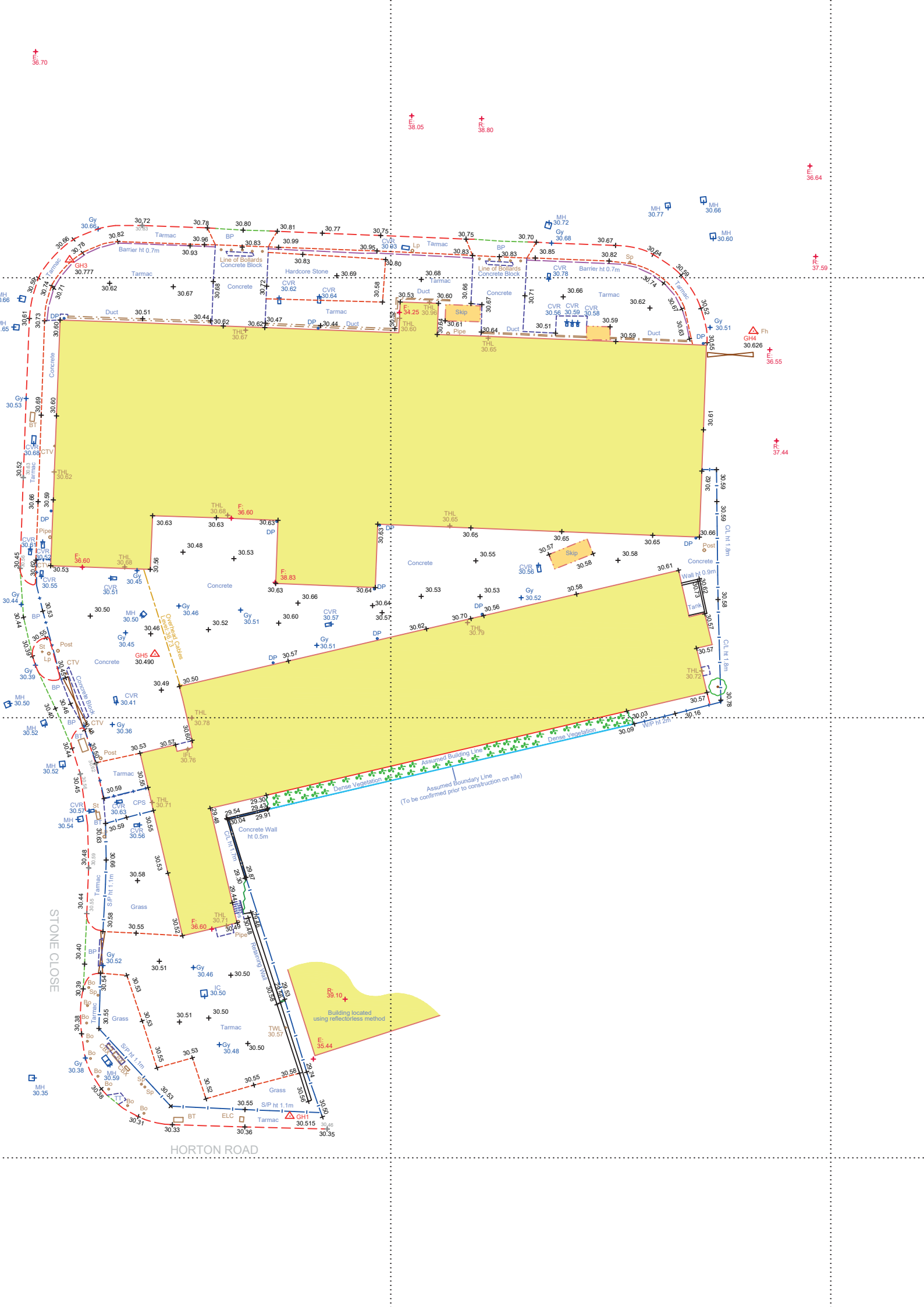
Source	Pathway(s)	Receptor(s)	Risk Ratings	Justification & Mitigation (if required)
S1, S2, S3, S4, S5, S6, S7	Direct contact/ ingestion and inhalation of dust, vapours and asbestos fibres.	Future Site users. Groundworkers during the redevelopment or during any sub-surface maintenance works.	Low / Moderate Risk	Given the Sites former use, the potential for relatively localised contamination cannot be discounted. A limited environmental investigation is recommended at the time of any geotechnical assessment to advise on the soil quality beneath the Site. A 'hotspot' protocol should be in place during the redevelopment for ground workers to act upon should suspected contamination be identified. A clean layer of certified suitable for use topsoil may be required in landscaped areas, if proposed. It is likely that the entire development area will be covered in buildings/hardstanding as such, the risk to future site users coming in to contact with contamination is considered low. Groundworkers should use appropriate personal protective equipment (PPE), including respiratory protective equipment (RPE) if required; and maintain good standards of hygiene to be protected from any soil contamination which may be present.
	Leaching of contamination into groundwater. Vertical and lateral migration of contamination through permeable deposits below the Site.	Controlled waters.	Low/Moderate Risk	Given the Sites former use, the potential for relatively localised contamination cannot be discounted. A limited environmental investigation is recommended at the time of any geotechnical assessment to advise on the soil quality beneath the Site.
	Direct infiltration in water supply pipes.	Service conduits.	Low / Moderate Risk	It is considered prudent to undertake hydrocarbon testing of the shallow soils at the time of any environmental investigation to provide recommendations for the upgrading of any potable service pipes.
	Lateral migration and subsequent indoor inhalation of volatile vapours.	Future Site users.	Low / Moderate Risk	The Site is located within a wider former industrial area. Previously undertaken limited intrusive investigation across the wider area has identified relatively localised groundwater contamination. A limited environmental investigation is recommended at the time of any geotechnical assessment to assess the risk of potentially contaminated groundwater migrating on to the development Site.

Source	Pathway(s)	Receptor(s)	Risk Ratings	Justification & Mitigation (if required)
Hazardous ground gas (Made Ground and landfill).	Accumulation of gas in enclosed spaces and sub-floor voids.	Buildings and future Site users.	Low/ Moderate Risk	As Made Ground has been identified in the wider site area it is recommended that ground gas monitoring and assessment is undertaken at the time of any environmental assessment. However, based on available information, it would be anticipated that only basic gas protection would be required for any new development.

4.0 Conclusions & Recommendations

4.1 Geo-Environmental Considerations

Summary	The Site comprises a vacant former vehicle body repair facility, with an associated former oil tank in the east, spray booths in the north, vehicle wash in the north, and remnant ancillary equipment. Historically, the Site remained largely undeveloped until 1965 mapping, where the Site is shown to be developed by an unspecified works, with a main unit in the centre of the Site and a smaller unit encroaching the north. By 1975 mapping, the Site is shown in its contemporary layout, which is denoted as an engineering works, and later as warehousing and works. Light industrial land use and landfilling has been identified in the surrounding area. Ground investigation of the wider area has identified relatively localised contamination. The proposed development for the Site comprises the demolition of the existing structures and the construction of a vehicle servicing facility including workshop areas, a MOT test bay, a tyre bay, parts storage area; customer reception and office area; and a drive through reception area. Based on the available information, it is anticipated that the Site is likely underlain by a sequence of Made Ground; cohesive River Brickearth; granular and potentially cohesive Lynch Hill Gravel Member (Principal Aquifer); over London Clay (Unproductive Strata). The nearest surface water feature is the Grand Union Canal located approximately 230 m to the south of the Site and no sensitive water abstractions are listed within close proximity to the Site.
Soils	The risk of the Site requiring widespread remediation to protect end users is considered to be low, although localised remedial measures, for example provision of a clean soil cover for proposed soft landscaping/hotspot removal may be required in areas of Made Ground. If contamination and/or ACMs are identified, then this may have an impact on waste disposal costs.
Groundwater	Significant widespread groundwater contamination is not anticipated based on the known Site history and available third-party ground investigation data (conducted on a wider area).
Ground Gas	Based on available information, it is considered unlikely that a significant ground gas risk exists although it would be prudent to allow for basic ground gas protection measures until monitoring data is available for interpretation.
Building Fabric & Services	Widespread contamination at the Site is considered unlikely. However, services are recommended to be placed in clean corridors. A drinking water pipeline assessment may be required following soils chemical results. Aggressive ground chemistry may attack buried concrete and therefore there may be a requirement for protection measures to be put in place at the Site.
Recommendations	It is recommended that a targeted environmental ground investigation is conducted in conjunction with a geotechnical investigation to verify design requirements for the proposed development. The identified asbestos containing materials within the current units should be removed from the Site prior to / during the demolition activities.





CERTIFICATE OF DIRECT PURGING OF GAS INSTALLATIONS TO IGE/UP/1A EDITION 2

Installation volume (IV) $\leq 1 \text{ m}^3$
Pipework diameter ($\varnothing$) $\leq 150 \text{ mm}$
MOP $\leq 40 \text{ mbar}$
Supply MOP $\leq 75 \text{ mbar}$
Natural Gas only

DP/UP/1A

CERTIFICATE NO

A 10527

CERTIFICATE REF:

OWNER OF INSTALLATION/CUSTOMER R Colado

TEL: _____ FAX: _____ email: _____

SITE NAME/OCCUPIER AND ADDRESS: Building 2, Stone Close, West Drayton, Uxbridge, 8HT

TEL: _____ FAX: _____ email: _____

DESCRIPTION OF INSTALLATION

Nomenclature

A, B, C, D are individual sections or components

☒ M = meter N = new E = existing

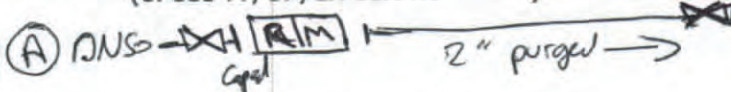
☒ V = valve • = capping

☒ R = regulator ☒ A = appliance

m = metallic PE = polyethylene

$\varnothing$ = pipe diameter

DIAGRAM OF INSTALLATION (or see TT/UP/1A Cert No)



REASON FOR PURGE:

TYPE OF GAS LEFT IN PIPEWORK AFTER PURGE: NATURAL GAS/AIR/NITROGEN

DETAIL TO BE RECORDED	SECTION A	SECTION B	SECTION C	SECTION D
MAXIMUM OPERATING PRESSURE (MOP) (mbar)	21			
OPERATING PRESSURE (OP) (mbar)	21			
PURGE VOLUME (PV)				
• meter(s) (m ³) (clause 6.9.1.)				
• pipework and components (m ³) (clause 6.9.1)				
• purge hose (m ³) (clause 6.9.1)				
• total (m ³)	0.236			
PURGE FLOW RATE (Q _p) (Table 9)	11			
MAXIMUM PURGE TIME (PT) = $\frac{PV(m^3) \times 3600}{Q_p}$ (sec s)	73			
PURGE RESULTS AND SUBSEQUENT ACTIONS	SECTION A	SECTION B	SECTION C	SECTION D
MEASURED PURGE VOLUME PASSED (m ³) OR PURGE VOLUME FLOW RATE (m ³ per hour) (clause 6.11.1 (b) or 6.11.2 (d))	11			
ACTUAL PURGE TIME (secs)	65			
VENT GAS (air to gas) % gas in sample	0% LEL			
VENT GAS (gas to air) % gas in sample (delete as required)	Yes			
WAS THE PURGE COMPLETE? (YES/NO) AND IF NO, WAS A PURGE TO NITROGEN CARRIED OUT AND IF YES, WAS THE PURGE REPEATED? (YES/NO) AND IF YES, STATE CERTIFICATE No FOR REPEAT PURGE				

PURGED BY (SIGNATURE): _____

GAS SAFE REGISTER No. (if applicable): 570 674

Hand top copy to the owner/customer. Retain copies required for records.

