IGSL Ltd

NDFA Social Housing Bundles 4/5
Lot 4 - Basin View

Ground Investigation Report

Project No. 25000-4

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FOREWORD
The following conditions and notes on the geotechnical site investigation procedures should be read in conjunction with this report.

Standards
The ground investigation works for this project (**NDFA Social Housing Bundles 4/5 - Lot 4 – Basin View**) have been carried out by IGSL in accordance with Eurocode 7 - Part 2: Ground Investigation & Testing (EN 1997-2:2007). This has been used together with complementary documents such as Engineers Ireland Specification for Ground Investigation (2nd Ed, 2016), BS 5930 (2015+A1:2020) and BS 1377 (Parts 1 to 9) and the following European Norms:

- EN 1997-2 Eurocode 7: 2007 – Geotechnical Design – Part 2: Ground Investigation & Testing
- EN ISO 22475-1:2006 Geotechnical Investigation and Sampling – Sampling Methods & Groundwater Measurements
- EN ISO 14688-1:2017 Geotechnical Investigation and Testing – Identification and Classification of Soil, Part 1: Identification and Description
- EN ISO 14688-2:2017 Geotechnical Investigation and Testing – Identification and Classification of Soil, Part 2: Principles for a classification
- EN ISO 14689-1:2017 Geotechnical Investigation and Testing – Identification, description & classification of rock

The Eurocode 7, Part 2 – Ground Investigation and Testing GI specification shall be read in conjunction with the Specification and Related Documents for Ground Investigation in Ireland, 2nd Edition, published by Engineers Ireland in 2016.

Reporting
No responsibility can be held by IGSL Ltd for ground conditions between exploratory hole locations. The engineering logs provide ground profiles and configuration of strata relevant to the investigation depths achieved and caution should be taken when extrapolating between exploratory points. No liability is accepted for ground conditions extraneous to the investigation points. Unless specifically stated, no account has been taken of possible subsidence due to mineral extraction, mining works or karstification below or close to the site.

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Boring Procedures
Where required, 'shell and auger' or cable percussive boring technique is employed as defined by Section 6.3 of IS EN ISO 22475-1:2006. The boring operations, sampling and in-situ testing meet with the recommendations set out in IS EN 1997-2:2007 and BS 1377:1990 and EN ISO 22476-3:2005. The shell and auger boring technique allows for continuous sampling in clay and silt above the water table and sand and gravel below the water table (Table 2 of IS EN ISO 22475-1:2006).

It is highlighted that some disturbance and variation is unavoidable in particular ground (e.g. blowing sands, gravel / cobble dominant glacial deposits etc). Attention is drawn to this condition, whenever it is suspected. Where cobbles and boulders are recorded, no conclusion should be drawn concerning the size, presence, lithological nature, or numbers per unit volume of ground.

In-Situ Testing
Where required, Standard Penetration Tests (SPT's) are conducted strictly in accordance with Section 4.6 of IS EN 1997-2:2007. The SPT equipment (hammer energy test) has been calibrated in accordance with EN ISO 22476-3:2005 and the Energy Ratio (E_r). A calibration certificate is

available upon request. The E_r is defined as the ratio of the actual energy E_{meas} (measured energy during calibration) delivered to the drive weight assembly into the drive rod below the anvil, to the theoretical energy (E_{theor}) as calculated from the drive weight assembly. The measured number of blows (N) reported on the engineering logs are uncorrected. In sands, the energy losses due to rod length and the effect of the overburden pressure should be taken into account (see IS EN ISO 22476-3:2005).

Soil Sampling

Three categories of sampling methods are outlined in EN ISO 22475-1:2006. The categories are referenced A, B and C for any given ground conditions and are shown in Tables 1 and 2 of EN ISO 22475-1:2006. Reference should be made to EN 1997-2:2002 for guidelines on sample class and quality for strength and compressibility testing. Samples of quality classes 1 or 2 can only be obtained by using Category A sampling methods.

Class 1 thin wall undisturbed tube samples (UT100) were obtained in fine grained soils and strictly meet the requirements of EN 1997-2:2002 and EN ISO 22475-1:2006. Soil samples for laboratory tests are divided into five classes with respect to the soil properties that are assumed to remain unchanged during sampling, handling transport and storage. The minimum sample quality required for testing purposes to Eurocode 7 compatibility (EN 1997-2:2002) is shown in Table A.

Table A – Details of Sample Quality Requirements

EN 1997 Clause	Test	Minimum Sample Quality Class
5.5.3	Water Content	3
5.5.4	Bulk Density	2
5.5.5	Particle Density	N/S
5.5.6	Particle Size Analysis	N/S
5.5.7	Consistency Limits	4
5.5.8	Density Index	N/S
5.5.9	Soil Dispersivity	N/S
5.5.10	Frost Susceptibility	N/S
5.6.2	Organic Content	4
5.6.3	Carbonate Content	3
5.6.4	Sulphate Content	3
5.6.5	pH	3
5.6.6	Chloride Content	3
5.7	Strength Index	1
5.8	Strength Tests	1
5.9	Compressibility Tests	1
5.10	Compaction Tests	N/S
5.11	Permeability	2

N/S – not stated. Presume a representative sample of appropriate size.

Samples recovered from trial pits or trenches meet the requirements of IS EN ISO 22475-1. It is highlighted that unforeseen circumstances such as variations in geological strata may lead to lower quality sample classes being obtained.

Groundwater

The depth of entry of any influx of groundwater is recorded during the course of boring operations. However, the normal rate of boring does not usually permit the recording of an equilibrium level for any one water strike. Where possible, drilling is suspended for a period of twenty minutes to monitor the subsequent rise in water level. Groundwater conditions observed in the borings or pits are those appertaining to the period of investigation. It should be noted however, that groundwater levels are

subject to diurnal, seasonal and climatic variations and can also be affected by drainage conditions, tidal variations etc.

Engineering Logging

Soil and rock identification has been based on the examination of the samples recovered and conforms with IS EN ISO 14688-1:2017 and IS EN ISO 14688-2:2017. Rock weathering classification conforms to IS EN ISO 14689-1:2017 along with discontinuities (bedding planes, joints, cleavages, faults etc) as classified in Section 6.4 of IS EN ISO 14689-1:2017 and Annex C of same. Rock mechanical indices (TCR, SCR, RQD) are defined in accordance with IS EN ISO 22475-1:2006.

Where peat has been encountered, samples have been logged in accordance with the Von Post Classification (ref. Von Post, L. 1992. Sveriges Gologiska Undersoknings torvinventering och nogra av dess hittils vunna resultat (SGU peat inventory and some preliminary results) Svenska Mosskulturforeningens Tidskrift, Jonkoping, Swedden, 36, 1-37 and Hobbs N. B. Mire morphology and the properties of some British and foreign peats. QJEG, Vol. 19, 1986.

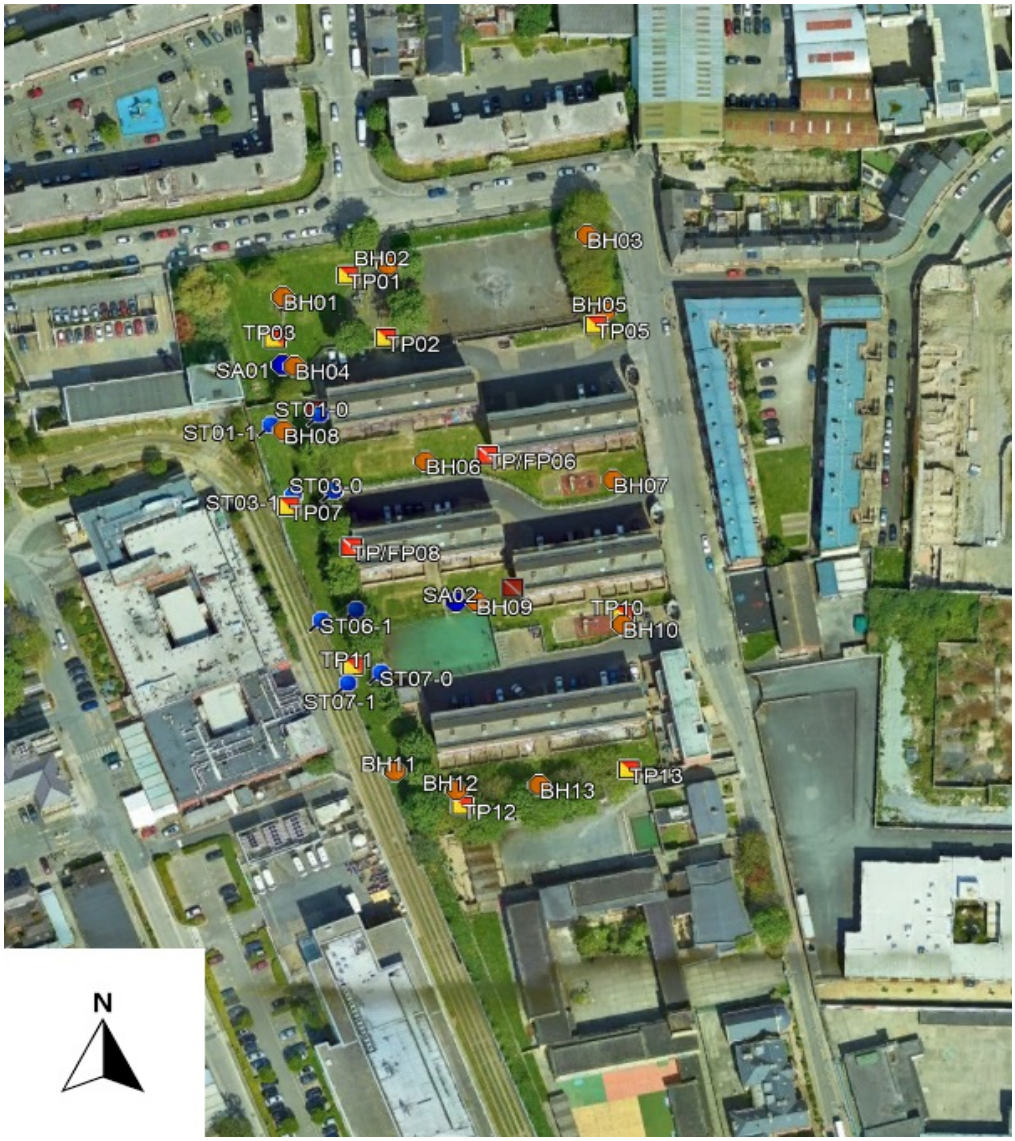
Retention of Samples

After satisfactory completion of all the scheduled laboratory tests on any sample, the remaining material will be discarded. Unless a period of retention of samples is agreed, it is our normal practice to discard all soil samples one month after submission of our final report.

1. INTRODUCTION

An investigation of subsoil conditions was undertaken by IGSL Limited at the site of a proposed social housing development at Basin Street Flats, Basin View, Dublin 8. The works were undertaken for Malone O'Regan Consulting Engineers [MORCE] on behalf of the National Development Finance Agency (the "NDFA"). The site is occupied by a number of multistorey flat complexes with intervening grassed and pavement areas. The site is bound by Basin Street Lower to the north and Brandon Terrace to the east. The Red Line Luas and St James' Hospital campus lie to the west (Figure 1).

Figure 1 - Location Plan



Retrieved from Google Earth Professional (Dated 07/2022)

The investigations comprised cable percussion boreholes, machine-dug trial pits, slit trenches, foundation inspection pits and soakaway tests (to BRE365). The investigations were executed in accordance with BS 5930, Code of Practice for Site Investigations (2015+A1:2020) and EN 1997-2 Eurocode 7 Part 2 Ground Investigation & Testing and supervised by an IGSL geotechnical engineer.

Geotechnical, chemical and environmental laboratory testing was scheduled on a range of soil samples. The geotechnical soil testing included moisture contents, Atterberg Limits and particle size distribution [PSD] testing in addition to hydrometer testing. Suites of both chemical testing and environmental testing were undertaken on soils. This report presents an interpretation of the data and an assessment of the key geotechnical issues. The exploratory hole locations are plotted on the site plans in Appendix 9.

2. FIELDWORK

2.1 General

The fieldworks were undertaken during January and February 2024 and comprised the following:

- Trial Pit (13 No.) of which 4 no. are Foundation Inspection Pits
- Cable Percussion Boring (13 No.)
- Soakaway Tests (to BRE 365) (2 No.)
- Slit Trenches (4 No.)
- Rotary Core Drilling
- Surveying of Exploratory Hole Locations

2.2 Trial Pits & Foundation Inspection Pits

Trial pitting was performed at thirteen locations across the site. Four of the trial pits prefixed TP/FP were undertaken adjacent to existing structures to examine the depth of existing building footings. All thirteen trial pits were excavated, logged and sampled under the direction of an IGSL geotechnical engineer in accordance with BS 5930 (2015+A1:2020). Bulk disturbed samples (typically 20 to 30kg) were taken as the pits progressed.

The bulk samples were placed in heavy-duty polyethylene bags. The trial pits were backfilled with the as-dug arisings and reinstated to the satisfaction of IGSL's site geotechnical engineer. The trial pit logs and photos are presented in Appendix 1 and include descriptions of the soils encountered, groundwater conditions and stability of the pit sidewalls.

As mentioned, in order to establish the depth and projection of existing foundations associated with the buildings currently occupying the site, foundation inspection pits were undertaken at four locations at the base of external facing walls. As with pits, the inspection pits were excavated and logged under the direction of an IGSL geotechnical engineer in accordance with BS 5930 (2015+A1:2020). Machine-assisted hand digging was used at each location with pits ranging in depth from 0.40 to 1.60m bgl. The pit logs and photos are presented in Appendix 2 and include descriptions of the soils encountered, the foundations exposed and any groundwater conditions noted during the excavation, if observed.

2.3 Cable Percussion Boreholes

Cable percussive boring (200mm diameter) was conducted at thirteen locations [BH_] using a Dando 2000 rig. The boreholes extended to depths of between 4.10m and 6.60m. At each location, boring commenced through hand-dug service inspection pits. Disturbed bulk samples were recovered at 1m intervals or change of strata during boring and these are denoted 'B' on the engineering logs.

Standard Penetration Tests (SPT's) were performed in the boreholes and given the nature of the soils, a solid cone was used. It is noted that the SPT N-Values reported are the number of blows for 300mm increment penetration (e.g. BH01 at 2.0m where N=21). These exclude the seating blow values, which represent the initial 150mm depth of penetration. Where partial penetration was achieved during testing, the number of blows is shown for the actual penetration depth achieved (e.g. BH01 at 6.0m where N=50/150mm). It is highlighted that the SPT N-Values reported on the engineering logs are uncorrected for energy ratio.

Groundwater monitoring standpipes were installed in both boreholes BH06 and BH12. The standpipes consisted of 50mm diameter HDPE pipework with proprietary 1mm slots and incorporated a pea gravel filter pack and cement / bentonite grout seal. Headwork covers were concreted in place.

Descriptions of the soils encountered, in-situ tests undertaken and samples recovered are presented on the borehole records in Appendix 3. Details of groundwater strikes and hard strata boring (i.e. chiselling) are also presented on the aforementioned records.

2.4 Soakaway Tests (to BRE 365)

Two number infiltration tests were performed to assess the suitability of the sub-soils for dispersion of storm water through a soakaway system. The infiltration tests were each performed in accordance with BRE Digest 365 'Soakaway Design'. To obtain a measure of the infiltration rate of the sub-soils, water was poured into each test pit, with records taken of the fall in water level against time. Following the first soak cycle, the procedure was repeated to ensure saturation of the sub-soils. The infiltration rate is the volume of water dispersed per unit of exposed area per unit of time, and is generally expressed as metres / minute or metres / second. Designs are based on the slowest infiltration rate, which is generally calculated from the final soak cycle. The soakaway design logs are presented in Appendix 4.

2.5 Slit Trenching

Slit trenching was undertaken at four locations on the site. The machine-assisted hand-dug trenches were opened to reveal the track of potential existing buried services running in a grassed area to the west of the flat complex.

Detailed records of the pit findings including depth, diameter and type of service (where found) are presented in Appendix 5. The soil profile provided on the slit trench logs describes the majority of the soils across the transverse trench. The location of trench extremities (X and Y) were surveyed to ITM using GPS techniques. Photographs taken during excavation are also presented with the logs in Appendix 5.

2.6 Rotary Core Drillholes

To be completed

2.7 Surveying of Exploratory Hole Locations

Following completion of the exploratory works, surveying was carried out using GPS techniques. Co-ordinates (x, y) were measured to Irish Transverse Mercator and ground levels (z) established to Malin Head. The co-ordinates and ground levels are incorporated on the exploratory hole logs with locations shown on the exploratory hole plans in Appendix 9.

3. LABORATORY TESTING

Geotechnical laboratory testing was carried out at IGSL's INAB-accredited laboratory in accordance with the methods set out in BS1377; British Standard Methods of Test for Soils for Civil Engineering Purposes; British Standards Institute:1990. The laboratory applies best practice management systems as per International Standard IS EN ISO/IEC 17025. The geotechnical testing included moisture contents, Atterberg Limits, particle size distribution [PSD] and hydrometer testing. The results from geotechnical testing on selected trial pit and cable percussive borehole soil samples are presented in Appendix 7.

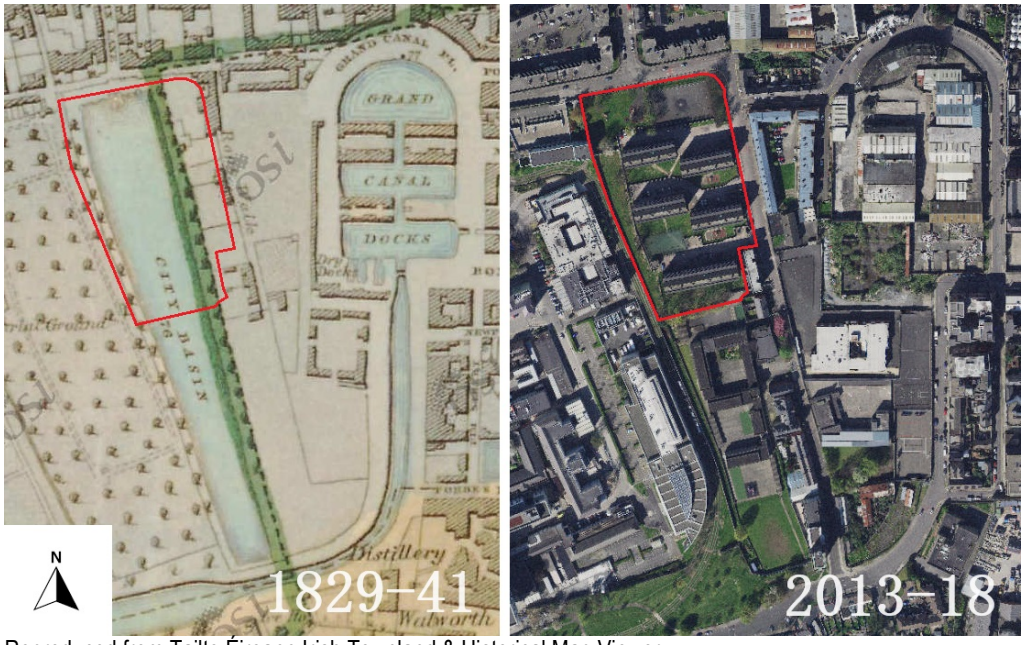
Chemical analysis incorporating BRE SD1 Suite B (Brownfield – Pyrite Present) was scheduled on recovered soils. The soil chemical results are presented in Appendix 8. A total of thirty soil samples were selected for Waste Acceptance Criteria (WAC) analysis as per the *Rilta* Suite of testing. The results can be used to classify the material with regard to its potential for disposal to landfill. The results are enclosed in the report in Appendix 8.

4. DESK STUDY

4.1 GSI / OSI Database Information

Reference to the OSI drawings from the nineteenth century (1829-41) show a reservoir on the site termed 'City Basin'. The feature survives to the 1897-1913 where it is noted as 'James's Basin'.

Figure 2 – Tailte Éireann (OSI) historical imagery (1829-41) together with aerial orthophotograph showing the site in 2013-2018. Approximate site outline in red.



Reproduced from Tailte Éireann Irish Townland & Historical Map Viewer

The City Basin or reservoir, illustrated in the early maps, took water from the *R*. Poddle and supplied 18th century Dublin with potable water. The Basin was built off James's Street in 1721. It was capable of supplying 25 million gallons of water, a three month supply, and of supplying water to 90 streets. The corporation raised and reconstructed the level of the Basin in the final development of the Poddle water supply to the city.

By 1735, the Poddle could no longer meet the water needs of the City. As the Grand Canal passed just south of the City Basin (the then terminus completed in 1785), it was decided that water from this source would be passed to the Basin by means of sluice gates (Brunkard, 2014).

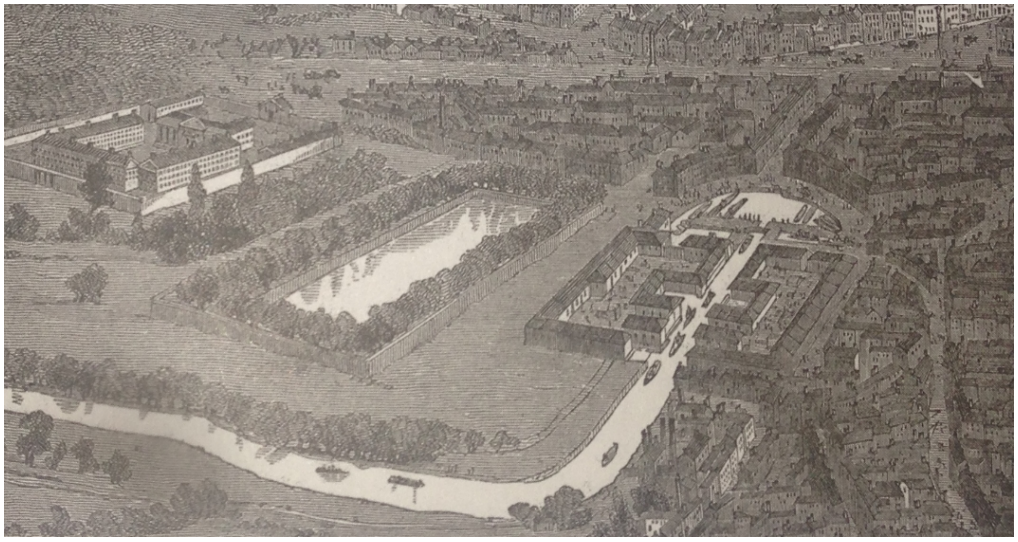
A clear description of the elevated nature of the reservoir, as well as its Victorian dimensions, is recounted in History of the City of Dublin Volume 2 (Gilbert, 1859).

> *"Its distinction as a reservoir to supply an extensive city with water rendered it necessary to give its surface as great an elevation as was consistent with moderate expense; for this purpose it is supported by a firm embankment of earth several feet higher than the adjacent fields, on the summit of which is a walk, bounded on both sides by quick-set hedges, judiciously kept low not to interrupt the view, while the outer fence is planted with elms, still in a good state of preservation, with their branches expanded so as to entwine with each other and form graceful arches; and these, from the moisture of the soil, are clothed in spring and summer with luxuriant verdure, they add much to the beauty of this charming scene. The form of the basin is a parallelogram, 1210 feet in length and 225 to 250 feet in breadth. The entrance is by a neat iron gate from Basin Lane and Pig Town, the latter appropriately so called, from*

being perpetually infested with those animals, and forming by its filth a strong contrast to the salubrious air and cheerful tranquillity of the scene within."

Eventually, the supply of water from the canal was inadequate and unsafe and this supply to the City Basin ceased in 1869, paving the way for a new water supply from the Vartry River (Brunkard, 2014).

Figure 3 – City Basin and Grand Canal Harbour, Illustrated London News, 1846, and reproduced in Cullen (2015)

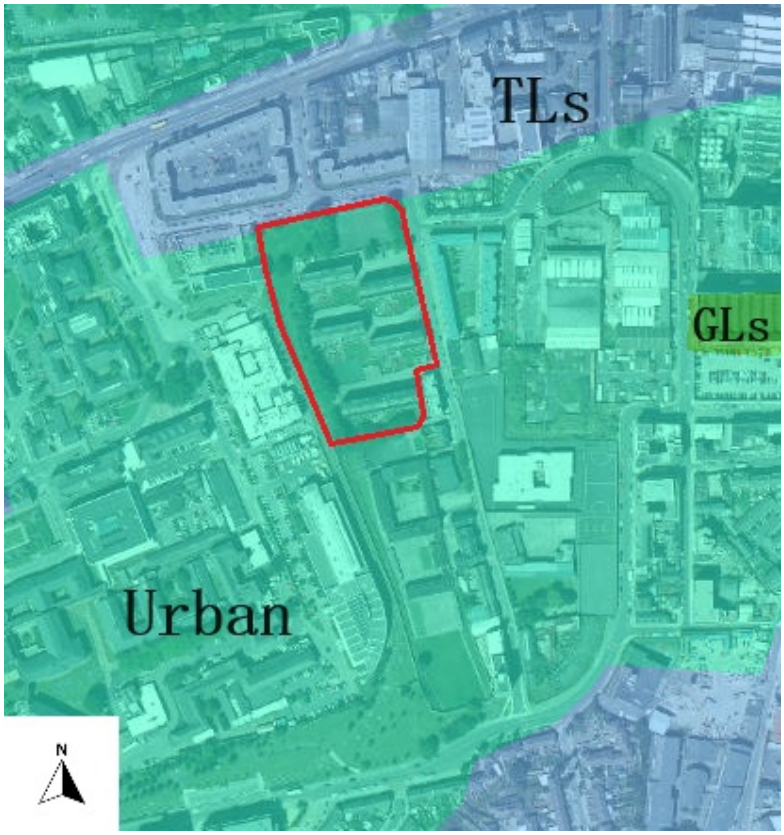


In March 2023, as part of ongoing works for the St James's Linear Park, excavation works unearthed some cutstone blockwork which highlight the stepped, elevated nature of the reservoir and neighbouring canal. With the closure of this branch of the Grand Canal in 1974, both the canal and basin were infilled (McAuley, 2023).

Figure 4 – Archaeologial works at a dig site to the eastern extent of St. James's Linear Park near Fatima Luas stop (The Liberties, Dublin, 2023)

The Quaternary Soils plot for the area (Figure 5 - retrieved from GSI website) reveals largely unclassified urban cover. There are both tills (TLs) and gravels (GLs) near the site. The presence of over-consolidated till was proven by the investigation with clay-dominant till proven in all boreholes.

Figure 5 – Quaternary Soils Plot for the Basin View Site

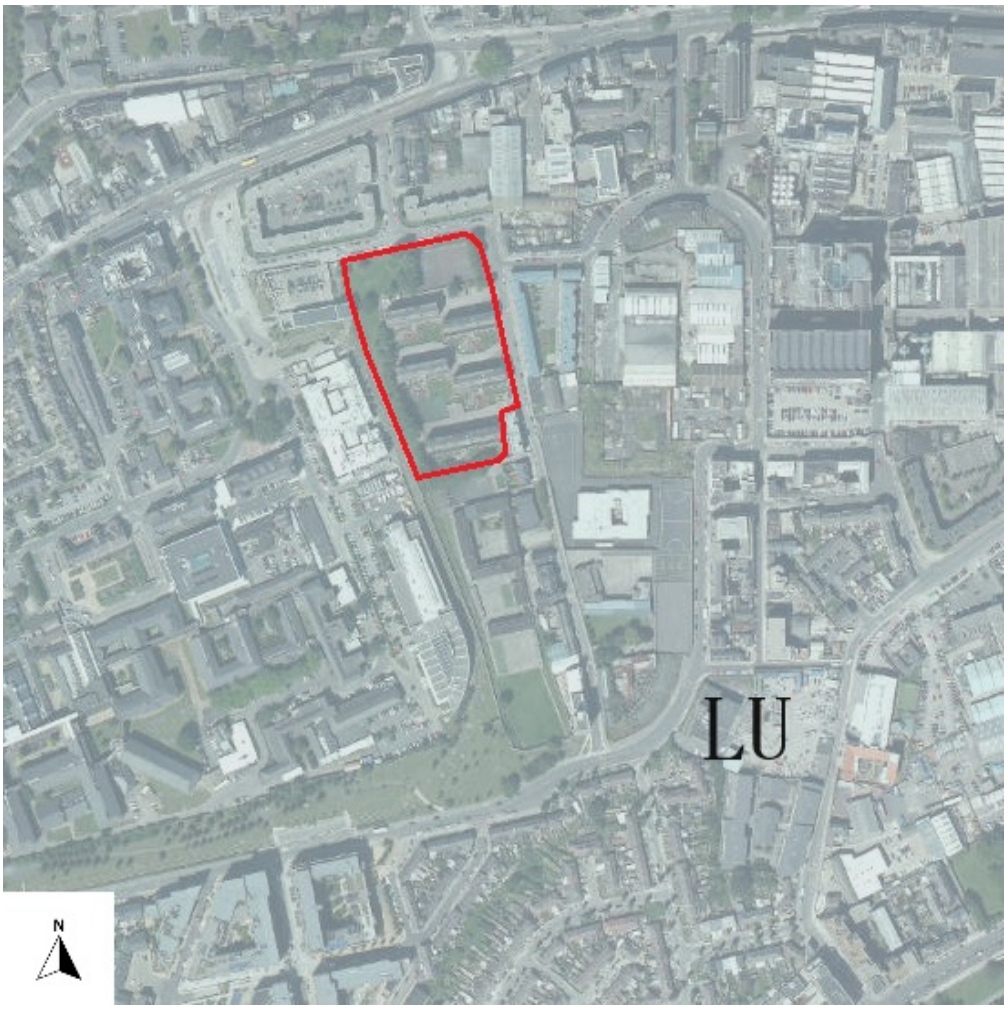


Map Key		
	Urban	- Unclassified Urban Cover
	TLs	- Till derived from Limestones
	GLs	- Gravels derived from Limestones

Reference to the GSI map for the area (Figure 6, 1:100,000 Solid Geology series) shows that the site is underlain by Lower Carboniferous, Lucan Formation. The Lucan Formation (Nolan 1986, 1989) forms the bulk of the basinal rocks throughout the geologically termed 'Dublin Basin', and is characterised by graded, intraclastic skeletal packstone/grainstone interbedded with anoxic calcareous mudstone / black shale, laminated calcisiltite and argillaceous micrite (i.e. impure limestone with clay minerals).

Its base is defined by the first appearance of thick graded beds of limestone, and a marked decrease in the proportion of interbedded shale, compared with the underlying Tober Colleen Formation. The Lucan Formation is widely known as the Calp Limestone (Marchant and Sevastopulo, 1980) but is also referred to as the Upper Dark Limestone and has long been a source of building materials and aggregate for Dublin. The Calp is largely undifferentiated geologically.

Figure 6 - Bedrock Geological Map for the Basin View Site (retrieved from the GSI website)



Key: **LU** = Lucan Formation

4.2 Archived Reports

There are a number of reports presented online on the GSI database which by inference, shed light on the possible ground conditions on site. One such report is that undertaken by The Irish Piling & Construction Company in 1962 on the site in question.

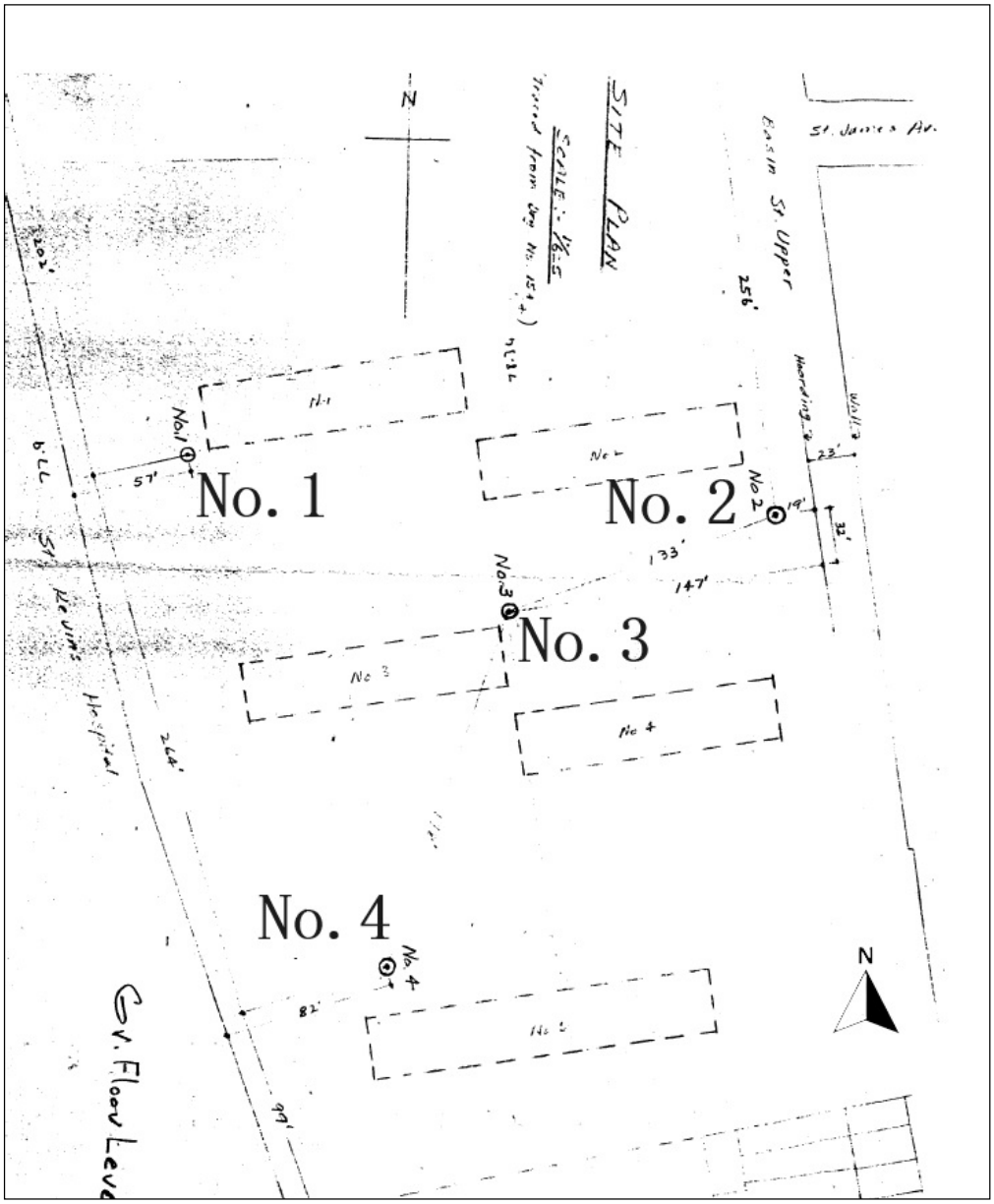
4.2.1 Trial Borings at Basin Street Upper, Dublin (The Irish Piling & Construction Company, 1962)

The project comprised four boreholes positioned close to the building footprints. Sketched logs revealed depths achieved of between 5feet and 17feet 6ins depth, the deepest being an equivalent of ca. 5.33m. All boreholes ended in 'black boulder clay' at depths ranging 3feet to 11feet below the existing ground level. This equates to 0.90m to 3.30m bgl. No water was reported in any of the boreholes.

Trial bore No.1 encountered a mere 0.90m of 'Large stone and blocks' before encountering the 'black boulder Clay'. Similarly, at No.3, a 1.20m cover of 'Big stones and fill' was documented prior to meeting the 'black boulder Clay'. In the case of the other two bores on the site, a 'Yellow Clay'

was found in both ahead of the 'Black boulder Clay'. It extended to 3.30m (No.2) and to 1.20m (No.4) before the till was unearthed.

Figure 7 – Trial bore layout on the Basin Street Upper site (The Irish Piling & Construction Company, 1962).



5. GROUND CONDITIONS & GROUNDWATER

5.1 Ground Profile – Superficial Deposits

The following is a summary of the ground conditions encountered across the site.

MADE GROUND

- Of the thirteen trial pits conducted, only trial pits TP07, TP10 and TP11 encountered natural deposits unearthed at depth. For the remainder, beneath what was typically an upper cover of Topsoil, a clay dominant Made Ground persisted for the depth of each respective pit. It should be noted however that many of the pits ended on shallow obstructions in the Made Ground thus preventing a deeper indigenous stratum from being exposed. In pits where exclusively Made Groud was met, the pit depths generally ranged from 0.40m to 1.70m bgl (18.68m OD). The deepest Made Ground was found was in TP09 where a (Medium dense) silty sandy Gravel with glass, rubbish, red brick and concrete rubble was logged to a depth of 2.20m (18.03m OD).