PRINT NAME: AS

COMPANY: MAG 16

DATE: 27/8/19

This certificate does not confer any kind of approval of an installation on behalf of IGEM. It confirms purge details used or obtained by installers when working to the Utilization Procedures IGE/UP/1A Edition 2. IGEM is not responsible for any errors or statements made in completing the details on the certificate, nor is it responsible for dealing with enquiries arising from completed certificates.



CERTIFICATE OF DIRECT PURGING OF GAS INSTALLATIONS TO IGE/UP/1A EDITION 2

DP/UP/1A

CERTIFICATE NO

A 10526

Installation volume (IV) $\leq 1 \text{ m}^3$
Pipework diameter ($\varnothing$) $\leq 150 \text{ mm}$
MOP $\leq 40 \text{ mbar}$
Supply MOP $\leq 75 \text{ mbar}$
Natural Gas only

CERTIFICATE REF:

OWNER OF INSTALLATION/CUSTOMER

R Collards

TEL: _____ FAX: _____

email: _____

SITE NAME/OCCUPIER AND ADDRESS:

Building 1, Stone Close, West Drayton, UB7 8HT

TEL: _____ FAX: _____

email: _____

DESCRIPTION OF INSTALLATION

Nomenclature

A,B,C,D are individual sections or components

☒ M = meter

N = new

E = existing

☒ V = valve

• = capping

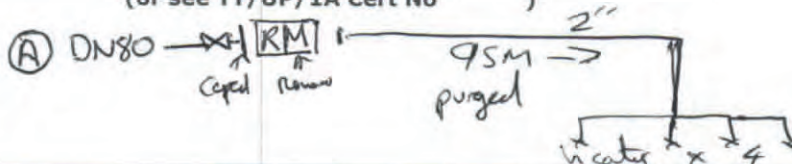
☒ R = regulator☒ A = appliance

m = metallic

PE = polyethylene

 $\varnothing$ = pipe diameter**DIAGRAM OF INSTALLATION**

(or see TT/UP/1A Cert No)

**REASON FOR PURGE:****TYPE OF GAS LEFT IN PIPEWORK AFTER PURGE: NATURAL GAS/AIR/NITROGEN****DETAIL TO BE RECORDED**

MAXIMUM OPERATING PRESSURE (MOP) (mbar)

SECTION A

SECTION B

SECTION C

SECTION D

OPERATING PRESSURE (OP) (mbar)

21

PURGE VOLUME (PV)

21

• meter(s) (m^3) (clause 6.9.1.)0.265
0.615
0.010
0.890• pipework and components (m^3) (clause 6.9.1)• purge hose (m^3) (clause 6.9.1)• total (m^3)PURGE FLOW RATE (Q_p) (Table 9)

11

MAXIMUM PURGE TIME (PT) = $\frac{PV(\text{m}^3) \times 3600}{Q_p}$ (sec s)

68

PURGE RESULTS AND SUBSEQUENT ACTIONS

SECTION A

SECTION B

SECTION C

SECTION D

MEASURED PURGE VOLUME PASSED (m^3) OR PURGE
VOLUME FLOW RATE (m^3 per hour) (clause 6.11.1 (b) or
6.11.2 (d))

11

ACTUAL PURGE TIME (secs)

69

VENT GAS (air to gas) % gas in sample

VENT GAS (gas to air) % gas in sample (delete as
required)

0% LEL

WAS THE PURGE COMPLETE? (YES/NO) AND

IF NO, WAS A PURGE TO NITROGEN CARRIED OUT AND

IF YES, WAS THE PURGE REPEATED? (YES/NO) AND

IF YES, STATE CERTIFICATE No FOR REPEAT PURGE

Yes

PURGED BY (SIGNATURE):

PRINT NAME:

A.S.

GAS SAFE REGISTER No. (if applicable):

570 674

COMPANY:

MAG Protection Services Ltd

Hand top copy to the owner/customer. Retain copies required for records.

DATE:

27/08/14

This certificate does not confer any kind of approval of an installation on behalf of IGEM. It confirms purge details used or obtained by installers when working to the Utilization Procedures IGE/UP/1A Edition 2. IGEM is not responsible for any errors or statements made in completing the details on the certificate, nor is it responsible for dealing with enquiries arising from completed certificates.

Design Calculations

Client: SHC HOARDING LTD

Project: Collard Stone Close west Drayton

Title: Hoarding Design

Cal Ref: 16-370-01

Reference Documents:

TWf2012: 01 Hoardings - A guide to good practice.

Revision	Date	Remarks
0	29/06/2019	First Issue

Design Brief:

A design for a 2.4m high timber hoarding with buried foundation posts.

Key Assumptions:

Soil assumed to be "average" as classified in TWf2012: 01.

Summary:

Use 75 x 150 C16 posts at max. 2.2m centres, with 4no. 100 x 50 C16 rails, buried into 400 x 400 x 800mm concrete foundations. For full details including connections see drawing CSH.16.370.01.

Significant Residual Risks:

None.

HOARDING DESIGN FOR TIMBER POSTS AND TIMBER RAILS WITH BURIED FOUNDATIONS

Client: SHC HOARDING LTD
Project:
Job Ref: 16-370
Date: 23/06/2019

These calculations are based on the recommendations of Temporary Works Forum Guide *TWf 2012:01 Hoardings - A guide to Good Practice*

Site Location:
 Site Altitude Source: OS map - Bing 35 m
 Hoarding Height 2.4 m
 Post centres 2.1 m
 Rail centres 0.8 m

Loading:

Wind loading, $V_{b,map}$ 22.5 m/s
 T_{wind} 1
 $S_{wind} = T_{wind} \times V_{b,map} \times (1 + (\text{Altitude}/1000))$ 23.29 m/s
 C_{prob} 0.83 m (0.83 if < 2 years, else 1.0)
 C_{ef} 1.06 Table B.1
 Peak Velocity Pressure, $q_p = 0.613 C_{2prob} C_{ef} S_{2wind}$ 243 N/mm²
 $C_{p,net}$ 1.4 Table B.2

Load Combinations:

LC1 = F_w LC3 = -LC1
 LC2 = F_{work} + Notional Horizontal Load LC4 = -LC2

Timber posts:

Maximum wind force, $F_w = q_p A_{ref} C_{p,net} \eta$ 0.816 kN / m length of hoarding
 Working wind force, $F_{work} = 200 A_{ref} C_{p,net} \eta$ 0.672 kN / m length of hoarding
 Notional Horizontal Load, acting 1.2m from the base 0.74 kN / m length of hoarding

LC1:
 Overturning moment, M_o 2.06 kNm
 Shear Force, V_o 1.71 kN

LC2:
 Overturning moment, M_o 3.56 kNm
 Shear Force, V_o 2.97 kN

Posts: 150 x 75 C16s
 b 75 mm $k_2 = 0.8$ (class 3)
 d 150 mm $k_3 = 1.75$ (very short term loading)
 z 382,813 mm³ $k_7 = 1.06$ (depth factor)

Permissible stresses 7.5 N/mm² $M_r = 4.27$ kNm

τ 0.71 N/mm² $V_r =$ 13.84 kN

Bending: Ok in Bending
Shear: Ok in Shear

Timber rails:

LC1:

Bending moment, M_o 0.150 kNm
Shear Force, V_o 0.285 kN

LC2:

Bending moment, M_o 0.327 kNm
Shear Force, V_o 0.420 kN

Rails: 100 x 50 C16s with bending about the minor axis

d 100 mm $k_2 =$ 0.8 (class 3)
b 50 mm $k_3 =$ 1.75 (very short term loading)
z 41,667 mm³ $k_7 =$ 1.22 (depth factor)

Permissible stresses

σ_b 5.3 N/mm² $M_r =$ 0.38 kNm
 τ 0.67 N/mm² $V_r =$ 5.71 kN

Bending: Ok in Bending
Shear: Ok in Shear

Face Material: 18 mm ply

LC1: (panel robustness loading = 1.5kN/m²)

Overturning Moment, M_o 0.120 kNm / m length of ply

LC2:

Overturning Moment, M_o 0.170 kNm / m length of ply

Permissible stress:

σ_b 7.24 N/mm² $M_r =$ 0.547 kNm / m

Bending: Ok in Bending

Connection of ply to rails:

Assumed Zone A for worst case scenario

$C_{p,net}$ 3.4 Table B.2

Maximum wind force, $F_w = q_p A_{ref} C_{p,net} \eta$ 0.660 kN / m length of ply

Working wind force, $F_{work} = 200 A_{ref} C_{p,net} \eta$ 0.544

Notional Horizontal Load, acting 1.2m from the base 0.74
1.284 kN / m length of ply

Nails .anular ring, 65mm long at 300 c/c

Length: 50 mm $k_{52} =$ 0.7 (class 3)
Centres: 300 mm $k_{53} =$ 1.25 (very short term loading)
Strength: 14.7 N/mm

Point Side Penetration, l 32 mm

Permissible load per meter 1.372 kN/m

Pull out: Ok nails ok in Pullout

Connection of rails to posts:

Assumed Zone A for worst case scenario, as above.

Maximum wind force, $F_w = q_p A_{ref} C_{p,net} \eta$ 1.387 kN / m length of ply

Working wind force, $F_{work} = 200 A_{ref} c_{p,net} \eta$ 1.142
 Notional Horizontal Load, acting 1.2m from the base 0.37
 1.512 kN / m length of ply

Screws: 3 no. nails ring shank, 100mm long

Length: 100 mm $k_{52} =$ 0.7 (class 3)
 Nails: 3 $k_{53} =$ 1.25 (very short term loading)
 Strength: 20.7 N/mm

Point Side Penetration, l 50 mm

Permissible load per meter 2.717 kN/m

Pull out: nails ok in Pullout

Foundations:

LC1:
 Overturning moment, M_o 4.54 kNm FOS = 1.5

LC2:
 Overturning moment, M_o 7.85 kNm FOS = 1.5

Ground classification: Average $G =$ 390 kN/m² Table D1

Depth: 0.8 m
 Width 0.40 m

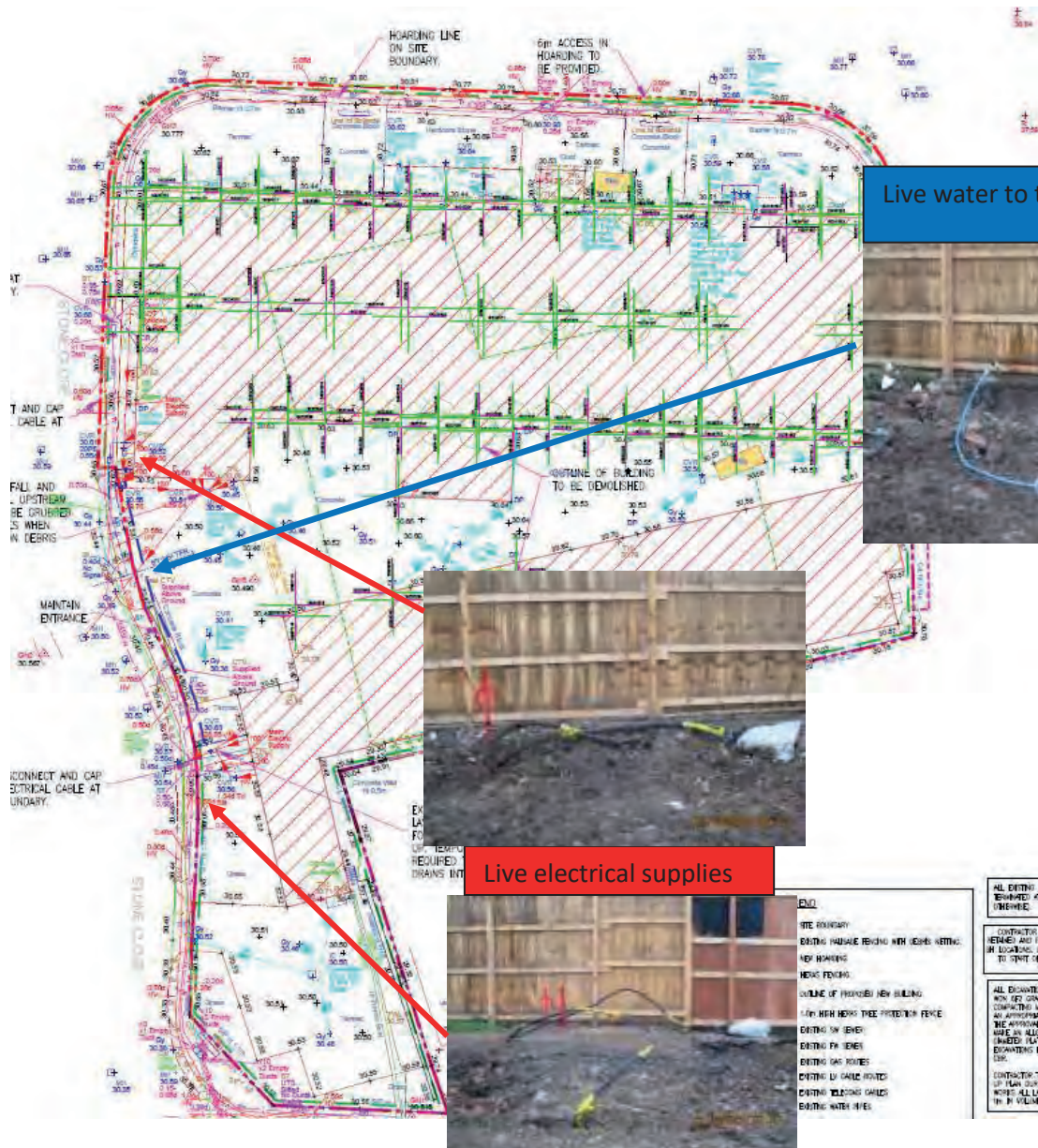
Ground Resistance, $M_g = G D P^3 / 10$ $M_g =$ 7.99 kNm

Overturning: Foundation OK against overturning

Table D1

Classification	G (kN/m ²)
Good	630
Average	390
Poor	230

Live services remaining on site at PC – Stone Close C6194



Live water to the boundary



Live electrical supplies



END

SITE BOUNDARY

EXISTING PARADE FENCING WITH DEBRIS NETTING

NEW HOARDING

NEW FENCING

OUTLINE OF PROPOSED NEW BUILDING

6m NEW HOARDING PROTECTION FENCE

EXISTING SW DRAIN

EXISTING PA DRAIN

EXISTING GAS MAINS

EXISTING 150mm RIGID

EXISTING TELECOM CABLES

EXISTING WATER MAIN

ALL EXISTING SERVICES TO BE GROUBED UP

REMOVED AT THE BOUNDARY (UNLESS STA

UNREMOVED

CONTRACTOR TO ENSURE ALL SERVICES ON SITE

REMOVED AND PROTECTED. REFER TO ALL SER

IN EXISTING SCHEDULES/PLANS TO BE PLACED

TO STATE OF THE WORKS TO MAINTAIN ALL

LOCATIONS

ALL EXISTING SERVICES ARE TO BE FILLED WITH OR

NEW 150mm CONCRETE MATERIAL. ALLOW FOR

COMPACTING MATERIAL IN EXISTING LAYERS USE

AN APPROPRIATELY SIZED SUPPORTING MATERIAL

THE APPROVAL OF THE ENGINEER. CONTRACT

HAVE AN ALLOWANCE FOR UNDETERMINED (200

LIMITED PLACES TEST TO VERIFY LAYERS

EXISTING SERVICES HAVE BEEN PROFILED TO 100

100

CONTRACTOR TO RECORD LOCATIONS ON A WH

UP PLAN DURING THE COURSE OF THE WORK

WORKS ALL LAYERS EXISTING SERVICES TO

IN A PLANNING THAT HAVE BEEN PROVIDED



25/10/2019 07:25



25/10/2019 07:25



25/10/2019 07:25

25/10/2019 07:26



25/10/2019 07:27





25/10/2019 07:27



25/10/2019 07:33



25/10/2019 07:32



25/10/2019 07:32





25/10/2019 07:31



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25/10/2019 07:30



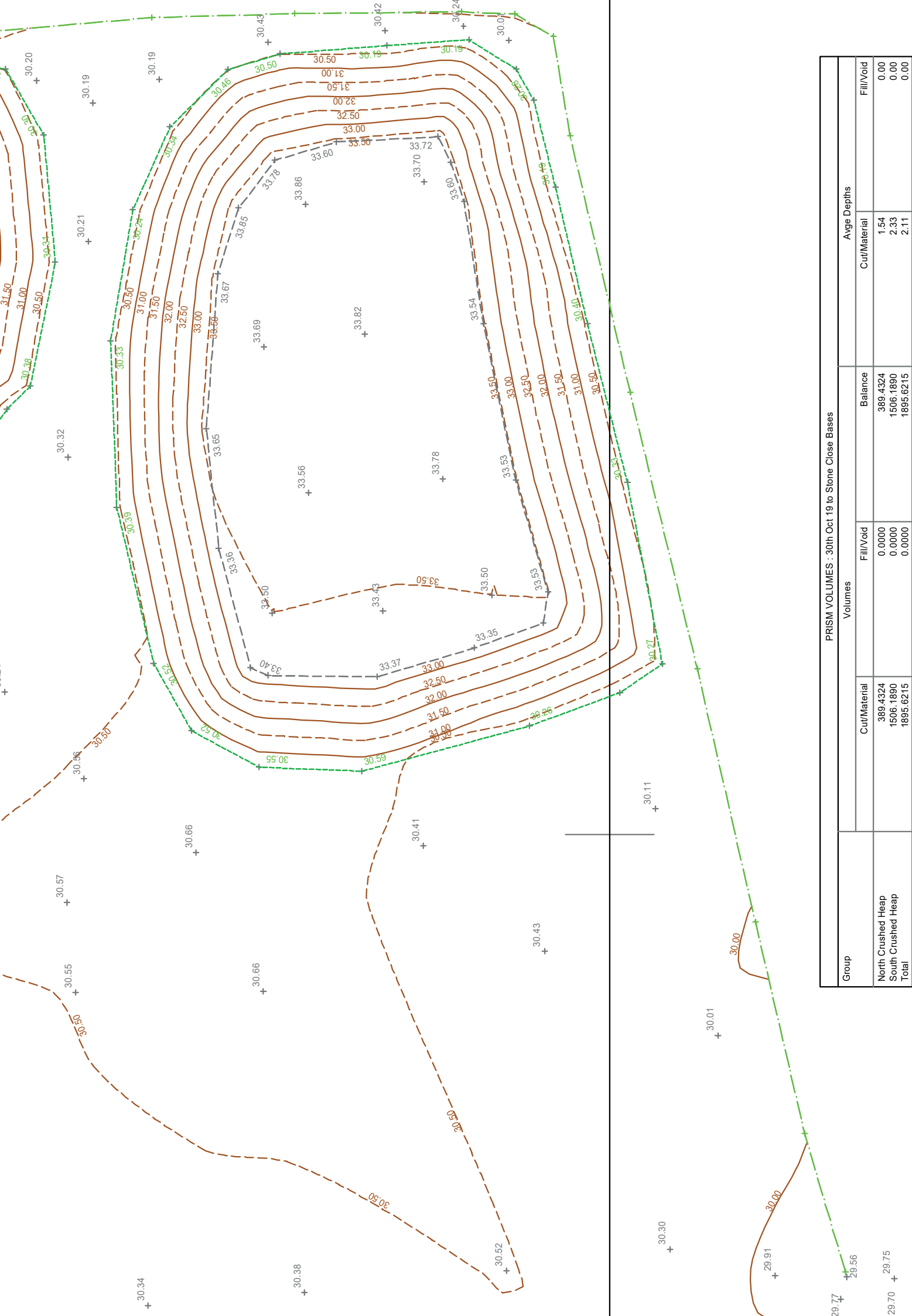
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25/10/2019 07:27





Stone Close, West Drayton
Week No. 3 dated 17th October 2019
Week Commencing 14/10/2019

Site Attendance

Date	DS Staff (Other Staff)
17.10.2019	Victor Gomez (John King - RCollard)

General Overview

- Delta Simons carried out the third monitoring visit at Stone Close.
- RCollard was carrying out screening of the won site material.
- A total of two (2No) samples were undertaken from the stockpiled won site material located in the southern part of the Site and sent to an UKAS accredited Laboratory for the following analysis: TPH CWG, BTEX, PAHs, Heavy Metals and Asbestos (RCollards have advised this material will be used to reinstate remediation excavation DS106)
- The eastern part of the Site where asbestos was found has been swept for any potential ACM by asbestos specialists in the form of hand picking. This task has been completed during last week.
- Asbestos has been disposed off site by a specialist. Asbestos Specialists certificates are expected to be sent by RCollard to Delta Simons.