- In slit trenches ST01, ST03 and ST06, an approximately 500mm wide limestone plinth was exposed at depths ranging 400mm to 700mm bgl. The slit trenches each extended to a depth of 1.50m, with ST07 extending locally to 1.60m in an effort to expose the second water main (two were found in nearby ST06). As with the majority of trial pits, only Made Ground was unearthed in slit trenches to their bases. The soil was described as a gravelly sandy Silt/Clay with a low to medium cobble content.

- This 500mm wide robust limestone linear feature found in each of ST01, ST03 and ST06 may be a remnant of the City Basin structure.

- The thirteen boreholes on site can be split into two distinct categories. Table 1 lists the depth to Made Ground in each. It can be seen that seven boreholes intercepted Made Ground to depths greater than 2m, and to almost 4m in the case of BH03 (3.90m bgl / 16.50m OD). Elsewhere, six boreholes noted Made Ground to depths of less than 2m. It is noted that aside from both BH01 and BH03 (which are located towards the northern extent of the site), all of the deeper accumulations of Made Gorund were found in bores placed along the central N-S axis of the site. This suggests the former City Basin was deepest along the centre of the site, ie., where the infill was found to be greatest.

- The findings of the boreholes also corroborate the findings in trial pitting where indigenous soils only appeared in peripheral pits 07, 10 and 11.

Table 1 – Depth to MADE GROUND measured in on site cable percussion boreholes

Category 1 – MADE GROUND >2m		**Category 2 – MADE GROUND <2m** (Peripheral Bores)	
BH No.	**Depth to base MADE GROUND m bgl (m OD)**	**BH No.**	**Depth to base MADE GROUND m bgl (m OD)**
BH01	3.10 (17.01)	BH04	1.70 (18.64)
BH02	2.60 (17.60)	BH05	1.90 (18.41)
BH03	3.90 (16.50)	BH07	1.60 (18.49)
BH06	3.0 (17.16)	BH08*	1.80 (19.43)
BH09	2.20 (18.02)	BH10	1.30 (18.79)
BH12	3.60 (16.77)	BH11*	1.70 (19.30)
BH13	3.40 (16.99)		

*Possible MADE GROUND

Uppermost Indigenous Sediments – Weathered Till

- In the three aforementioned trial pits where natural deposits were thought to be found, the soils were variably described as 'firm brown sandy gravelly CLAY (Possible MADE GROUND)' in TP07 and 'Soft to firm and firm greyish brown sandy gravelly CLAY with a low cobble content' in TP10 and TP11.

- Along the western flank of the site, the natural ground was found in trial pits 07 and 11 at depths of 1.30m and 1.50m bgl corresponding to elevations of between 19.88m OD and 19.70m OD. Towards the east in TP10 the level of Made Ground was measured at 18.74m OD (1.40m bgl). The three pits ended at depths ranging 2.20m to 2.60m bgl.

- In the case of the six peripheral bores, where the Made Ground was not found to such depths (<2m depth), the placed deposits were found to lie on firm occasionally soft to firm grey and brown sandy gravelly SILT/CLAY. This increased in consistency to stiff generally before meeting the very stiff black till at depth.

GLACIAL DEPOSITS (Lodgement Till)

- Where the Made Ground cover measured >2m (See Table 1), a very stiff black Clay till was sampled in each of the seven bores. It was logged directly beneath the anthropogenic cover in each of boreholes BH01, BH02, BH13 and within 200mm to 500mm of the base of infill in each of BH03, BH04, BH12. At BH09, the Made Ground was found to lie on a stiff colour mottled CLAY from 2.20m bgl underlain at 3.10m bgl (17.12m OD) by the very stiff black sandy gravelly CLAY with cobbles and boulders.

- The entry of over-consolidated till in each of the deep Made Ground holes corresponded to levels ranging 16.10m to 17.60m OD. Each of the seven bores ended in this material at depths of between 4.10m to 6.60m.

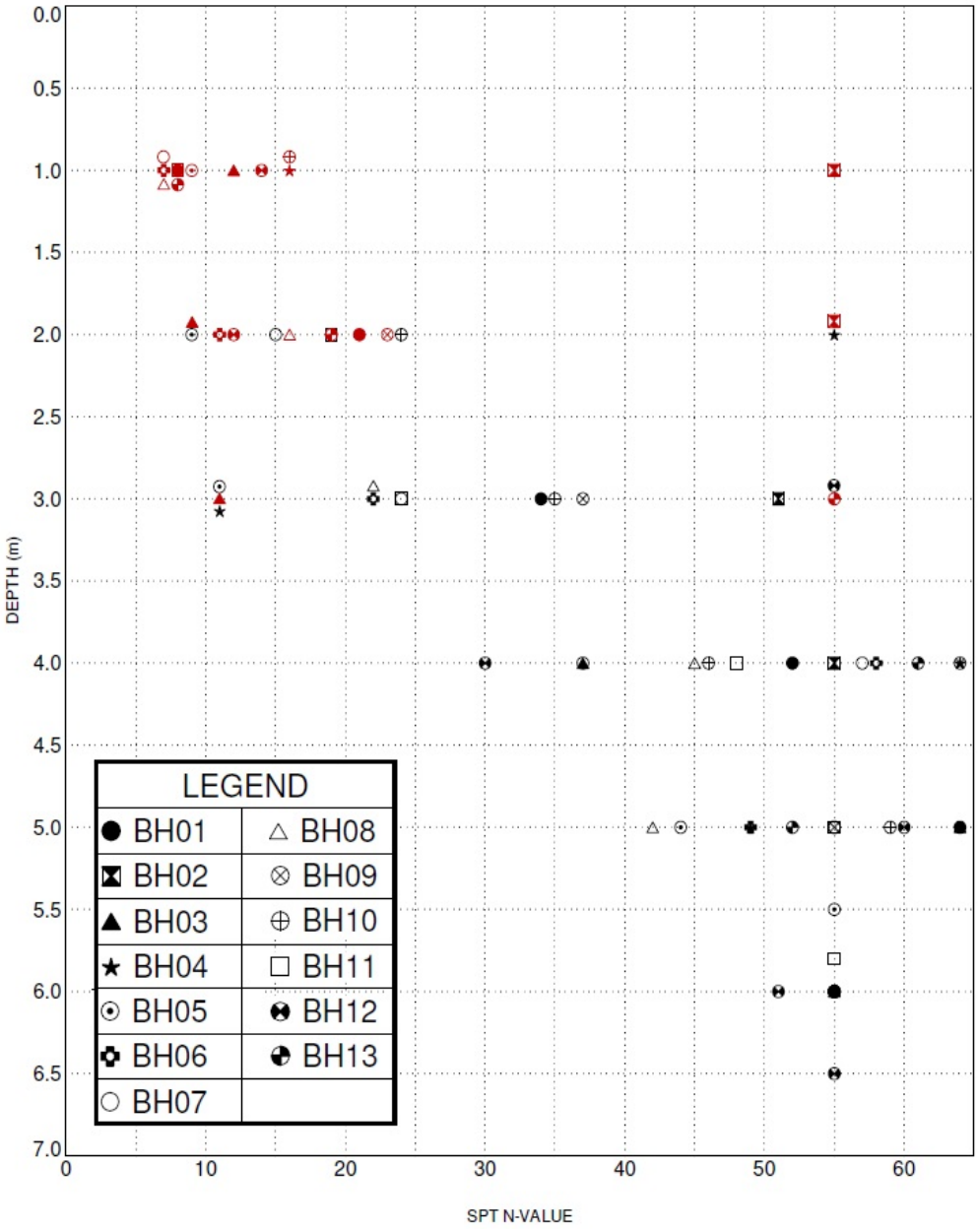
- In the case of the six peripheral bores, the very stiff black till was logged at depths ranging 2.90m (17.19m OD) to 3.80m (17.20m OD).

In-situ testing was undertaken during the construction of the thirteen boreholes. The standard penetration test [SPT] allows for an appraisal of the ground stiffness. A plot showing the blowcounts generated from testing at each hole is presented in Figure 8. The tests undertaken in Made Ground are coloured red.

The plot initially in the upper metre to 2m depth shows an inconsistent scatter of points indicative of a broad strength profile. As the majority of tests undertaken in the uppermost 2metres lie in Made Ground, the presence of obstructing anthropogenic constituents in the material only serve to obstruct test drives and thereby deliver erroneous results.

Those points which were conducted in indigenous soils are coloured black. They suggest the natural soils are soft to firm and firm in the upper 2metres. 'Low strength' deposits are those where N values of <10 blows are present. Based on SPT testing, by 3m depth, with the exception of BH04 and BH05, the soils are consistently stiff. From 4m, all soils are stiff to very stiff.

Figure 8 – SPT Plot versus Depth for Cable Percussion Boreholes. Red data points denote test drives / partial test drives in MADE GROUND.



Figures 9A & 9B – Sidewall profiles photographed during trial pitting. Fig 9A TP10 Topsoil overlying Made Ground comprising greyish brown sandy gravelly CLAY with a low cobble and boulder content (up to 450mm) with glass, concrete, red brick and nails. Underlying the Made Ground layer was a soft to firm greyish brown sandy gravelly CLAY to the pit base at 2.50m. A seepage was noted at 1.90m. **Fig 9B** At TP13, boulders and possible concrete was observed at 0.60m indicative of the presence of large obstructing material at shallow depths. The pit was terminated at this depth (19.77m OD).

Fig 9A

Fig 9B

5.2 Bedrock

Consultation of the GSI map for the area suggests the bedrock underlying the site is that of the Lucan Formation limestone and shales (See Section 4). Rotary drilling had not yet been completed at the time of draft report preparation.

5.3 Groundwater

Given the shallow termination depths recorded in many of the trial pits, it is not surprising that groundwater was encountered in just one trial pit. TP10 intercepted a seepage at 1.90m bgl (18.24m OD). The seepage was recorded in natural subsoils described as soft to firm sandy gravelly CLAY.

Water strikes were often encountered in boreholes at depths of ca. 4.0m bgl. They were recorded as largely seepages or slow water strikes and were seated in very stiff, largely impermeable Clay till.

Immediately post boring completion, groundwater was dipped by the driller with levels generally measuring the same as that of the initial strike. In line with this, once struck, groundwater did not appear to ascend inside the drill casing to any appreciable extent, in some cases not at all. Table 2 outlines where water was met in each of the exploratory holes. The potential does exist for there to be seasonal changes in groundwater level. The works were carried out during winter / early spring 2024.

Table 2 – Water measurements in on-site exploratory holes

	Exploratory Hole No.	Water Struck **m bgl** (m OD)	Stratum Description	Rate of Flow	Remarks / Stratum of water ingress (m OD)
Cable Percussion Boreholes	BH03	-	-	-	Water was noted at **4.0m** bgl (16.40m OD) in the borehole upon removal of the drill casing. BH ended at 6.0m. (18-01-24)
	BH04	**4.0** (16.34)	Very stiff black sandy gravelly CLAY with some cobbles and occasional boulders	Seepage – water did not rise during 20min observation period	-
	BH07	**4.60** (15.49)	Very stiff black sandy gravelly CLAY with cobbles and occasional boulders	Slow – water rose to **4.30m** in 20min. Sealed at 4.90m.	Water was noted at **4.30m** bgl (15.79m OD) in the borehole upon removal of the drill casing. BH ended at 6.20m. (13-02-24)
	BH10	**4.0** (16.09)	Very stiff black sandy gravelly CLAY with some cobbles and occasional boulders	Seepage – water did not rise during 20min observation period	Water was noted at **4.0m** bgl (16.09m OD) in the borehole upon removal of the drill casing. BH ended at 6.20m. (23-01-24)

Cont.

Cable Percussion Boreholes	BH12	**3.80** (16.57)	Interface of MADE GROUND with underlying Stiff grey brown sandy gravelly SILT/CLAY with occasional cobbles	Slow – water rose to **3.50m** in 20min. Sealed at 4.20m.	Water was noted at **3.50m** bgl (16.87m OD) in the borehole upon removal of the drill casing. BH ended at 6.60m. (07-02-24)
	BH13	**2.90** (17.49)	MADE GROUND comprising firm grey mottled brown and black sandy gravelly SILT/CLAY with cobbles, red brick fragments and tree roots.	Slow – water rose to **2.40m** in 20min. Sealed at 3.90m.	Water was noted at **2.30m** bgl (18.09m OD) in the borehole upon removal of the drill casing. BH ended at 6.20m. (31-01-24)
Trial Pits	TP10	**1.90** (18.24)	Soft to firm greyish brown sandy gravelly CLAY with a low cobble and boulder content (up to 300mm)	Seepage	Trial Pit remarked as stable. Pit ended at 2.50m.

6. GROUND ASSESSMENT & ENGINEERING RECOMMENDATIONS

6.1 General

In light of the ground investigation findings, the following geotechnical issues are developed and discussed:

- Foundations
- Groundwater / Infiltration
- Slopes / Batters
- Buried Concrete
- Waste Acceptance Criteria [WAC] & Environmental Testing
  - *Soils destined for Landfill*

6.2 Foundations

The ground investigation findings demonstrate a variable sequence of soils mantling the site, thought to be Made Ground in the upper 1 to 3m, thickening to 3.90m in BH03. The findings in all of the cable percussive boreholes suggest a stiff to very stiff over-consolidated CLAY underlies the cover of MADE GROUND. Where Made Ground was noted to thin towards the peripheral exploratory holes, a natural firm becoming firm to stiff and stiff colour motted CLAY was logged ahead of the black till. This is thought to be the "Yellow Clay" observed in bores undertaken in 1962 (See Section 4.2.1). The depth to the basal very stiff and stiff till is quite consistent in that it ranges from 3 to 4m below ground level in all boreholes save for BH02. At BH02, the black till enters the stratigraphy at 2.60m bgl.

The potential to intercept Made Ground to appreciable depths (up to 3.90m / 16.50m OD in BH03) suggests there is a significant variability in soil composition on the site, most likely attributable to historical periods of infilling at the site. Based on SPT N-Values, there are areas with soft to firm deposits to depths of ca. 3.0m, both comprising Made Ground and in natural deposits.

Foundation inspection pits positioned at existing multi-storey buildings on the site offer little in clarity as to the type of foundation. Given the infill history of the site, it is likely the buildings are built on footings that extend to the underlying over-consolidated black till, ie., at ca. 3.0m to 4.0m bgl.

Given the prominence of Made Ground (varying from 1.30m to 3.90m) and presence of soft to firm soils, the selected foundation solution will have to be founded within deeper competent strata to support structural loads.

Piles are recommended to support the structural loads and negate the risk of unacceptable settlement in the Made Ground and underlying low to medium strength soils. The use of piles would also eliminate the need to form excavations in potentially water-bearing near-surface soils (refer to Section 6.3). The use of a bored displacement pile system would curb the volume of arisings which would otherwise be generated using bored / CFA piles. However, advice should be sought from the piling contractor (or their designer) with regard to the most suitable pile type for the ground conditions.

Given the depth of rockhead (unproven currently - the GSI GeoUrban Viewer predicts rock in the range 15-25m), it is expected that adequate embedment in the lower CLAY layer will mobilise skin friction and end bearing. Ahead of coring, pile safe working load capacity (compression) should not be dependent on achieving end-bearing on the bedrock. Trial piling (at least 2 No.) would be advised to confirm embedment or penetration depths and more importantly validate that settlements would be acceptable at safe working load (SWL).

The pile designer should consider negative skin friction from the Made Ground and soft to firm CLAY (upper 2-3m) on the selected piling technique. Floor slab loadings for the building unit are unknown but a suspended floor slab is recommended in view of the presence of potentially compressible Made

Ground across the site. It may be possible, if the existing fill is rolled and capped with a layer of SR21 Annex E compliant granular material, an adequate support for floor slabs could be generated, unless unusually high pressures are envisaged. Given the occasionally elevated concentrations of total organic carbon detected in shallow soils (See Section 6.6), ground gas may be present on site. Measures should be incorporated in the ground slab design for the inclusion of a barrier to any such subterranean gases.

An engineered fill platform or piling mat to support the piling plant should be designed in accordance with BRE 470. The thickness and granular fill type (most likely T0 to SR21) should be selected for the ground conditions and specific rig loadings. It is assumed that imported granular fill used will remain in situ under the footprint of the building after piling works are completed, therefore it should meet the chemical and durability / soundness parameters listed in Annex E of SR21:2014+A1:2016. Drainage and maintenance are key factors or considerations in pile platform design and to ensure successful piling operations. It is noted that T0 will not permit free draining conditions, hence surface water management and maintenance of the piling is advised as set out in BRE 470.

Plate bearing tests could be undertaken across the site to assess the performance of the existing Made Ground layer and the results used design platform thickness. Assuming the Made Ground is to be left in place, compaction using a smooth drum roller without vibration with a mass per metre of roll of not less than 5400 kg should be used and achieve an improvement in the performance (stiffness) of the Made Ground before constructing a piling platform.

6.3 Groundwater / Infiltration

As noted in Section 5.3, groundwater strikes were largely absent in shallow excavation, albeit the trial pits failed to extend to depths greater than 1.50m to 2m given the obstructive constituents in the Made Ground. Strikes in the boreholes remained around 4.0m bgl with only one strike occurring in the uppermost 3m, BH13 at 2.90mbgl. The absence of water entry in seven of the thirteen bores may be attributed to the permeability of the natural CLAY (or lack thereof). This should limit the ingress of groundwater where excavations are formed solely in fine soils. Therefore, shallow temporary excavation should generally see an absence of water ingress in natural deposits. It should be noted that groundwater can exist in perched waterbodies often hosted in mixed Made Ground.

Should water be encountered during deeper digs / excavations it is likely that de-watering will be required through a combination of strategic sump pumping and / or perimeter drains. As mentioned in Section 5.3, the potential does exist for there to be seasonal changes in groundwater level. The works were carried out during winter/early spring 2024. It may be the case that the various waterbodies at depth are subject to seasonal variations.

Two soakaway tests were conducted on the site. Both tests were carried out primarily in the Made Ground Clay soils within open excavations. The impermeable fine grained nature of the soils may account for the low infiltration rates obtained.

It is likely that such soils would not be suitable for conventional soakaways being classified as offering only low natural infiltration (Table 3).

Table 3 – Measured infiltration rates (f) expressed as exposed area (metre) per unit time (minute)

Soakaway Test No.	Depth of Test (m bgl)	*f* (m/min)	*f* (m/sec)
SA01	1.0	0.00039 m/min	6.492E -06 m/sec
SA12	1.10	0.00029 m/min	4.915E -06 m/sec

6.4 Slopes / Batters

A maximum temporary slope angle of 1V to 1.5H (33º) is anticipated for batters constructed within the upper medium strength fine grained soils. A slope angle of 1V to 2H (26°) should be appropriate for long term batters in the same soils. Instability is likely in loosely bound Made Ground (where it occurs) in addition to the uppermost lower strength soft to firm deposits. Where deep excavation works are required in the superficial deposits, the use of trench box support is advised. In addition, the uppermost fine subsoils will be susceptible to softening and degradation and surface water or groundwater ingress can lead to a significant reduction in shear strength. Perched water can exist locally and this should be considered in risk assessments for excavations. Presence of ground gas should also be a consideration given the drape of Made Ground on the site.

Site operatives or personnel should not enter unsupported excavations and should be informed of potential risks. Where site operatives or engineering staff work in close proximity to temporary slopes or batters, these should be inspected and approved by a suitably experienced civil engineer, preferably with geotechnical experience. Where there is a risk of spalling of battered slopes, the use of a geogrid is recommended. The geogrid should be anchored at the top and bottom of the ridge face to contain particles such as gravel, cobbles and / or boulders, anthropogenic materials that may become dislodged.

6.5 Buried Concrete

The chemical analysis tests on natural soil samples (BRE SD1 analysis suite) show pH (2.5:1) values ranging from 8.2 to 8.6. The sulphate aqueous extract (SO_4) results from borehole and trial pit samples determined values of <10 and 230mg/l. This would suggest the 'as-received' soil samples tested could be categorised as BRE Class DS-1.

Table C2 ACEC for brownfield sites in BRE SD 1 (2005) can be used in the selection and design of concrete. If mobile groundwater conditions prevail at the site and given the pH values obtained from the testing, then ACEC class AC-1 would be expected to be appropriate for buried concrete in the soils. In line with I.S. EN 206-1:2013, given the elevated acid soluble sulphate contents reported, concrete could be manufactured to Class XA2 where founded or positioned in the upper soils (Class XA2 being >3000 and ≤ 12000 SO_4^{2-} mg/kg).

6.6 Waste Acceptance Criteria [WAC] & Environmental Testing – *Soils destined for Landfill*

Thirty soil samples from boreholes and trial pits were analysed for their compliance to the criteria set out in the 2002 European Landfill Directive (2003/33/EC). The results from testing feature in Appendix 8.

It would be prudent, given the volume of analysis, that a waste characterisation assessment of the results would be carried out in accordance with the Environmental Protection Agency (EPA) Guidelines on the Classification of Waste (2015). We would recommend that a specialist environmental consultant (e.g. O'Callaghan Moran Consultants) be engaged to undertake this assessment.

Asbestos (<0.001% to 0.095%) levels in the form of both Chrysotile and Amosite were found in samples from 0.30m to 2.0m depth. Given the abundance of rubble noted in the Made Ground cover on site, the potential to intercept similar "fibres/clumps" cannot be discounted. Table 4 lists where fibres / clumps were encountered.

Table 4 – Occurrence of Asbestos (Chemtest Report 24-06640-1)

Sample Location	Sample Depth	ACM type	Asbestos Identification	Asbestos by Gravimetry / Total Asbestos	Sample Description
TP04	0.30	Fibres/Clumps	Chrysotile	<0.001%	CLAY (MG)
TP05	0.60	Fibres/Clumps	Chrysotile	0.008%	cl/si GRAVEL (MG)
TP08	0.40	Fibres/Clumps	Chrysotile	0.018%	CLAY (MG)
BH09	2.0	Fibres/Clumps	Amosite / Chrysotile	0.095%	SILT/CLAY (MG)
BH12	1.0	Fibres/Clumps	Chrysotile	<0.001%	SILT/CLAY (MG)
BH13	1.0	Fibres/Clumps	Chrysotile	<0.001%	SILT/CLAY (MG)

MG = Made Ground
cl/si = clayey/silty

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Appendix 1

Trial Pit Logs & Photographs

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP01**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,766.42 E 733,779.72 N
		DATE STARTED	19/01/2024
		DATE COMPLETED	19/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.03
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL									
MADE GROUND comprising greyish brown sandy gravely Clay/Silt with a low cobble content. Cobbles are subangular to subrounded. Gravel is subangular to subrounded medium to coarse. Sand is fine to coarse		0.30	19.73		AA210349	B	0.60-0.60		
1.0 Pit ended on obstruction at 1.0m End of Trial Pit at 1.00m		1.00	19.03						
2.0									

Groundwater Conditions

Stability
Good

General Remarks
Hole terminated due to obstruction / boulders

IGSL TP LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP02**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,776.61 E 733,762.67 N
		DATE STARTED	19/01/2024
		DATE COMPLETED	19/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.17
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL		0.20	19.97						
MADE GROUND comprising (Loose) blue grey sandy Gravel. Gravel is angular to subangular medium. Sand is fine.		0.40	19.77		AA210351	B	0.30-0.30		
MADE GROUND comprising grey silty sandy Gravel with a low cobble and boulder content and abundant red brick fragments. Cobble and boulders are angular to sub rounded (up to 450mm). Gravel is fine to medium subangular to subrounded. Sand is fine.									
1.0					AA210352	B	1.20-1.20		
Pit ended on obstruction at 1.40m End of Trial Pit at 1.40m		1.40	18.77						
2.0									

Groundwater Conditions

Stability
Good

General Remarks
Hole terminated due to obstruction / boulders

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP03**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,748.16 E 733,761.61 N
		DATE STARTED	19/01/2024
		DATE COMPLETED	19/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.35
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL									
MADE GROUND comprising Greyish brown sandy gravely Clay/Silt with a low cobble content. Cobbles are subangular to subrounded. Gravel is subangular to subrounded medium to coarse. Sand is fine to coarse		0.35	20.00		AA210350	B	0.50-0.50		
Pit ended on obstruction at 0.90m End of Trial Pit at 0.90m		0.90	19.45						
1.0									
2.0									

Groundwater Conditions

Stability
Good

General Remarks
Hole terminated due to obstruction / boulders

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP04**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,759.24 E 733,742.36 N
		DATE STARTED	19/01/2024
		DATE COMPLETED	19/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	19.72
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 MADE GROUND comprising greyish brown sandy silty gravelly CLAY with a low cobble and boulder content and bricks, concrete, glass and plastic bags. Cobbles and boulders are angular to subrounded (up to 400mm). Gravel is subangular medium. Sand is fine to medium.					AA210348	B	0.30-0.30		
		0.40	19.32						
Pit ended on obstruction at 0.40m - Buried pipework obstructing dig End of Trial Pit at 0.40m									
1.0									
2.0									

Groundwater Conditions

Stability
Good

General Remarks
Hole terminated due to obstruction / boulders

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP05**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,830.23 E 733,767.50 N
		DATE STARTED	19/01/2024
		DATE COMPLETED	19/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.30
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL		0.20	20.10						
MADE GROUND comprising grey clayey/silty sandy Gravel with a low cobble and boulder content. Cobble and boulders are angular to subrounded (up to 450mm). Gravel is subangular to subrounded fine to medium. Sand is fine.					AA210353	B	0.60-0.60		
1.0									
Pit ended on obstruction at 1.40m End of Trial Pit at 1.40m		1.40	18.90						
2.0									

Groundwater Conditions

Stability
Good

General Remarks
Hole terminated due to obstruction / boulders

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP06**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,803.38 E 733,730.82 N
		DATE STARTED	22/01/2024
		DATE COMPLETED	22/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.03
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL					AA210360	B	0.20-0.20		
MADE GROUND comprising (Loose) grey clayey gravelly Sand with a medium cobble and boulder content and occasional red and yellow brick fragment. Boulders and cobbles are angular to subangular (up to 800mm). Gravel is angular to subangular medium to coarse. Sand is fine to coarse.		0.30	19.73						
1.0					AA210361	B	1.30-1.30		
End of Trial Pit at 0.60m		1.50	18.53						
2.0									

Groundwater Conditions

Stability
Side wall collapse

General Remarks
Hole terminated due to obstruction / boulders

IGSL TP LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP07**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,752.88 E 733,715.38 N
		DATE STARTED	18/01/2024
		DATE COMPLETED	18/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	21.20
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL					AA210339	B	0.20-0.20		
MADE GROUND comprising greyish brown sandy gravelly Clay with a low cobble and boulder content (up to 450mm) with rare glass, red brick, concrete and nails. Gravel is subangular to subrounded medium to coarse. Sand is coarse to fine.		0.30	20.90						
1.0					AA210340	B	1.30-1.30		
Firm brown sandy gravelly Clay with a low cobble content (Possible MADE GROUND)		1.50	19.70						
2.0									
End of Trial Pit at 2.20m		2.20	19.00		AA210341	B	2.20-2.20		

Groundwater Conditions

Stability
Good

General Remarks

IGSL TP LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP08**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,769.18 E 733,704.58 N
		DATE STARTED	22/01/2024
		DATE COMPLETED	22/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.10
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0	MADE GROUND comprsied of greyish brown sandy silty gravelly CLAY with a low cobble and boulder content with bricks, concrete, glass and plastic bags. Cobbles and boulders are angular to subrounded (up to 400mm). Gravel is subangular medium. Sand is fine to medium.					AA210362	B	0.40-0.40		
	Pit ended on obstruction at 0.60m End of Trial Pit at 0.60m		0.60	19.50						
1.0										
2.0										

Groundwater Conditions

Stability
Good

General Remarks
Hole terminated due to obstruction / boulders

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP09**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,810.69 E 733,694.28 N
		DATE STARTED	22/01/2024
		DATE COMPLETED	22/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.23
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL					AA210354	B	0.10-0.10		
MADE GROUND comprising (Medium dense) silty sandy Gravel with glass, rubbish, red brick and concrete rubble. Gravel is rounded to subrounded fine to medium. Sand is fine to coarse.		0.20	20.03						
1.0					AA210355	B	1.00-1.00		
2.0					AA210356	B	2.10-2.10		
End of Trial Pit at 2.20m		2.20	18.03						

Groundwater Conditions

Stability
Good

General Remarks

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP10**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,839.08 E 733,687.65 N
		DATE STARTED	22/01/2024
		DATE COMPLETED	22/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.14
		EXCAVATION METHOD	Midi Tracked Excavator
ENGINEER	MORCE		

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL					AA210357	B	0.20-0.20		
MADE GROUND comprising Greyish brown sandy gravelly Clay with a low cobble and boulder content (up to 450mm) with glass, red brick, concrete and nails. Gravel is subangular to subrounded medium to coarse. Sand is fine to coarse.		0.40	19.74						
1.0					AA210358	B	1.30-1.30		
Soft to firm greyish brown sandy gravelly CLAY with a low cobble and boulder content (up to 300mm). Cobbles and boulders are suborunded. Gravel is subangular to subrounded medium to coarse. Sand is fine to medium		1.40	18.74	1 (Seepage)					
2.0					AA210359	B	2.10-2.10		
End of Trial Pit at 2.50m		2.50	17.64						

Groundwater Conditions
Seepage at 1.9m

Stability
Good

General Remarks

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP11**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,770.32 E 733,671.65 N
		DATE STARTED	18/01/2024
		DATE COMPLETED	18/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	21.18
		EXCAVATION METHOD	Midi Tracked Excavator
ENGINEER	MORCE		

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL					AA210342	B	0.20-0.20		
MADE GROUND comprising soft to firm greyish brown sandy gravelly Clay with a low cobble and boulder content (up to 450mm) and with glass, red brick, concrete and nails. Gravel is subangular to subrounded medium to coarse. Sand is fine to coarse.		0.30	20.88						
1.0					AA210343	B	1.20-1.20		
Soft to firm and firm greyish brown sandy gravelly Clay with a low cobble content (Possible MADE GROUND)		1.30	19.88						
2.0					AA210344	B	2.40-2.40		
End of Trial Pit at 2.60m		2.60	18.58						

Groundwater Conditions

Stability
Good

General Remarks

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP12**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,799.26 E 733,633.66 N
		DATE STARTED	18/01/2024
		DATE COMPLETED	18/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.38
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL		0.25	20.13		AA210345	B	0.20-0.20		
MADE GROUND comprising (Loose) greyish brown silty gravelly Sand with a low cobble content, steel pipe fragments, red bricks and concrete. Cobbles are angular to subrounded. Gravel is fine to medium. Sand is medium to coarse.									
1.0					AA210346	B	1.50-1.50		
Pit ended on obstruction at 1.70m End of Trial Pit at 1.70m		1.70	18.68						
2.0									

Groundwater Conditions

Stability
Good

General Remarks
Hole terminated due to obstruction / boulders

TRIAL PIT RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**TRIAL PIT NO.**	**TP13**
		SHEET	Sheet 1 of 1
LOGGED BY	PN	**CO-ORDINATES**	713,841.71 E 733,644.68 N
		DATE STARTED	18/01/2024
		DATE COMPLETED	18/01/2024
CLIENT	NDFA	**GROUND LEVEL (m)**	20.37
ENGINEER	MORCE	**EXCAVATION METHOD**	Midi Tracked Excavator

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TOPSOIL									
MADE GROUND comprising brown silty gravelly Sand with a low cobble and boulder content (up to 400mm). Gravel is subangular to subrounded medium to coarse. Sand is medium.		0.25	20.12		AA210347	B	0.40-0.40		
Pit ended on obstruction at 0.60m - Boulders and possible concrete End of Trial Pit at 0.60m		0.60	19.77						
1.0									
2.0									

Groundwater Conditions

Stability
Good

General Remarks
Hole terminated due to obstruction / boulders

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP01

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP02

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP03

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP04

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP05

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP06

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

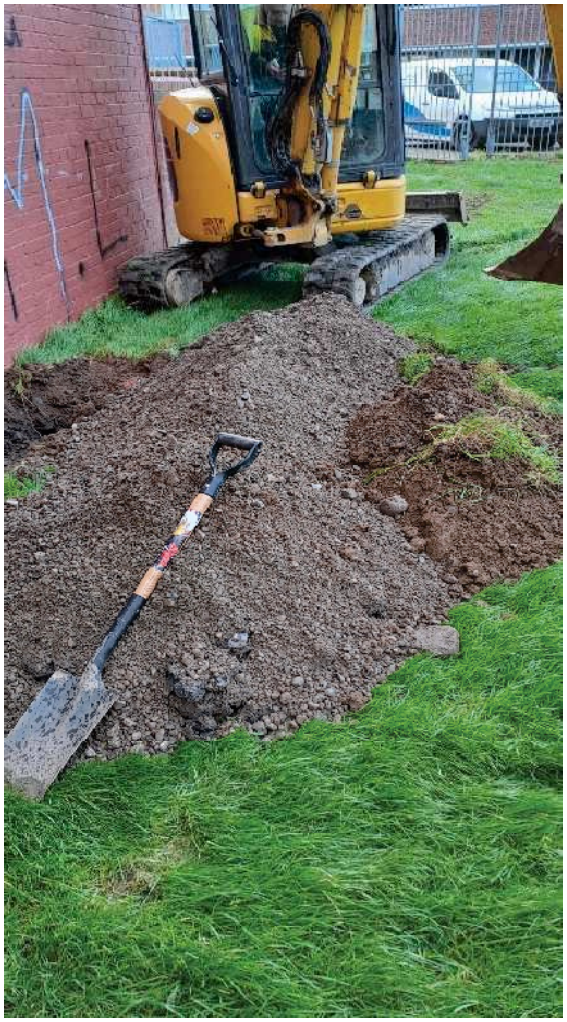
TP07

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP08

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP09



Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP10

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP11

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP12

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP12

Project Number: **25000-4**
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

TP13

Appendix 2

Foundation Pit Logs

FOUNDATION INSPECTION PIT RECORD

REPORT NUMBER

25000-4

Contract:	NDFA Social Housing Bundles 4/5 - Lot 4 – Basin View
Location:	FP04 (at TP04)
Engineer	MORCE
Client:	NDFA
Logged by:	PN
Date:	18/01/2024

TRIAL PIT NO. **FP04**

PHOTOS

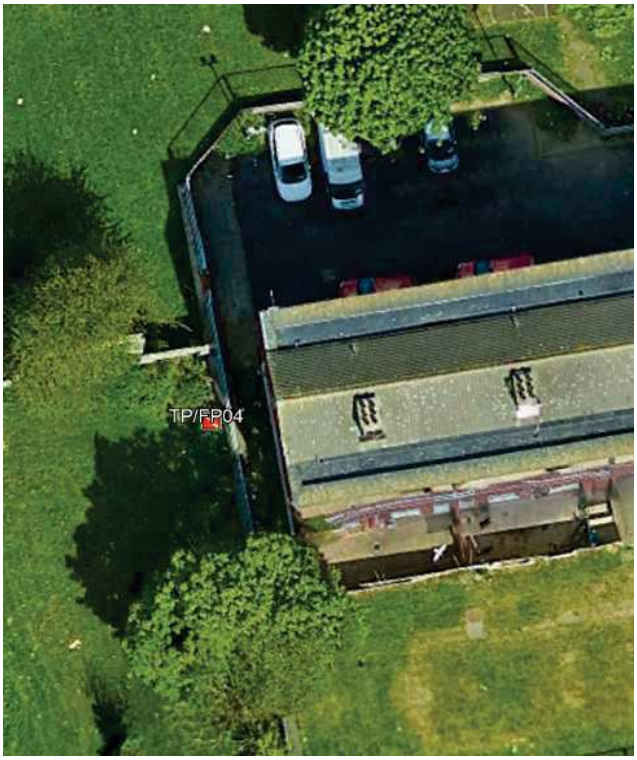
Summary of ground conditions

from	to	Description	Ground water
0.00	0.40	MADE GROUND comprising greyish brown sandy silty gravelly CLAY with a low cobble and boulder content and bricks, concrete, glass and plastic bags	Dry
	Note	Excavation hampered due to presence of 4" black PVC pipes	

Samples: AA210348

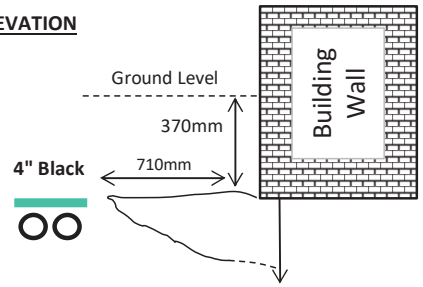
Location:

Easting	Northing	Elevation
713759.241	733742.359	19.72

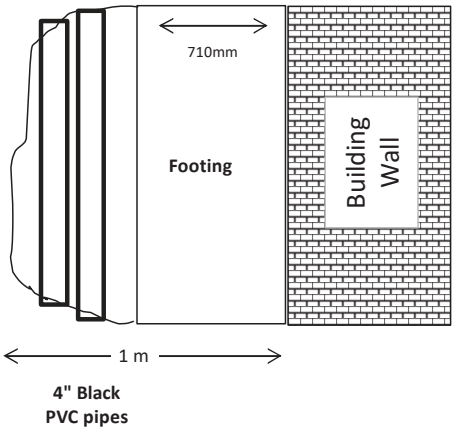


Detail:

ELEVATION



PLAN



FOUNDATION INSPECTION PIT RECORD

REPORT NUMBER

25000-4

Contract:	NDFA Social Housing Bundles 4/5 - Lot 4 – Basin View
Location:	FP06 (at TP06)
Engineer	MORCE
Client:	NDFA
Logged by:	PN
Date:	22/01/2024

TRIAL PIT NO. **FP06**

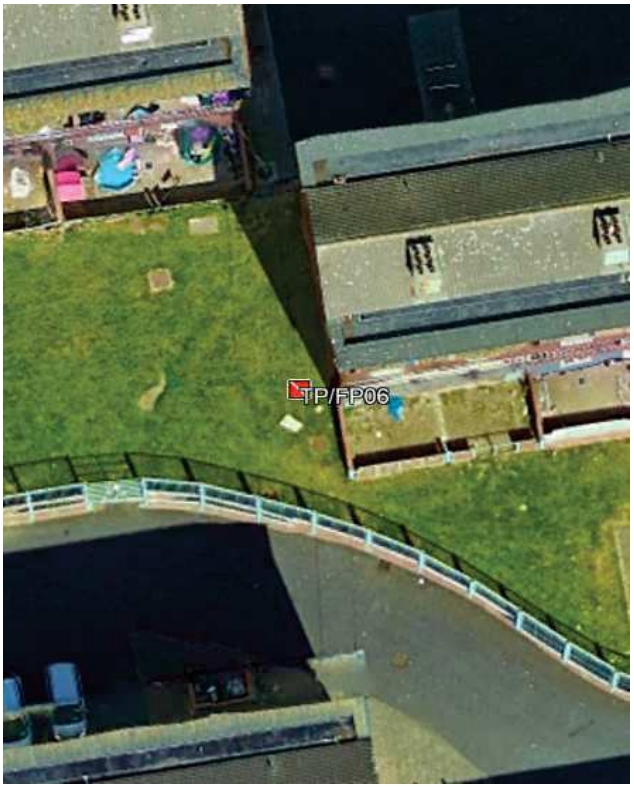
PHOTOS

Summary of ground conditions

from	to	Description	Ground water
0.00	0.50	TOPSOIL	Dry
0.50	1.50	MADE GROUND comprising (Loose) grey clayey gravelly Sand with a medium cobble and boulder content and occasional red and yellow brick fragment.	