Remediation Activities

Any potential hotspot found on site will be reported to Delta Simons. None have arisen or been reported by RCollard this week. It is understood RCollards current programme to complete all demolitions by approximately 25th October 2019.

Discussions with Client/ DSM

N/A

Other Notes

Samples have been collected on 18th October 2019 AM time.

Plant on Site

- 2 no. 360 excavators; (active)
- 1no. Shovel

Recommended Actions/ Actions Completed

Action	By	Action Status	Complete/
Delta Simons would attend a further Site visit next week	Delta Simons	On going	
RCollard to provide Delta-Simons with waste transfer tickets for soils disposed of associated with DS106.	RCollard	Awaiting	
Analytical results for the DS106 (Validation Sampling) have been returned and attached to this note (Rep No. 19-64289) (Lab sample numbers 1322693, 1322694, 1322695, 1322696,	Note	Complete	

Delta-Simons Environmental Consultants Limited

20 Little Britain, London, EC1A 7DH. Switchboard: 0203 478 1167

1322697; Refs ES1, ES2, ES3, ES4 & ES5; DS106 02/10/2019). Comparison of these results to the Geo-Environmental Assessment (Aug 2018) commercial GAC indicates all parameters within limits/ no exceedances. Based on the visual description/ observations made 2 nd October 2019 and confirmatory testing, it is considered the DS106 hotspot excavation has been carried out successfully.		
Analytical results for the DS106 (excavated soils) have been returned and attached to this note (Rep No. 19-65025) (Lab sample numbers 136128 & 136129; Refs ES6 & ES7; DS106 08/10/2019).	Note	Complete
Analytical results for Area 1 & Area 2 potential hotspots have been returned and attached to this note (Rep No. 19-65025) (Lab sample numbers 136130 & 136131; Ref ES1; Area 1 & Area 2 08/10/2019). Comparison of these results to the Geo-Environmental Assessment (Aug 2018) commercial GAC indicates all parameters within limits/ no exceedances. Based on the visual description/ observations made 8 th October 2019 and confirmatory testing, it is considered these locations do not therefore represent unexpected ground conditions/ potential hotspots.	Note	Complete
Site won material which were to be used to infill the previous excavation at DS106 and reinstate the small voids created by the removal of the two manhole structures mentioned during week 2 need to be analyse for re-using.	RCollard	Delta Simons has taken 2 samples 17/10/2019 Results anticipated c. 25 th October 2019
Asbestos Specialists certificates	RCollard	Awaiting

Name	Signature	Position	Mobile	Email
Victor Gomez		Senior Consultant	07530 653653	Victor.gomez@deltasimons.com
Dan Webb		Unit Manager	07917 753687	Dan.webb@deltasimons.com

Photos

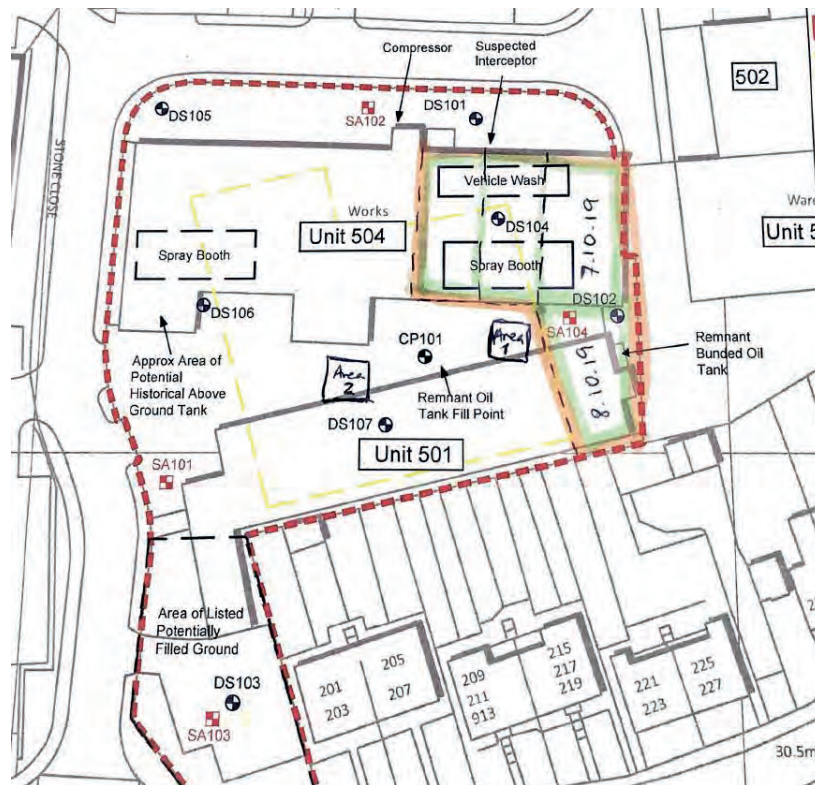


Fig 1. Plan of the Site showing current areas of work. Area 1 and 2 were the potential hotspots reported week 2. Asbestos concerned area is shown in orange. Divisions of asbestos area are shown in green.



Fig 2. Stockpiled won site material, located in the southern part of the Site.



Fig 3. RCollard carrying out screening of the won site material.



Fig 4. Northern part of the Site.



Victor Gomez
Delta-Simons
20 Little Britain
London
EC1A 7DH

t: 02034781168

e: victor.gomez@deltasimons.com



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 : 19-64289

Project / Site name:	Stone Close	Samples received on:	04/10/2019
Your job number:	17-0685.06	Samples instructed on:	04/10/2019
Your order number:	DS49992	Analysis completed by:	11/10/2019
Report Issue Number:	1	Report issued on:	11/10/2019
Samples Analysed:	5 soil samples		

Signed:

Katarzyna Lewicka
Head of Reporting Section
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.

Iss No 19-64289-1 Stone Close 17-0685.06

This certificate should not be reproduced, except in full, without the express permission of the laboratory.

The results included within the report are representative of the samples submitted for analysis.

Page 1 of 10



Analytical Report Number: 19-64289

Project / Site name: Stone Close

Your Order No: DS49992

Lab Sample Number				1322693	1322694	1322695	1322696	1322697
Sample Reference				ES1	ES2	ES3	ES4	ES5
Sample Number				DS106	DS106	DS106	DS106	DS106
Depth (m)				3.60-3.60	2.50-2.60	2.50-2.60	2.50-2.60	2.50-2.60
Date Sampled				02/10/2019	02/10/2019	02/10/2019	02/10/2019	02/10/2019
Time Taken				None Supplied	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
Moisture Content				%	N/A	NONE	16	22
Total mass of sample received				kg	0.001	NONE	1.5	1.4

Monoaromatics & Oxygenates

Benzene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
p & m-xylene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
o-xylene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	8.9
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	96
TPH-CWG - Aliphatic >EC35 - EC40	mg/kg	10	NONE	< 10	< 10	< 10	< 10	13
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	110

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC35 - EC40	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10



Analytical Report Number: 19-64289

Project / Site name: Stone Close

Your Order No: DS49992

Lab Sample Number				1322693	1322694	1322695	1322696	1322697
Sample Reference				ES1	ES2	ES3	ES4	ES5
Sample Number				DS106	DS106	DS106	DS106	DS106
Depth (m)				3.60-3.60	2.50-2.60	2.50-2.60	2.50-2.60	2.50-2.60
Date Sampled				02/10/2019	02/10/2019	02/10/2019	02/10/2019	02/10/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Chloroethane	mg/kg	0.001	NONE	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Bromomethane	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vinyl Chloride	mg/kg	0.001	NONE	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Trichlorofluoromethane	mg/kg	0.001	NONE	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,1-Dichloroethene	mg/kg	0.001	NONE	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,1,2-Trichloro 1,2,2-Trifluoroethane	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cis-1,2-dichloroethene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,1-Dichloroethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
2,2-Dichloropropane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Trichloromethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,1,1-Trichloroethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,2-Dichloroethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,1-Dichloropropene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Trans-1,2-dichloroethene	mg/kg	0.001	NONE	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Benzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Tetrachloromethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,2-Dichloropropane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Trichloroethene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Dibromomethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Bromodichloromethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cis-1,3-dichloropropene	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Trans-1,3-dichloropropene	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Toluene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,1,2-Trichloroethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,3-Dichloropropane	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Dibromochloromethane	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Tetrachloroethene	mg/kg	0.001	NONE	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,2-Dibromoethane	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Chlorobenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,1,1,2-Tetrachloroethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Ethylbenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
p & m-Xylene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Styrene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Tribromomethane	mg/kg	0.001	NONE	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
o-Xylene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,1,2,2-Tetrachloroethane	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Isopropylbenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Bromobenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
n-Propylbenzene	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
2-Chlorotoluene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
4-Chlorotoluene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,3,5-Trimethylbenzene	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
tert-Butylbenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,2,4-Trimethylbenzene	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
sec-Butylbenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,3-Dichlorobenzene	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
p-Isopropyltoluene	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,2-Dichlorobenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,4-Dichlorobenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Butylbenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,2-Dibromo-3-chloropropane	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,2,4-Trichlorobenzene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Hexachlorobutadiene	mg/kg	0.001	MCERTS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,2,3-Trichlorobenzene	mg/kg	0.001	ISO 17025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010

Iss No 19-64289-1 Stone Close 17-0685.06

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The results included within the report are representative of the samples submitted for analysis.

Page 3 of 10



Analytical Report Number : 19-64289

Project / Site name: Stone Close

* 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 *
1322693	ES1	DS106	3.60-3.60	Light brown clay.
1322694	ES2	DS106	2.50-2.60	Brown clay and sand.
1322695	ES3	DS106	2.50-2.60	Light brown clay.
1322696	ES4	DS106	2.50-2.60	Brown clay.
1322697	ES5	DS106	2.50-2.60	Light brown clay.



Analytical Report Number : 19-64289

Project / Site name: Stone Close

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
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
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
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
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/cleanup.	L088/76-PL	W	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS

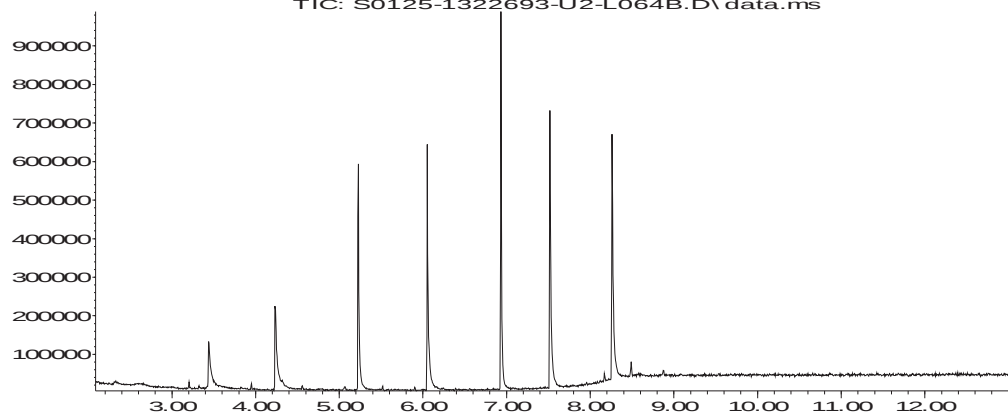
For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' 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.

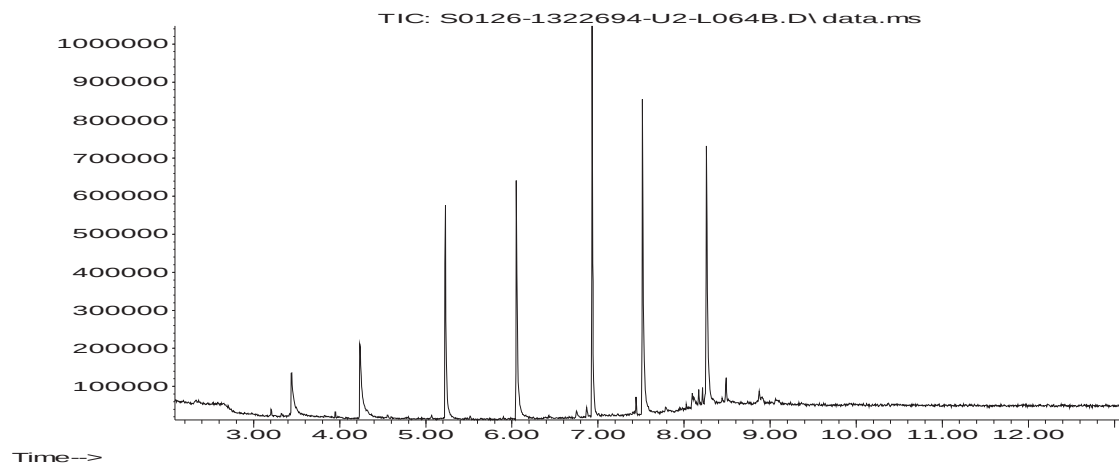
Abundance

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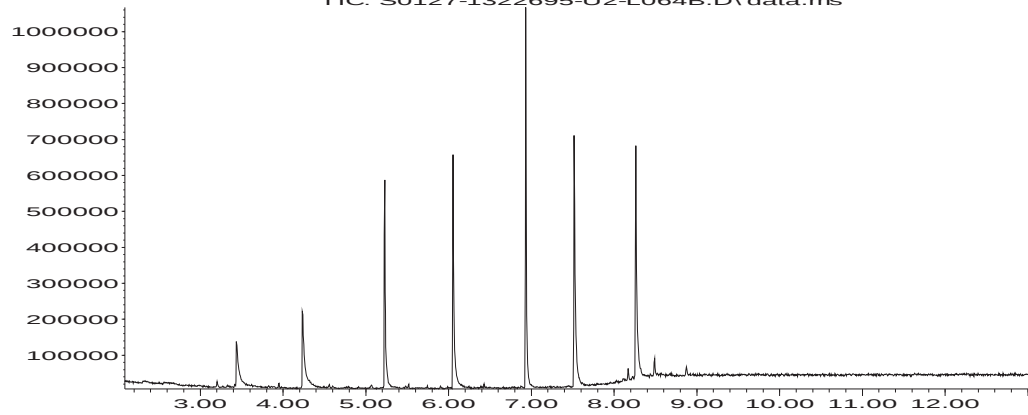
Time-->

Abundance

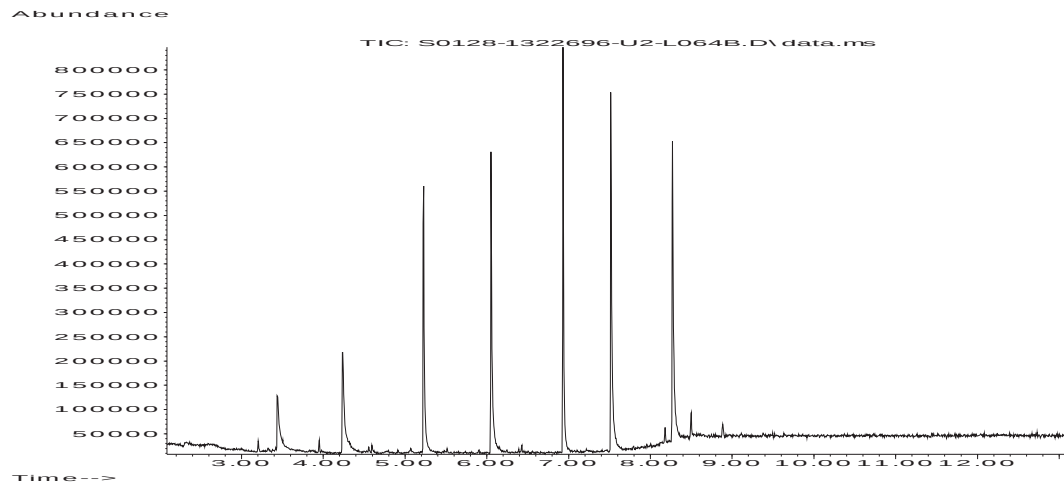


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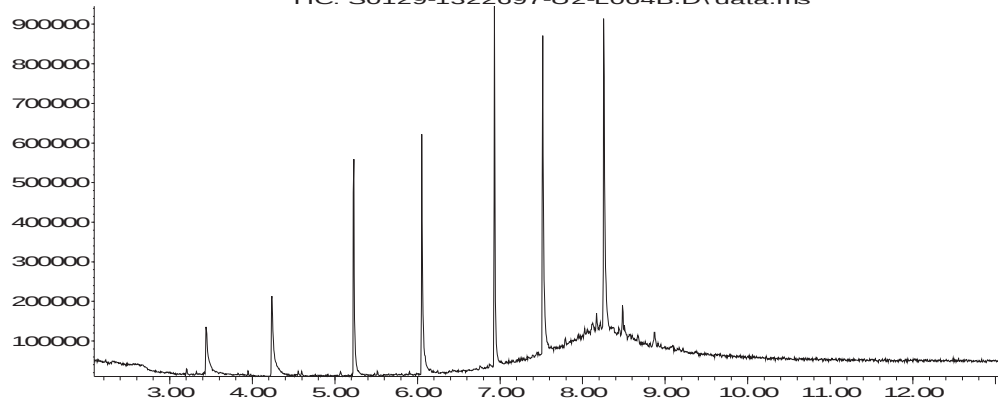


Time-->



Abundance

TIC: S0129-1322697-U2-L064B.D\data.ms



Time-->



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Analytical Report Number : 19-65025

Project / Site name: Stone Close

Samples received on: 09/10/2019

Your job number: 17-0685.06

Samples instructed on: 09/10/2019

Your order number: DS49992

Analysis completed by: 16/10/2019

Report Issue Number: 1

Report issued on: 16/10/2019

Samples Analysed: 4 soil samples

Signed: 

Rexona Rahman
Head of Customer Services
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

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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.

Iss No 19-65025-1 Stone Close 17-0685.06

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The results included within the report are representative of the samples submitted for analysis.

Page 1 of 10



Analytical Report Number: 19-65025

Project / Site name: Stone Close

Your Order No: DS49992

Lab Sample Number				1326128	1326129	1326130	1326131	
Sample Reference				ES6	ES7	ES1	ES1	
Sample Number				DS106	DS106	Area 1	Area 2	
Depth (m)				None Supplied	None Supplied	1.50-1.60	1.50-1.60	
Date Sampled				08/10/2019	08/10/2019	08/10/2019	08/10/2019	
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
Moisture Content				%	N/A	NONE	20	19
Total mass of sample received				kg	0.001	NONE	1.3	1.4

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	-	-	
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	8.0	-	-	
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	97	72	-	-	
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.049	0.036	-	-	
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	48.7	36.1	-	-	

Speciated PAHs

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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	-	-	
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.6	15	-	-	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	-	-	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	42	36	-	-	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	18	-	-	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	13	12	-	-	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	23	-	-	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	38	44	-	-	



Analytical Report Number: 19-65025

Project / Site name: Stone Close

Your Order No: DS49992

Lab Sample Number				1326128	1326129	1326130	1326131	
Sample Reference				ES6	ES7	ES1	ES1	
Sample Number				DS106	DS106	Area 1	Area 2	
Depth (m)				None Supplied	None Supplied	1.50-1.60	1.50-1.60	
Date Sampled				08/10/2019	08/10/2019	08/10/2019	08/10/2019	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

Monoaromatics & Oxygenates

Benzene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
Toluene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
Ethylbenzene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
p & m-xylene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
o-xylene	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	1.7	< 1.0	
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	11	< 2.0	
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	21	< 8.0	
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	53	< 8.0	
TPH-CWG - Aliphatic >EC35 - EC40	mg/kg	10	NONE	< 10	< 10	< 10	< 10	
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	87	< 10	

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1.8	
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	9.8	6.7	
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	27	29	
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	35	77	
TPH-CWG - Aromatic >EC35 - EC40	mg/kg	10	NONE	< 10	< 10	< 10	< 10	
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	73	110	