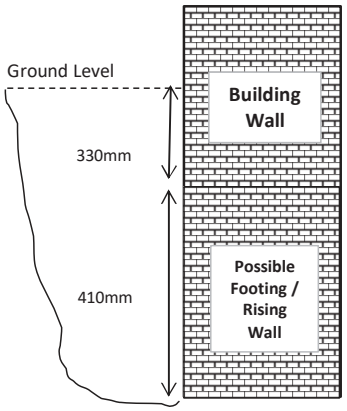
Samples: AA210360, AA210361

Location: Easting 713803.375 Northing 733730.82 Elevation 20.028



Detail:

ELEVATION



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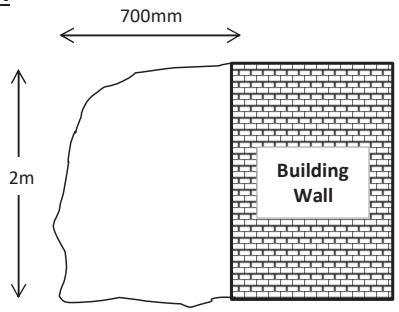


FOUNDATION INSPECTION PIT RECORD

REPORT NUMBER

25000-4

Contract:	NDFA Social Housing Bundles 4/5 - Lot 4 – Basin View
Location:	FP08 (at TP08)
Engineer	MORCE
Client:	NDFA
Logged by:	PN
Date:	22/01/2024

TRIAL PIT NO. **FP08**

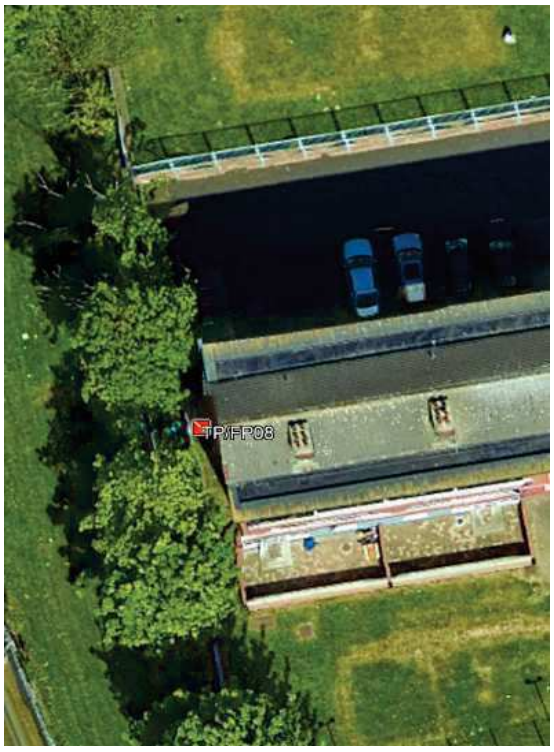
PHOTOS

Summary of ground conditions

from	to	Description	Ground water
0.00	0.60	MADE GROUND comprsied of greyish brown sandy silty gravelly CLAY with a low cobble and boulder content with bricks, concrete, glass and plastic bags	Dry
	Note	Dig terminated due to restricted access	

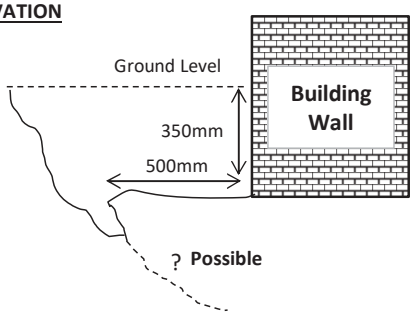
Samples: AA210362

Location: Easting 713769.18 Northing 733704.58 Elevation 20.098



Detail:

ELEVATION



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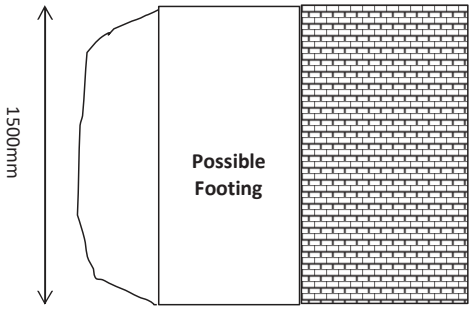


FOUNDATION INSPECTION PIT RECORD

REPORT NUMBER

25000-4

Contract:	NDFA Social Housing Bundles 4/5 - Lot 4 – Basin View
Location:	FP09 (at TP09)
Engineer	MORCE
Client:	NDFA
Logged by:	PN
Date:	22/01/2024

TRIAL PIT NO. **FP09**

PHOTOS

Summary of ground conditions

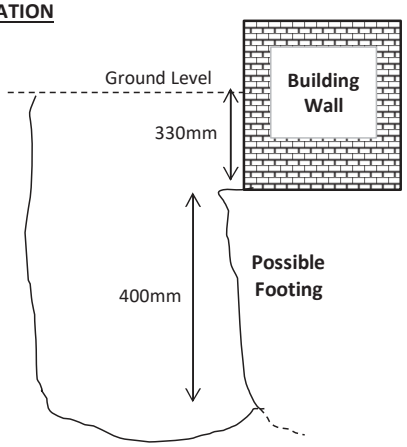
from	to	Description	Ground water
0.00	0.20	TOPSOIL	Dry
0.20	1.60	(Medium dense) Silty gravelly Sand (MADE GROUND)	

Samples: AA210354, AA210355

Location: Easting 713810.685 Northing 733694.279 Elevation 20.233

Detail:

ELEVATION



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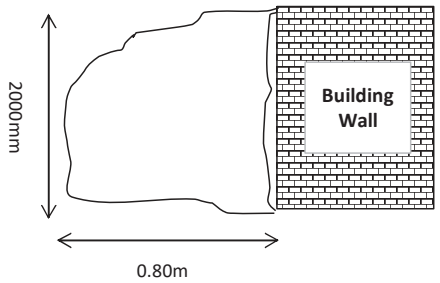


Appendix 3

Cable Percussion Borehole Logs

SPT Calibration Sheet (Er)

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH01**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,749.89 E 733,773.50 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.11	**BOREHOLE DEPTH (m)**	6.30
		DATE COMMENCED	17/01/2024
		DATE COMPLETED	18/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.01	0.10						
	MADE GROUND comprising brown sandy slightly gravelly SILT/CLAY. Gravel is fine.		19.61	0.50	AA210276	B	0.50			
1	MADE GROUND comprising grey/brown sandy gravelly SILT/CLAY with occasional cobbles/boulders and red brick fragments.				AA210277	B	1.00		N = 8 (0, 2, 2, 2, 2, 2)	
			18.51	1.60						
2	MADE GROUND comprising grey/white sandy gravelly SILT/CLAY with cobbles, concrete, red and white brick fragments.				AA210278	B	2.00		N = 21 (7, 5, 5, 5, 5, 6)	
3			17.01	3.10	AA210279	B	3.00		N = 34 (5, 6, 8, 8, 9, 9)	
	Very stiff black sandy gravelly CLAY with some cobbles and occasional boulders									
4					AA210280	B	4.00		N = 52 (8, 10, 10, 15, 15, 12)	
5					AA210281	B	5.00		N = 64 (9, 7, 14, 16, 17, 17)	
6					AA210282	B	6.00		N = 50/150 mm (15, 10, 20, 30)	
			13.81	6.30						
	Obstruction End of Borehole at 6.30 m									
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
4.80	6.00	1	
6.20	6.30	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend

D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH02**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,776.56 E 733,782.87 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.20	**BOREHOLE DEPTH (m)**	4.10
		DATE COMMENCED	18/01/2024
		DATE COMPLETED	19/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.10	0.10						
	MADE GROUND comprising brown sandy gravelly SILT/CLAY		19.60	0.60	AA210283	B	0.50			
	Large BOULDER		19.40	0.80						
1	MADE GROUND comprising brown sandy gravelly SILT/CLAY with cobbles, boulders and red/white brick fragments				AA210284	B	1.00		N = 50/75 mm (25, 50)	
2					AA210285	B	2.00		N = 50/75 mm (14, 11, 50)	
			17.60	2.60						
3	Very stiff dark grey/black sandy silty gravelly CLAY with some cobbles and occasional boulders				AA210286	B	3.00		N = 51 (8, 15, 15, 10, 10, 16)	
4			16.10	4.10	AA210287	B	4.00		N = 50/75 mm (25, 50)	
	Obstruction End of Borehole at 4.10 m									
5										
6										
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
2.80	3.00	1	
4.00	4.10	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend
D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH03**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,827.35 E 733,792.51 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.40	**BOREHOLE DEPTH (m)**	6.00
		DATE COMMENCED	17/01/2024
		DATE COMPLETED	18/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	WB
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.20	0.20						
	MADE GROUND comprising brown sandy gravelly SILT/CLAY with root fibres		19.70	0.70						
1	MADE GROUND comprising brown sandy gravelly CLAY with plastic pieces and red brick fragments				AA198339	B	1.00		N = 12 (2, 3, 4, 2, 3, 3)	
			18.60	1.80						
2	MADE GROUND comprising brown sandy gravelly SILT/CLAY with occasional cobbles and some root fibres				AA198340	B	2.00		N = 9 (2, 2, 2, 3, 2, 2)	
3					AA198341	B	3.00		N = 11 (1, 1, 2, 2, 4, 3)	
			16.50	3.90						
4	Dense grey/brown very sandy GRAVEL (Possibly very gravelly Sand)		16.10	4.30	AA198342	B	4.00		N = 37 (2, 4, 5, 9, 11, 12)	
	Very stiff black sandy gravelly CLAY with occasional cobbles									
5					AA198343	B	5.00		N = 64 (5, 12, 14, 19, 17, 14)	
			14.40	6.00						
6	Obstruction End of Borehole at 6.00 m				AA198344	B	6.00		N = 50/75 mm (25, 50)	
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
5.80	6.00	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
18-01-24	6.00	Nil	4.00	End of BH

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend
D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH04**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,753.39 E 733,754.46 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.34	**BOREHOLE DEPTH (m)**	6.30
		DATE COMMENCED	15/01/2024
		DATE COMPLETED	16/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.24	0.10						
	MADE GROUND comprising brown sandy gravelly SILT/CLAY		19.54	0.80	AA210269	B	0.50			
	Large BOULDER		19.34	1.00						
1	MADE GROUND comprising brown sandy gravelly SILT/CLAY with cobbles and red brick fragments		18.64	1.70	AA210270	B	1.00		N = 16 (0, 2, 3, 4, 4, 5)	
2	Firm grey sandy gravelly SILT/CLAY with occasional cobbles				AA210271	B	2.00		N = 50/75 mm (25, 50)	
3					AA210272	B	3.00		N = 11 (1, 2, 2, 4, 3, 2)	
			16.74	3.60						
4	Very stiff black sandy gravelly CLAY with some cobbles and occasional boulders				AA210273	B	4.00		N = 64 (7, 8, 14, 15, 16, 19)	
5					AA210274	B	5.00		N = 49 (7, 10, 12, 12, 13, 12)	
6					AA210275	B	6.00		N = 50/150 mm (11, 14, 34, 16)	
			14.04	6.30						
	Obstruction End of Borehole at 6.30 m									
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
2.00	2.40	0.75	
3.00	3.20	1	
6.20	6.30	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
4.00	4.00	No	No	20	Seepage

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend

D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH05**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,832.52 E 733,771.44 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.31	**BOREHOLE DEPTH (m)**	5.50
		DATE COMMENCED	16/01/2024
		DATE COMPLETED	16/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.11	0.20						
	MADE GROUND comprising brown sandy slightly gravelly SILT/CLAY		19.81	0.50						
1	MADE GROUND comprising brown sandy gravelly CLAY with cobbles, concrete pieces and red brick fragments				AA198354	B	1.00		N = 9 (2, 2, 3, 2, 2, 2)	
			18.41	1.90						
2	Soft to firm brown sandy gravelly SILT/CLAY with occasional cobbles				AA198355	B	2.00		N = 9 (2, 2, 2, 2, 3, 2)	
3					AA198356	B	3.00		N = 11 (1, 1, 1, 2, 3, 5)	
			16.71	3.60						
4	Very stiff black sandy gravelly CLAY with some cobbles				AA198357	B	4.00		N = 37 (2, 3, 9, 7, 10, 11)	
5					AA198358	B	5.00		N = 44 (5, 7, 10, 10, 10, 14)	
			14.81	5.50					N = 50/75 mm (25, 50)	
	Obstruction End of Borehole at 5.50 m									
6										
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
5.30	5.50	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend
D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH06**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,787.42 E 733,728.91 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.16	**BOREHOLE DEPTH (m)**	6.20
		DATE COMMENCED	08/02/2024
		DATE COMPLETED	09/02/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.06	0.10						
	MADE GROUND comprising light brown sandy gravelly SILT/CLAY		19.86	0.30						
1	MADE GROUND comprising grey/brown sandy gravelly SILT/CLAY with yellow and red brick fragments and large cobbles throughout				AA220290	B	1.00		N = 7 (0, 1, 1, 2, 2, 2)	
2					AA220291	B	2.00		N = 11 (2, 2, 2, 3, 2, 4)	
			17.16	3.00						
3	Stiff grey sandy gravelly SILT/CLAY with occasional cobbles				AA220292	B	3.00		N = 22 (2, 4, 4, 5, 5, 8)	
			16.66	3.50						
	Very stiff black sandy silty gravelly CLAY with some cobbles and occasional cobbles									
4					AA220293	B	4.00		N = 58 (7, 6, 10, 14, 16, 18)	
5					AA220294	B	5.00		N = 49 (17, 8, 10, 11, 14, 14)	
6			13.96	6.20	AA220295	B	6.00		N = 50/75 mm (15, 10, 50)	
	Obstruction End of Borehole at 6.20 m									
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
6.10	6.20	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type
09-02-24	6.20	1.00	6.20	50mm SP

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS 2hrs standing due to parked car, cones having been moved. Safety fencing erected around work zone. CAT scanned location and hand dug inspection pit carried out.

Sample Legend
D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH07**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,835.65 E 733,724.91 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.09	**BOREHOLE DEPTH (m)**	6.20
		DATE COMMENCED	12/02/2024
		DATE COMPLETED	13/02/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		19.89	0.20						
	MADE GROUND comprising light brown sandy gravelly SILT/CLAY		19.69	0.40	AA216801	B	0.50			
1	MADE GROUND comprising grey/brown sandy gravelly SILT/CLAY with yellow and red brick fragments and large cobbles throughout		18.49	1.60	AA216802	B	1.00		N = 7 (0, 1, 1, 2, 2, 2)	
2	Firm light grey sandy gravelly SILT/CLAY with some cobbles		17.59	2.50	AA216803	B	2.00		N = 15 (2, 2, 3, 3, 4, 5)	
3	Stiff mottled grey sandy silty gravelly CLAY with some cobbles		16.59	3.50	AA216804	B	3.00		N = 24 (3, 4, 5, 5, 6, 8)	
4	Very stiff black sandy gravelly CLAY with cobbles and occasional boulders				AA216805	B	4.00		N = 57 (8, 10, 14, 14, 14, 15)	
5					AA216806	B	5.00		N = 55 (10, 15, 10, 16, 14, 15)	
6			13.89	6.20	AA216807	B	6.00		N = 50/75 mm (25, 50)	
	Obstruction End of Borehole at 6.20 m									
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
6.10	6.20	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
4.60	4.60	4.90	4.30	20	Slow

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
13-02-24	6.20	Nil	4.30	End of BH

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend
D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH08**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,750.98 E 733,736.54 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	21.23	**BOREHOLE DEPTH (m)**	6.20
		DATE COMMENCED	24/01/2024
		DATE COMPLETED	25/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		21.03	0.20						
	Brown sandy slightly gravelly SILT/CLAY. Gravel is fine.		20.83	0.40						
	Soft grey/brown sandy gravelly SILT/CLAY (Possible Made Ground)				AA220258	B	0.50			
1					AA220259	B	1.00		N = 7 (0, 2, 2, 1, 2, 2)	
			19.43	1.80						
2	Firm light brown sandy gravelly SILT/CLAY with occasional cobbles				AA220260	B	2.00		N = 16 (2, 3, 3, 4, 4, 5)	
			18.83	2.40						
	Stiff grey/brown sandy silty gravelly CLAY with occasional cobbles									
3					AA220261	B	3.00		N = 22 (5, 5, 4, 5, 6, 7)	
			17.53	3.70						
	Very stiff black sandy gravelly CLAY with some cobbles and occasional boulders				AA220262	B	4.00		N = 45 (7, 9, 9, 10, 12, 14)	
4										
5					AA220263	B	5.00		N = 42 (8, 8, 10, 7, 10, 15)	
6			15.03	6.20	AA220264	B	6.00		N = 50/150 mm (19, 6, 27, 23)	
	Obstruction End of Borehole at 6.20 m									
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
4.10	5.00	1	
5.00	5.10	0.75	
6.10	6.20	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend

D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH09**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,801.50 E 733,690.42 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.22	**BOREHOLE DEPTH (m)**	6.20
		DATE COMMENCED	23/01/2024
		DATE COMPLETED	23/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.02	0.20						
	MADE GROUND comprising brown sandy slightly gravelly SILT/CLAY. Gravel is fine.		19.62	0.60	AA220251	B	0.50			
	MADE GROUND comprising brown sandy gravelly SILT/CLAY		19.32	0.90						
1	MADE GROUND comprising grey/brown sandy gravelly SILT/CLAY with cobbles and red brick fragments				AA220252	B	1.00			
2			18.02	2.20	AA220253	B	2.00		N = 23 (2, 5, 5, 6, 5, 7)	
	Stiff mottled brown sandy silty gravelly CLAY with occasional cobbles									
3			17.12	3.10	AA220254	B	3.00		N = 37 (5, 5, 7, 8, 8, 14)	
	Very stiff black sandy gravelly CLAY with some cobbles and occasional boulders									
4					AA220255	B	4.00		N = 64 (10, 10, 14, 16, 18, 16)	
5					AA220256	B	5.00		N = 50/225 mm (7, 8, 10, 15, 25)	
6			14.02	6.20	AA220257	B	6.00		N = 50/75 mm (25, 50)	
	Obstruction End of Borehole at 6.20 m									
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
1.20	1.70	1	
6.10	6.20	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend

D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH10**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,839.04 E 733,684.97 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.09	**BOREHOLE DEPTH (m)**	6.20
		DATE COMMENCED	22/01/2024
		DATE COMPLETED	23/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		19.89	0.20						
	MADE GROUND comprising brown sandy slightly gravelly SILT/CLAY. Gravel is fine.		19.69	0.40	AA210292	B	0.50			
	MADE GROUND comprising brown sandy gravelly SILT/CLAY		19.19	0.90	AA210293	B	1.00		N = 16 (2, 2, 3, 4, 4, 5)	
1	MADE GROUND comprising grey/brown sandy gravelly SILT/CLAY with cobbles and red brick fragments		18.79	1.30						
	Firm to stiff mottled brown sandy silty gravelly CLAY with occasional cobbles				AA210294	B	2.00		N = 24 (2, 2, 3, 5, 7, 9)	
2			17.19	2.90						
3	Very stiff black sandy gravelly CLAY with some cobbles and occasional bouders				AA210295	B	3.00		N = 35 (5, 5, 6, 7, 9, 13)	
4					AA210296	B	4.00		N = 46 (7, 9, 8, 12, 14, 12)	
5					AA210297	B	5.00		N = 59 (10, 8, 9, 18, 19, 13)	
6			13.89	6.20	AA210298	B	6.00		N = 50/75 mm (8, 17, 50)	
	Obstruction End of Borehole at 6.20 m									
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
5.20	6.20	0.75	
6.10	6.20	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
4.00	4.00	No	No	20	Seepage

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
23-01-24	6.20	Nil	4.00	End of BH

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend

D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH11**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,781.73 E 733,643.01 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	21.00	**BOREHOLE DEPTH (m)**	5.80
		DATE COMMENCED	29/01/2024
		DATE COMPLETED	30/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.80	0.20						
	Soft brown sandy slightly gravelly SILT/CLAY (Possible Made Ground)				AA220265	B	0.50			
			20.00	1.00						
1	Soft grey/brown sandy gravelly SILT/CLAY with occasional cobbles (Possible Made Ground)				AA220266	B	1.00		N = 8 (1, 1, 2, 2, 2, 2)	
			19.30	1.70						
2	Firm to stiff grey/brown sandy silty gravelly CLAY with occasional cobbles				AA220267	B	2.00		N = 19 (2, 3, 4, 4, 5, 6)	
3					AA220268	B	3.00		N = 24 (4, 4, 5, 6, 6, 7)	
			17.20	3.80						
4	Very stiff black sandy gravelly CLAY with some cobbles and occasional boulders				AA220269	B	4.00		N = 48 (6, 6, 10, 12, 12, 14)	
5					AA220270	B	5.00		N = 50/150 mm (15, 10, 28, 22)	
			15.20	5.80						
6	Obstruction End of Borehole at 5.80 m								N = 50/75 mm (18, 21, 50)	
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
5.70	5.80	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend

D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH12**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,797.59 E 733,638.15 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.37	**BOREHOLE DEPTH (m)**	6.60
		DATE COMMENCED	06/02/2024
		DATE COMPLETED	07/02/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.17	0.20						
	MADE GROUND comprising grey/brown sandy gravelly SILT/CLAY with cobbles and yellow/red brick fragments				AA202083	B	1.00		N = 14 (0, 2, 3, 4, 4, 3)	
1										
					AA202084	B	2.00		N = 12 (1, 2, 2, 2, 3, 5)	
2										
			17.37	3.00	AA202085	B	3.00		N = 50/75 mm (18, 25, 50)	
3	Possible large BOULDER									
			16.77	3.60						
	Stiff grey/brown sandy gravelly SILT/CLAY with occasional cobbles		16.57	3.80						
4	Very stiff black sandy silty gravelly CLAY with some cobbles and occasional boulders				AA202086	B	4.00		N = 30 (2, 3, 5, 7, 7, 11)	
					AA202087	B	5.00		N = 60 (6, 12, 14, 14, 15, 17)	
5										
					AA202088	B	6.00		N = 51 (8, 17, 14, 14, 11, 12)	
6			13.77	6.60	AA202089	B	6.50		N = 50/75 mm (25, 50)	
	Obstruction End of Borehole at 6.60 m									
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
3.00	3.60	1.5	
6.50	6.60	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
3.80	3.80	4.20	3.50	20	Slow

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type
07-02-24	6.60	1.00	6.60	50mm SP

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
07-02-24	6.60	Nil	3.50	End of BH

REMARKS 2hrs moving rig into position due to very wet ground conditions. Safety fencing erected around work zone. CAT scanned location and hand dug inspection pit carried out.

Sample Legend

D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

GEOTECHNICAL BORING RECORD

REPORT NUMBER 25000-4

CONTRACT	NDFA Social Housing Bundles 4/5 - Lot 4- Basin View	**BOREHOLE NO.**	**BH13**
		SHEET	Sheet 1 of 1
CO-ORDINATES	713,818.82 E 733,640.04 N	**RIG TYPE**	Dando 2000
		BOREHOLE DIAMETER (mm)	200
GROUND LEVEL (mOD)	20.39	**BOREHOLE DEPTH (m)**	6.20
		DATE COMMENCED	31/01/2024
		DATE COMPLETED	31/01/2024
CLIENT	NDFA	**SPT HAMMER REF. NO.**	SA7
ENGINEER	MORCE	**ENERGY RATIO (%)**	74.07
		BORED BY	DT
		PROCESSED BY	FC

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples: Ref. Number	Sample Type	Depth (m)	Recovery	Field Test Results	Standpipe Details
0	TOPSOIL		20.29	0.10						
	MADE GROUND comprising brown sandy gravelly SILT/CLAY with roots and occasional cobbles		19.79	0.60	AA220271	B	0.50			
1	Firm mottled grey/brown/black sandy gravelly SILT/CLAY with cobbles and red brick fragments and tree roots (MADE GROUND)				AA220272	B	1.00		N = 8 (0, 1, 2, 2, 1, 3)	
2					AA220273	B	2.00		N = 19 (2, 3, 4, 4, 5, 6)	
			17.39	3.00						
3	Large BOULDER/COBBLES (MADE GROUND)		16.99	3.40					N = 50/75 mm (25, 50)	
	Very stiff grey sandy gravelly SILT/CLAY with occasional cobbles		16.59	3.80	AA220274	B	3.50			
4	Very stiff black sandy silty gravelly CLAY with some cobbles and occasional boulders				AA220275	B	4.00		N = 61 (8, 13, 14, 14, 16, 17)	
5					AA220276	B	5.00		N = 52 (15, 10, 14, 10, 16, 12)	
6			14.19	6.20	AA220277	B	6.00		N = 50/75 mm (25, 28, 50)	
	Obstruction End of Borehole at 6.20 m									
7										
8										
9										

HARD STRATA BORING/CHISELLING

From (m)	To (m)	Time (h)	Comments
3.00	3.40	1	
6.10	6.20	1.5	

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
2.90	2.90	3.90	2.40	20	Slow

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER PROGRESS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
31-01-24	6.20	Nil	2.30	End of BH

REMARKS Safety fencing erected around work area. CAT scanned location and hand dug inspection pit carried out.

Sample Legend

D - Small Disturbed (tub)
B - Bulk Disturbed
LB - Large Bulk Disturbed
Env - Environmental Sample (Jar + Vial + Tub)
UT - Undisturbed 100mm Diameter Sample
P - Undisturbed Piston Sample
W - Water Sample

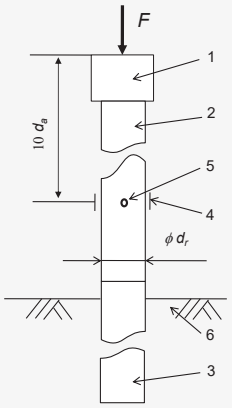
IGSL BH LOG 25000- SITE 4.GPJ IGSL.GDT 12/3/24

SPT Calibration Report

Hammer Energy Measurement Report

Type of Hammer		SPT Hammer
Test No		EQU2023_59
Client		IGSL
Test Depth (m)		9.70
Mass of hammer	m =	63.5kg
Falling height	h =	0.76m
E_{theor} =	$m \times g \times h$ =	473J

Characteristics of the instrumented rod



Key

1 Anvil
2 Part of instrumented rod
3 Drive Rod
4 Strain Gauge
5 Accelerometer
6 Ground

F Force
d_r Diameter of rod

Fig. B.1 and B.2
BS EN ISO 22476-3 : 2005 + A1 : 2011

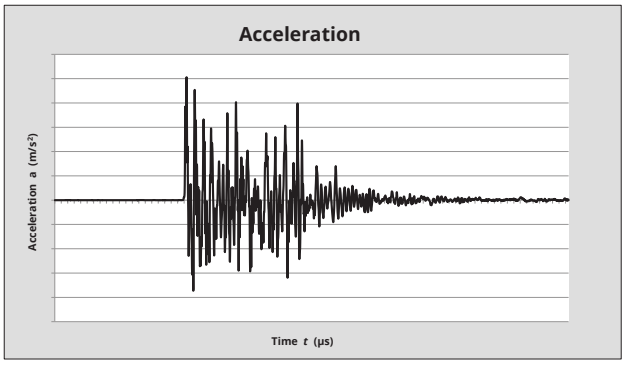
Diameter	d_r =	0.052 m
Length of instrumented rod		0.558 m
Area	A =	11.61 cm²
Modulus	E_a =	206843 MPa

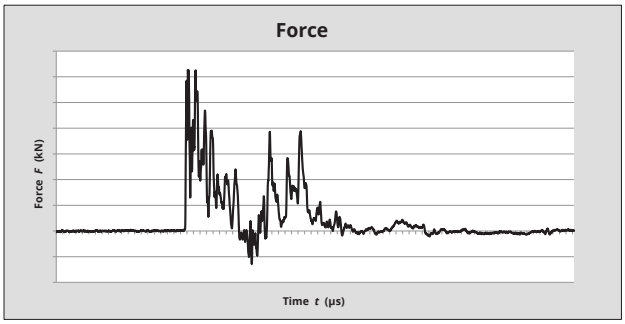
DATE OF TEST	VALID UNTIL	HAMMER ID
06/03/2023	05/03/2024	SA7

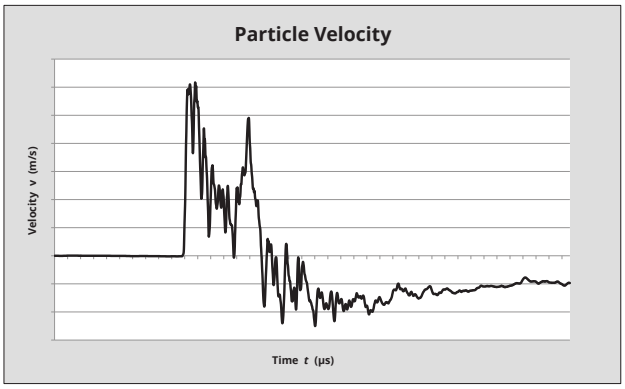
E_{meas} = **0.350** kN-m

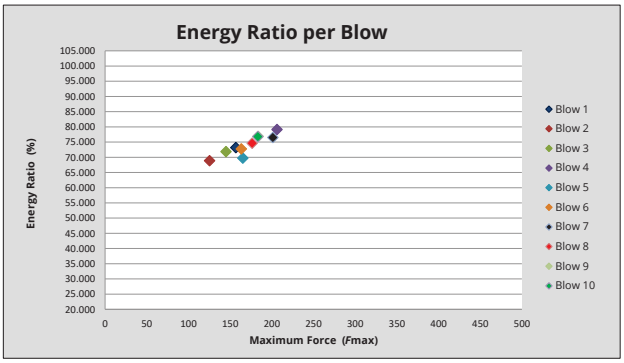
E_{theor} = **0.473** kN-m

Comments









Energy Ratio (Er) = $\frac{E_{meas}}{E_{theor}}$ **74.07%**

Equipe SPT Analyzer Operator	Certificate prepared by	Certificate checked by	Certificate date
JL			10/03/2023

 Equipe Group, The Paddocks, Home Farm Offices, The Upton Estate, Banbury, Oxfordshire, OX15 6HU
Tel: +44 (0)1295 670990 Fax: +44 (0)1295 678232 Email: info@equipegroup.com

Appendix 4

Soakaway Records

Soakaway Design f -value from field tests (F2C) IGSL

Contract:	NDFA Social Housing Bundles 4/5 - Lot 4 - Basin View	Contract No.	25000-4
Test No.	SA01	Easting	713750.234
Engineer	MORCE	Northing	733754.733
Date:	23/01/2024	Elevation (m OD)	20.513

Summary of ground conditions

from	to	Description	Ground water
0.00	0.30	TOPSOIL	DRY
0.30	1.00	MADE GROUND comprised of gravelly sandy Clay with a low cobble and boulder content	
1.00		Obstruction - Large boulders	

Notes:

Field Data

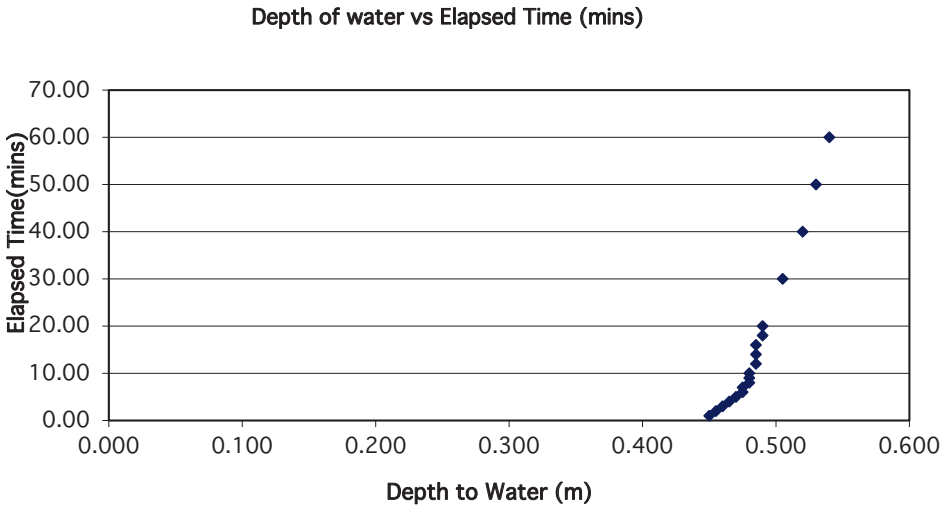
Depth to Water (m)	Elapsed Time (min)
0.450	1.00
0.455	2.00
0.460	3.00
0.465	4.00
0.470	5.00
0.475	6.00
0.475	7.00
0.480	8.00
0.480	9.00
0.480	10.00
0.485	12.00
0.485	14.00
0.485	16.00
0.490	18.00
0.490	20.00
0.505	30.00
0.520	40.00
0.530	50.00
0.540	60.00

Field Test

Depth of Pit (D)	1.00	m
Width of Pit (B)	0.40	m
Length of Pit (L)	1.40	m
Initial depth to Water =	0.44	m
Final depth to water =	0.54	m
Elapsed time (mins)=	60.00	
Top of permeable soil		m
Base of permeable soil		m
Base area=	0.56	m2
*Av. side area of permeable stratum over test period	1.836	m2
Total Exposed area =	2.396	m2

Infiltration rate (f) = Volume of water used/unit exposed area / unit time

f= 0.00039 m/min or 6.492E-06 m/sec



Soakaway Design f -value from field tests (F2C) IGSL

Contract:	NDFA Social Housing Bundles 4/5 - Lot 4 - Basin View	Contract No.	25000-4
Test No.	SA02	Easting	713796.277
Engineer	MORCE	Northing	733690.212
Date:	23/01/2024	Elevation (m OD)	20.101

Summary of ground conditions

from	to	Description	Ground water
0.00	0.30	TOPSOIL	DRY
0.30	1.10	MADE GROUND comprised of sandy gravely Clay with low a cobble and boulder content	

Notes:

Field Data

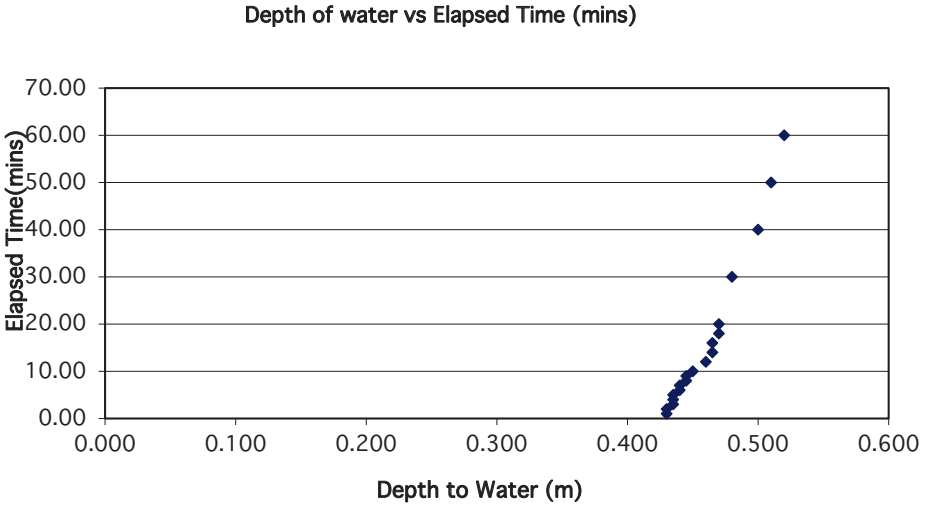
Depth to Water (m)	Elapsed Time (min)
0.430	1.00
0.430	2.00
0.435	3.00
0.435	4.00
0.435	5.00
0.440	6.00
0.440	7.00
0.445	8.00
0.445	9.00
0.450	10.00
0.460	12.00
0.465	14.00
0.465	16.00
0.470	18.00
0.470	20.00
0.480	30.00
0.500	40.00
0.510	50.00
0.520	60.00

Field Test

Depth of Pit (D)	1.10	m
Width of Pit (B)	0.40	m
Length of Pit (L)	1.30	m
Initial depth to Water =	0.43	m
Final depth to water =	0.52	m
Elapsed time (mins)=	60.00	
Top of permeable soil		m
Base of permeable soil		m
Base area=	0.52	m2
*Av. side area of permeable stratum over test perio	2.125	m2
Total Exposed area =	2.645	m2

Infiltration rate (f) = Volume of water used/unit exposed area / unit time

f= 0.00029 m/min or 4.915E-06 m/sec



Appendix 5

Slit Trench Logs & Photographs

Report No. 25000-4	SLIT TRENCH RECORD	FACING DIRECTION: N / W / E / S	IGSL

			Survey				
Project:	NDFA Social Housing Bundles 4/5 - Lot 4 – Basin View		Easting (m)	Northing (m)	Elevation (mOD)	Slit Trench No.	ST01
Engineer:	MORCE					Sheet	1 of 1
Client:	NDFA	Start of Trench	713759.535	733740.623	20.538	Date Commenced	16/01/2024
Crew:	PN / ESK	End of Trench	713747.172	733737.449	21.301	Date Completed	16/01/2024

Ground Conditions

From (m)	To (m)	Soil Description
0	0.25	TOPSOIL
0.25	1.5	MADE GROUND comprising gravelly sandy Silt/Clay with a low to medium cobble content

Photograph

Trench Dimensions	
LHS of Trench (m)	0.0
RHS of Trench (m)	11.50
Trench Depth (m)	1.50
Trench Width (m)	0.5
Facing Direction	South
Facing Features	Looking South
Groundwater	None encountered

Location

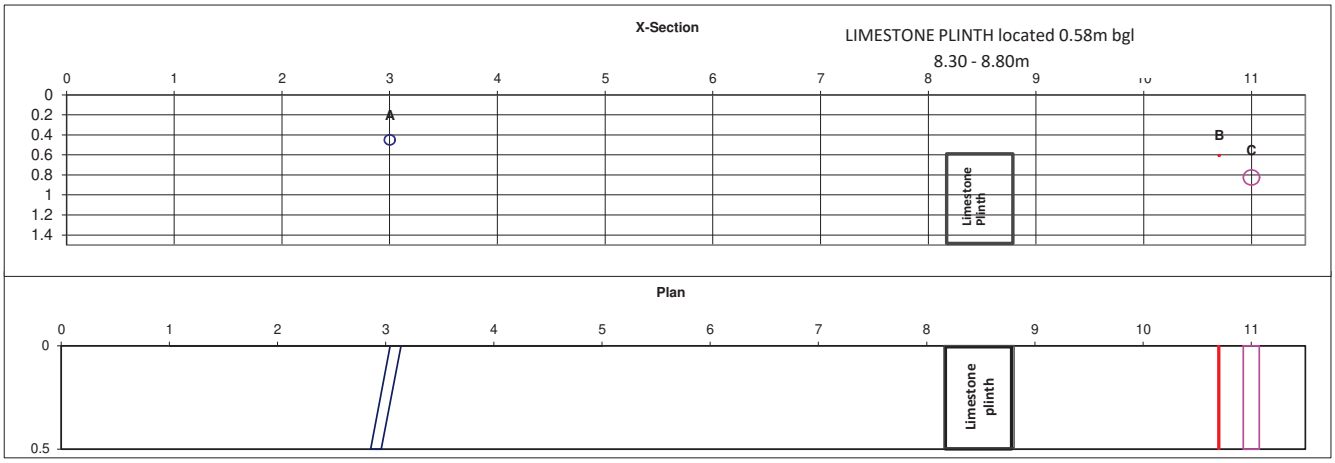
SAMPLES

AA210331

AA210332

Excavation Quantities		
Surface	**Length (m)**	**Material**
Road		
Path (LHS)		
Path (RHS)		
Grass Verge (LHS)		
Grass Verge (RHS)		
Other	11.5	Grass
Total Length	11.5	

Zero Metres Taken As: Fence on LHS



	Diameter (mm)	Material	Description	Distance (m)	Depth to crown (m)	Angle (deg.)
Service A	100	PVC	Black	3	0.4	70
Service B	13	Copper Cable	Black Cable	10.7	0.6	90
Service C	150	PVC	Red ESB	11	0.75	90
Service D						
Service E						
Service F						
Service G						
Service H						
Service I						
Service J						
Service K						
Service L						
Service M						

Report No. 25000-4	SLIT TRENCH RECORD	FACING DIRECTION: N / W / E / S	IGSL

		Survey				
Project:	NDFA Social Housing Bundles 4/5 - Lot 4 – Basin View		Easting (m)	Northing (m)	Elevation (mOD)	Slit Trench No. ST03
Engineer:	MORCE					Sheet 1 of 1
Client:	NDFA	Start of Trench	713763.717	733719.622	20.483	Date Commenced 16/01/2024
Crew:	PN / ESK	End of Trench	713753.351	733718.15	21.178	Date Completed 16/01/2024

Ground Conditions

From (m)	To (m)	Soil Description	Photograph
0	0.25	TOPSOIL	
0.25	1.5	MADE GROUND comprising gravelly sandy Silt/Clay with a low to medium cobble content	

Trench Dimensions

LHS of Trench (m)	0.0
RHS of Trench (m)	10.00
Trench Depth (m)	1.30
Trench Width (m)	0.5

Location

Excavation Quantities

Surface	Length (m)	Material
Road		
Path (LHS)		
Path (RHS)		
Grass Verge (LHS)		
Grass Verge (RHS)		
Other	10	Grass
Total Length	10.0	

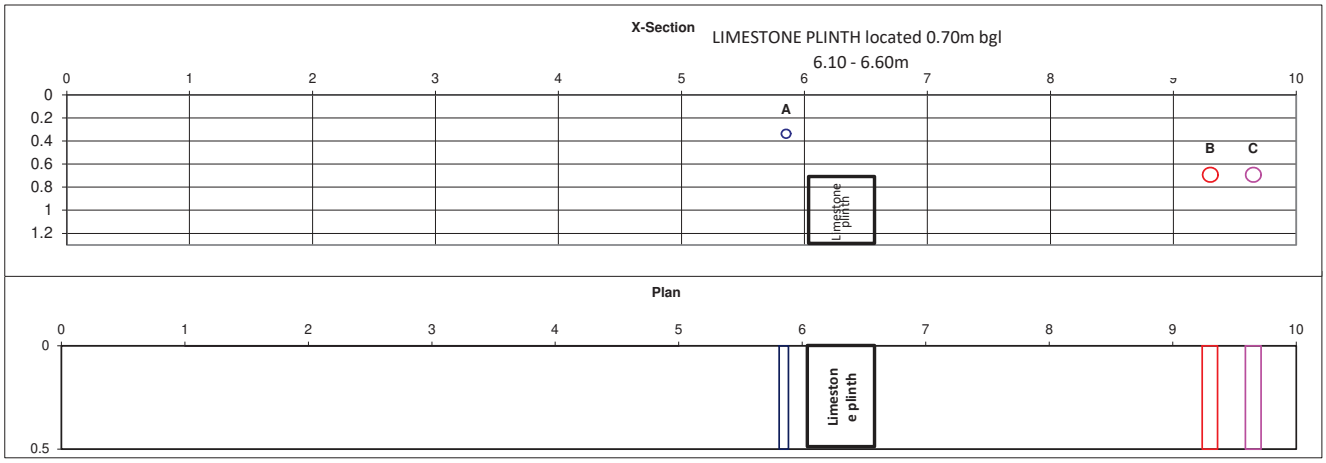
Facing Direction	South
Facing Features	Looking South
Groundwater	None encountered

SAMPLES

AA210333

AA210334

Zero Metres Taken As: LHS (Fence)



	Diameter (mm)	Material	Description	Distance (m)	Depth to crown (m)	Angle (deg.)
Service A	75	PVC	Orange corrugated ducting	5.85	0.3	90
Service B	125	PVC	Red ESB	9.3	0.63	90
Service C	125	PVC	Red ESB	9.65	0.63	90
Service D						
Service E						
Service F						
Service G						
Service H						
Service I						
Service J						
Service K						
Service L						
Service M						

Report No. 25000-4	SLIT TRENCH RECORD	FACING DIRECTION: N / W / E / S	IGSL

		Survey				
Project:	NDFA Social Housing Bundles 4/5 - Lot 4 – Basin View		Easting (m)	Northing (m)	Elevation (mOD)	Slit Trench No. ST06
Engineer:	MORCE					Sheet 1 of 1
Client:	NDFA	Start of Trench	713770.249	733686.853	20.693	Date Commenced 16/01/2024
Crew:	PN / ESK	End of Trench	713761.429	733683.79	21.205	Date Completed 16/01/2024

Ground Conditions

From (m)	To (m)	Soil Description	Photograph
0	0.25	TOPSOIL	
0.25	1.5	MADE GROUND comprising gravelly sandy Silt/Clay with a low to medium cobble content	

Trench Dimensions	
LHS of Trench (m)	0.0
RHS of Trench (m)	10.00
Trench Depth (m)	1.40
Trench Width (m)	0.5

Location

Facing Direction	South
Facing Features	Towards Basketball Court
Groundwater	None encountered

SAMPLES

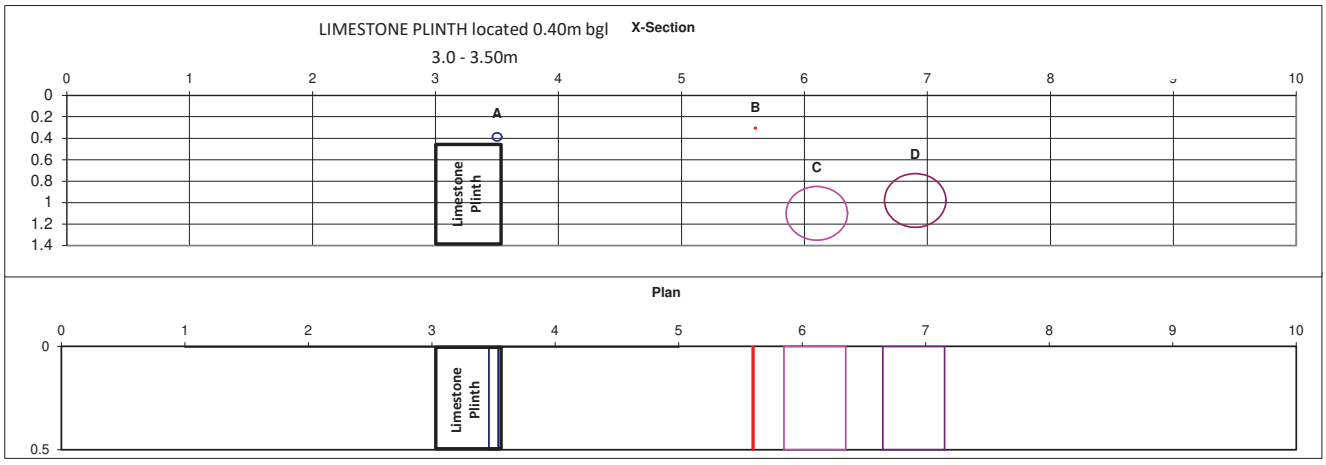
AA210335

AA210336

Excavation Quantities

Surface	Length (m)	Material
Road		
Path (LHS)		
Path (RHS)		
Grass Verge (LHS)		
Grass Verge (RHS)		
Other	10	Grass
Total Length	10.0	

Zero Metres Taken As: LHS (Fence)



	Diameter (mm)	Material	Description	Distance (m)	Depth to crown (m)	Angle (deg.)
Service A	75	PVC	Orange PVC corrugated ducting	3.5	0.35	90
Service B	13	Copper Cable	Black Copper Cable	5.6	0.3	90
Service C	500	PVC	Blue PVC pipe	6.1	0.85	90
Service D	500	Steel	Steel pipe	6.9	0.73	90
Service E						
Service F						
Service G						
Service H						
Service I						
Service J						
Service K						
Service L						
Service M						

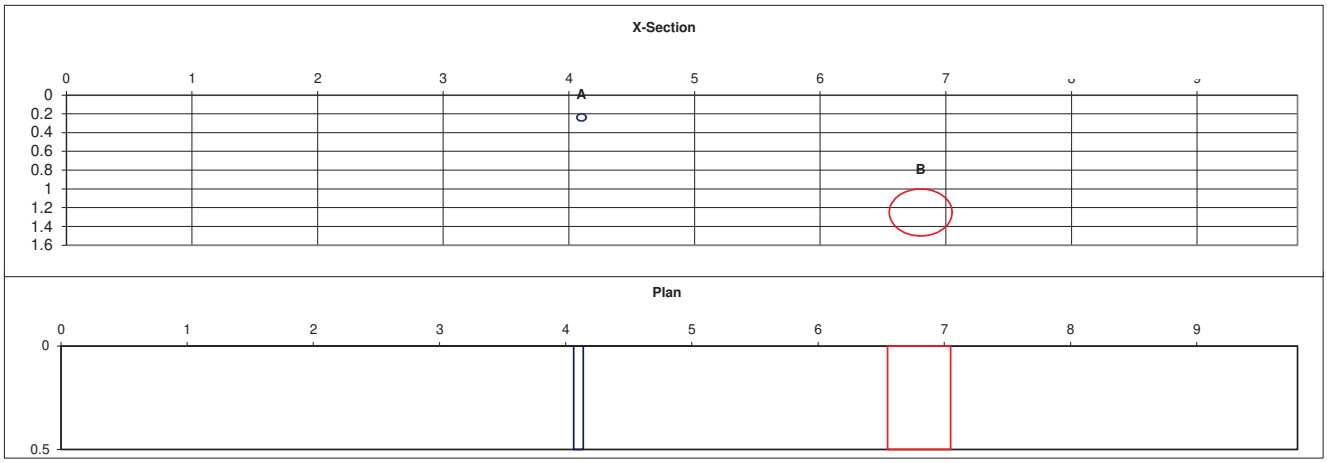
Report No. 25000-4	SLIT TRENCH RECORD	FACING DIRECTION: N / W / E / S	IGSL

Project:	NDFA Social Housing Bundles 4/5 - Lot 4 – Basin View		Survey			Slit Trench No. ST07
Engineer:	MORCE		Easting (m)	Northing (m)	Elevation (mOD)	Sheet 1 of 1
Client:	NDFA	Start of Trench	713777.052	733669.602	20.521	Date Commenced 16/01/2024
Crew:	PN / ESK	End of Trench	713768.622	733666.489	21.307	Date Completed 16/01/2024

Ground Conditions

From (m)	To (m)	Soil Description	Photograph
0	0.25	TOPSOIL	
0.25	1.5	MADE GROUND comprising gravelly sandy Silt/Clay with a low to medium cobble content	

Trench Dimensions		Location	Excavation Quantities		
LHS of Trench (m)	0.0		Surface	Length (m)	Material
RHS of Trench (m)	9.80		Road		
Trench Depth (m)	1.60		Path (LHS)		
Trench Width (m)	0.5		Path (RHS)		
			Grass Verge (LHS)		
			Grass Verge (RHS)		
Facing Direction	South	SAMPLES	Other	9.8	Grass
Facing Features	Looking South	AA210337	Total Length	9.8	
Groundwater	None encountered	AA210338	Zero Metres Taken As: LHS (Fence)		



	Diameter (mm)	Material	Description	Distance (m)	Depth to crown (m)	Angle (deg.)
Service A	75	PVC	Orange corrugated pipe	4.1	0.2	90
Service B	500	PVC	Blue PVC pipe (Water Main)	6.8	1	90
Service C						
Service D						
Service E						
Service F						
Service G						
Service H						
Service I						
Service J						
Service K						
Service L						
Service M						

Project Number: 25000-4
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

ST01

Project Number: 25000-4
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

ST01

Project Number: 25000-4
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

ST03

Project Number: 25000-4
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

ST03

Project Number: 25000-4
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

ST06

Project Number: 25000-4
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

ST06

Project Number: 25000-4
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

ST07

Project Number: 25000-4
Project: NDFA Social Housing Bundles 4/5 – Lot 4 – Basin View
Engineer: MORCE

ST07

Appendix 6

Rotary Drillhole Logs & Core Photographs

SPT Calibration Sheet (Er)

Appendix 7

Geotechnical Laboratory Results (Soil)

IGSL Ltd
Materials Laboratory
Unit J5, M7 Business Park
Newhall, Naas
Co. Kildare
045 846176

Test Report

Determination of Moisture Content, Liquid & Plastic Limits

Tested in accordance with BS1377:Part 2:1990, clauses 3.2, 4.3, 4.4 & 5.3**

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

Report No. **R154536** Contract No. 25000-4 Contract Name: NDFA Social Housing - Site 4 Basin View

Customer MORCE

Samples Received: 28/02/24 Date Tested: 28/02/24

BH/TP*	Sample No.	Depth* (m)	Lab. Ref	Sample Type*	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity Index	% <425µm	Preparation	Liquid Limit Clause	Classification (BS5930)	Description
BH01	AA210279	3.0	A24/0706	B	21	47	NP	NP	37	WS	4.4		Grey/brown sandy gravelly SILT
BH01	AA210280	4.0	A24/0707	B	13	25	14	11	48	WS	4.4	C L	Grey slightly sandy, gravelly, CLAY
BH01	AA210282	6.0	A24/0708	B	15	30	12	18	61	WS	4.4	C L	Black slightly sandy, slightly gravelly, CLAY
BH02	AA210286	3.0	A24/0709	B	21	53	NP	NP	33	WS	4.4		Grey silty, very sandy, GRAVEL
BH03	AA198340	2.0	A24/0710	B	24	45	22	23	76	WS	4.4	C I	Brown sandy gravelly CLAY
BH03	AA198344	6.0	A24/0712	B	8.8	29	14	15	65	WS	4.4	C L	Brown slightly sandy, slightly gravelly, CLAY with some cobbles
BH04	AA210271	2.0	A24/0713	B	30	46	NP	NP	41	WS	4.4		Grey/brown sandy gravelly SILT
BH04	AA210273	4.0	A24/0714	B	7.3	33	16	17	55	WS	4.4	C L	Black slightly sandy, gravelly, CLAY with some cobbles
BH04	AA210275	6.0	A24/0715	B	15	35	17	18	59	WS	4.4	C L	Black slightly sandy, slightly gravelly, CLAY
BH05	AA198355	2.0	A24/0716	B	18	32	17	15	42	WS	4.4	C L	Brown sandy gravelly CLAY
BH05	AA198356	3.0	A24/0717	B	16	31	15	16	44	WS	4.4	C L	Grey/brown sandy gravelly CLAY
BH05	AA198358	5.0	A24/0718	B	8.6	27	13	14	41	WS	4.4	C L	Brown slightly sandy, gravelly, CLAY with some cobbles
BH06	AA220293	4.0	A24/0719	B	8.8	30	14	16	59	WS	4.4	C L	Black slightly sandy, gravelly, CLAY
BH06	AA220295	6.0	A24/0720	B	14	33	14	19	66	WS	4.4	C L	Black slightly sandy, slightly gravelly, CLAY
BH07	AA216804	3.0	A24/0721	B	15	34	16	18	56	WS	4.4	C L	Brown sandy gravelly CLAY

Preparation: WS - Wet sieved
AR - As received
NP - Non plastic

Liquid Limit Clause: 4.3 Cone Penetrometer definitive method
4.4 Cone Penetrometer one point method

Sample Type: B - Bulk Disturbed
U - Undisturbed

Remarks:
Results relate only to the specimen tested,in as received condition unless otherwise noted.
NOTE: **These clauses have been superceded by EN 17892-1 and EN17892-12.
Opinions and interpretations are outside the scope of accreditation. * denotes Customer supplied information.
This report shall not be reproduced except in fullwithout written approval from the Laboratory.

IGSL Ltd Materials Laboratory

Persons authorized to approve reports
H Byrne (Laboratory Manager)

Approved by | Date: 07/03/24 | Page: 1 of 1

IGSL Ltd
Materials Laboratory
Unit J5, M7 Business Park
Newhall, Naas
Co. Kildare
045 846176

Test Report

Determination of Moisture Content, Liquid & Plastic Limits

Tested in accordance with BS1377:Part 2:1990, clauses 3.2, 4.3, 4.4 & 5.3**

Report No. **R154537** Contract No. 25000-4 Contract Name: NDFA Social Housing - Site 4 Basin View

Customer MORCE

Samples Received: 28/02/24 Date Tested: 28/02/24

BH/TP*	Sample No.	Depth* (m)	Lab. Ref	Sample Type*	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity Index	% <425µm	Preparation	Liquid Limit Clause	Classification (BS5930)	Description
BH07	AA216805	4.0	A24/0722	B	13	33	19	19	64	WS	4.4	C L	Brown slightly sandy, slightly gravelly, CLAY with occasional cobbles
BH07	AA216807	6.0	A24/0723	B	14	39	17	22	58	WS	4.4	C I	Grey slightly sandy, gravelly, CLAY
BH08	AA220259	1.0	A24/0724	B	23	57	NP	NP	45	WS	4.4		Grey/brown sandy gravelly SILT
BH08	AA220261	3.0	A24/0725	B	12	35	15	20	51	WS	4.4	C L	Brown slightly sandy, slightly gravelly, CLAY
BH08	AA220263	5.0	A24/0726	B	10	35	15	20	55	WS	4.4	C L	Black slightly sandy, slightly gravelly, CLAY
BH09	AA220254	3.0	A24/0727	B	20	36	20	16	57	WS	4.4	C I	Brown sandy gravelly CLAY
BH09	AA220255	4.0	A24/0728	B	9.8	34	19	15	59	WS	4.4	C L	Black slightly sandy, slightly gravelly, CLAY with many cobbles
BH09	AA220257	6.0	A24/0729	B	12	30	14	16	59	WS	4.4	C L	Brown slightly sandy, gravelly, CLAY
BH10	AA210294	2.0	A24/0730	B	27	41	20	21	67	WS	4.4	C I	Brown sandy gravelly CLAY
BH10	AA210296	4.0	A24/0731	B	12	29	15	14	59	WS	4.4	C L	Grey/brown slightly sandy, gravelly, CLAY with some cobbles
BH10	AA210298	6.0	A24/0732	B	8.2	32	14	18	50	WS	4.4	C L	Black slightly sandy, gravelly, CLAY
BH11	AA220266	1.0	A24/0733	B	27	43	20	23	69	WS	4.4	C I	Brown sandy gravelly CLAY
BH11	AA220268	3.0	A24/0734	B	12	33	17	16	63	WS	4.4	C L	Brown slightly sandy, slightly gravelly, CLAY with some cobbles
BH11	AA220270	5.0	A24/0735	B	14	33	16	17	57	WS	4.4	C L	Grey slightly sandy, gravelly, CLAY
BH12	AA202086	4.0	A24/0736	B	12	35	16	19	50	WS	4.4	C L	Brown sandy gravelly CLAY

Preparation: WS - Wet sieved
AR - As received
NP - Non plastic

Liquid Limit Clause: 4.3 Cone Penetrometer definitive method
4.4 Cone Penetrometer one point method

Sample Type: B - Bulk Disturbed
U - Undisturbed

Remarks:
Results relate only to the specimen tested,in as received condition unless otherwise noted.
NOTE: **These clauses have been superceded by EN 17892-1 and EN17892-12.
Opinions and interpretations are outside the scope of accreditation. * denotes Customer supplied information.
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IGSL Ltd Materials Laboratory

Persons authorized to approve reports
H Byrne (Laboratory Manager)

Approved by | Date: 07/03/24 | Page: 1 of 1

IGSL Ltd
Materials Laboratory
Unit J5, M7 Business Park
Newhall, Naas
Co. Kildare
045 846176

Test Report

Determination of Moisture Content, Liquid & Plastic Limits

Tested in accordance with BS1377:Part 2:1990, clauses 3.2, 4.3, 4.4 & 5.3**

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

Report No. **R154538** Contract No. 25000-4 Contract Name: NDFA Social Housing - Site 4 Basin View

Customer MORCE

Samples Received: 28/02/24 Date Tested: 28/02/24

BH/TP*	Sample No.	Depth* (m)	Lab. Ref	Sample Type*	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity Index	% <425µm	Preparation	Liquid Limit Clause	Classification (BS5930)	Description
BH12	AA202088	6.0	A24/0737	B	15	29	13	16	53	WS	4.4	C L	Grey/brown sandy, slightly gravelly, CLAY
BH12	AA202089	6.5	A24/0738	B	12	27	12	15	50	WS	4.4	C L	Grey/brown sandy gravelly CLAY
BH13	AA220274	3.5	A24/0739	B	18	41	21	20	51	WS	4.4	C I	Brown sandy gravelly CLAY
BH13	AA220275	4.0	A24/0740	B	13	31	14	17	55	WS	4.4	C L	Grey/brown slightly sandy, gravelly, CLAY
BH13	AA220277	6.0	A24/0741	B	15	29	14	15	44	WS	4.4	C L	Grey/brown sandy gravelly CLAY
TP10	AA210359	2.1	A24/0742	B	32	47	21	26	86	WS	4.4	C I	Brown slightly sandy, slightly gravelly, CLAY

Preparation: WS - Wet sieved; AR - As received; NP - Non plastic

Liquid Limit Clause: 4.3 Cone Penetrometer definitive method; 4.4 Cone Penetrometer one point method

Sample Type: B - Bulk Disturbed; U - Undisturbed

Remarks:

Results relate only to the specimen tested,in as received condition unless otherwise noted.

NOTE: **These clauses have been superceded by EN 17892-1 and EN17892-12.

Opinions and interpretations are outside the scope of accreditation. * denotes Customer supplied information.

IGSL Ltd Materials Laboratory

Persons authorized to approve reports

H Byrne (Laboratory Manager)

Approved by: H Byrne

Date: 07/03/24

Page: 1 of 1

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	100	
28	100	
20	97	
14	92	
10	86	
6.3	78	
5	74	
3.35	67	
2	60	
1.18	54	SAND
0.6	49	
0.425	46	
0.3	43	
0.15	37	
0.063	31	SILT/CLAY
0.038	28	
0.027	26	
0.017	22	
0.010	19	
0.007	17	
0.005	14	
0.002	11	

Contract No. 25000 Report No. R154539
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH01
Sample No.* AA210280 Lab. Sample No. A24/0707
Sample Type: B
Depth* (m) 4.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 27/02/2024
Description: Grey slightly sandy, gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2016 .

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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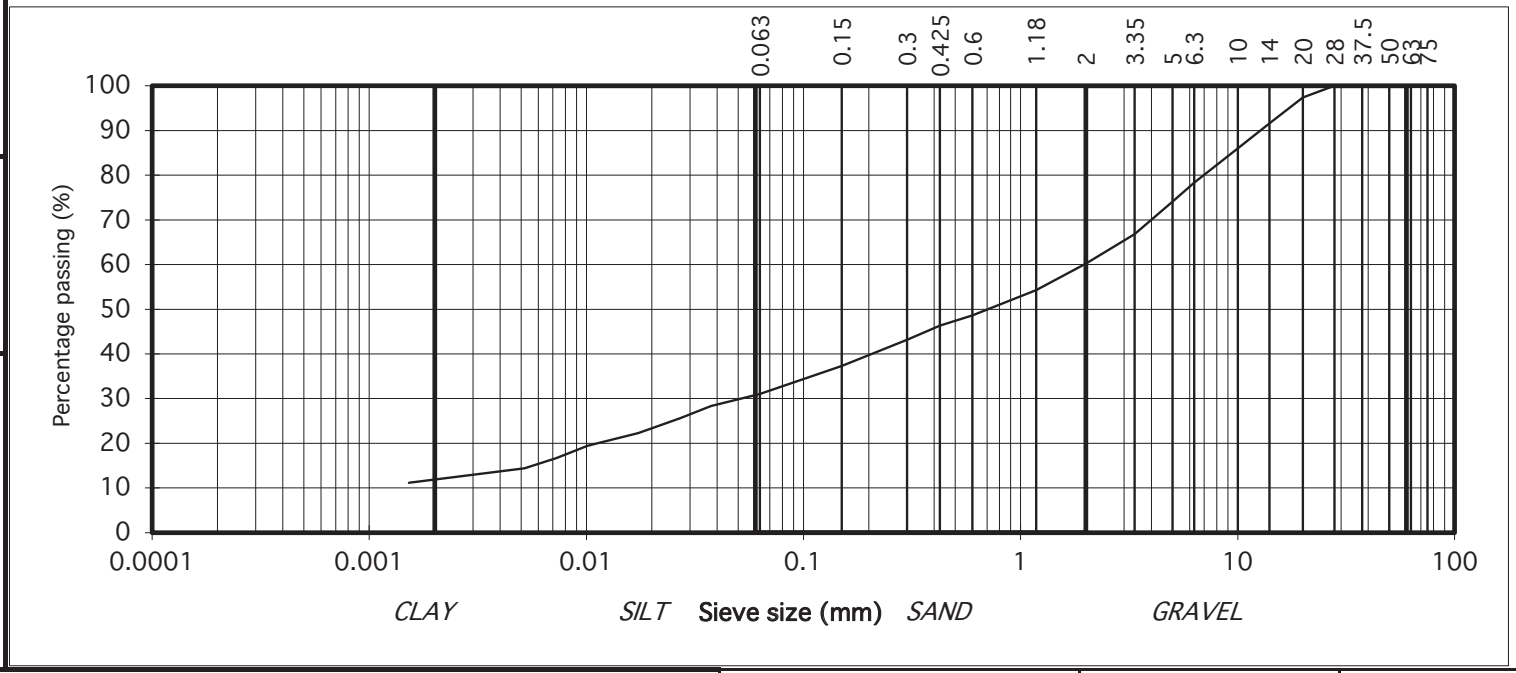

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Approved by:	Date:	Page no:
H Byrne	08/03/24	1 of 1

Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	100	
28	98	
20	94	
14	91	
10	89	
6.3	83	
5	81	
3.35	77	
2	71	
1.18	66	SAND
0.6	60	
0.425	57	
0.3	54	
0.15	50	
0.063	44	SILT/CLAY
0.037	40	
0.027	37	
0.017	33	
0.010	28	
0.007	25	
0.005	22	
0.002	16	

Contract No. 25000 Report No. R154540
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH01
Sample No.* AA210282 Lab. Sample No. A24/0708
Sample Type: B
Depth* (m) 6.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 27/02/2024
Description: Black slightly sandy, slightly gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2016 .

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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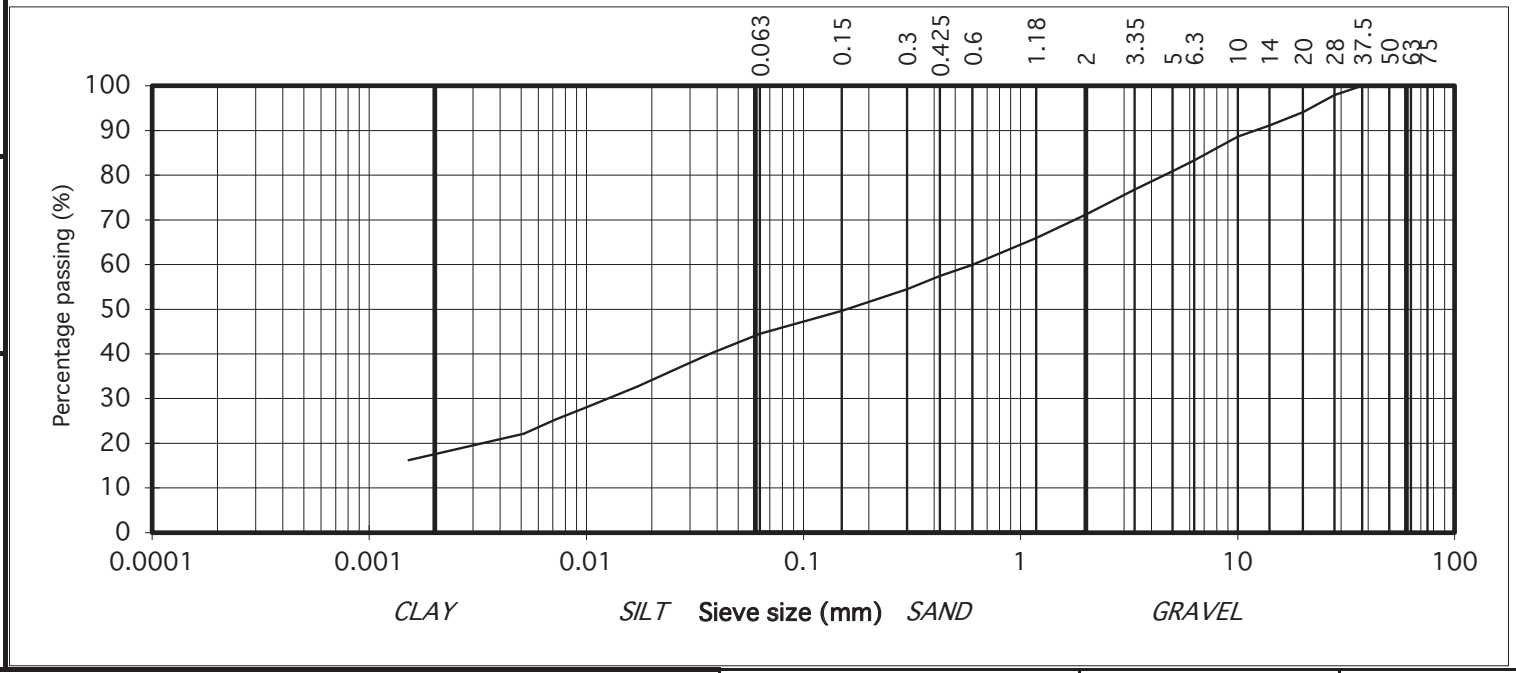

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Approved by:	Date:	Page no:
H Byrne	08/03/24	1 of 1

Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 IVNAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	100	
28	100	
20	98	
14	93	
10	88	
6.3	78	
5	74	
3.35	65	
2	56	
1.18	48	SAND
0.6	39	
0.425	36	
0.3	32	
0.15	24	
0.063	16	SILT/CLAY

Contract No. 25000 Report No. R154541
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH02
Sample No.* AA210286 Lab. Sample No. A24/0709
Sample Type: B
Depth* (m) 3.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 27/02/2024
Description: Grey silty, very sandy, GRAVEL

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2016 .