Analytical Report Number: 19-65025

Project / Site name: Stone Close

Your Order No: DS49992

Lab Sample Number				1326128	1326129	1326130	1326131	
Sample Reference				ES6	ES7	ES1	ES1	
Sample Number				DS106	DS106	Area 1	Area 2	
Depth (m)				None Supplied	None Supplied	1.50-1.60	1.50-1.60	
Date Sampled				08/10/2019	08/10/2019	08/10/2019	08/10/2019	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
VOCs								
Chloromethane	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
Chloroethane	mg/kg	0.001	NONE	-	-	< 0.0010	< 0.0010	
Bromomethane	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
Vinyl Chloride	mg/kg	0.001	NONE	-	-	< 0.0010	< 0.0010	
Trichlorofluoromethane	mg/kg	0.001	NONE	-	-	< 0.0010	< 0.0010	
1,1-Dichloroethene	mg/kg	0.001	NONE	-	-	< 0.0010	< 0.0010	
1,1,2-Trichloro 1,2,2-Trifluoroethane	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
Cis-1,2-dichloroethene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,1-Dichloroethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
2,2-Dichloropropane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Trichloromethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,1,1-Trichloroethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,2-Dichloroethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,1-Dichloropropene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Trans-1,2-dichloroethene	mg/kg	0.001	NONE	-	-	< 0.0010	< 0.0010	
Benzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Tetrachloromethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,2-Dichloropropane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Trichloroethene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Dibromomethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Bromodichloromethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Cis-1,3-dichloropropene	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
Trans-1,3-dichloropropene	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
Toluene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,1,2-Trichloroethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,3-Dichloropropane	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
Dibromochloromethane	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
Tetrachloroethene	mg/kg	0.001	NONE	-	-	< 0.0010	< 0.0010	
1,2-Dibromoethane	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
Chlorobenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,1,1,2-Tetrachloroethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Ethylbenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
p & m-Xylene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Styrene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Tribromomethane	mg/kg	0.001	NONE	-	-	< 0.0010	< 0.0010	
o-Xylene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,1,2,2-Tetrachloroethane	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Isopropylbenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Bromobenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
n-Propylbenzene	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
2-Chlorotoluene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
4-Chlorotoluene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,3,5-Trimethylbenzene	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
tert-Butylbenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,2,4-Trimethylbenzene	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
sec-Butylbenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,3-Dichlorobenzene	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
p-Isopropyltoluene	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
1,2-Dichlorobenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,4-Dichlorobenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Butylbenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,2-Dibromo-3-chloropropane	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	
1,2,4-Trichlorobenzene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
Hexachlorobutadiene	mg/kg	0.001	MCERTS	-	-	< 0.0010	< 0.0010	
1,2,3-Trichlorobenzene	mg/kg	0.001	ISO 17025	-	-	< 0.0010	< 0.0010	

Iss No 19-65025-1 Stone Close 17-0685.06

This certificate should not be reproduced, except in full, without the express permission of the laboratory.

The results included within the report are representative of the samples submitted for analysis.

Page 4 of 10



Analytical Report Number : 19-65025

Project / Site name: Stone Close

* 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 *
1326128	ES6	DS106	None Supplied	Light brown clay.
1326129	ES7	DS106	None Supplied	Light brown clay.
1326130	ES1	Area 1	1.50-1.60	Brown clay.
1326131	ES1	Area 2	1.50-1.60	Brown clay with gravel.



Analytical Report Number : 19-65025

Project / Site name: Stone Close

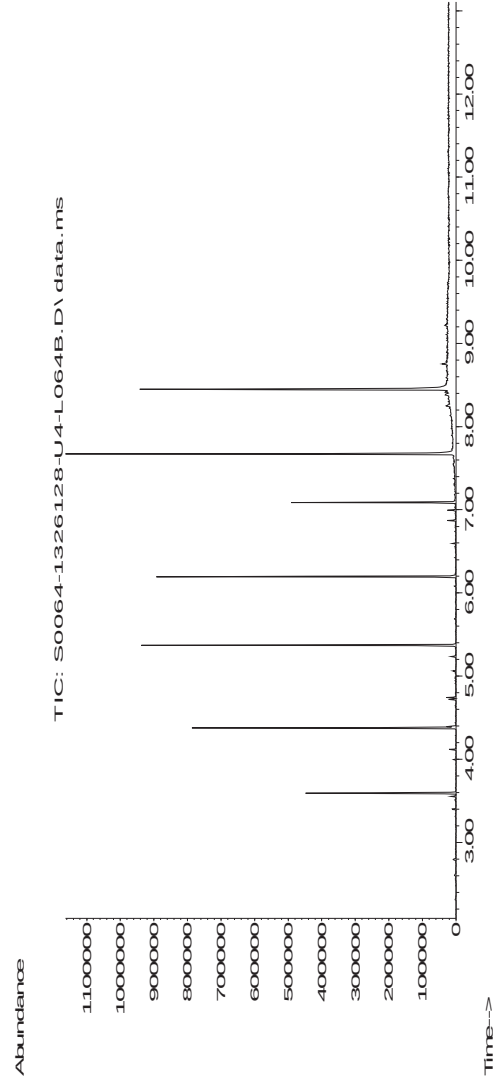
Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

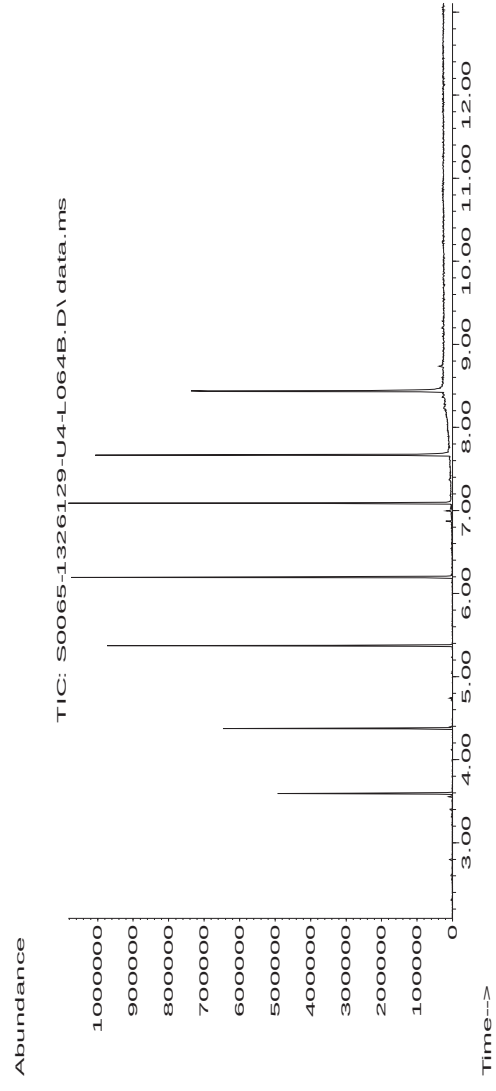
Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphénylcarbazine followed by colorimetry.	In-house method	L080-PL	W	MCERTS
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
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	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.	In-house method based on USEPA 8270	L064-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
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 based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
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
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/cleanup.	L088/76-PL	W	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS

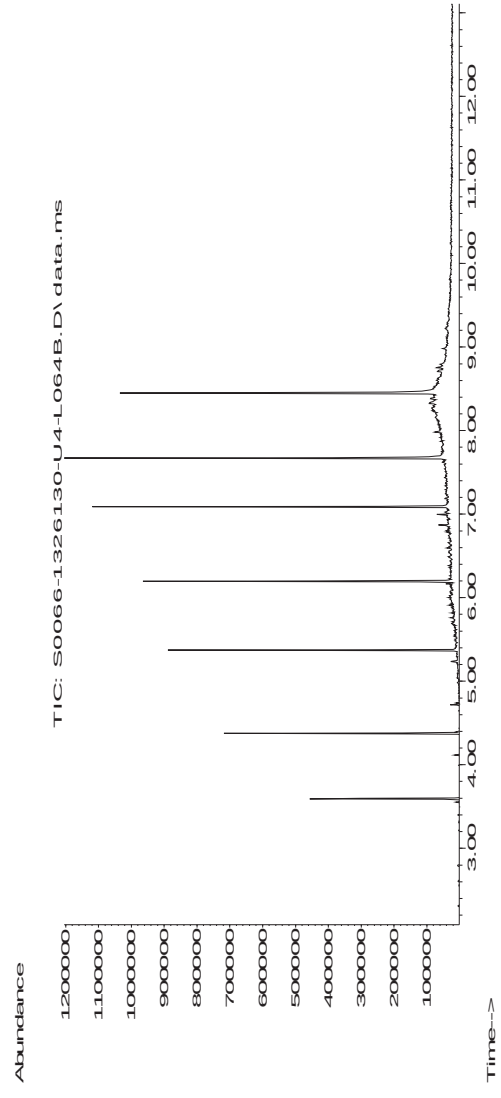
For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

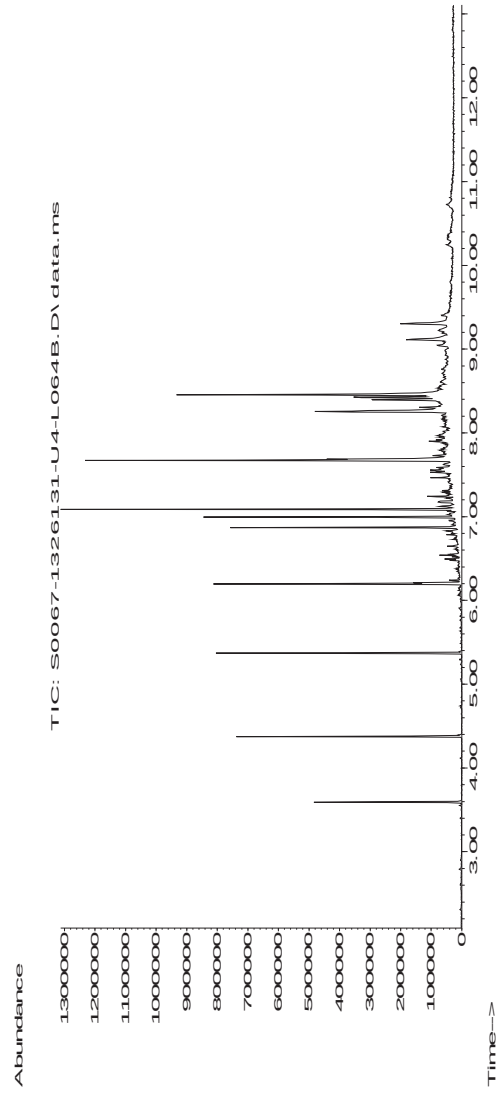
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

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 30oC.









Appendix D – MCS Statement & Affinity Water Dialogue



Build

Special Projects

Primary Projects

5th May 2020

To Whom it may concern,

MSC Group can confirm that no additional unidentified contamination was found on site during the construction phase throughout our contracted works from between 4th November 2019 and 10th June 2020 which embraced all of the planned below ground works (e.g. foundations, utilities & drainage) where the potential for such contamination may have been present. We also confirm that the requirements of Affinity Water in respect of the size and materials (32mm protecta line pipework with double check valve on each end) required for the water supplies have been installed to their design/ requirements.

Regards

George Baker
Commercial Manager
MCS primary Projects



Paul Maysey
MCS Group
Haywood Road
Warwick
CV34 5AH
Warwick
CV34 5AH

Your project reference number: DS0021330

12/03/2020

Dear Paul Maysey

Thank you for contacting us about your new water connections at Stone Close.

Based upon the information provided in your application, we have set out below the services which we understand are required for your project. The rates for services shown in the tables below have been taken from our published [Charging Arrangements document for the 2019/20](#). Please refer to our Charging Arrangements document on our website for more information about our charge rates, and the circumstances under which these rates are fixed.

So that you can choose who provides your connections services, we have separated the contestable work from the other services. Contestable work is open to competition and can be provided by alternative connections providers rather than the water company. Work that the water company must carry out is referred to as non-contestable, and this includes some works on the existing network, for example.

Some of the items on this quote may not be covered by the Charging Arrangements for New Connections Services 2019/2020. In these cases, we have estimated the costs using the same methodology and will carry out a reconciliation of the costs at the end of the works, so that we only pass on to you the actual costs of these items.

You have already paid: £180.00

Total amount outstanding for your project: £4,660.40

Transitional period

Please note that from the 1st April 2020 the New Charging Arrangements for 2020/2021 will apply. If you received your quote between the 1st February 2020 and 31st March 2020 it will remain valid for 120 days from receipt. For the full details please refer to our [New Connection Charging Arrangements 2020/2021](#), section 14 provide the detail on the Transitional Arrangements.

During the Transition period of 1st February 2020 to 1st April 2020 you have the option to request a second quote based on the 2020/2021 charging arrangements. To obtain a second quote please contact 0345 357 2428. If a second quote is requested the standard fees will be applied.

Please note that there are some key changes to the Charging Arrangements for 2020/2021. The main changes are listed below:

- Removal of Asset Payments to SLP's
- Movement of Income Offset payments from requisitions to an Income Offset against the Infrastructure charge
- Discounts for the development of water efficient homes

Please refer to the [New Connection Charging Arrangements 2020/2021](#) for full details of the changes and options available.

Summary of the charges:
Revision 2:

Item	Charge / Credit	Description
Contestable Services	£3,941.00	This is our charge for the contestable items in this quote. Please note that this work can also be carried out by accredited Self-Lay Providers rather than Affinity Water.
Non-Contestable Services	£314.40	This is our charge for the non-contestable items in this quote. This work must be provided by Affinity Water due to a heightened risk to existing customers and to the public water network.
Total Charges for your new connection(s)	£4,255.40	This is the total amount of the work you have asked us to provide.
Infrastructure Charges	£585.00	This is the charge we levy to reflect broadly the expected additional load placed on our network by new properties being connected.
Infrastructure Credits	£0.00	This is the amount which we will award in credit in recognition of properties disconnected from our network in the five years beforehand.
Total Infrastructure Payments	£585.00	This is the total amount payable for infrastructure charges, once the relevant credits have been deducted.
Extraordinary Charges	£0.00	This is the charge for any extraordinary items, credits, or amendments.

Breakdown of our charges for providing new connections

Non-contestable Charges

Item Description	Charge (excl VAT)	VAT	Total Charge
Application fee - Company Laid Connection (for first connection)	£157.00	£31.40	£188.40
Application fee - Company Laid Connection - (each subsequent connection)	£0.00	£0.00	£0.00
Administration fee - Company Laid Connection (for first connection)	£126.00	£0.00	£126.00
Administration fee - Company Laid Connection - (each subsequent connection)	£0.00	£0.00	£0.00

Contestable Charges

Item Description	Charge (excl VAT)	VAT	Total Charge
1 - 25mm Single Supply and 12m of Protectaline pipe with a connection to the main on the Footpath	£3,941.00	£0.00	£3,941.00
Install internal 15mm screw-in meter (first property connected)	£0.00	£0.00	£0.00
Install internal 15mm screw-in meter (subsequent property connected)	£0.00	£0.00	£0.00

Extraordinary Charges

Item Description	Total Charge
------------------	--------------

Next steps

Self-Laying your connections

You may choose your own accredited contractor to do the work, which is known as self-lay. We will take over responsibility for (adopt) self-laid pipes that meet the terms of an agreement with the developer and/or the self-lay provider that carried out the work. This can save you both time and money.

If you choose this route, your chosen self-lay provider should contact us and provide a letter of authority to take over the application.

Proceeding with the requisition

Step 1: Contact us to make payment

If you would like for Affinity Water to carry out the installation of the new water connections, please contact Developer Services quoting your project reference number to arrange payment so that we can proceed.

Step 2: Install your internal plumbing

If any of the services we list in the breakdown above is a manifold connection (2 to 6 port connection), you will be required to install as many 25mm services in the same material to the agreed connection point.

Water Fittings Regulations

It is the responsibility of the Owner, Landlord, User and installer to comply with the Water Fittings Regulations. Under the Water Act, Affinity Water must not connect any supply pipe until we are satisfied that the property to be supplied is compliant with these regulations.

This could mean waiting for all the plumbing in properties to be completed, leaving trenches open, ready to be inspected by a Water Fittings Officer, then if this fails for any reason, any failures would have to be rectified and then re-inspected. This is to protect public health against contamination, avoid waste, misuse and erroneous measurements in your water bill. Inappropriate fittings can also cause pressure and flow problems.

A connection can be made if an Approved Water Industry Contractor installs the supply pipe from the boundary to the inside stop valve and issues a certificate verifying that the installation is compliant with the Water Fittings Regulations. You will be asked to submit a copy of this certificate when you confirm that your pipework is ready for us to book our works.

An Approved Contractor (Plumber or Groundworker) can be found on the Watersafe website at <https://www.watersafe.org.uk/>.



Trench Specifications

Affinity Water would expect your supply pipe to be 750mm deep at the boundary, tagged with the plot number and with a capped or sealed end to prevent ingress from contaminants, the supply must be laid between 750mm and 1350mm deep and enter the property in compliance with the water fittings regulations. Depending on the type of property, diagrams are available on our website at <https://www.affinitywater.co.uk/water-fittings-regulations.aspx>. If you require any further assistance, please do not hesitate to contact us on network.regs@affinitywater.co.uk.

A stop valve must be installed as close to the point of entry into the property as possible. On commercial properties a double check valve must be installed on the incoming supply above the inside stop valve to provide backflow protection. This is a condition for your connection to be approved.

All fittings used must be approved for use with wholesome water. More information can be found on www.wras.co.uk, www.affinitywater.co.uk and www.watersafe.org.uk

STEP 3: Please contact Developer Services to confirm site is ready for connection.

For us to schedule works we require confirmation that the site is ready for connection. As a way of confirmation, please send us photographs showing that the pipework has been laid at the correct depth in the specified material and to the agreed point of connection. This is to ensure that as far as possible we are able to install your connection on the first visit and avoid any additional costs for aborted or return visits.

The photographs should also show a capped or sealed end at the boundary and the internal stop valve for control, as well as the WIAPS certificate from your plumber, confirming that the pipe has been installed in compliance with the water fittings regulations.

Once the photographs and certificate have been approved, we aim to complete the installation of your water connection in no longer than 21 calendar days, subject to there being no 3rd party restrictions.

For further information please visit our website <https://www.affinitywater.co.uk/fittings-regulations.aspx>.

At this stage, if you are building a new property you will need to update your scheme details with the full postal address of the property(s).

Yours sincerely

Michael Owolabi

Developer Services
Affinity Water
0345 357 2428
ds@affinitywater.co.uk

Dan Webb

From: Affinity Water Developer Services <aw_developerservices@affinitywater.co.uk>
Sent: 17 April 2020 11:12
To: George Baker
Cc: pmaysey@wppgroup.co.uk
Subject: Scheme - DS0021330
Attachments: DS0021330 - 101150448.pdf; DS0021330 - 701028293-294.pdf

Follow Up Flag: Follow up
Flag Status: Flagged



Dear George,

Please see below for the latest updates to Application DS0021330 - Connections - Stone Close.

Response By E-mail (Alex Payton) (17/04/2020 11:12)

Good morning,

Please find copies of your receipts attached.

Kind regards,

Alex Payton

Response By E-mail (Mohammed Khan) (02/04/2020 16:07)

Good Afternoon,

Your photos have been approved. Please be advised that due to the current climate we will not be completing any non-essential works until we receive further Government guidance.

As soon as we are able to, our planning team will advise you of a schedule date.

If you haven't already, please can you confirm the registered address for this new connection.

Should you wish to discuss further, please call us on 03453572428.

Thanks

Regards

Mohammed Khan.

Customer By Service Email (George Baker) (31/03/2020 08:21)

Hi Peter,

Thanks for the below update on our water connection.

- Sadly the trench has already been backfilled, however I can confirm the correct depth of 750mm-850mm was met during the install.
- Also I can the pipework and double check valves have been laid and installed to affinity water regulations.

Based on the above 2 confirmations, can you confirm you have everything required to book a date in for the works (when government guidelines allow)?

Regards

George Baker
Commercial Manager

M: 07387 106507
T: 01926 840900

Check our Latest news : www.mcs-ltd.com follow the link to the Latest news page.



MCS Group
Haywood Road
Warwick
CV34 5AH

01926 842500



Response By E-mail (Peter Walmsley) (30/03/2020 16:09)

Dear Mr Baker,

Please be advised that due to the current climate we will no longer be completing any non-essential works until we receive further Government guidance.

Thank you very much for the photos provided. Unfortunately, not all the required photos have been received.

Please provide the following:

- A photo showing the trench depth (750-850 mm) using a **measuring tool/tape**. If you have already back-filled the trench please confirm in writing the correct depth was met.
- A **certificate** showing the plumber is approved and the pipe work has been laid compliant with our regulations (please see below certificates we accept). If you cannot provide any of the certificates below, please confirm in writing the pipe work has been laid according to and compliant with our regulations.

(please see below certificates we accept. If you cannot provide any of the certificates below, please confirm in writing)

THE SUPPLY YOU LAY MUST MATCH THE SIZE AND MATERIAL DETAILED ON YOUR QUOTATION.