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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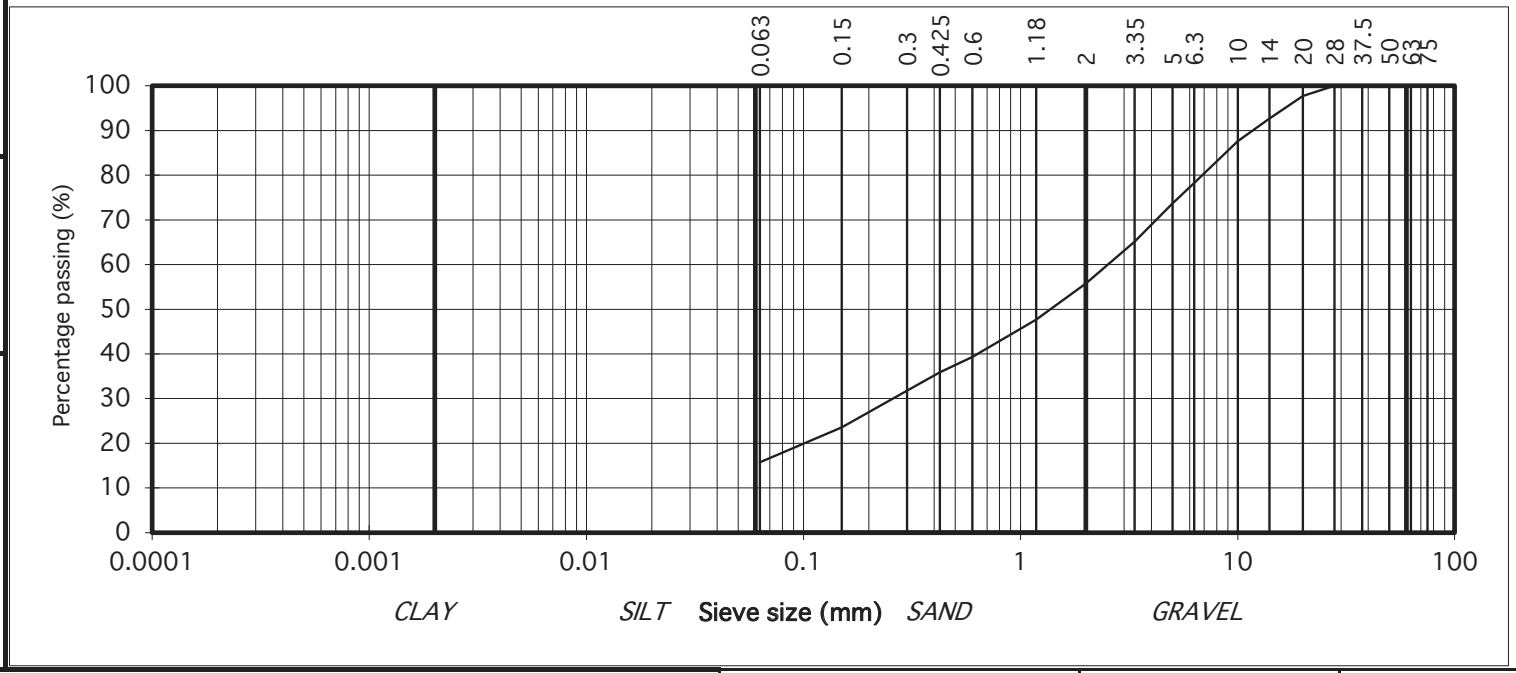

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Approved by:	Date:	Page no:
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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	88	
50	77	GRAVEL
37.5	73	
28	70	
20	60	
14	54	
10	50	
6.3	47	
5	45	
3.35	42	
2	38	
1.18	35	SAND
0.6	31	
0.425	29	
0.3	27	
0.15	22	
0.063	16	SILT/CLAY

Contract No. 25000 Report No. R154542
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH03
Sample No.* AA198342 Lab. Sample No. A24/0711
Sample Type: B
Depth* (m) 4.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 27/02/2024
Description: Brown clayey/silty, very sandy, GRAVEL with some cobbles

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2 Sample size did not meet the requirements of BS1377

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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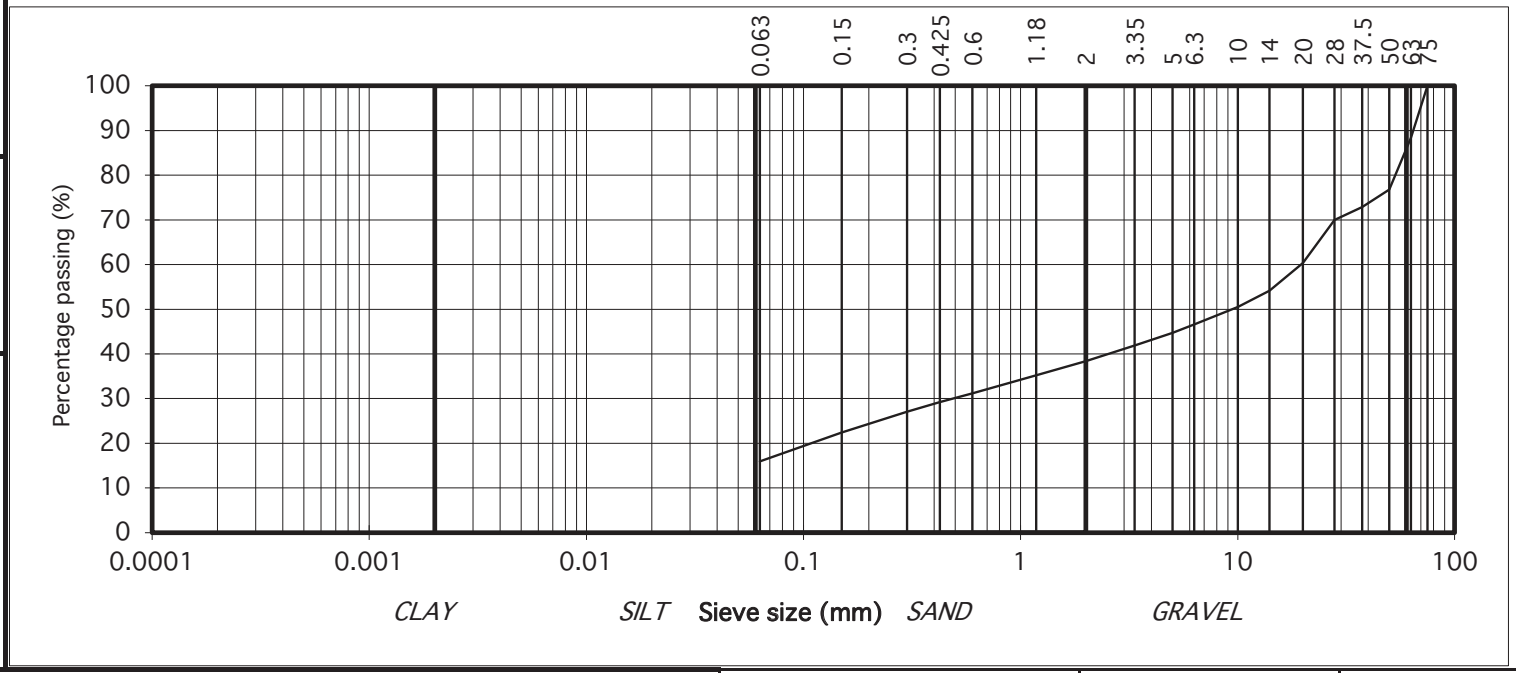

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Approved by:	Date:	Page no:
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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution

Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 IVNAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	84	COBBLES
63	80	
50	79	GRAVEL
37.5	79	
28	79	
20	76	
14	74	
10	72	
6.3	68	
5	66	
3.35	62	
2	58	
1.18	54	SAND
0.6	49	
0.425	47	
0.3	45	
0.15	40	
0.063	35	SILT/CLAY
0.037	31	
0.027	29	
0.017	26	
0.010	22	
0.007	19	
0.005	17	
0.002	12	

Contract No. 25000 Report No. R154543
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH03
Sample No.* AA198344 Lab. Sample No. A24/0712
Sample Type: B
Depth* (m) 6.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 27/02/2024
Description: Brown slightly sandy, slightly gravelly, CLAY with some cobbles

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2 Sample size did not meet the requirements of BS1377

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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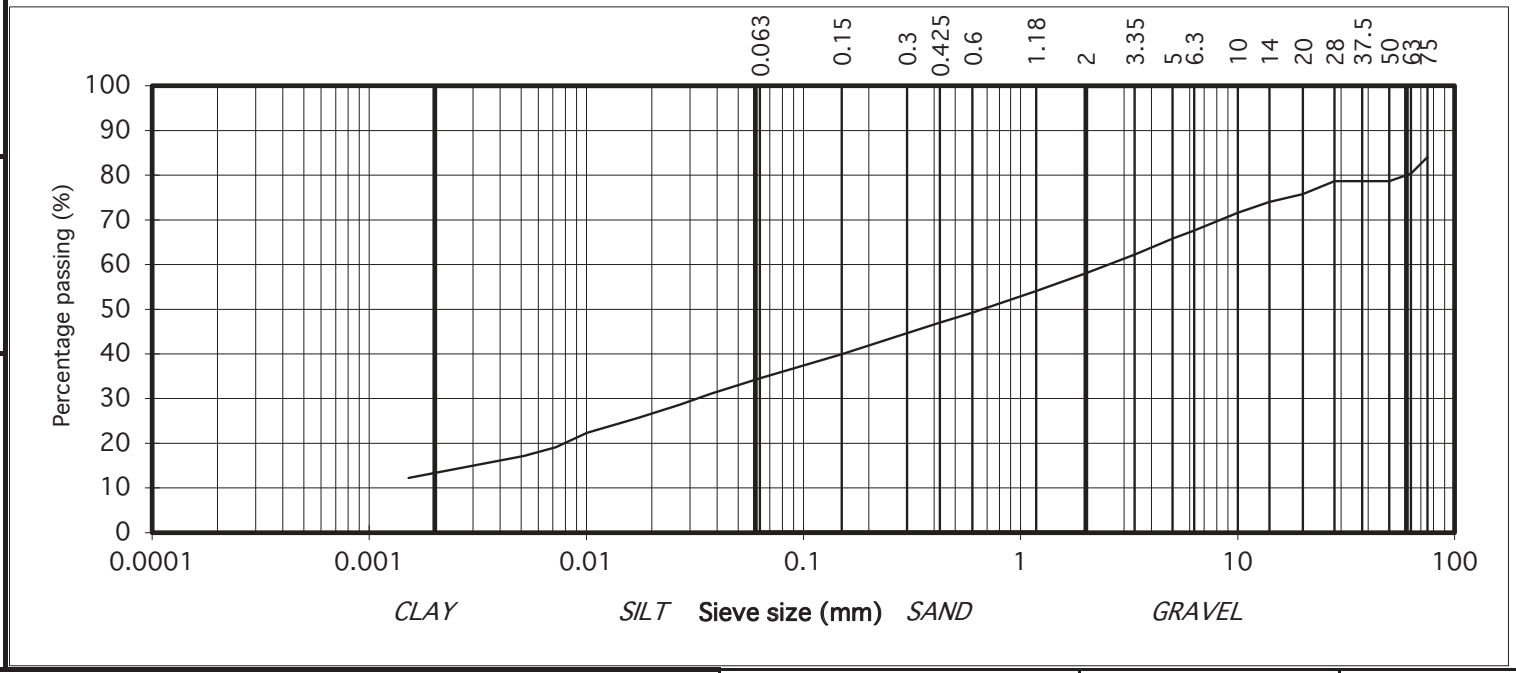

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Approved by:	Date:	Page no:
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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	86	
50	82	GRAVEL
37.5	75	
28	69	
20	63	
14	57	
10	55	
6.3	52	
5	50	
3.35	47	
2	43	
1.18	40	SAND
0.6	36	
0.425	34	
0.3	32	
0.15	30	
0.063	27	SILT/CLAY
0.038	24	
0.027	22	
0.017	20	
0.010	17	
0.007	15	
0.005	14	
0.002	11	

Contract No. 25000 Report No. R154544
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH04
Sample No.* AA210273 Lab. Sample No. A24/0714
Sample Type: B
Depth* (m) 4.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Black slightly sandy, gravelly, CLAY with some cobbles

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2 Sample size did not meet the requirements of BS1377

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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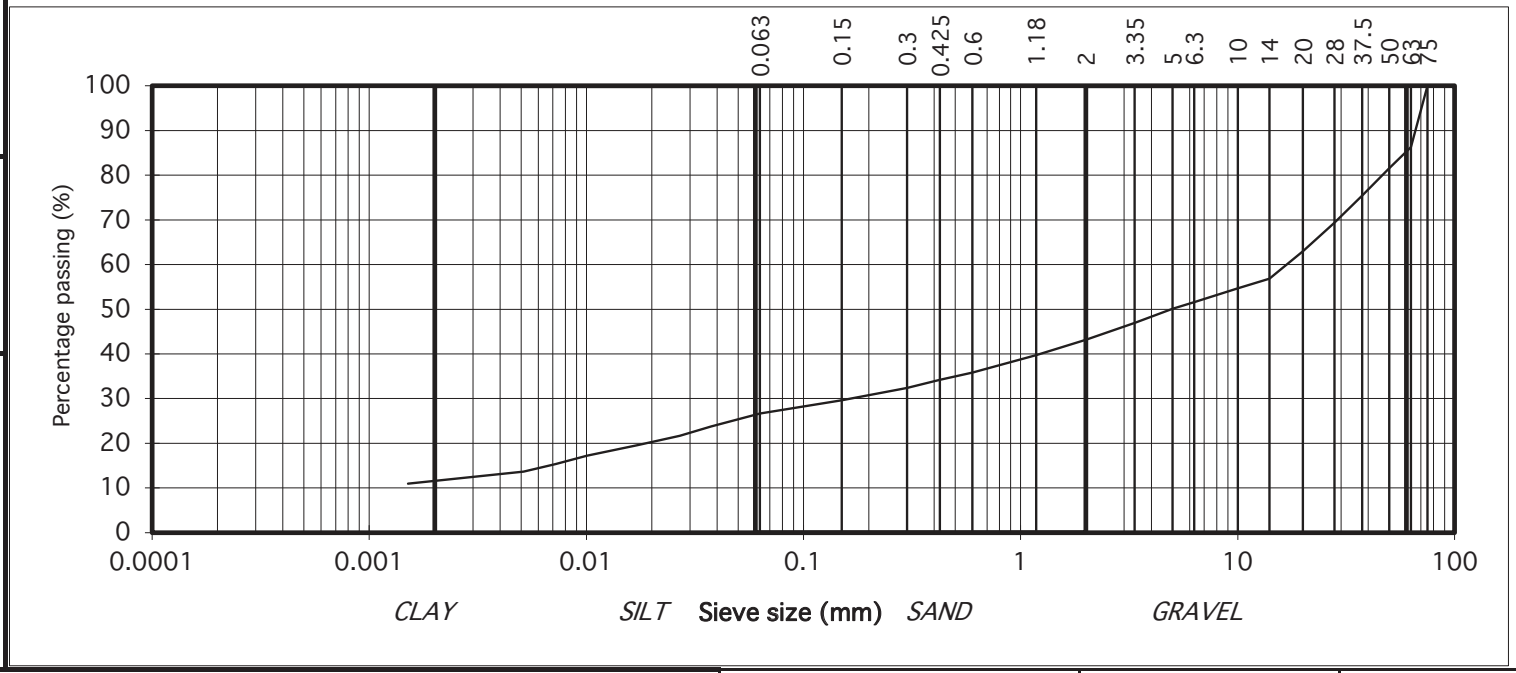

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Approved by:	Date:	Page no:
H Byrne	08/03/24	1 of 1

Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 IVNAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	100	
28	100	
20	97	
14	92	
10	89	
6.3	83	
5	81	
3.35	78	
2	72	
1.18	67	SAND
0.6	61	
0.425	58	
0.3	54	
0.15	50	
0.063	44	SILT/CLAY
0.038	39	
0.027	35	
0.017	31	
0.010	27	
0.007	24	
0.005	21	
0.002	13	

Contract No.	25000	Report No.	R154545	
Contract Name :	NDFA Social Housing Site 4 Basin View			
BH/TP No.	BH04			
Sample No.*	AA210275	Lab. Sample No.		A24/0715
Sample Type:	B			
Depth* (m)	6.00	Customer:	MORCE	
Date Received	27/02/2024	Date Testing started		28/02/2024
Description:	Black slightly sandy, slightly gravelly, CLAY			

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2 Sample size did not meet the requirements of BS1377

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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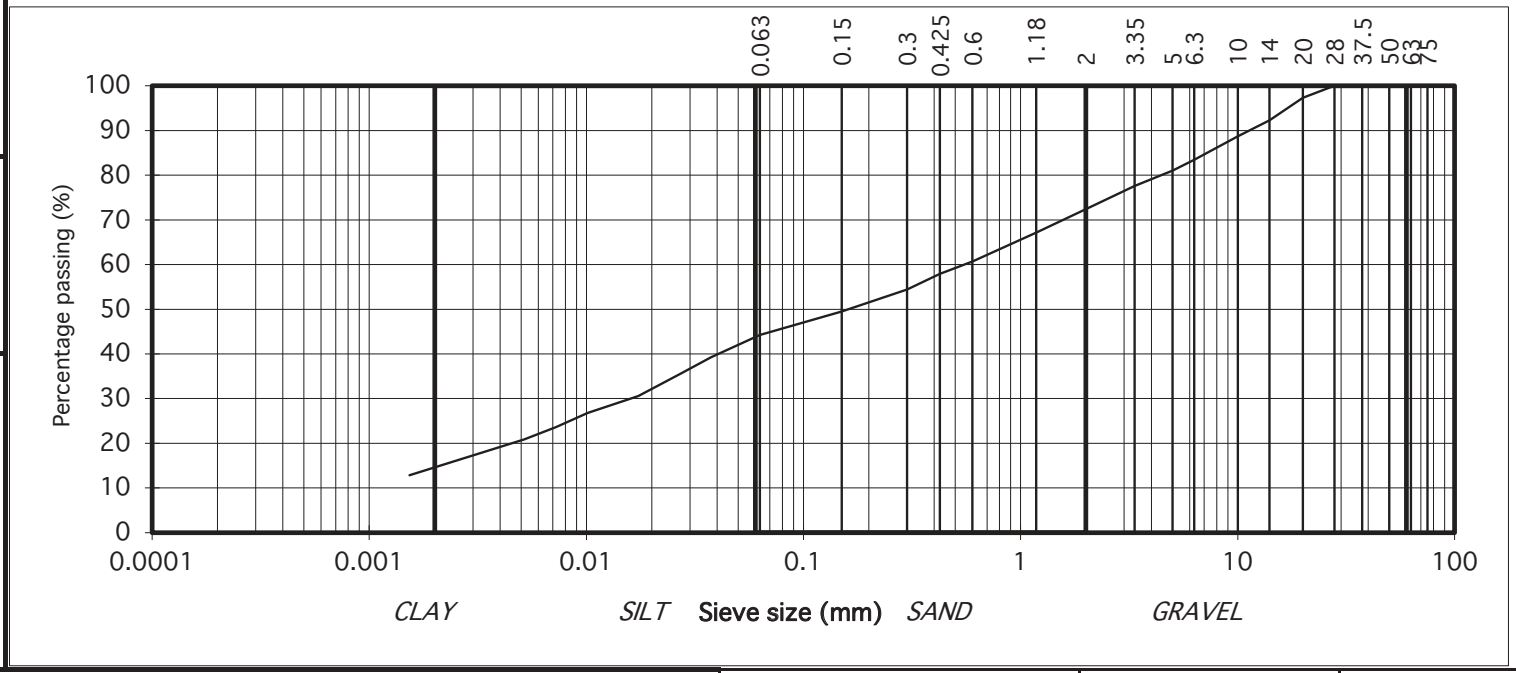

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Approved by:	Date:	Page no:
H Byrne	08/03/24	1 of 1

Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	92	
50	92	GRAVEL
37.5	92	
28	92	
20	89	
14	85	
10	79	
6.3	71	
5	66	
3.35	62	
2	56	
1.18	49	SAND
0.6	42	
0.425	39	
0.3	35	
0.15	29	
0.063	22	SILT/CLAY
0.038	19	
0.027	18	
0.017	16	
0.010	14	
0.007	13	
0.005	11	
0.002	9	

Contract No. 25000 Report No. R154546
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH05
Sample No.* AA198358 Lab. Sample No. A24/0718
Sample Type: B
Depth* (m) 5.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Brown slightly sandy, gravelly, CLAY with some cobbles

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2016 .

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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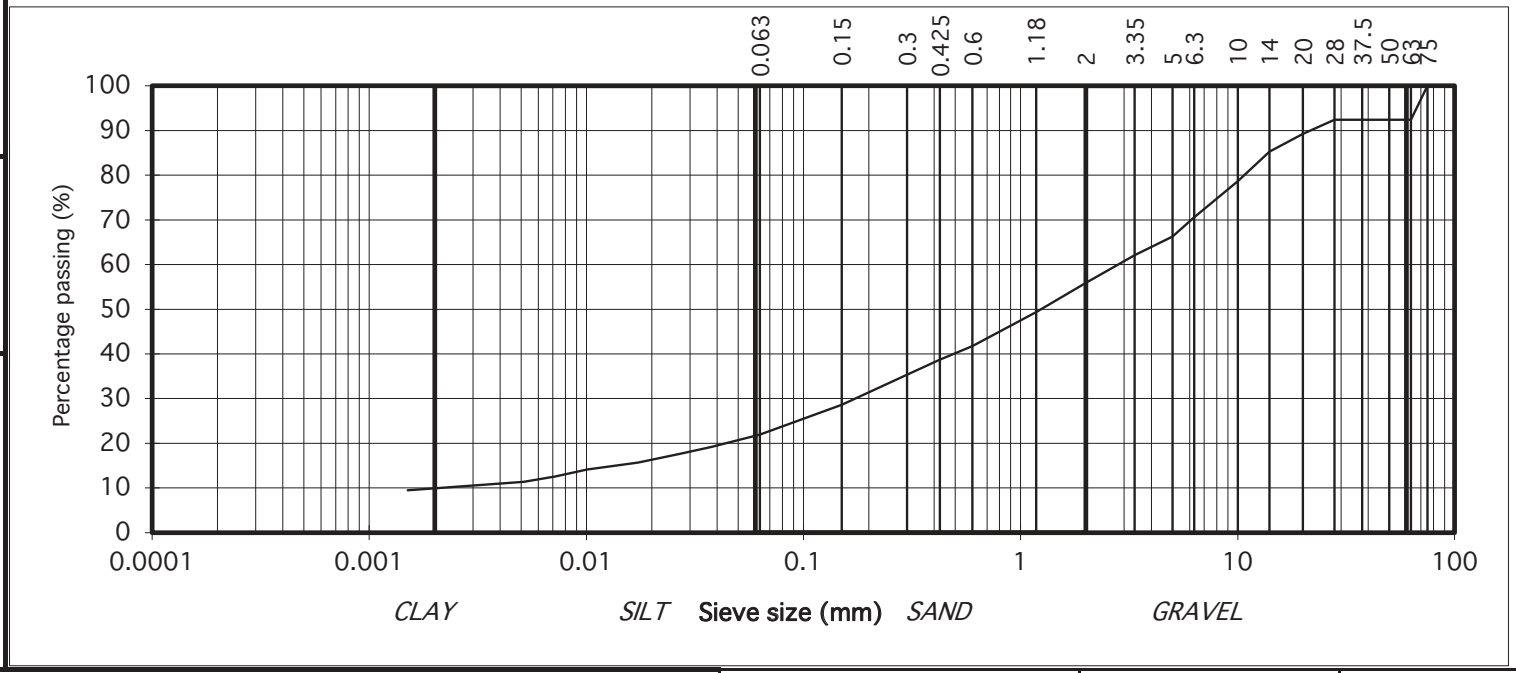

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Approved by:	Date:	Page no:
H Byrne	08/03/24	1 of 1

Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	89	GRAVEL
37.5	89	
28	85	
20	82	
14	79	
10	76	
6.3	72	
5	70	
3.35	66	
2	61	
1.18	58	SAND
0.6	53	
0.425	51	
0.3	48	
0.15	44	
0.063	40	SILT/CLAY
0.037	36	
0.027	33	
0.017	29	
0.010	26	
0.007	23	
0.005	21	
0.002	14	

Contract No. 25000 Report No. R154547
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH06
Sample No.* AA220293 Lab. Sample No. A24/0719
Sample Type: B
Depth* (m) 4.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Black slightly sandy, gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2 Sample size did not meet the requirements of BS1377

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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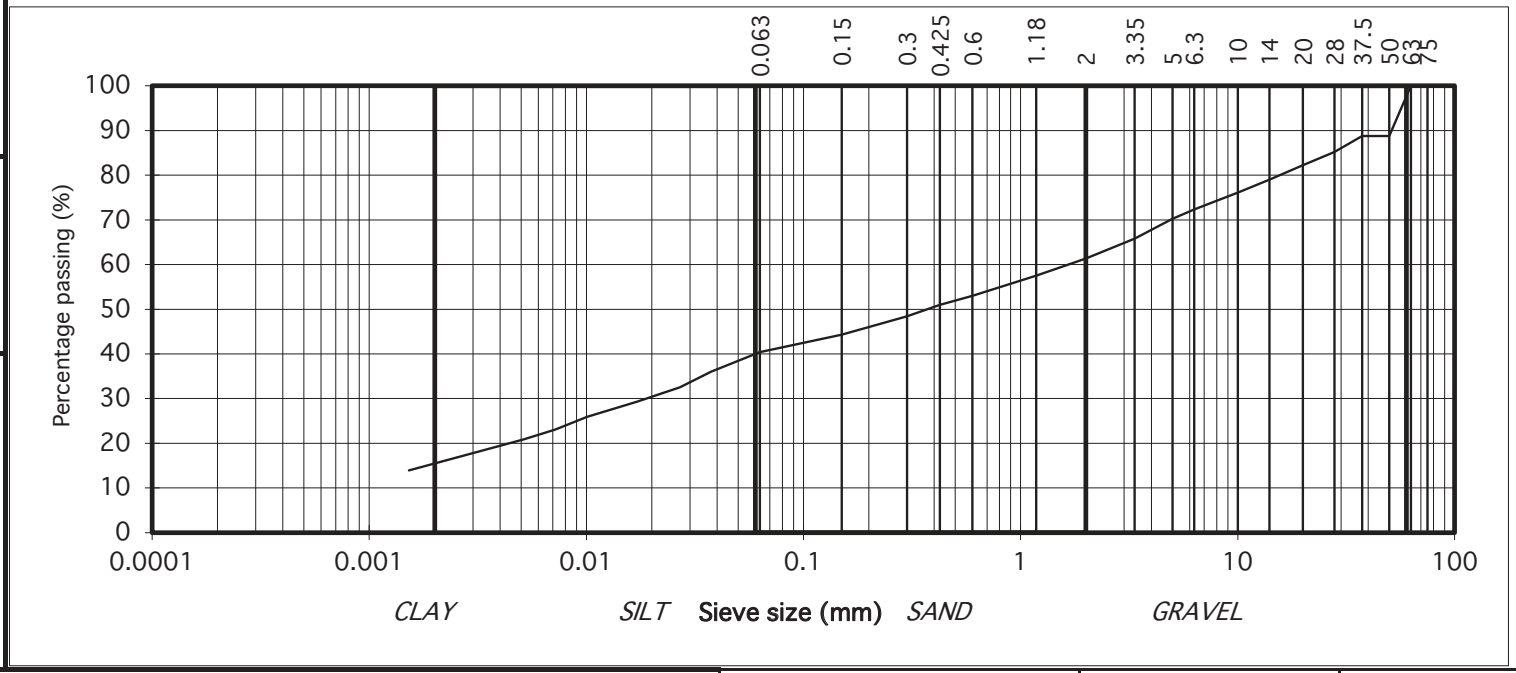

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Approved by:	Date:	Page no:
H Byrne	08/03/24	1 of 1

Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	100	
28	100	
20	98	
14	95	
10	91	
6.3	88	
5	86	
3.35	81	
2	76	
1.18	72	SAND
0.6	67	
0.425	65	
0.3	62	
0.15	58	
0.063	52	SILT/CLAY
0.038	46	
0.027	42	
0.017	37	
0.010	34	
0.007	30	
0.005	27	
0.002	14	

Contract No. 25000 Report No. R154548
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH06
Sample No.* AA220295 Lab. Sample No. A24/0720
Sample Type: B
Depth* (m) 6.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Black slightly sandy, slightly gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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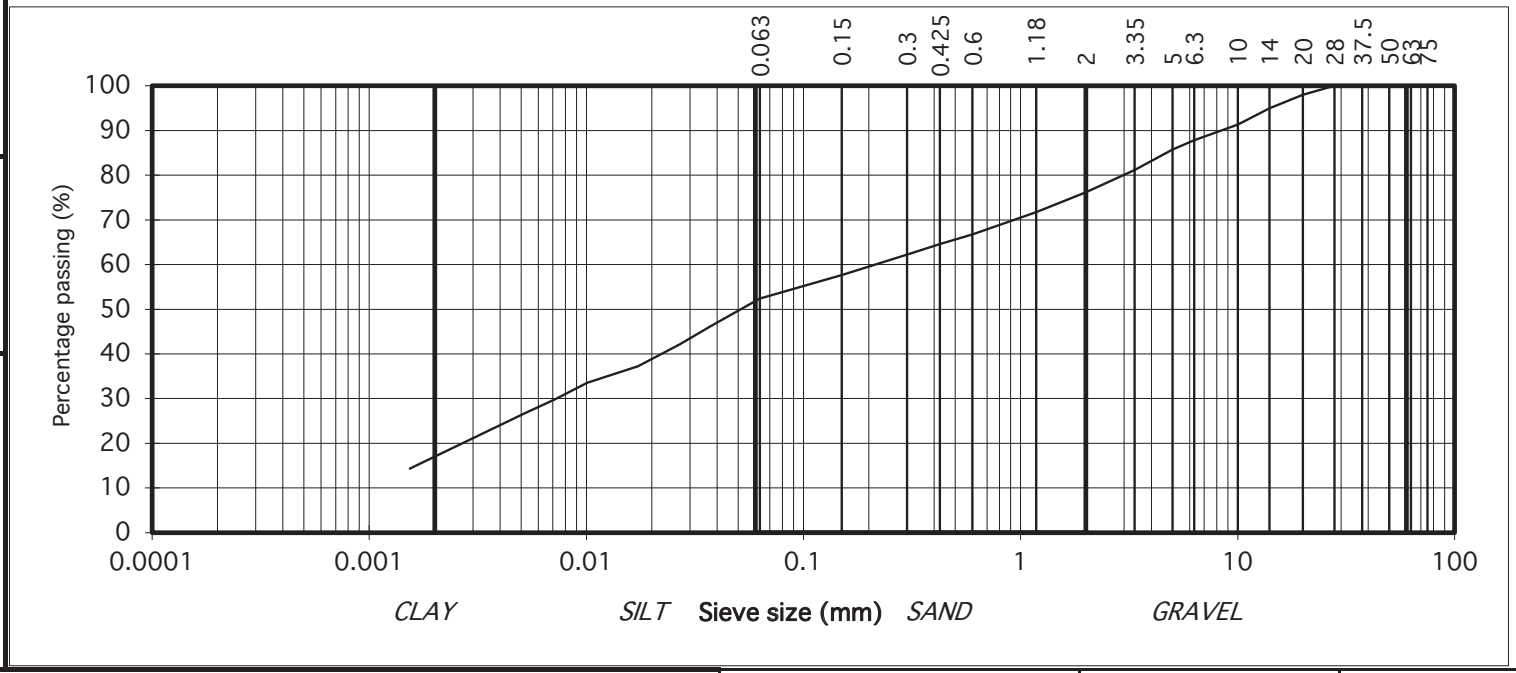

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	94	GRAVEL
37.5	91	
28	91	
20	89	
14	85	
10	82	
6.3	78	
5	75	
3.35	72	
2	68	
1.18	64	SAND
0.6	59	
0.425	57	
0.3	54	
0.15	49	
0.063	43	SILT/CLAY
0.038	37	
0.027	34	
0.017	30	
0.010	25	
0.007	23	
0.005	19	
0.002	12	

Contract No. 25000 Report No. R154561
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH07
Sample No.* AA216805 Lab. Sample No. A24/0722
Sample Type: B
Depth* (m) 4.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 29/02/2024
Description: Brown slightly sandy, slightly gravelly, CLAY with occasional cobbles

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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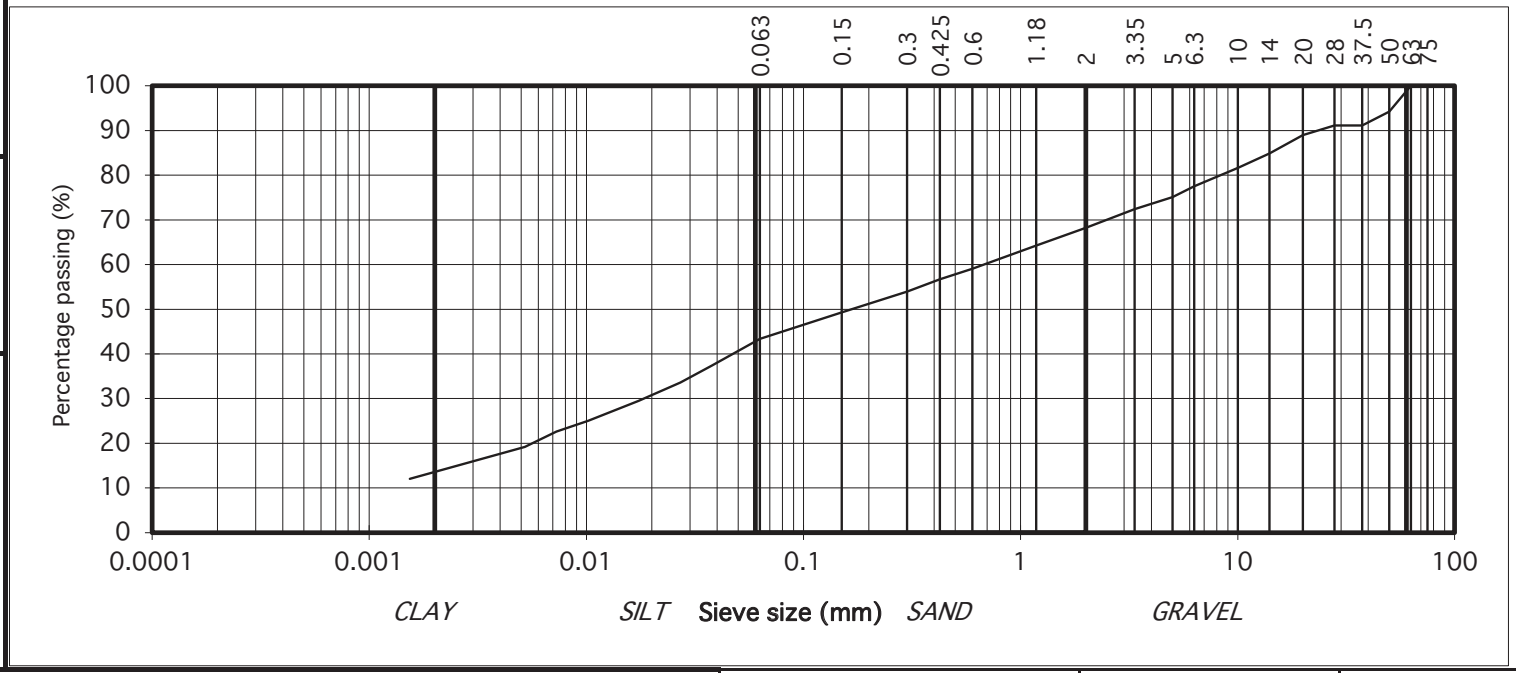

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	92	GRAVEL
37.5	85	
28	83	
20	81	
14	77	
10	73	
6.3	69	
5	67	
3.35	64	
2	60	
1.18	56	SAND
0.6	52	
0.425	50	
0.3	47	
0.15	44	
0.063	39	SILT/CLAY
0.038	34	
0.027	31	
0.017	27	
0.010	23	
0.007	21	
0.005	18	
0.002	11	

Contract No. 25000 Report No. R154559
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH07
Sample No.* AA216807 Lab. Sample No. A24/0723
Sample Type: B
Depth* (m) 6.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Grey slightly sandy, gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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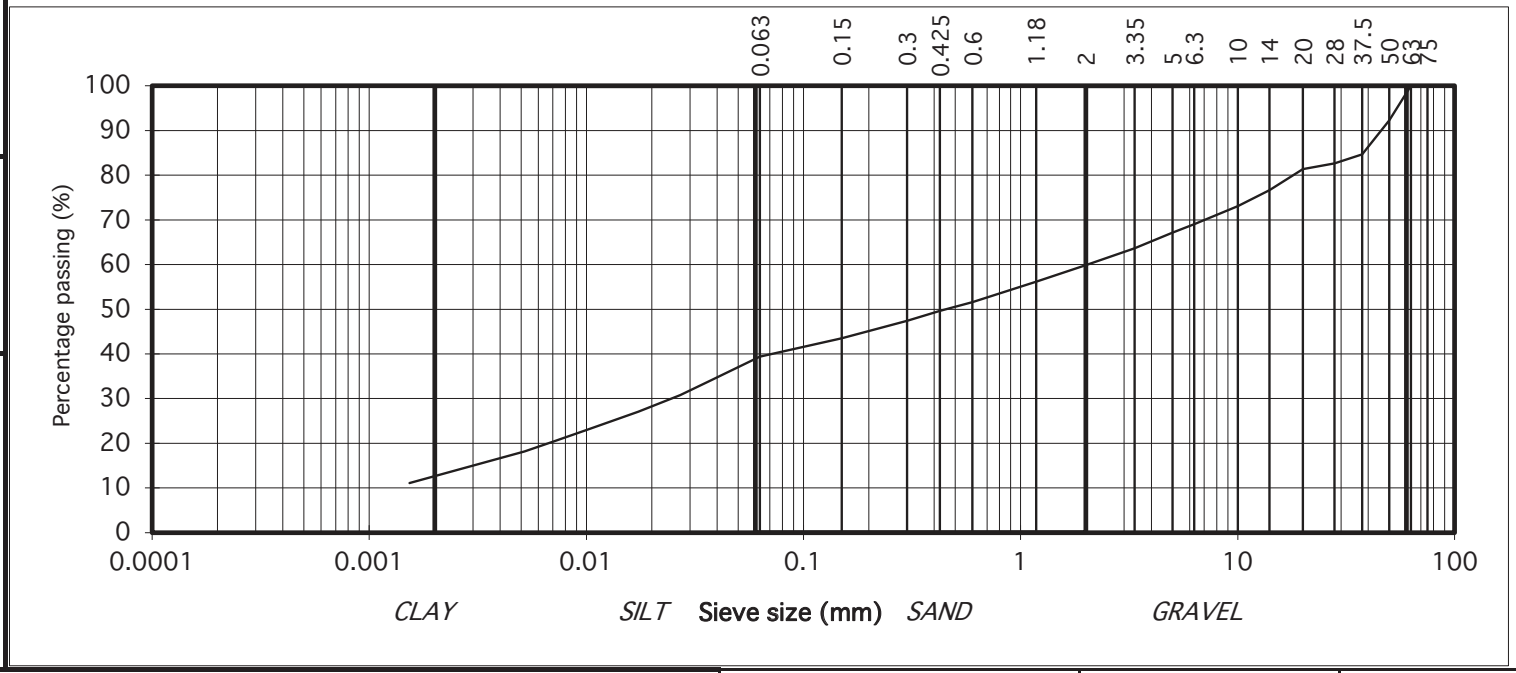

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	96	
28	94	
20	90	
14	85	
10	81	
6.3	77	
5	75	
3.35	71	
2	66	
1.18	61	SAND
0.6	55	
0.425	52	
0.3	49	
0.15	44	
0.063	40	SILT/CLAY
0.037	35	
0.027	32	
0.017	30	
0.010	27	
0.007	24	
0.005	21	
0.002	12	

Contract No. 25000 Report No. R154549
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH08
Sample No.* AA220261 Lab. Sample No. A24/0725
Sample Type: B
Depth* (m) 3.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Brown slightly sandy, slightly gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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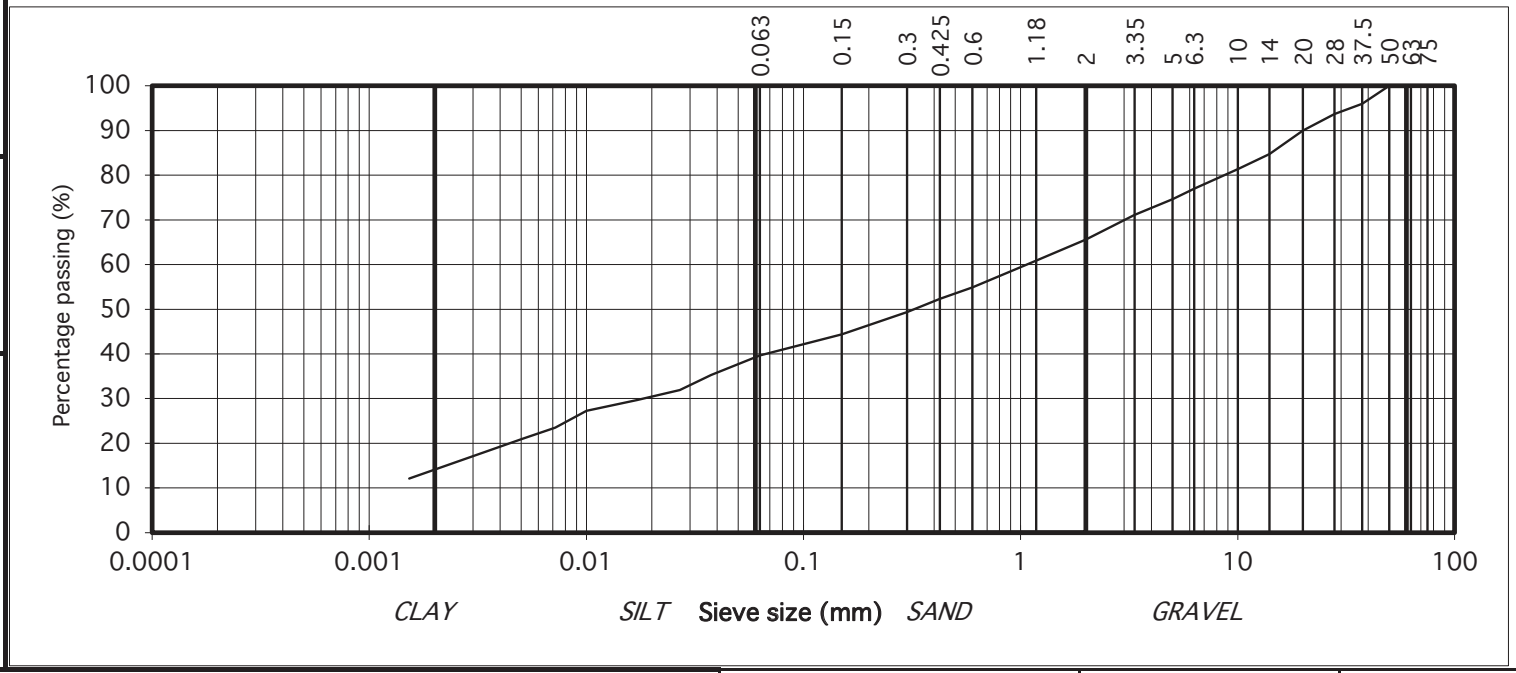

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	97	
28	93	
20	91	
14	88	
10	84	
6.3	80	
5	77	
3.35	73	
2	68	
1.18	64	SAND
0.6	59	
0.425	57	
0.3	54	
0.15	48	
0.063	42	SILT/CLAY
0.037	35	
0.027	32	
0.017	28	
0.010	26	
0.007	24	
0.005	21	
0.002	13	

Contract No. 25000 Report No. R154550
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH08
Sample No.* AA220263 Lab. Sample No. A24/0726
Sample Type: B
Depth* (m) 5.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Black slightly sandy, slightly gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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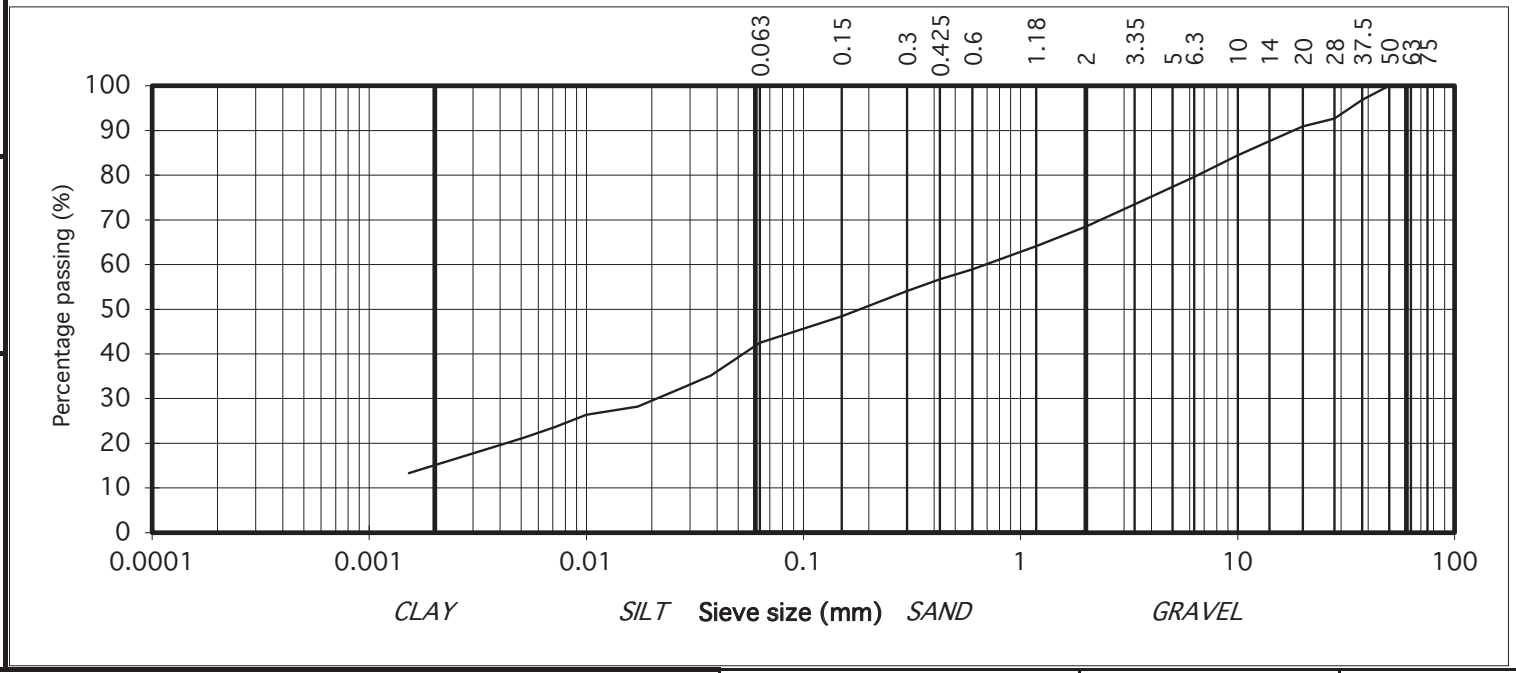

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 IVNAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	74	COBBLES
63	61	
50	61	GRAVEL
37.5	58	
28	56	
20	55	
14	54	
10	52	
6.3	49	
5	48	
3.35	46	
2	44	
1.18	41	SAND
0.6	38	
0.425	36	
0.3	34	
0.15	30	
0.063	27	SILT/CLAY
0.038	23	
0.027	21	
0.017	19	
0.010	16	
0.007	14	
0.005	13	
0.002	10	

Contract No. 25000 Report No. R154551
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH09
Sample No.* AA220255 Lab. Sample No. A24/0728
Sample Type: B
Depth* (m) 4.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Black slightly sandy, slightly gravelly, CLAY with many cobbles

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2 Sample size did not meet the requirements of BS1377

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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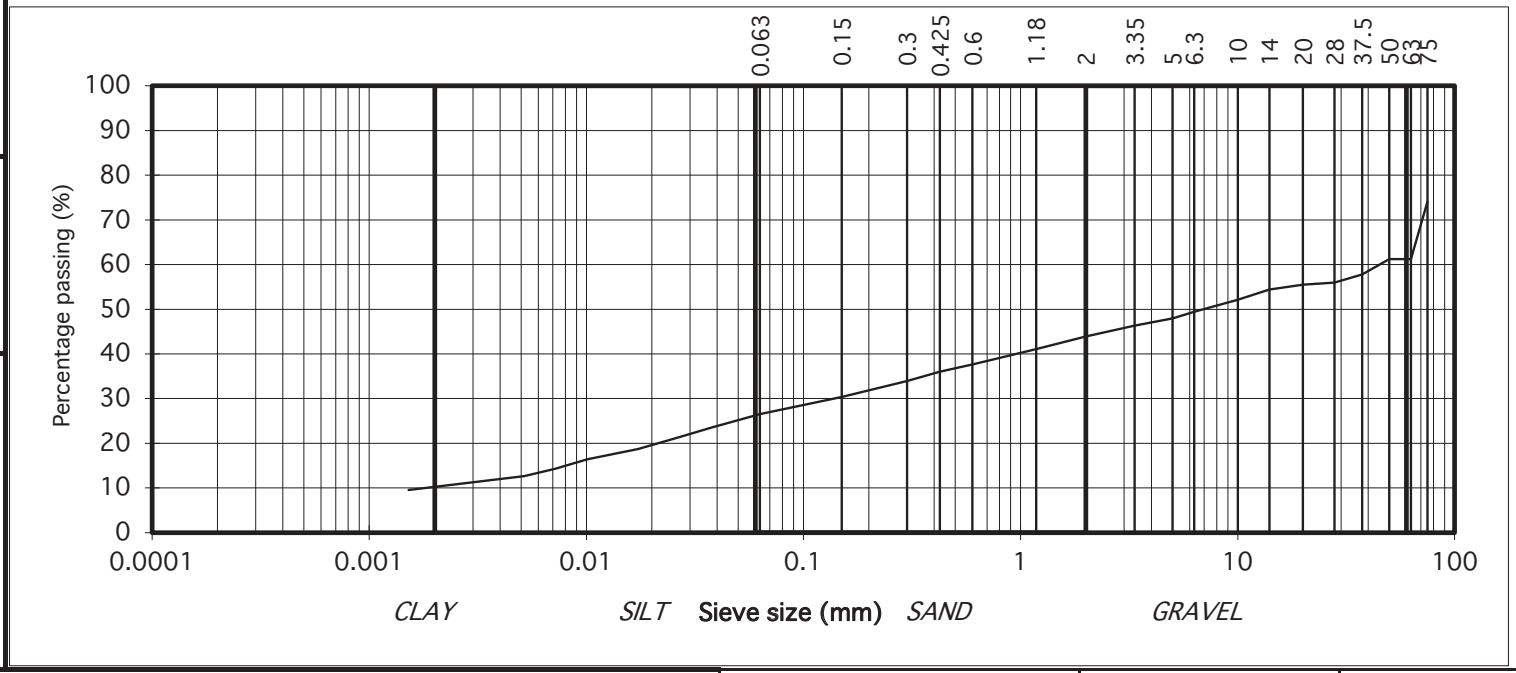

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Approved by:	Date:	Page no:
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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	95	
28	95	
20	89	
14	86	
10	81	
6.3	77	
5	74	
3.35	69	
2	65	
1.18	60	SAND
0.6	54	
0.425	52	
0.3	49	
0.15	44	
0.063	38	SILT/CLAY
0.037	34	
0.027	30	
0.017	27	
0.010	23	
0.007	20	
0.005	18	
0.002	14	

Contract No. 25000 Report No. R154552
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH09
Sample No.* AA220257 Lab. Sample No. A24/0729
Sample Type: B
Depth* (m) 6.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Brown slightly sandy, gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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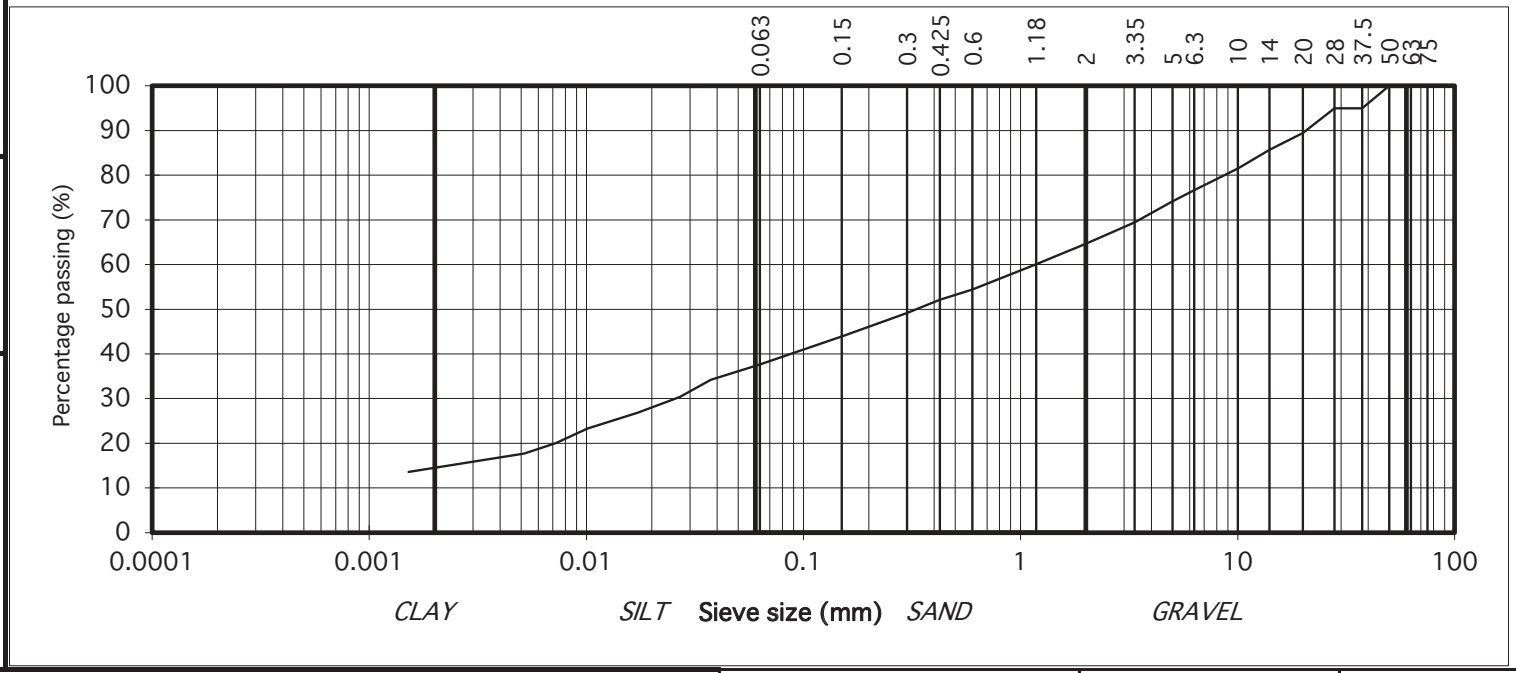

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	90	
50	84	GRAVEL
37.5	79	
28	78	
20	73	
14	71	
10	67	
6.3	64	
5	62	
3.35	60	
2	55	
1.18	52	SAND
0.6	47	
0.425	46	
0.3	43	
0.15	39	
0.063	35	SILT/CLAY
0.038	31	
0.027	28	
0.017	25	
0.010	21	
0.007	18	
0.005	16	
0.002	12	

Contract No. 25000 Report No. R154553
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH10
Sample No.* AA210296 Lab. Sample No. A24/0731
Sample Type: B
Depth* (m) 4.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 29/02/2024
Description: Grey/brown slightly sandy, gravelly, CLAY with some cobbles

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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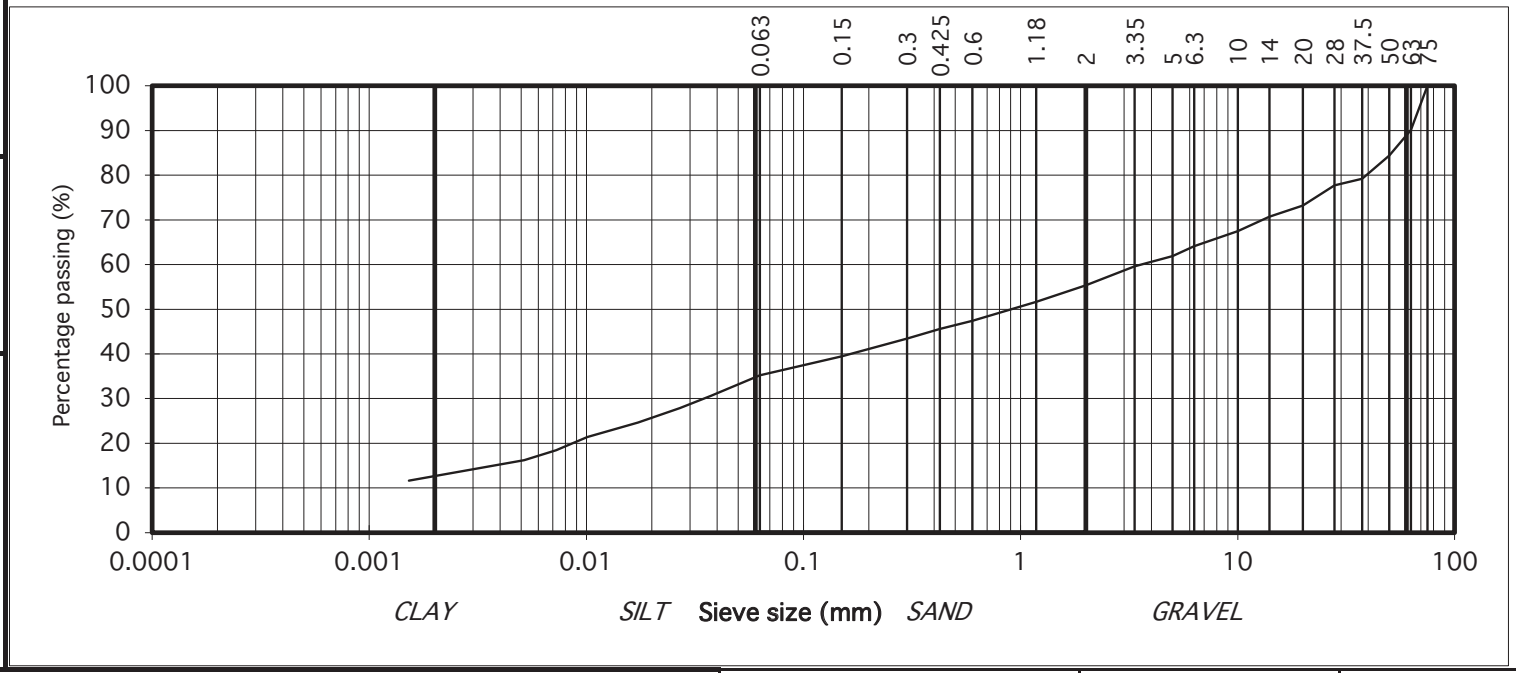

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	92	GRAVEL
37.5	82	
28	77	
20	69	
14	65	
10	62	
6.3	58	
5	56	
3.35	52	
2	48	
1.18	44	SAND
0.6	40	
0.425	38	
0.3	36	
0.15	32	
0.063	29	SILT/CLAY
0.038	24	
0.027	22	
0.017	19	
0.010	16	
0.007	15	
0.005	13	
0.002	10	

Contract No. 25000 Report No. R154554
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH10
Sample No.* AA210298 Lab. Sample No. A24/0732
Sample Type: B
Depth* (m) 6.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Black slightly sandy, gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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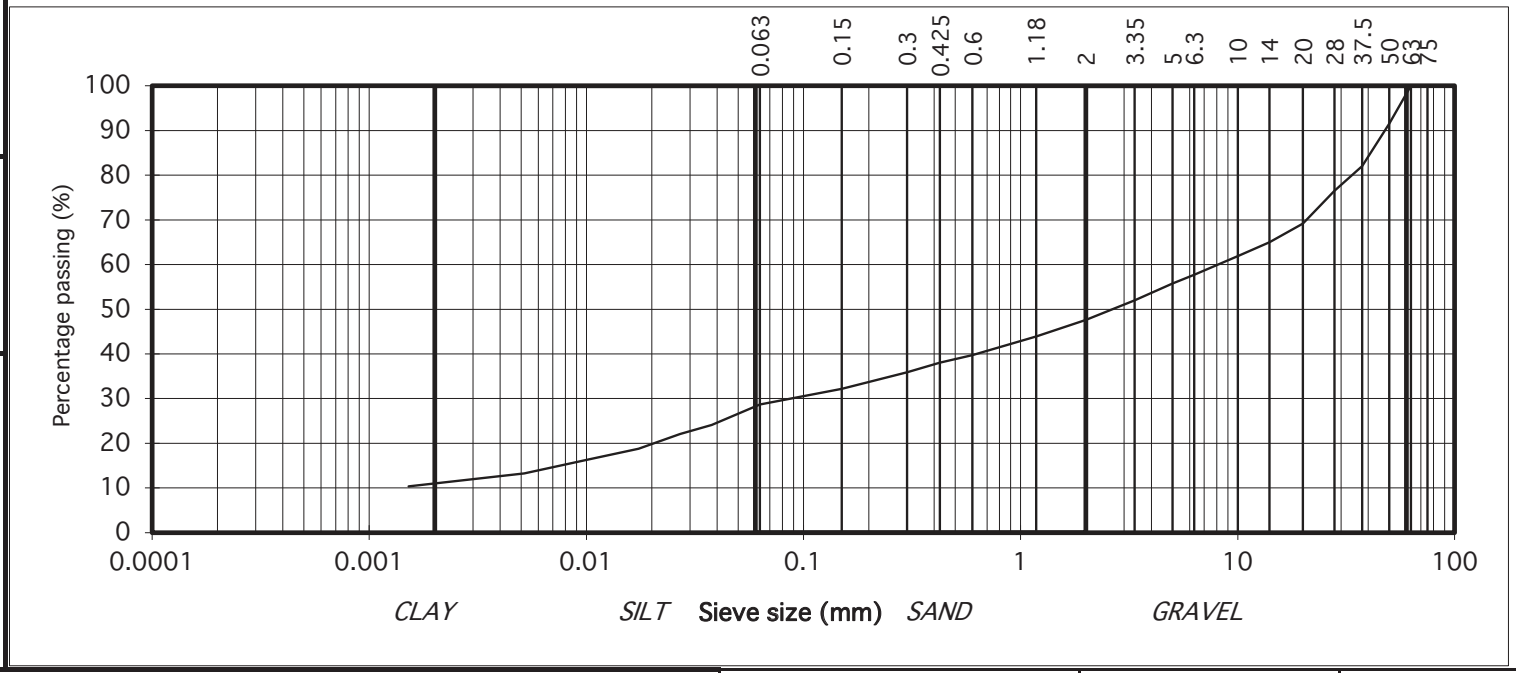

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	81	COBBLES
63	81	
50	81	GRAVEL
37.5	81	
28	80	
20	77	
14	74	
10	70	
6.3	67	
5	65	
3.35	62	
2	58	
1.18	55	SAND
0.6	51	
0.425	49	
0.3	47	
0.15	43	
0.063	38	SILT/CLAY
0.038	34	
0.027	30	
0.017	27	
0.010	23	
0.007	20	
0.005	18	
0.002	11	

Contract No. 25000 Report No. R154560
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH11
Sample No.* AA220268 Lab. Sample No. A24/0734
Sample Type: B
Depth* (m) 3.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Brown slightly sandy, slightly gravelly, CLAY with some cobbles

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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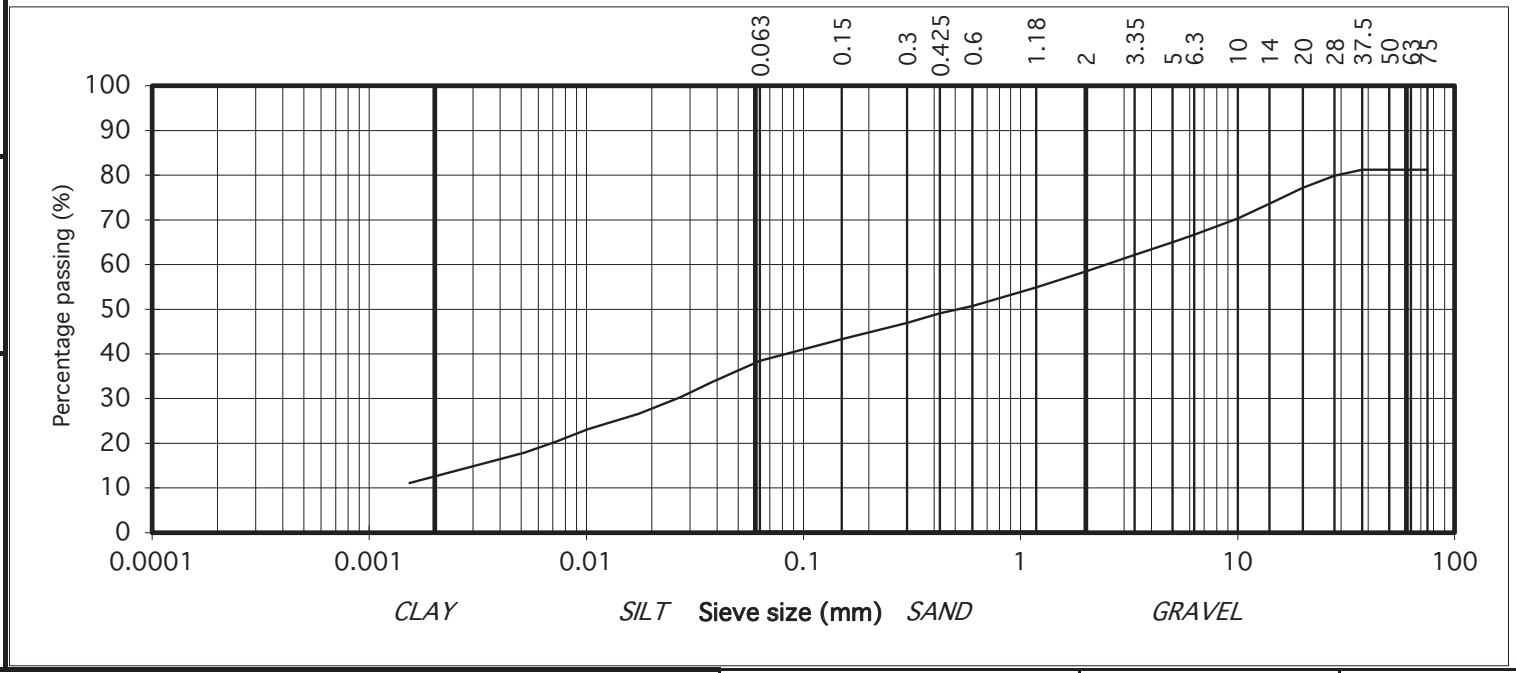

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	92	GRAVEL
37.5	92	
28	89	
20	83	
14	80	
10	76	
6.3	73	
5	71	
3.35	68	
2	64	
1.18	59	SAND
0.6	54	
0.425	52	
0.3	50	
0.15	44	
0.063	39	SILT/CLAY
0.038	33	
0.027	30	
0.017	26	
0.010	23	
0.007	21	
0.005	19	
0.002	13	

Contract No. 25000 Report No. R154555
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH11
Sample No.* AA210270 Lab. Sample No. A24/0735
Sample Type: B
Depth* (m) 5.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Grey slightly sandy, gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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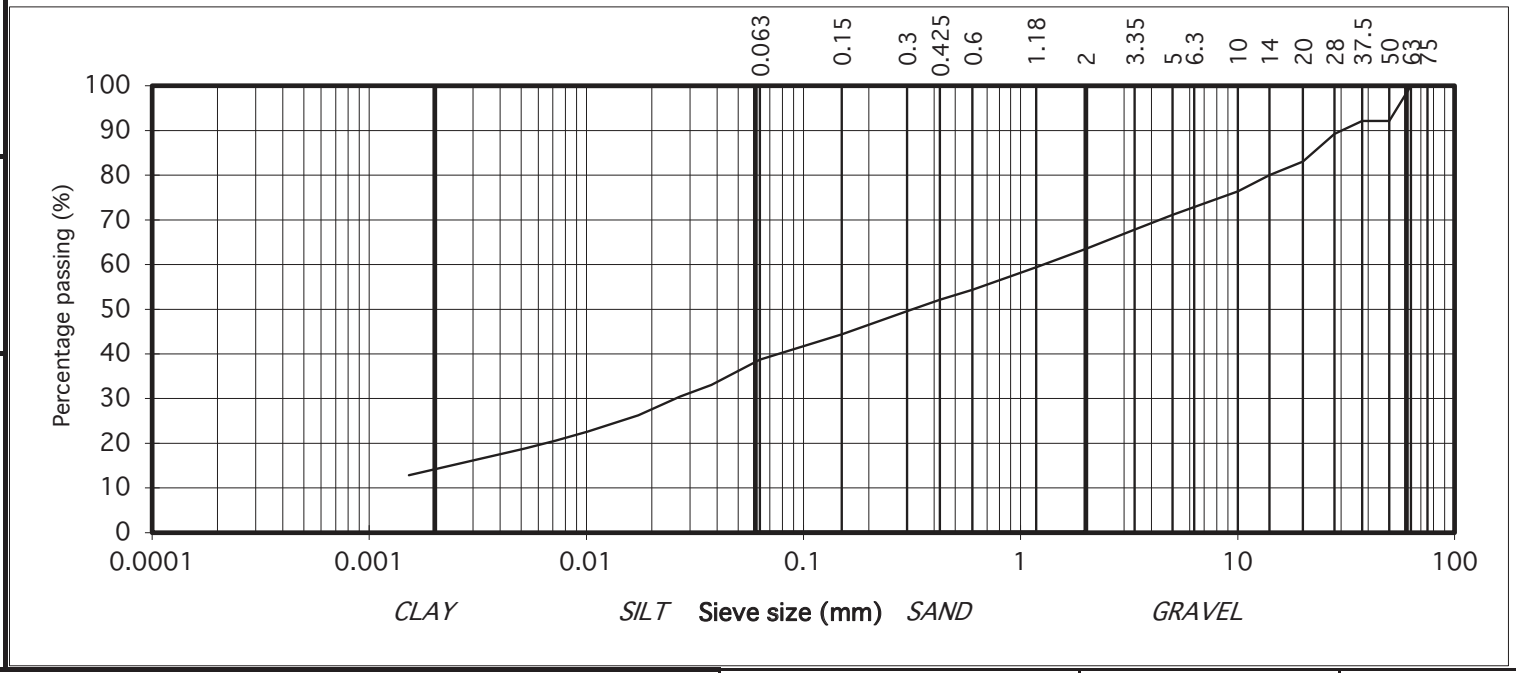

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 IVNAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	100	
28	98	
20	96	
14	94	
10	89	
6.3	85	
5	83	
3.35	80	
2	75	
1.18	70	SAND
0.6	62	
0.425	59	
0.3	54	
0.15	47	
0.063	40	SILT/CLAY
0.037	36	
0.027	32	
0.017	29	
0.010	26	
0.007	22	
0.005	19	
0.002	13	

Contract No. 25000 Report No. R154556
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH12
Sample No.* AA202088 Lab. Sample No. A24/0737
Sample Type: B
Depth* (m) 6.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Grey/brown sandy, slightly gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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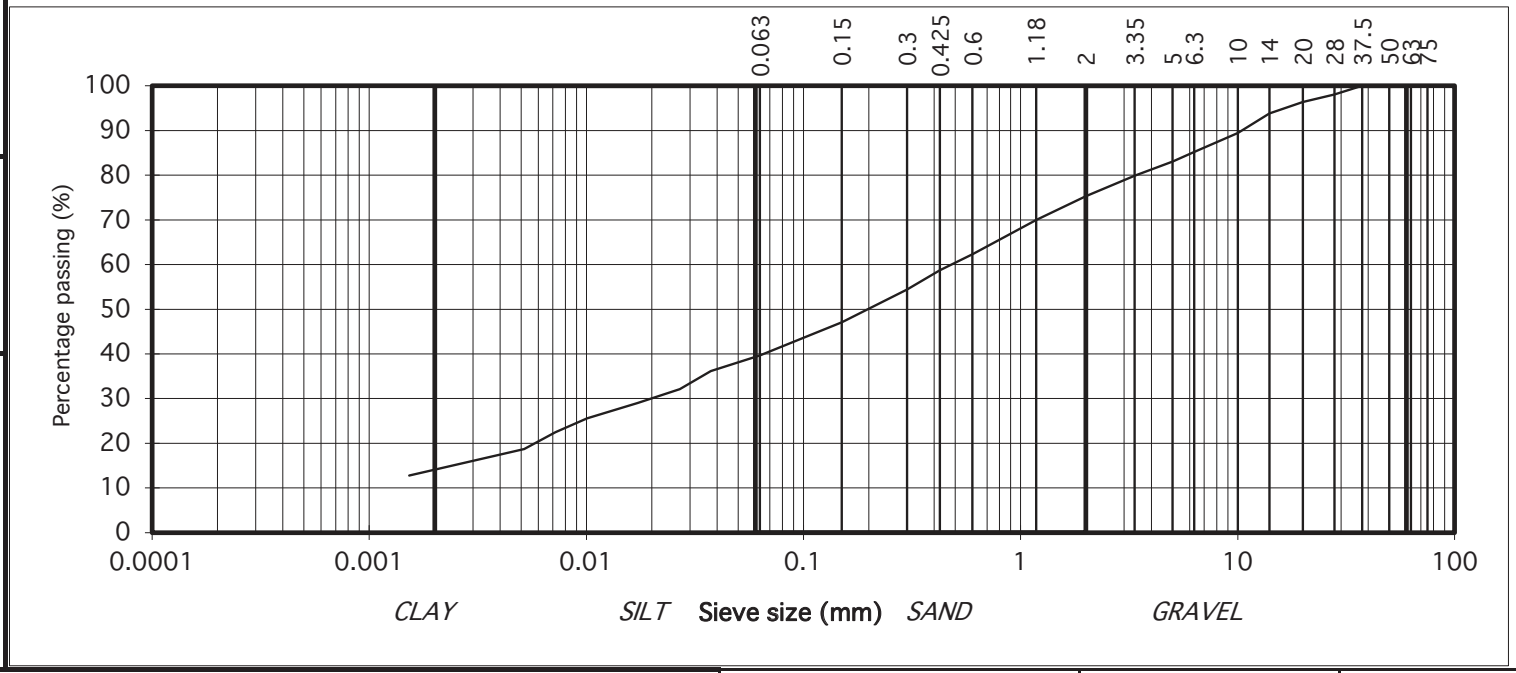