Please see the following helpful link with example photos:

<https://www.affinitywater.co.uk/installation-requirements.aspx>

Regards

Peter Walmsley



Response By E-mail (Michael Owolabi) (18/03/2020 16:47)

Good Afternoon,

Please see the updated quote with new addressee.

Regards

Michael Owolabi

Auto-Response By (Administrator) (12/03/2020 10:32)

Re: Application Design and Cost Advice Issued - DS0021330 - Stone Close

Dear George Baker,

We would like to inform you that your Connections application has been reviewed and your budget cost is available for review.

Please log on to the portal to find the budget cost attached to the attachments tab of your application (our portal website can be accessed via this link: <https://www.affinitywater.co.uk/developer-services.aspx>). This cost is based upon information you provided in your Connections application.

Proceeding with an application

If you are satisfied with the information provided and wish to proceed with your application, please accept the design and cost advice we have issued and make payment at your convenience before the cost advice expiry date.

Please note that the current charging arrangements are subject to change on the 1st of April 2020. For more information about these changes, and how they may impact your development, please take a look at the 'Transitional Arrangements' section of our new Charging Arrangements 2020-2021 Document, which can be found [here](#).

We hope that this information proves satisfactory. If you require any further assistance or require additional information, please log onto our portal for help or contact us on 0345 357 2428.

You may find other useful information on our website at <https://affinitywater.co.uk/developer-services.aspx>.

Your sincerely,
Michael Owolabi

Response By E-mail () (19/02/2020 09:45)

Dear Watkins Payne Partnership

Thank you for your request for a requote/redesign. This has been passed to the APM assigned to your scheme who will review the nature of the request and advise of a reasonable due date via the [My Developments Portal](#).

Should you require any further assistance with any aspect of your request please do not hesitate to contact our Developer Services Team on 0345 357 2428.

Auto-Response By (Administrator) (19/02/2020 09:45)

Re: Application Accepted - DS0021330 - Stone Close

Dear Watkins Payne Partnership - Paul Maysey,

We are pleased to confirm that your application has been accepted, in accordance with the Water Industry Act 1991, as amended by the Water Act 2003.

What happens next?

We will now begin the process of creating a design and cost advice, in line with the information provided in your application. This will be issued to you within 28 calendar days, counted from the 03/10/2018.

Please note, there could be factors that delay the issue of design and cost, for example the local authority requiring a traffic management meeting on site, but your Project Manager will endeavour to keep you informed.

You may find other useful information on our website at <https://affinitywater.co.uk/developer-services.aspx>.

Customer By E-mail () (19/02/2020 09:45)

SENT 19.02.2020

Morning George,

Please see attached.

Kind regards,

Kilian Fiveash
Building Services Design Engineer
Watkins Payne

DDI: 01932 753 720
Mob: 07713243878

From: George Baker <george@mcs-ltd.com>

Sent: 18 February 2020 12:42

To: Developer Services Department (inbox) <ds@affinitywater.co.uk>; Kilian Fiveash <KFiveash@wppgroup.co.uk>

Subject: RE: DS0021330 - Authority for mcs

Hi Kilian,

Can you please given authority for a re-quote as requested below ?

Thanks

George Baker
Commercial Manager

M: 07387 106507
T: 01926 840900

Check our Latest news : www.mcs-ltd.com **follow the link to the Latest news page.**



MCS Group
Haywood Road
Warwick
CV34 5AH

01926 842500



Customer By Service Web (Watkins Payne Partnership - Paul Maysey)
(19/02/2020 08:52)

Dear sirs,

Further to the previous email, we authorise MCS to take ownership (including any amendments) of this quote going forwards.

Regards

Paul Maysey (Watkins Payne Partnership).

Response By E-mail (Alice Pinnock) (17/02/2020 14:33)

Good Afternoon,

Thank you for your email.

I have made a note on the application to reflect the authority to discuss with MCS group.

Kind Regards

Alice

Customer By Service Web (Watkins Payne Partnership - Paul Maysey)
(17/02/2020 12:49)

Dear sirs,

We authorise MCS Group to liaise with Affinity water regarding all matter in relation to the water connections to this site.

Regards

Paul Maysey (Watkins Payne Partnership)

Customer By Service Web (Watkins Payne Partnership - Paul Maysey)
(19/02/2019 09:41)

Hi,

Further to the recent telephone conversation regarding disconnections at the above site, once the contractor is on site, we will advise Affinity water of their contact details so the contractor can coordinate directly with Affinity Water to arrange the disconnections.

Regards

Paul

Auto-Response By (Administrator) (23/10/2018 15:45)

Dear Mr. - Paul Maysey

We would to inform you that the cost advice for your new/replacement connection is available for your review. Please log on to the portal to find the cost advice attached to the details tab of your application (our portal website can be accessed by this link: <https://www.affinitywater.co.uk/developer-services.aspx>). This cost is based on the information you provided in your application.

We are obliged to recover all reasonable costs incurred in completing works as requisitioned by yourself but we are not permitted to make a profit.

Proceeding with your connection:

If you are satisfied with the cost advice for your connection and wish to proceed then please follow the steps outlined in the "Accept Cost Advice" tab on the My Developments portal. If your application was not originally submitted via the My Developments portal then please send us an enquiry through the portal advising that you wish to call off the plots.

As part of the acceptance process we ask you to deposit a security equal to the cost with Affinity Water Ltd before we can undertake your connection, in accordance with Section 47 of the Water Industry Act.

Cancellations

If you decide to proceed with your connection and lodge security with Affinity Water Ltd and decide at a later date not to continue with your connection or wish to change your requirements, the company may retain reasonable administrative costs from any refund due.

We hope that this information and the cost advice issued are to your satisfaction. If you require any further assistance or require additional information, please log onto our portal for help or contact us on 0345 357 2428.

Your sincerely,
Michael Owolabi

Auto-Response By (Administrator) (13/10/2018 00:02)

Re: Application Fee Reminder - DS0021330 - Stone Close

Dear Mr. - Paul Maysey

Thank you very much for your application submitted on 03/10/2018, which we are currently processing. The work we are carrying out requires the payment of an application fee to cover the administrative costs being incurred. At the time

of this email, we have not yet been able to confirm the receipt of the application fee.

If you had not yet had a chance to do so, please let us know [how you intend to make this payment by following these instructions](#) . This is so that we can locate your payment quicker and avoid any unnecessary delays.

If you have already notified us of how you intend to pay the application fee but have not yet made payment, we urge you to do so as soon as possible. If you have already paid you can ignore this message as our team will update your record as soon as possible to acknowledge the payment.

If we are unable to confirm your payment within 14 days of the submission date we will close your application. We do this so that we can provide a better, more cost effective service to all of our applicants.

You can find more information about our Application Fees in the links below.

[How much is the application fee?](#)
[When do I pay the application fee?](#)

Auto-Response By (Administrator) (08/10/2018 00:02)

Re: Application Fee Reminder - DS0021330 - Stone Close

Dear Mr. - Paul Maysey

Thank you very much for your application submitted on 03/10/2018, which we are currently processing. The work we are carrying out requires the payment of an application fee to cover the administrative costs being incurred. At the time of this email, we have not yet been able to confirm the receipt of the application fee.

If you had not yet had a chance to do so, please let us know [how you intend to make this payment by following these instructions](#) . This is so that we can locate your payment quicker and avoid any unnecessary delays.

If you have already notified us of how you intend to pay the application fee but have not yet made payment, we urge you to do so as soon as possible. If you have already paid you can ignore this message as our team will update your record as soon as possible to acknowledge the payment.

If we are unable to confirm your payment within 14 days of the submission date we will close your application. We do this so that we can provide a better, more cost effective service to all of our applicants.

You can find more information about our Application Fees in the links below.

[How much is the application fee?](#)
[When do I pay the application fee?](#)

Auto-Response By (Administrator) (04/10/2018 09:47)

In accordance with the Water Industry Act 1991, as amended by the Water Act 2003, we acknowledge and accept your Application. We attach your notification

and would refer you to the terms and conditions stated within. Please use the portal for all further related correspondence regarding this application.

The Affinity Water Developer Services website identifies the activities that your Project Manager will complete in order to respond to your application.

We aim to provide you with a cost advice and drawing in a reasonable time frame and no more than 28 days from the submission of full and complete information. Should certain conditions be met, such as the requirement for traffic management in trunk roads or site specific engineering difficulties then the application would be considered to be extraordinary and the we may require additional time. You will be notified if this is the situation.

The above Levels of Service are in line with the industry standard set by Water UK.

Please read the documentation available on the Developer Services website carefully to ensure that all necessary steps are carried out and to avoid delays in construction.

In the event that your development has already commenced construction, we attach Affinity Water's Site Manager's Guide and trench specification for onsite water mains. Please pass on to your onsite teams.

Your Project Manager will prepare the most economical quote to serve your development. This includes considering whether infrastructure credits are due. This assessment is made based on the information you supplied in your application. In the absence of detailed fittings information, one infrastructure credit will be issued per property that was previously connected to the network. It is recommended that detailed fittings information is supplied, particularly where the site's previous use was non-domestic as credits are calculated differently on larger diameter supplies. Please refer to the Affinity Water Central charges scheme for more information on how we calculate infrastructure credits, available to download from our website.

You may find other useful information on our website at <https://affinitywater.co.uk/developer-services.aspx>.

Customer By Service Web (Watkins Payne Partnership - Paul Maysey)
(03/10/2018 17:08)

Further to the application for a new water supply to the above site, I would like to provide additional commentary to help the application.

The existing site is a car repair workshop consisting of 2 industrial units. The proposed development is to demolish these units and replace them with a single industrial unit which will be an aftercare workshop for Mercedes Benz. The new metered water supply will be utilised to serve the sanitary fittings (4 WCs and 4 WHBs) within the unit. There will also be a small package break tank booster set providing a category 5 water supply to serve mechanical plant. We therefore require a quote for a new metered water connection to serve this. We also require the existing supply to the site to be disconnected. Please can the quote include for this.

Many thanks

Paul Maysey - on behalf of Watkins Payne Partnership

Auto-Response By (Administrator) (03/10/2018 16:59)

Thank you for submitting your application through our online portal.

We acknowledge receipt of your application and aim to respond to it within 5 days.

Please be patient whilst we undertake a review of your application.

You can track your application status in our Developer Services Online Portal at www.affinitywater.custhelp.com.

Alternatively, you can find general information about all developer services process at www.affinitywater.co.uk/developer-services.

Thank you,

Affinity Water Developer Services



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If your query is an emergency and falls out of our opening times, please call our Operations Line on 0345 357 2407.

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