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 INAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	83	GRAVEL
37.5	74	
28	71	
20	67	
14	64	
10	61	
6.3	57	
5	55	
3.35	52	
2	47	
1.18	44	SAND
0.6	39	
0.425	38	
0.3	36	
0.15	32	
0.063	29	SILT/CLAY
0.038	26	
0.027	23	
0.017	21	
0.010	19	
0.007	17	
0.005	15	
0.002	11	

Contract No. 25000 Report No. R154557
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. BH13
Sample No.* AA2020275 Lab. Sample No. A24/0740
Sample Type: B
Depth* (m) 4.00 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Grey/brown slightly sandy, gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2 Sample size did not meet the requirements of BS1377

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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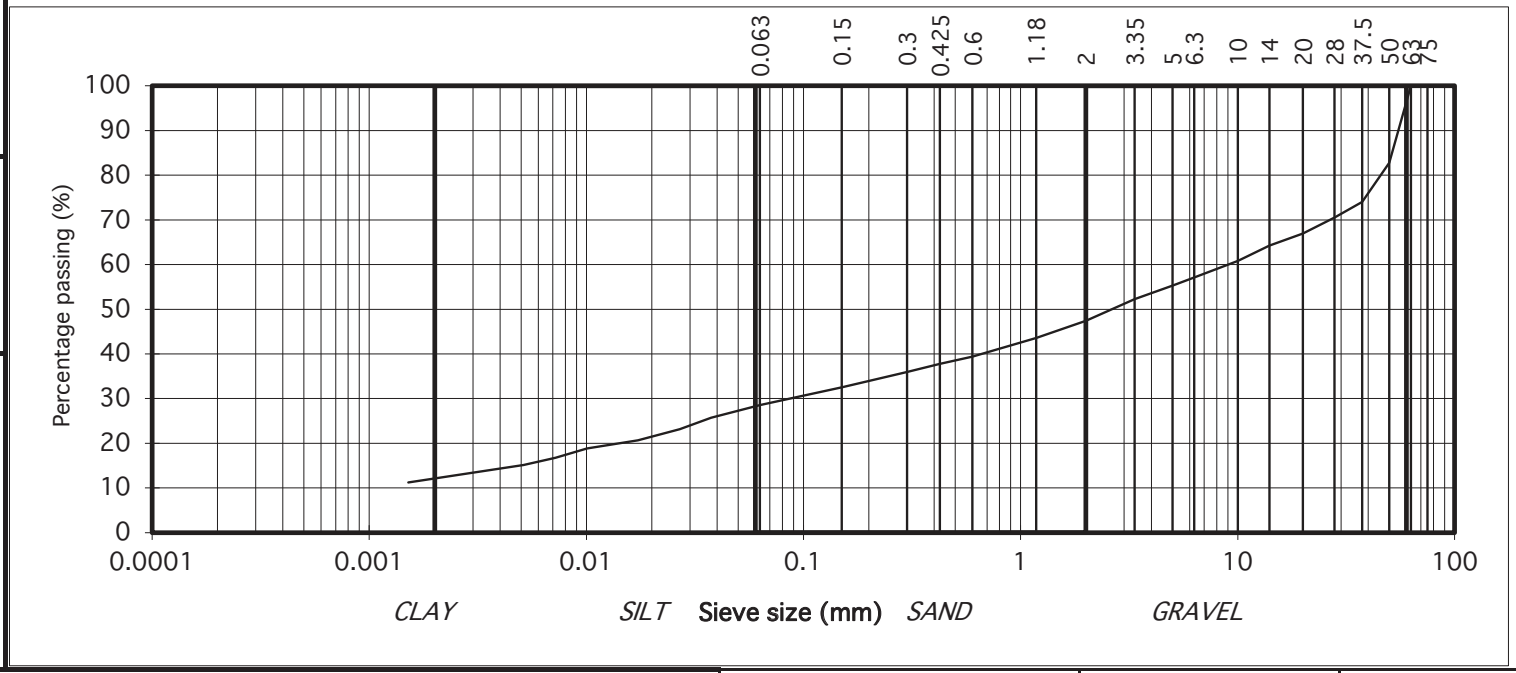

IGSL Ltd Materials Laboratory

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Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

TEST REPORT
Determination of Particle Size Distribution
Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5**
(note: Sedimentation stage not accredited)

ISO 17025 IVNAB ACCREDITED TESTING DETAILED IN SCOPE REG NO. 133T

particle size	% passing	
75	100	COBBLES
63	100	
50	100	GRAVEL
37.5	100	
28	100	
20	98	
14	96	
10	94	
6.3	91	
5	90	
3.35	87	
2	84	
1.18	81	SAND
0.6	77	
0.425	74	
0.3	72	
0.15	64	
0.063	55	SILT/CLAY
0.038	47	
0.027	42	
0.017	37	
0.010	33	
0.007	27	
0.005	24	
0.002	13	

Contract No. 25000 Report No. R154558
Contract Name : NDFA Social Housing Site 4 Basin View
BH/TP No. TP10
Sample No.* AA210359 Lab. Sample No. A24/0742
Sample Type: B
Depth* (m) 2.10 Customer: MORCE
Date Received 27/02/2024 Date Testing started 28/02/2024
Description: Grey/brown slightly sandy, slightly gravelly, CLAY

Remarks Note: **Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2 Sample size did not meet the requirements of BS1377

Results relate only to the specimen tested in as received condition unless otherwise noted. * denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.
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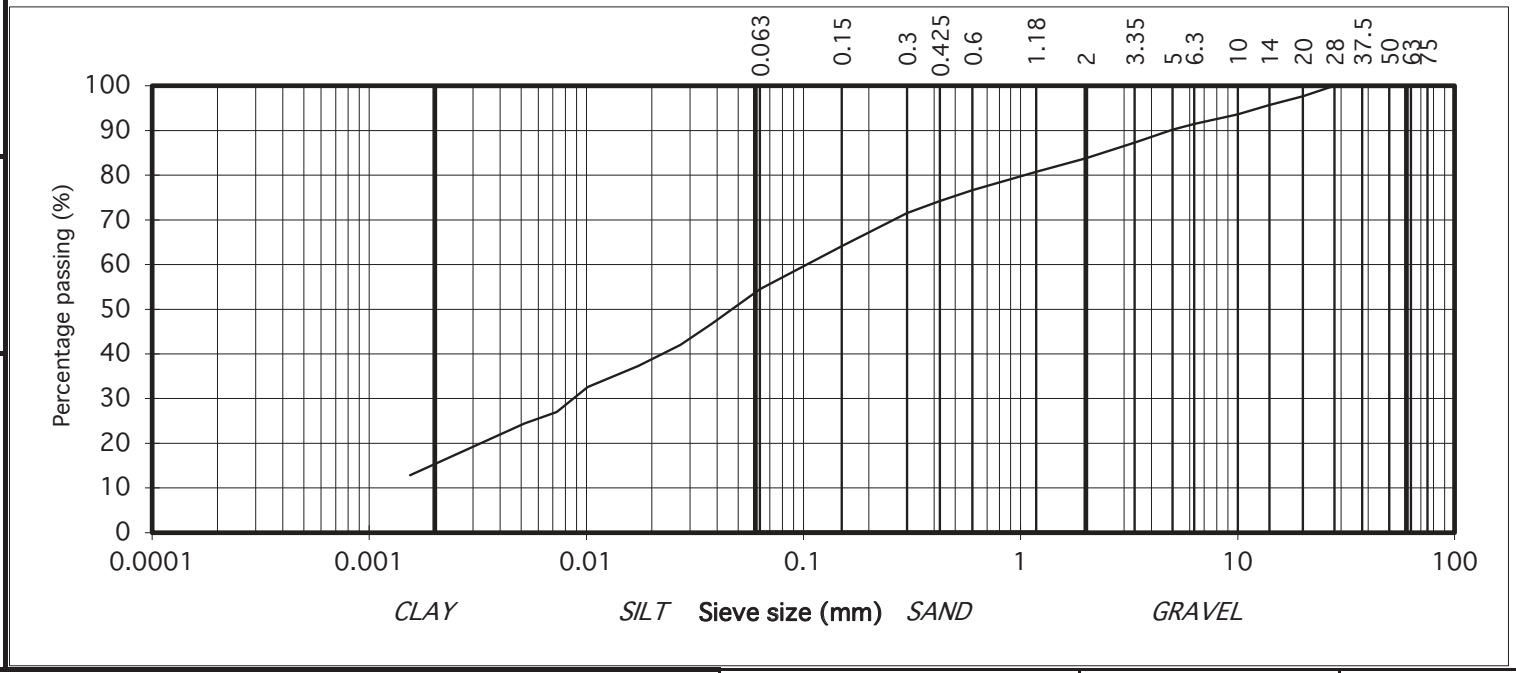

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H Byrne	08/03/24	1 of 1

Persons authorised to approve report: J Barrett (Quality Manager) H Byrne (Laboratory Manager)

Appendix 8

Geo-Environmental & Chemical Laboratory Results (Soils)

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-06640-1
Initial Date of Issue:	12-Mar-2024
Re-Issue Details:	
Client	IGSL
Client Address:	M7 Business Park Naas County Kildare Ireland
Contact(s):	Darren Keogh
Project	25000-4 Basin View
Quotation No.:	Q20-21693
Order No.:	
No. of Samples:	38
Turnaround (Wkdays):	5
Date Approved:	12-Mar-2024
Approved By:	
Details:	Stuart Henderson, Technical Manager

Date Received:	04-Mar-2024
Date Instructed:	04-Mar-2024
Results Due:	08-Mar-2024

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Leachate

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775125	1775126	1775128	1775129	1775130	1775132	1775134	1775135	1775136
Order No.:						Client Sample Ref.:	BH9	BH10	BH11	BH12	BH12	BH13	TP01	TP02	BH1
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	2.00	1.00	1.00	1.00	3.00	1.00	0.60	1.20	1.00
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**										
Ammonium	U	1220	10:1	mg/l	0.050		0.22	0.24	0.30	0.20	0.25	0.18	0.28	0.30	0.36
Ammonium	N	1220	10:1	mg/kg	0.10		2.3	2.5	3.2	2.1	2.7	2.1	3.0	3.3	3.9

Results - Leachate

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775137	1775139	1775140	1775142	1775143	1775145	1775146	1775147	1775148
Order No.:						Client Sample Ref.:	BH1	BH2	BH3	BH3	BH4	BH5	BH6	BH7	TP03
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	0.50
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**										
Ammonium	U	1220	10:1	mg/l	0.050		0.24	0.65	0.30	0.33	0.24	0.23	0.48	0.41	0.21
Ammonium	N	1220	10:1	mg/kg	0.10		2.5	8.7	4.5	3.7	2.6	3.2	5.8	4.5	2.3

Results - Leachate

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775149	1775150	1775151	1775152	1775153	1775154	1775155	1775156	1775158
Order No.:						Client Sample Ref.:	TP04	TP05	TP06	TP07	TP08	TP09	TP09	TP10	TP11
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0.30	0.60	1.30	1.30	0.40	1.00	2.10	1.30	1.20
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**										
Ammonium	U	1220	10:1	mg/l	0.050		0.31	0.72	0.56	0.29	0.26	0.21	0.25	0.24	0.30
Ammonium	N	1220	10:1	mg/kg	0.10		3.1	7.8	6.1	3.1	2.9	2.6	2.7	2.7	3.2

Results - Leachate

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775159	1775160	1775161
Order No.:						Client Sample Ref.:	TP11	TP12	TP13
						Sample Type:	SOIL	SOIL	SOIL
						Top Depth (m):	2.40	1.50	0.40
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**				
Ammonium	U	1220	10:1	mg/l	0.050		0.21	0.21	0.20
Ammonium	N	1220	10:1	mg/kg	0.10		2.2	2.4	2.4

Results - Soil

Project: 25000-4 Basin View

Client: IGSL				**Chemtest Job No.:**		24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693				**Chemtest Sample ID.:**		1775124	1775125	1775126	1775127	1775128	1775129	1775130
Order No.:				Client Sample Ref.:		BH8	BH9	BH10	BH10	BH11	BH12	BH12
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		1.00	2.00	1.00	2.00	1.00	1.00	3.00
				Date Sampled:		28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
				Asbestos Lab:			COVENTRY	COVENTRY		COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
ACM Type		U	2192		N/A		Fibres/Clumps	-		-	Fibres/Clumps	-
Asbestos Identification		U	2192		N/A		Amosite Chrysotile	No Asbestos Detected		No Asbestos Detected	Chrysotile	No Asbestos Detected
Asbestos by Gravimetry		U	2192	%	0.001		0.095				<0.001	
Total Asbestos		U	2192	%	0.001		0.095				<0.001	
Moisture		N	2030	%	0.020	19	22	24	27	21	18	2.5
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Clay	Loam	Clay	Clay	Clay	Loam	Clay
pH (2.5:1) at 20C		N	2010		4.0	8.5			8.6			
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40		0.88	0.95		0.55	0.66	1.4
Magnesium (Water Soluble)		N	2120	g/l	0.010	< 0.010			< 0.010			
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	< 0.010			0.039			
Total Sulphur		U	2175	%	0.010	0.034			0.090			
Sulphur (Elemental)		M	2180	mg/kg	1.0		1100	8.3		< 1.0	< 1.0	3.2
Chloride (Water Soluble)		M	2220	g/l	0.010	< 0.010			< 0.010			
Nitrate (Water Soluble)		N	2220	g/l	0.010	0.013			< 0.010			
Cyanide (Total)		M	2300	mg/kg	0.50		< 0.50	< 0.50		< 0.50	0.60	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50		45	4.8		3.8	6.4	3.5
Ammonium (Water Soluble)		M	2220	g/l	0.01	< 0.01			< 0.01			
Sulphate (Total)		U	2430	%	0.010		1.2	0.23		0.12	0.91	1.5
Sulphate (Acid Soluble)		U	2430	%	0.010	0.042			0.10			
Arsenic		M	2455	mg/kg	0.5		33	18		21	12	14
Barium		M	2455	mg/kg	0.5		230	150		130	340	340
Cadmium		M	2455	mg/kg	0.10		1.2	2.1		3.4	0.92	0.97
Chromium		M	2455	mg/kg	0.5		14	22		27	12	20
Molybdenum		M	2455	mg/kg	0.5		5.3	2.8		3.3	2.1	2.7
Antimony		N	2455	mg/kg	2.0		2.6	< 2.0		2.3	4.5	3.7
Copper		M	2455	mg/kg	0.50		32	63		56	32	28
Mercury		M	2455	mg/kg	0.05		0.28	0.41		0.15	0.39	0.42
Nickel		M	2455	mg/kg	0.50		38	46		71	18	26
Lead		M	2455	mg/kg	0.50		330	140		70	780	770
Selenium		M	2455	mg/kg	0.25		1.3	1.1		1.3	1.5	1.7
Zinc		M	2455	mg/kg	0.50		260	130		150	290	300
Chromium (Trivalent)		N	2490	mg/kg	1.0		14	22		27	12	20
Chromium (Hexavalent)		N	2490	mg/kg	0.50		< 0.50	< 0.50		< 0.50	< 0.50	< 0.50
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	< 0.05

Results - Soil

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775124	1775125	1775126	1775127	1775128	1775129	1775130
Order No.:						Client Sample Ref.:	BH8	BH9	BH10	BH10	BH11	BH12	BH12
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	1.00	2.00	1.00	2.00	1.00	1.00	3.00
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
						Asbestos Lab:		COVENTRY	COVENTRY		COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25	< 0.25		< 0.25	< 0.25	< 0.25	
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		7.2	6.2		4.2	5.5	4.8	
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		< 2.0	< 2.0		< 2.0	< 2.0	< 2.0	
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		< 3.0	6.3		4.1	3.6	< 3.0	
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		< 10	< 10		< 10	< 10	< 10	
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		9.3	12		8.4	9.1	6.9	
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25	< 0.25		< 0.25	< 0.25	< 0.25	
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		1.2	1.4		2.3	1.1	< 1.0	
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		4.5	3.8		4.7	6.9	3.3	
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		< 2.0	4.9		2.1	2.3	< 2.0	
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		< 1.0	1.1		< 1.0	< 1.0	< 1.0	
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		6.6	10		9.0	10	5.3	
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50	< 0.50		< 0.50	< 0.50	< 0.50	
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		16	22		17	19	12	
Mineral Oil EPH	EH_CU_1D_Total	N	2670	mg/kg	10		< 10	12		< 10	< 10	< 10	
Benzene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	
Toluene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	
Ethylbenzene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	
m & p-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	
o-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	
Methyl Tert-Butyl Ether		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	
Naphthalene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	
Acenaphthylene		N	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	
Acenaphthene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	
Fluorene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	
Phenanthrene		M	2800	mg/kg	0.10		0.17	< 0.10		< 0.10	0.37	0.24	
Anthracene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	0.12	< 0.10	
Fluoranthene		M	2800	mg/kg	0.10		0.23	0.39		< 0.10	0.59	0.38	
Pyrene		M	2800	mg/kg	0.10		0.20	0.30		< 0.10	0.51	0.34	
Benzo[a]anthracene		M	2800	mg/kg	0.10		0.13	< 0.10		< 0.10	< 0.10	< 0.10	
Chrysene		M	2800	mg/kg	0.10		0.10	< 0.10		< 0.10	< 0.10	< 0.10	
Benzo[b]fluoranthene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	

Results - Soil

Project: 25000-4 Basin View

Client: IGSL				**Chemtest Job No.:**		24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693				**Chemtest Sample ID.:**		1775124	1775125	1775126	1775127	1775128	1775129	1775130
Order No.:				Client Sample Ref.:		BH8	BH9	BH10	BH10	BH11	BH12	BH12
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		1.00	2.00	1.00	2.00	1.00	1.00	3.00
				Date Sampled:		28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
				Asbestos Lab:			COVENTRY	COVENTRY		COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Benzo[k]fluoranthene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Coronene		N	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Total Of 17 PAH's Lower		N	2800	mg/kg	1.0		< 1.0	< 1.0		< 1.0	1.6	< 1.0
PCB 28		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010	< 0.010
PCB 52		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010	< 0.010
PCB 101		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010	< 0.010
PCB 118		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010	< 0.010
PCB 153		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010	< 0.010
PCB 138		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010	< 0.010
PCB 180		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)		U	2815	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Total Phenols		M	2920	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10

Results - Soil

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775131	1775132	1775133	1775134	1775135	1775136	1775137
Order No.:						Client Sample Ref.:	BH12	BH13	BH13	TP01	TP02	BH1	BH1
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	4.00	1.00	3.50	0.60	1.20	1.00	2.00
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
						Asbestos Lab:		COVENTRY		COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
ACM Type		U	2192		N/A		Fibres/Clumps		-	-	-	-	
Asbestos Identification		U	2192		N/A		Chrysotile		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	
Asbestos by Gravimetry		U	2192	%	0.001		<0.001						
Total Asbestos		U	2192	%	0.001		<0.001						
Moisture		N	2030	%	0.020	15	19	17	16	18	18	19	
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	
Other Material		N	2040		N/A	Stones	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones	Stones and Roots	
Soil Texture		N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Clay	Clay	
pH (2.5:1) at 20C		N	2010		4.0	8.2		8.6					
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40		0.62		0.92	0.88	< 0.40	0.63	
Magnesium (Water Soluble)		N	2120	g/l	0.010	< 0.010		< 0.010					
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.23		0.038					
Total Sulphur		U	2175	%	0.010	0.083		0.045					
Sulphur (Elemental)		M	2180	mg/kg	1.0		5.0		30	1.2	< 1.0	1.9	
Chloride (Water Soluble)		M	2220	g/l	0.010	< 0.010		< 0.010					
Nitrate (Water Soluble)		N	2220	g/l	0.010	< 0.010		< 0.010					
Cyanide (Total)		M	2300	mg/kg	0.50		< 0.50		< 0.50	< 0.50	0.50	< 0.50	
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50		5.4		5.2	3.4	3.4	14	
Ammonium (Water Soluble)		M	2220	g/l	0.01	< 0.01		< 0.01					
Sulphate (Total)		U	2430	%	0.010		0.11		0.30	0.13	0.083	0.30	
Sulphate (Acid Soluble)		U	2430	%	0.010	0.15		0.053					
Arsenic		M	2455	mg/kg	0.5		22		9.8	13	19	11	
Barium		M	2455	mg/kg	0.5		200		76	72	230	250	
Cadmium		M	2455	mg/kg	0.10		1.9		0.94	2.0	1.2	1.3	
Chromium		M	2455	mg/kg	0.5		22		15	17	25	13	
Molybdenum		M	2455	mg/kg	0.5		4.7		2.3	2.7	2.5	3.2	
Antimony		N	2455	mg/kg	2.0		5.0		< 2.0	< 2.0	9.0	3.9	
Copper		M	2455	mg/kg	0.50		100		41	50	120	34	
Mercury		M	2455	mg/kg	0.05		0.41		0.16	0.14	0.88	0.26	
Nickel		M	2455	mg/kg	0.50		56		36	34	37	38	
Lead		M	2455	mg/kg	0.50		150		63	61	330	600	
Selenium		M	2455	mg/kg	0.25		1.7		1.2	1.4	1.2	2.9	
Zinc		M	2455	mg/kg	0.50		160		100	130	280	350	
Chromium (Trivalent)		N	2490	mg/kg	1.0		22		15	17	25	13	
Chromium (Hexavalent)		N	2490	mg/kg	0.50		< 0.50		< 0.50	< 0.50	< 0.50	< 0.50	
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	

Results - Soil

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775131	1775132	1775133	1775134	1775135	1775136	1775137
Order No.:						Client Sample Ref.:	BH12	BH13	BH13	TP01	TP02	BH1	BH1
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	4.00	1.00	3.50	0.60	1.20	1.00	2.00
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
						Asbestos Lab:		COVENTRY		COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25		< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		4.8		5.6	7.0	3.9	3.7
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		< 2.0		< 2.0	< 2.0	< 2.0	3.1
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		5.5		3.1	3.1	5.1	10
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		< 10		< 10	< 10	14	14
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		10		8.6	11	9.0	18
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25		< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0		1.1	< 1.0	< 1.0	< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		9.2		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		5.9		3.8	4.0	83	16
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		7.6		5.4	4.7	150	12
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		< 1.0		< 1.0	< 1.0	16	5.9
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		23		10	9.5	230	29
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50		< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		33		19	21	240	47
Mineral Oil EPH	EH_CU_1D_Total	N	2670	mg/kg	10		10		< 10	11	23	32
Benzene		M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Toluene		M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene		M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether		M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene		M	2800	mg/kg	0.10		0.14		< 0.10	< 0.10	0.31	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10		< 0.10		< 0.10	< 0.10	0.26	< 0.10
Acenaphthene		M	2800	mg/kg	0.10		0.59		< 0.10	< 0.10	0.75	< 0.10
Fluorene		M	2800	mg/kg	0.10		0.52		< 0.10	< 0.10	0.60	< 0.10
Phenanthrene		M	2800	mg/kg	0.10		5.1		0.22	0.56	8.9	0.23
Anthracene		M	2800	mg/kg	0.10		0.75		< 0.10	0.16	2.9	< 0.10
Fluoranthene		M	2800	mg/kg	0.10		5.0		0.36	1.3	24	0.33
Pyrene		M	2800	mg/kg	0.10		4.0		0.36	1.2	21	0.33
Benzo[a]anthracene		M	2800	mg/kg	0.10		2.4		0.22	0.80	15	< 0.10
Chrysene		M	2800	mg/kg	0.10		2.1		0.19	0.67	14	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10		3.1		0.35	1.2	20	< 0.10

Results - Soil

Project: 25000-4 Basin View

Client: IGSL												
Quotation No.: Q20-21693		**Chemtest Job No.:**				24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Order No.:		**Chemtest Sample ID.:**				1775131	1775132	1775133	1775134	1775135	1775136	1775137
		Client Sample Ref.:				BH12	BH13	BH13	TP01	TP02	BH1	BH1
		Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):				4.00	1.00	3.50	0.60	1.20	1.00	2.00
		Date Sampled:				28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
		Asbestos Lab:					COVENTRY		COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Benzo[k]fluoranthene		M	2800	mg/kg	0.10		0.99		0.11	0.40	7.1	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10		2.3		0.28	0.84	16	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10		1.4		0.15	0.58	9.2	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10		0.42		< 0.10	< 0.10	2.0	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10		1.4		0.19	0.58	9.3	< 0.10
Coronene		N	2800	mg/kg	0.10		< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's Lower		N	2800	mg/kg	1.0		30		2.4	8.3	150	< 1.0
PCB 28		U	2815	mg/kg	0.010		< 0.010		< 0.010	< 0.010	< 0.010	< 0.010
PCB 52		U	2815	mg/kg	0.010		< 0.010		< 0.010	< 0.010	< 0.010	< 0.010
PCB 101		U	2815	mg/kg	0.010		< 0.010		< 0.010	< 0.010	< 0.010	< 0.010
PCB 118		U	2815	mg/kg	0.010		< 0.010		< 0.010	< 0.010	< 0.010	< 0.010
PCB 153		U	2815	mg/kg	0.010		< 0.010		< 0.010	< 0.010	< 0.010	< 0.010
PCB 138		U	2815	mg/kg	0.010		< 0.010		< 0.010	< 0.010	< 0.010	< 0.010
PCB 180		U	2815	mg/kg	0.010		< 0.010		< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)		U	2815	mg/kg	0.10		< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols		M	2920	mg/kg	0.10		< 0.10		< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775138	1775139	1775140	1775141	1775142	1775143	1775144
Order No.:						Client Sample Ref.:	BH1	BH2	BH3	BH3	BH3	BH4	BH4
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	3.00	1.00	1.00	2.00	3.00	1.00	2.00
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
						Asbestos Lab:		COVENTRY	COVENTRY		COVENTRY	COVENTRY	
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
ACM Type		U	2192		N/A			-	-		-	-	
Asbestos Identification		U	2192		N/A			No Asbestos Detected	No Asbestos Detected		No Asbestos Detected	No Asbestos Detected	
Asbestos by Gravimetry		U	2192	%	0.001								
Total Asbestos		U	2192	%	0.001								
Moisture		N	2030	%	0.020	16	20	20	19	11	18	19
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones and Roots	Stones and Roots	Stones and Roots	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Clay	Clay
pH (2.5:1) at 20C		N	2010		4.0	8.6			8.5			8.4
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40		0.99	0.84		< 0.40	1.3	
Magnesium (Water Soluble)		N	2120	g/l	0.010	< 0.010			< 0.010			< 0.010
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.17			0.071			0.063
Total Sulphur		U	2175	%	0.010	0.15			0.069			0.14
Sulphur (Elemental)		M	2180	mg/kg	1.0		2.0	2.1		< 1.0	2.6	
Chloride (Water Soluble)		M	2220	g/l	0.010	< 0.010			0.030			0.011
Nitrate (Water Soluble)		N	2220	g/l	0.010	< 0.010			< 0.010			< 0.010
Cyanide (Total)		M	2300	mg/kg	0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50		4.4	5.3		5.3	9.8	
Ammonium (Water Soluble)		M	2220	g/l	0.01	< 0.01			< 0.01			< 0.01
Sulphate (Total)		U	2430	%	0.010		0.17	0.39		0.14	0.090	
Sulphate (Acid Soluble)		U	2430	%	0.010	0.62			0.33			0.22
Arsenic		M	2455	mg/kg	0.5		12	6.5		14	6.6	
Barium		M	2455	mg/kg	0.5		78	51		93	51	
Cadmium		M	2455	mg/kg	0.10		1.3	0.74		3.0	0.72	
Chromium		M	2455	mg/kg	0.5		19	14		18	14	
Molybdenum		M	2455	mg/kg	0.5		2.1	1.6		5.5	1.5	
Antimony		N	2455	mg/kg	2.0		< 2.0	< 2.0		< 2.0	< 2.0	
Copper		M	2455	mg/kg	0.50		45	26		39	26	
Mercury		M	2455	mg/kg	0.05		0.31	0.16		0.08	0.16	
Nickel		M	2455	mg/kg	0.50		36	25		59	25	
Lead		M	2455	mg/kg	0.50		110	49		27	49	
Selenium		M	2455	mg/kg	0.25		1.4	1.2		1.7	1.2	
Zinc		M	2455	mg/kg	0.50		180	100		120	100	
Chromium (Trivalent)		N	2490	mg/kg	1.0		19	14		18	14	
Chromium (Hexavalent)		N	2490	mg/kg	0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	

Results - Soil

Project: 25000-4 Basin View

Client: IGSL				**Chemtest Job No.:**		24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693				**Chemtest Sample ID.:**		1775138	1775139	1775140	1775141	1775142	1775143	1775144
Order No.:				Client Sample Ref.:		BH1	BH2	BH3	BH3	BH3	BH4	BH4
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		3.00	1.00	1.00	2.00	3.00	1.00	2.00
				Date Sampled:		28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
				Asbestos Lab:			COVENTRY	COVENTRY		COVENTRY	COVENTRY	
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25	< 0.25		< 0.25	< 0.25	
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		8.3	4.9		6.5	4.7	
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		< 1.0	< 1.0		< 1.0	1.3	
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		< 2.0	< 2.0		< 2.0	< 2.0	
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		4.2	5.5		< 3.0	9.6	
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		< 10	11		< 10	11	
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		12	10		7.1	17	
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05		< 0.05	< 0.05	
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25	< 0.25		< 0.25	< 0.25	
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0		< 1.0	< 1.0	
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0		< 1.0	7.0	
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		7.4	8.9		6.6	140	
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		6.6	6.3		< 2.0	250	
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		2.1	2.5		1.4	8.9	
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		14	15		7.0	390	
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		26	26		14	410	
Mineral Oil EPH	EH_CU_1D_Total	N	2670	mg/kg	10		12	21		< 10	28	
Benzene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Toluene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Ethylbenzene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	
m & p-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	
o-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Methyl Tert-Butyl Ether		M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Naphthalene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	0.46	
Acenaphthylene		N	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	0.10	
Acenaphthene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	0.96	
Fluorene		M	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	0.84	
Phenanthrene		M	2800	mg/kg	0.10		0.56	0.69		< 0.10	7.5	
Anthracene		M	2800	mg/kg	0.10		0.10	0.15		< 0.10	2.4	
Fluoranthene		M	2800	mg/kg	0.10		0.80	0.83		< 0.10	13	
Pyrene		M	2800	mg/kg	0.10		0.69	0.73		< 0.10	11	
Benzo[a]anthracene		M	2800	mg/kg	0.10		0.45	0.43		< 0.10	6.2	
Chrysene		M	2800	mg/kg	0.10		0.40	0.45		< 0.10	6.4	
Benzo[b]fluoranthene		M	2800	mg/kg	0.10		0.54	0.57		< 0.10	7.6	

Results - Soil

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775138	1775139	1775140	1775141	1775142	1775143	1775144
Order No.:						Client Sample Ref.:	BH1	BH2	BH3	BH3	BH3	BH4	BH4
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	3.00	1.00	1.00	2.00	3.00	1.00	2.00
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
						Asbestos Lab:		COVENTRY	COVENTRY		COVENTRY	COVENTRY	
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Benzo[k]fluoranthene		M	2800	mg/kg	0.10		0.17	0.23		< 0.10	3.2		
Benzo[a]pyrene		M	2800	mg/kg	0.10		0.47	0.53		< 0.10	6.3		
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10		0.32	0.26		< 0.10	3.9		
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10		< 0.10	0.15		< 0.10	0.92		
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10		0.33	0.31		< 0.10	3.5		
Coronene		N	2800	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10		
Total Of 17 PAH's Lower		N	2800	mg/kg	1.0		4.8	5.3		< 1.0	74		
PCB 28		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010		
PCB 52		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010		
PCB 101		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010		
PCB 118		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010		
PCB 153		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010		
PCB 138		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010		
PCB 180		U	2815	mg/kg	0.010		< 0.010	< 0.010		< 0.010	< 0.010		
Total PCBs (7 Congeners)		U	2815	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10		
Total Phenols		M	2920	mg/kg	0.10		< 0.10	< 0.10		< 0.10	< 0.10		

Results - Soil

Project: 25000-4 Basin View

Client: IGSL				**Chemtest Job No.:**		24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693				**Chemtest Sample ID.:**		1775145	1775146	1775147	1775148	1775149	1775150	1775151
Order No.:				Client Sample Ref.:		BH5	BH6	BH7	TP03	TP04	TP05	TP06
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		1.00	2.00	1.00	0.50	0.30	0.60	1.30
				Date Sampled:		28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
				Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
ACM Type		U	2192		N/A	-	-	-	-	Fibres/Clumps	Fibres/Clumps	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	Chrysotile	Chrysotile	No Asbestos Detected
Asbestos by Gravimetry		U	2192	%	0.001					<0.001	0.008	
Total Asbestos		U	2192	%	0.001					<0.001	0.008	
Moisture		N	2030	%	0.020	14	21	16	19	25	12	18
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones	Stones and Roots
Soil Texture		N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Clay	Clay
pH (2.5:1) at 20C		N	2010		4.0							
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40	< 0.40	0.44	< 0.40	1.1	2.6	0.47	0.67
Magnesium (Water Soluble)		N	2120	g/l	0.010							
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010							
Total Sulphur		U	2175	%	0.010							
Sulphur (Elemental)		M	2180	mg/kg	1.0	9.0	39	9.5	< 1.0	< 1.0	1.4	2.7
Chloride (Water Soluble)		M	2220	g/l	0.010							
Nitrate (Water Soluble)		N	2220	g/l	0.010							
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	3.8	9.0	4.5	3.7	3.3	3.9	4.8
Ammonium (Water Soluble)		M	2220	g/l	0.01							
Sulphate (Total)		U	2430	%	0.010	0.18	0.44	0.24	0.12	0.11	0.089	0.16
Sulphate (Acid Soluble)		U	2430	%	0.010							
Arsenic		M	2455	mg/kg	0.5	18	17	13	14	10	11	14
Barium		M	2455	mg/kg	0.5	130	220	89	120	63	91	170
Cadmium		M	2455	mg/kg	0.10	1.2	1.4	0.98	1.1	0.85	1.3	1.5
Chromium		M	2455	mg/kg	0.5	16	18	15	22	18	14	20
Molybdenum		M	2455	mg/kg	0.5	2.9	2.9	2.1	1.8	1.5	2.2	1.8
Antimony		N	2455	mg/kg	2.0	2.6	2.0	2.9	2.9	< 2.0	< 2.0	5.7
Copper		M	2455	mg/kg	0.50	44	50	49	120	39	33	35
Mercury		M	2455	mg/kg	0.05	0.35	0.37	0.36	0.35	0.24	0.18	0.27
Nickel		M	2455	mg/kg	0.50	33	38	32	35	27	34	33
Lead		M	2455	mg/kg	0.50	180	240	120	140	130	96	180
Selenium		M	2455	mg/kg	0.25	0.97	2.9	0.97	1.2	0.88	0.84	1.1
Zinc		M	2455	mg/kg	0.50	160	150	110	180	120	120	190
Chromium (Trivalent)		N	2490	mg/kg	1.0	16	18	15	22	18	14	20
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Results - Soil

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775145	1775146	1775147	1775148	1775149	1775150	1775151
Order No.:						Client Sample Ref.:	BH5	BH6	BH7	TP03	TP04	TP05	TP06
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	1.00	2.00	1.00	0.50	0.30	0.60	1.30
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
						Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		4.8	4.9	2.6	7.9	8.1	7.6	4.1
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		3.6	5.1	3.5	4.5	6.7	3.5	< 3.0
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		< 10	12	< 10	< 10	< 10	11	< 10
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		10	9.9	6.1	12	16	11	6.3
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		13	29	8.4	6.2	11	8.0	11
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		< 2.0	9.5	< 2.0	8.3	21	< 2.0	5.6
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		3.9	2.4	1.6	2.4	6.0	3.2	2.6
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		14	39	9.4	14	32	9.8	16
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		24	49	16	27	48	21	23
Mineral Oil EPH	EH_CU_1D_Total	N	2670	mg/kg	10		10	22	< 10	12	16	22	< 10
Benzene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene		M	2800	mg/kg	0.10		0.12	0.43	0.13	< 0.10	0.22	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10		< 0.10	0.52	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10		< 0.10	0.59	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10		0.81	3.4	0.80	1.1	1.6	< 0.10	0.55
Anthracene		M	2800	mg/kg	0.10		0.19	1.1	0.25	0.18	0.35	< 0.10	0.14
Fluoranthene		M	2800	mg/kg	0.10		1.2	3.6	1.1	1.6	2.3	0.50	1.6
Pyrene		M	2800	mg/kg	0.10		1.1	3.1	0.95	1.3	1.9	0.45	1.4
Benzo[a]anthracene		M	2800	mg/kg	0.10		0.65	1.7	0.57	0.80	1.1	< 0.10	0.97
Chrysene		M	2800	mg/kg	0.10		0.61	1.8	0.59	0.72	< 0.10	< 0.10	0.82
Benzo[b]fluoranthene		M	2800	mg/kg	0.10		0.99	2.2	0.77	1.1	1.3	< 0.10	1.5

Results - Soil

Project: 25000-4 Basin View

Client: IGSL				**Chemtest Job No.:**		24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693				**Chemtest Sample ID.:**		1775145	1775146	1775147	1775148	1775149	1775150	1775151
Order No.:				Client Sample Ref.:		BH5	BH6	BH7	TP03	TP04	TP05	TP06
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		1.00	2.00	1.00	0.50	0.30	0.60	1.30
				Date Sampled:		28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
				Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.36	0.68	0.23	0.37	0.40	< 0.10	0.44
Benzo[a]pyrene		M	2800	mg/kg	0.10	0.83	1.8	0.74	0.81	0.91	< 0.10	1.2
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	0.65	1.2	0.46	0.58	0.56	< 0.10	0.71
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	0.26	< 0.10	< 0.10	< 0.10	< 0.10	0.23
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	0.59	1.2	0.47	0.57	0.62	< 0.10	0.86
Coronene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's Lower		N	2800	mg/kg	1.0	8.1	24	7.1	9.1	11	< 1.0	10
PCB 28		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 101		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)		U	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775152	1775153	1775154	1775155	1775156	1775157	1775158
Order No.:						Client Sample Ref.:	TP07	TP08	TP09	TP09	TP10	TP10	TP11
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	1.30	0.40	1.00	2.10	1.30	2.10	1.20
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
						Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY		COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
ACM Type		U	2192		N/A		-	Fibres/Clumps	-	-	-		-
Asbestos Identification		U	2192		N/A		No Asbestos Detected	Chrysotile	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected		No Asbestos Detected
Asbestos by Gravimetry		U	2192	%	0.001			0.018					
Total Asbestos		U	2192	%	0.001			0.018					
Moisture		N	2030	%	0.020		17	11	6.4	17	14	28	19
Soil Colour		N	2040		N/A		Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A		Stones	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones	Stones and Roots
Soil Texture		N	2040		N/A		Clay	Clay	Loam	Clay	Clay	Clay	Clay
pH (2.5:1) at 20C		N	2010		4.0							8.4	
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40		1.3	0.56	< 0.40	0.53	0.52		2.1
Magnesium (Water Soluble)		N	2120	g/l	0.010							< 0.010	
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010							0.020	
Total Sulphur		U	2175	%	0.010							0.020	
Sulphur (Elemental)		M	2180	mg/kg	1.0		1.5	2.1	< 1.0	< 1.0	1.4		1.9
Chloride (Water Soluble)		M	2220	g/l	0.010							< 0.010	
Nitrate (Water Soluble)		N	2220	g/l	0.010							< 0.010	
Cyanide (Total)		M	2300	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50		3.2	4.0	4.0	3.5	4.7		3.3
Ammonium (Water Soluble)		M	2220	g/l	0.01							< 0.01	
Sulphate (Total)		U	2430	%	0.010		0.23	0.28	0.067	0.056	0.16		0.10
Sulphate (Acid Soluble)		U	2430	%	0.010							0.038	
Arsenic		M	2455	mg/kg	0.5		26	11	10	16	21		19
Barium		M	2455	mg/kg	0.5		320	1200	83	88	140		120
Cadmium		M	2455	mg/kg	0.10		1.6	1.2	1.3	0.96	5.2		2.3
Chromium		M	2455	mg/kg	0.5		19	18	19	19	23		19
Molybdenum		M	2455	mg/kg	0.5		13	1.8	0.9	2.2	7.2		2.9
Antimony		N	2455	mg/kg	2.0		3.6	3.8	< 2.0	< 2.0	5.3		2.1
Copper		M	2455	mg/kg	0.50		78	93	17	25	44		59
Mercury		M	2455	mg/kg	0.05		0.37	0.12	0.05	0.10	0.24		0.34
Nickel		M	2455	mg/kg	0.50		43	31	30	32	47		45
Lead		M	2455	mg/kg	0.50		330	130	45	58	88		170
Selenium		M	2455	mg/kg	0.25		1.7	0.92	0.72	0.85	5.0		1.2
Zinc		M	2455	mg/kg	0.50		280	180	93	110	140		160
Chromium (Trivalent)		N	2490	mg/kg	1.0		19	18	19	19	23		19
Chromium (Hexavalent)		N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05

Results - Soil

Project: 25000-4 Basin View

Client: IGSL						**Chemtest Job No.:**	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693						**Chemtest Sample ID.:**	1775152	1775153	1775154	1775155	1775156	1775157	1775158
Order No.:						Client Sample Ref.:	TP07	TP08	TP09	TP09	TP10	TP10	TP11
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	1.30	0.40	1.00	2.10	1.30	2.10	1.20
						Date Sampled:	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
						Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY		COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25		< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		7.7	6.3	3.9	4.7	6.0		7.2
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		< 1.0	< 1.0	< 1.0	< 1.0	5.9		< 1.0
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		< 2.0	< 2.0	< 2.0	< 2.0	2.6		< 2.0
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		4.3	< 3.0	< 3.0	5.8	4.8		4.8
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		10	< 10	< 10	< 10	< 10		< 10
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		12	6.3	5.8	10	19		12
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25		< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		16	7.1	6.5	5.5	19		12
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		5.4	< 2.0	< 2.0	3.6	3.0		8.4
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		1.4	1.3	1.2	1.5	1.3		1.1
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		22	8.0	6.5	9.0	22		20
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		34	14	12	19	41		32
Mineral Oil EPH	EH_CU_1D_Total	N	2670	mg/kg	10		22	< 10	< 10	10	19		12
Benzene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0
Toluene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0
Ethylbenzene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0
m & p-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0
o-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0
Methyl Tert-Butyl Ether		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0
Naphthalene		M	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		< 0.10
Acenaphthylene		N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		< 0.10
Acenaphthene		M	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		< 0.10
Fluorene		M	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		< 0.10
Phenanthrene		M	2800	mg/kg	0.10		1.2	< 0.10	0.97	< 0.10	< 0.10		1.0
Anthracene		M	2800	mg/kg	0.10		0.28	< 0.10	0.20	< 0.10	< 0.10		0.25
Fluoranthene		M	2800	mg/kg	0.10		1.4	< 0.10	1.3	0.23	0.24		2.2
Pyrene		M	2800	mg/kg	0.10		1.2	< 0.10	0.98	0.17	0.27		1.8
Benzo[a]anthracene		M	2800	mg/kg	0.10		0.71	< 0.10	0.43	< 0.10	< 0.10		1.2
Chrysene		M	2800	mg/kg	0.10		0.67	< 0.10	0.38	< 0.10	< 0.10		1.1
Benzo[b]fluoranthene		M	2800	mg/kg	0.10		0.88	< 0.10	0.45	< 0.10	< 0.10		1.4

Results - Soil

Project: 25000-4 Basin View

Client: IGSL				**Chemtest Job No.:**		24-06640	24-06640	24-06640	24-06640	24-06640	24-06640	24-06640
Quotation No.: Q20-21693				**Chemtest Sample ID.:**		1775152	1775153	1775154	1775155	1775156	1775157	1775158
Order No.:				Client Sample Ref.:		TP07	TP08	TP09	TP09	TP10	TP10	TP11
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		1.30	0.40	1.00	2.10	1.30	2.10	1.20
				Date Sampled:		28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024	28-Feb-2024
				Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY		COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.23	< 0.10	0.18	< 0.10	< 0.10		0.41
Benzo[a]pyrene		M	2800	mg/kg	0.10	0.56	< 0.10	< 0.10	< 0.10	< 0.10		1.1
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	0.29	< 0.10	< 0.10	< 0.10	< 0.10		0.65
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	0.48	< 0.10	< 0.10	< 0.10	< 0.10		0.72
Coronene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		< 0.10
Total Of 17 PAH's Lower		N	2800	mg/kg	1.0	7.9	< 1.0	4.9	< 1.0	< 1.0		12
PCB 28		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010		< 0.010
PCB 52		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010		< 0.010
PCB 101		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010		< 0.010
PCB 118		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010		< 0.010
PCB 153		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010		< 0.010
PCB 138		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010		< 0.010
PCB 180		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010		< 0.010
Total PCBs (7 Congeners)		U	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		< 0.10
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		< 0.10

Results - Soil

Project: 25000-4 Basin View

Client: IGSL				**Chemtest Job No.:**		24-06640	24-06640	24-06640
Quotation No.: Q20-21693				**Chemtest Sample ID.:**		1775159	1775160	1775161
Order No.:				Client Sample Ref.:		TP11	TP12	TP13
				Sample Type:		SOIL	SOIL	SOIL
				Top Depth (m):		2.40	1.50	0.40
				Date Sampled:		28-Feb-2024	28-Feb-2024	28-Feb-2024
				Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type		U	2192		N/A	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Asbestos by Gravimetry		U	2192	%	0.001			
Total Asbestos		U	2192	%	0.001			
Moisture		N	2030	%	0.020	21	19	16
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones and Roots	Stones
Soil Texture		N	2040		N/A	Clay	Clay	Clay
pH (2.5:1) at 20C		N	2010		4.0			
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40	0.66	0.70	0.66
Magnesium (Water Soluble)		N	2120	g/l	0.010			
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010			
Total Sulphur		U	2175	%	0.010			
Sulphur (Elemental)		M	2180	mg/kg	1.0	1.1	< 1.0	< 1.0
Chloride (Water Soluble)		M	2220	g/l	0.010			
Nitrate (Water Soluble)		N	2220	g/l	0.010			
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	2.3	3.3	3.5
Ammonium (Water Soluble)		M	2220	g/l	0.01			
Sulphate (Total)		U	2430	%	0.010	0.048	0.27	0.15
Sulphate (Acid Soluble)		U	2430	%	0.010			
Arsenic		M	2455	mg/kg	0.5	12	21	14
Barium		M	2455	mg/kg	0.5	86	340	93
Cadmium		M	2455	mg/kg	0.10	1.7	1.5	1.7
Chromium		M	2455	mg/kg	0.5	18	24	18
Molybdenum		M	2455	mg/kg	0.5	2.4	3.2	3.4
Antimony		N	2455	mg/kg	2.0	< 2.0	5.9	2.7
Copper		M	2455	mg/kg	0.50	38	62	39
Mercury		M	2455	mg/kg	0.05	0.11	0.39	0.20
Nickel		M	2455	mg/kg	0.50	41	41	39
Lead		M	2455	mg/kg	0.50	53	430	220
Selenium		M	2455	mg/kg	0.25	0.82	1.4	1.3
Zinc		M	2455	mg/kg	0.50	100	300	130
Chromium (Trivalent)		N	2490	mg/kg	1.0	18	24	18
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05

Results - Soil

Project: 25000-4 Basin View

Client: IGSL				**Chemtest Job No.:**		24-06640	24-06640	24-06640
Quotation No.: Q20-21693				**Chemtest Sample ID.:**		1775159	1775160	1775161
Order No.:				Client Sample Ref.:		TP11	TP12	TP13
				Sample Type:		SOIL	SOIL	SOIL
				Top Depth (m):		2.40	1.50	0.40
				Date Sampled:		28-Feb-2024	28-Feb-2024	28-Feb-2024
				Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	4.5	6.7	6.9
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00	< 1.0	4.7	6.3
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	< 2.0	< 2.0	< 2.0
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00	6.9	4.7	5.1
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	< 10	< 10	< 10
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00	11	17	20
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0	< 1.0	< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0	< 1.0	< 1.0
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	7.3	9.4	2.8
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	< 2.0	9.4	7.3
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	1.3	9.8	1.2
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	8.7	20	11
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00	20	37	31
Mineral Oil EPH	EH_CU_1D_Total	N	2670	mg/kg	10	11	17	20
Benzene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Toluene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
o-Xylene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Naphthalene		M	2800	mg/kg	0.10	< 0.10	0.23	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	2.5	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	2.8	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	< 0.10	23	0.18
Anthracene		M	2800	mg/kg	0.10	< 0.10	2.4	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	< 0.10	14	0.35
Pyrene		M	2800	mg/kg	0.10	< 0.10	11	0.27
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	5.0	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10	4.7	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	5.2	< 0.10

Results - Soil

Project: 25000-4 Basin View

Client: IGSL				**Chemtest Job No.:**		24-06640	24-06640	24-06640
Quotation No.: Q20-21693				**Chemtest Sample ID.:**		1775159	1775160	1775161
Order No.:				Client Sample Ref.:		TP11	TP12	TP13
				Sample Type:		SOIL	SOIL	SOIL
				Top Depth (m):		2.40	1.50	0.40
				Date Sampled:		28-Feb-2024	28-Feb-2024	28-Feb-2024
				Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	1.8	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	4.2	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	2.0	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	0.62	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	2.4	< 0.10
Coronene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's Lower		N	2800	mg/kg	1.0	< 1.0	82	< 1.0
PCB 28		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 52		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 101		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 118		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 153		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 138		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 180		U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)		U	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775125							
Sample Ref:	BH9							
Sample ID:								
Sample Location:								
Top Depth(m):	2.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	4.8	3	5	6
Loss On Ignition	2610		M	%	6.0	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	< 10	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		7.7	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.064	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0044	0.044	0.5	2	25
Barium	1455		U	0.015	0.15	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0011	0.011	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0019	0.019	0.5	10	30
Nickel	1455		U	0.0006	0.0059	0.4	10	40
Lead	1455		U	< 0.0005	< 0.0050	0.5	10	50
Antimony	1455		U	0.0009	0.0085	0.06	0.7	5
Selenium	1455		U	0.0017	0.017	0.1	0.5	7
Zinc	1455		U	0.005	0.050	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.22	2.2	10	150	500
Sulphate	1220		U	240	2400	1000	20000	50000
Total Dissolved Solids	1020		N	310	3100	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	6.5	65	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	18

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775126							
Sample Ref:	BH10							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	0.84	3	5	6
Loss On Ignition	2610		M	%	5.2	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	< 10	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.3	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.0050	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0078	0.078	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0042	0.042	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0060	0.060	0.5	10	30
Nickel	1455		U	0.0014	0.014	0.4	10	40
Lead	1455		U	0.0022	0.022	0.5	10	50
Antimony	1455		U	0.0019	0.019	0.06	0.7	5
Selenium	1455		U	0.0013	0.013	0.1	0.5	7
Zinc	1455		U	0.009	0.087	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.11	1.1	10	150	500
Sulphate	1220		U	16	160	1000	20000	50000
Total Dissolved Solids	1020		N	61	610	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	11	110	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	19

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775128							
Sample Ref:	BH11							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	0.75	3	5	6
Loss On Ignition	2610		M	%	3.6	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	< 10	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.3	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.0080	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0006	0.0055	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0016	0.016	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0007	0.0074	0.5	10	30
Nickel	1455		U	0.0007	0.0069	0.4	10	40
Lead	1455		U	< 0.0005	< 0.0050	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	0.0006	0.0062	0.1	0.5	7
Zinc	1455		U	0.005	0.048	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.089	< 1.0	10	150	500
Sulphate	1220		U	1.9	19	1000	20000	50000
Total Dissolved Solids	1020		N	34	340	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	7.8	78	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	17

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775129							
Sample Ref:	BH12							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	3.2	3	5	6
Loss On Ignition	2610		M	%	4.0	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	21	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.0	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.026	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0016	0.016	0.5	2	25
Barium	1455		U	0.033	0.33	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	0.0026	0.026	0.5	10	70
Copper	1455		U	0.0017	0.017	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0014	0.014	0.5	10	30
Nickel	1455		U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455		U	0.0039	0.039	0.5	10	50
Antimony	1455		U	0.0018	0.018	0.06	0.7	5
Selenium	1455		U	0.0009	0.0087	0.1	0.5	7
Zinc	1455		U	0.006	0.059	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.14	1.4	10	150	500
Sulphate	1220		U	150	1500	1000	20000	50000
Total Dissolved Solids	1020		N	230	2300	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	7.3	73	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775130							
Sample Ref:	BH12							
Sample ID:								
Sample Location:								
Top Depth(m):	3.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	1.5	3	5	6
Loss On Ignition	2610		M	%	10	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	< 10	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.8	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.061	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0029	0.029	0.5	2	25
Barium	1455		U	0.020	0.20	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	0.0011	0.011	0.5	10	70
Copper	1455		U	0.0013	0.013	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0062	0.062	0.5	10	30
Nickel	1455		U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455		U	0.0014	0.014	0.5	10	50
Antimony	1455		U	0.0017	0.017	0.06	0.7	5
Selenium	1455		U	0.0013	0.013	0.1	0.5	7
Zinc	1455		U	0.004	0.040	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.14	1.4	10	150	500
Sulphate	1220		U	270	2700	1000	20000	50000
Total Dissolved Solids	1020		N	330	3300	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	4.9	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	2.4

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775132							
Sample Ref:	BH13							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	4.0	3	5	6
Loss On Ignition	2610		M	%	5.6	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	41	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.2	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.0090	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0020	0.020	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0028	0.028	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0017	0.017	0.5	10	30
Nickel	1455		U	0.0009	0.0091	0.4	10	40
Lead	1455		U	0.0017	0.017	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.009	0.085	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.12	1.2	10	150	500
Sulphate	1220		U	5.5	55	1000	20000	50000
Total Dissolved Solids	1020		N	38	380	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	8.2	82	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	16

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775134							
Sample Ref:	TP01							
Sample ID:								
Sample Location:								
Top Depth(m):	0.60							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	2.3	3	5	6
Loss On Ignition	2610		M	%	3.7	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	20	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.0	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.0050	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0015	0.015	0.5	2	25
Barium	1455		U	0.006	0.059	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0043	0.044	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0010	0.0096	0.5	10	30
Nickel	1455		U	0.0021	0.021	0.4	10	40
Lead	1455		U	0.0013	0.013	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.011	0.11	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.12	1.2	10	150	500
Sulphate	1220		U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020		N	41	410	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	11	110	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775135							
Sample Ref:	TP02							
Sample ID:								
Sample Location:								
Top Depth(m):	1.20							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	3.2	3	5	6
Loss On Ignition	2610		M	%	4.8	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	88	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.1	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.014	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0012	0.012	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0031	0.031	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0005	0.0052	0.5	10	30
Nickel	1455		U	0.0008	0.0078	0.4	10	40
Lead	1455		U	0.0010	0.010	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.009	0.092	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.12	1.2	10	150	500
Sulphate	1220		U	1.2	12	1000	20000	50000
Total Dissolved Solids	1020		N	38	380	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	8.6	86	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775136							
Sample Ref:	BH1							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	3.5	3	5	6
Loss On Ignition	2610		M	%	5.7	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	1400	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.3	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.031	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0037	0.037	0.5	2	25
Barium	1455		U	0.009	0.088	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	0.0013	0.013	0.5	10	70
Copper	1455		U	0.0046	0.046	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0011	0.011	0.5	10	30
Nickel	1455		U	0.0006	0.0062	0.4	10	40
Lead	1455		U	0.0037	0.037	0.5	10	50
Antimony	1455		U	0.0029	0.029	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.014	0.14	4	50	200
Chloride	1220		U	57	570	800	15000	25000
Fluoride	1220		U	0.18	1.8	10	150	500
Sulphate	1220		U	7.1	71	1000	20000	50000
Total Dissolved Solids	1020		N	52	520	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	11	110	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775137							
Sample Ref:	BH1							
Sample ID:								
Sample Location:								
Top Depth(m):	2.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	2.9	3	5	6
Loss On Ignition	2610		M	%	4.8	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	110	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.0	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.016	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0017	0.017	0.5	2	25
Barium	1455		U	0.036	0.36	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0014	0.014	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.014	0.14	0.5	10	30
Nickel	1455		U	0.0009	0.0092	0.4	10	40
Lead	1455		U	0.0012	0.012	0.5	10	50
Antimony	1455		U	0.0074	0.074	0.06	0.7	5
Selenium	1455		U	0.0027	0.027	0.1	0.5	7
Zinc	1455		U	0.005	0.049	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.24	2.4	10	150	500
Sulphate	1220		U	100	1000	1000	20000	50000
Total Dissolved Solids	1020		N	200	2000	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	14	140	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	16

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775139							
Sample Ref:	BH2							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	3.1	3	5	6
Loss On Ignition	2610		M	%	5.3	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	190	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		9.2	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.020	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.015	0.15	0.5	2	25
Barium	1455		U	0.007	0.073	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.020	0.20	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.012	0.12	0.5	10	30
Nickel	1455		U	0.0037	0.037	0.4	10	40
Lead	1455		U	0.0056	0.056	0.5	10	50
Antimony	1455		U	0.0016	0.016	0.06	0.7	5
Selenium	1455		U	0.0024	0.024	0.1	0.5	7
Zinc	1455		U	0.011	0.11	4	50	200
Chloride	1220		U	3.0	30	800	15000	25000
Fluoride	1220		U	0.67	6.7	10	150	500
Sulphate	1220		U	24	240	1000	20000	50000
Total Dissolved Solids	1020		N	130	1300	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	30	300	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	17

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775140							
Sample Ref:	BH3							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	3.1	3	5	6
Loss On Ignition	2610		M	%	5.7	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	90	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		9.2	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.014	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.015	0.15	0.5	2	25
Barium	1455		U	0.007	0.067	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.017	0.17	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.011	0.11	0.5	10	30
Nickel	1455		U	0.0035	0.035	0.4	10	40
Lead	1455		U	0.0013	0.013	0.5	10	50
Antimony	1455		U	0.0015	0.016	0.06	0.7	5
Selenium	1455		U	0.0028	0.028	0.1	0.5	7
Zinc	1455		U	0.014	0.14	4	50	200
Chloride	1220		U	2.7	27	800	15000	25000
Fluoride	1220		U	0.76	7.6	10	150	500
Sulphate	1220		U	26	260	1000	20000	50000
Total Dissolved Solids	1020		N	130	1300	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	29	290	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	17

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775142							
Sample Ref:	BH3							
Sample ID:								
Sample Location:								
Top Depth(m):	3.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	1.1	3	5	6
Loss On Ignition	2610		M	%	2.0	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	< 10	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.8	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.035	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0003	0.0028	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0011	0.011	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.014	0.13	0.5	10	30
Nickel	1455		U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455		U	< 0.0005	< 0.0050	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.004	0.036	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.20	2.0	10	150	500
Sulphate	1220		U	6.5	65	1000	20000	50000
Total Dissolved Solids	1020		N	59	590	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	20	200	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775143							
Sample Ref:	BH4							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	2.3	3	5	6
Loss On Ignition	2610		M	%	4.8	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	520	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.6	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.054	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0042	0.042	0.5	2	25
Barium	1455		U	0.024	0.24	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	0.0012	0.012	0.5	10	70
Copper	1455		U	0.0061	0.061	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0052	0.052	0.5	10	30
Nickel	1455		U	0.0013	0.013	0.4	10	40
Lead	1455		U	0.0062	0.062	0.5	10	50
Antimony	1455		U	0.0041	0.041	0.06	0.7	5
Selenium	1455		U	0.0008	0.0083	0.1	0.5	7
Zinc	1455		U	0.007	0.072	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.22	2.2	10	150	500
Sulphate	1220		U	14	140	1000	20000	50000
Total Dissolved Solids	1020		N	81	810	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	15	150	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	16

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775145							
Sample Ref:	BH5							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	3.2	3	5	6
Loss On Ignition	2610		M	%	4.7	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	69	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		9.7	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.024	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.019	0.19	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	0.0022	0.022	0.5	10	70
Copper	1455		U	0.0048	0.048	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0083	0.083	0.5	10	30
Nickel	1455		U	0.0009	0.0088	0.4	10	40
Lead	1455		U	0.0055	0.055	0.5	10	50
Antimony	1455		U	0.0024	0.024	0.06	0.7	5
Selenium	1455		U	0.0007	0.0074	0.1	0.5	7
Zinc	1455		U	0.005	0.051	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.27	2.7	10	150	500
Sulphate	1220		U	9.4	94	1000	20000	50000
Total Dissolved Solids	1020		N	56	550	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	13	130	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775146							
Sample Ref:	BH6							
Sample ID:								
Sample Location:								
Top Depth(m):	2.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	1.3	3	5	6
Loss On Ignition	2610		M	%	4.0	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	82	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.6	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.031	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0034	0.034	0.5	2	25
Barium	1455		U	0.014	0.14	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0014	0.014	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0052	0.052	0.5	10	30
Nickel	1455		U	0.0007	0.0070	0.4	10	40
Lead	1455		U	0.0037	0.038	0.5	10	50
Antimony	1455		U	0.0015	0.015	0.06	0.7	5
Selenium	1455		U	0.0014	0.014	0.1	0.5	7
Zinc	1455		U	0.007	0.071	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.11	1.1	10	150	500
Sulphate	1220		U	17	170	1000	20000	50000
Total Dissolved Solids	1020		N	57	570	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	9.4	94	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	17

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775147							
Sample Ref:	BH7							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	2.8	3	5	6
Loss On Ignition	2610		M	%	5.9	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	130	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.4	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.051	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0031	0.031	0.5	2	25
Barium	1455		U	0.006	0.058	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0027	0.027	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0029	0.029	0.5	10	30
Nickel	1455		U	0.0010	0.010	0.4	10	40
Lead	1455		U	0.0012	0.013	0.5	10	50
Antimony	1455		U	0.0012	0.012	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.004	0.044	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.10	1.0	10	150	500
Sulphate	1220		U	11	110	1000	20000	50000
Total Dissolved Solids	1020		N	57	570	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	54	540	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775148							
Sample Ref:	TP03							
Sample ID:								
Sample Location:								
Top Depth(m):	0.50							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	2.8	3	5	6
Loss On Ignition	2610		M	%	6.4	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	120	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.3	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.020	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0025	0.025	0.5	2	25
Barium	1455		U	0.006	0.062	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0052	0.052	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0008	0.0082	0.5	10	30
Nickel	1455		U	0.0007	0.0075	0.4	10	40
Lead	1455		U	0.0015	0.015	0.5	10	50
Antimony	1455		U	0.0010	0.0095	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.21	2.1	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.19	1.9	10	150	500
Sulphate	1220		U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020		N	43	420	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	15	150	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	16

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775149							
Sample Ref:	TP04							
Sample ID:								
Sample Location:								
Top Depth(m):	0.30							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	3.2	3	5	6
Loss On Ignition	2610		M	%	8.0	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	120	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		7.7	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.034	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0019	0.019	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0030	0.030	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0006	0.0064	0.5	10	30
Nickel	1455		U	0.0006	0.0065	0.4	10	40
Lead	1455		U	0.0006	0.0064	0.5	10	50
Antimony	1455		U	0.0005	0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.006	0.064	4	50	200
Chloride	1220		U	1.1	11	800	15000	25000
Fluoride	1220		U	0.096	< 1.0	10	150	500
Sulphate	1220		U	2.6	26	1000	20000	50000
Total Dissolved Solids	1020		N	60	600	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	8.2	82	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	20

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775150							
Sample Ref:	TP05							
Sample ID:								
Sample Location:								
Top Depth(m):	0.60							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	2.2	3	5	6
Loss On Ignition	2610		M	%	3.4	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	77	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.5	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.035	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0020	0.020	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0026	0.026	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0014	0.014	0.5	10	30
Nickel	1455		U	0.0007	0.0073	0.4	10	40
Lead	1455		U	0.0012	0.012	0.5	10	50
Antimony	1455		U	0.0005	0.0052	0.06	0.7	5
Selenium	1455		U	0.0007	0.0074	0.1	0.5	7
Zinc	1455		U	0.010	0.096	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.21	2.1	10	150	500
Sulphate	1220		U	1.1	11	1000	20000	50000
Total Dissolved Solids	1020		N	40	390	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	9.9	99	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775151							
Sample Ref:	TP06							
Sample ID:								
Sample Location:								
Top Depth(m):	1.30							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	2.0	3	5	6
Loss On Ignition	2610		M	%	4.7	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	170	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.2	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.012	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0019	0.019	0.5	2	25
Barium	1455		U	0.005	0.051	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	0.0015	0.015	0.5	10	70
Copper	1455		U	0.0017	0.017	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0004	0.0042	0.5	10	30
Nickel	1455		U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455		U	0.0016	0.016	0.5	10	50
Antimony	1455		U	0.0012	0.012	0.06	0.7	5
Selenium	1455		U	0.0005	0.0051	0.1	0.5	7
Zinc	1455		U	0.008	0.082	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.11	1.1	10	150	500
Sulphate	1220		U	7.7	77	1000	20000	50000
Total Dissolved Solids	1020		N	46	450	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	9.2	92	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775152							
Sample Ref:	TP07							
Sample ID:								
Sample Location:								
Top Depth(m):	1.30							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	4.9	3	5	6
Loss On Ignition	2610		M	%	7.7	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	94	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.2	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.024	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0021	0.021	0.5	2	25
Barium	1455		U	0.006	0.062	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	0.0007	0.0068	0.5	10	70
Copper	1455		U	0.0018	0.018	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0011	0.011	0.5	10	30
Nickel	1455		U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455		U	0.0014	0.014	0.5	10	50
Antimony	1455		U	0.0006	0.0055	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.005	0.047	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.11	1.1	10	150	500
Sulphate	1220		U	2.5	25	1000	20000	50000
Total Dissolved Solids	1020		N	41	410	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	8.6	86	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775153							
Sample Ref:	TP08							
Sample ID:								
Sample Location:								
Top Depth(m):	0.40							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	2.9	3	5	6
Loss On Ignition	2610		M	%	3.9	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	61	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.3	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.019	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0023	0.023	0.5	2	25
Barium	1455		U	0.005	0.051	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0037	0.037	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0006	0.0062	0.5	10	30
Nickel	1455		U	0.0007	0.0067	0.4	10	40
Lead	1455		U	0.0013	0.013	0.5	10	50
Antimony	1455		U	0.0010	0.010	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.007	0.065	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.13	1.3	10	150	500
Sulphate	1220		U	2.2	22	1000	20000	50000
Total Dissolved Solids	1020		N	43	430	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	9.1	91	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775154							
Sample Ref:	TP09							
Sample ID:								
Sample Location:								
Top Depth(m):	1.00							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	1.8	3	5	6
Loss On Ignition	2610		M	%	1.1	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	< 10	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.9	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.031	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0013	0.013	0.5	2	25
Barium	1455		U	0.007	0.074	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0011	0.011	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0011	0.011	0.5	10	30
Nickel	1455		U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455		U	< 0.0005	< 0.0050	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.008	0.076	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.10	1.0	10	150	500
Sulphate	1220		U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020		N	32	310	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	8.2	82	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	6.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775155							
Sample Ref:	TP09							
Sample ID:								
Sample Location:								
Top Depth(m):	2.10							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	2.0	3	5	6
Loss On Ignition	2610		M	%	3.8	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	95	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.5	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.012	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0018	0.018	0.5	2	25
Barium	1455		U	0.005	0.051	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0020	0.020	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0006	0.0062	0.5	10	30
Nickel	1455		U	0.0006	0.0065	0.4	10	40
Lead	1455		U	0.0007	0.0071	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.009	0.087	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.21	2.1	10	150	500
Sulphate	1220		U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020		N	41	410	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775156							
Sample Ref:	TP10							
Sample ID:								
Sample Location:								
Top Depth(m):	1.30							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	1.4	3	5	6
Loss On Ignition	2610		M	%	3.2	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	< 10	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.2	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.026	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0022	0.022	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0021	0.021	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0011	0.011	0.5	10	30
Nickel	1455		U	0.0006	0.0059	0.4	10	40
Lead	1455		U	0.0008	0.0076	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.008	0.083	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.18	1.8	10	150	500
Sulphate	1220		U	3.3	33	1000	20000	50000
Total Dissolved Solids	1020		N	45	450	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775158							
Sample Ref:	TP11							
Sample ID:								
Sample Location:								
Top Depth(m):	1.20							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	3.7	3	5	6
Loss On Ignition	2610		M	%	8.5	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	110	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.1	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.0060	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0020	0.020	0.5	2	25
Barium	1455		U	0.005	0.053	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0037	0.037	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0010	0.0095	0.5	10	30
Nickel	1455		U	0.0007	0.0065	0.4	10	40
Lead	1455		U	0.0009	0.0093	0.5	10	50
Antimony	1455		U	0.0005	0.0054	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.005	0.048	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.15	1.5	10	150	500
Sulphate	1220		U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020		N	49	490	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	16

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775159							
Sample Ref:	TP11							
Sample ID:								
Sample Location:								
Top Depth(m):	2.40							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625		M	%	1.0	3	5	6
Loss On Ignition	2610		M	%	4.1	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	< 10	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.2	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.0040	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0004	0.0036	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0013	0.013	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0004	0.0037	0.5	10	30
Nickel	1455		U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455		U	< 0.0005	< 0.0050	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.008	0.078	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.11	1.1	10	150	500
Sulphate	1220		U	4.6	46	1000	20000	50000
Total Dissolved Solids	1020		N	39	390	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	6.0	60	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	18

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775160							
Sample Ref:	TP12							
Sample ID:								
Sample Location:								
Top Depth(m):	1.50							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	2.5	3	5	6
Loss On Ignition	2610		M	%	4.5	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	75	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.3	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.017	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0025	0.025	0.5	2	25
Barium	1455		U	0.011	0.11	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	0.0011	0.011	0.5	10	70
Copper	1455		U	0.0022	0.022	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0009	0.0094	0.5	10	30
Nickel	1455		U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455		U	0.0020	0.020	0.5	10	50
Antimony	1455		U	0.0012	0.012	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.008	0.077	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.14	1.4	10	150	500
Sulphate	1220		U	28	280	1000	20000	50000
Total Dissolved Solids	1020		N	77	770	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	9.5	95	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	16

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 25000-4 Basin View

						Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-06640							
Chemtest Sample ID:	1775161							
Sample Ref:	TP13							
Sample ID:								
Sample Location:								
Top Depth(m):	0.40							
Bottom Depth(m):								
Sampling Date:	28-Feb-2024					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	1.5	3	5	6
Loss On Ignition	2610		M	%	4.9	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	77	500	--	--
Total (of 17) PAHs						100	--	--
pH at 20C	2010		M		8.4	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.017	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0023	0.023	0.5	2	25
Barium	1455		U	< 0.005	< 0.050	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0025	0.025	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0021	0.021	0.5	10	30
Nickel	1455		U	0.0007	0.0066	0.4	10	40
Lead	1455		U	0.0008	0.0075	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.008	0.083	4	50	200
Chloride	1220		U	< 1.0	< 10	800	15000	25000
Fluoride	1220		U	0.14	1.4	10	150	500
Sulphate	1220		U	2.8	28	1000	20000	50000
Total Dissolved Solids	1020		N	43	430	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	9.6	96	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity at 25°C and Total Dissolved Solids (TDS) in Waters	Conductivity Meter	
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2010	pH Value of Soils	pH at 20°C	pH Meter	
2015	Acid Neutralisation Capacity	Acid Reserve	Titration	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2220	Water soluble Chloride in Soils	Chloride	Aqueous extraction and measuremernt by 'Aquakem 600' Discrete Analyser using ferric nitrate / mercuric thiocyanate.	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8-C10 Aromatics: >C5–C7,>C7-C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable
PL - Prepared Leachate
PW - Processed Water

Report Information

RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Appendix 9

Exploratory Hole Location Plans


25000-4 - NDFA Social Housing
Bundles 4/5 - Lot 4 - Basin View
Exploratory Hole Location Plan - DWG01
Legend
Cable Percussion Borehole
Trial Pit incorporating Foundation Inspection Pit (FP_)
Slit Trench Extremity (x , y)
Soakaway Test (to BRE365)
Trial Pit
BH01
BH02
BH03
BH04
BH05
BH06
BH07
BH08
BH09
BH10
TP01
TP02
TP03
TP05
TP07
TP10
TP11
SA01
SA02
TP/FP04
TP/FP06
TP/FP08
TP/FP09
ST01-0
ST01-1
ST03-0
ST03-1
ST06-0
ST06-1
Google Earth
70 m
N


25000-4 - NDFA Social Housing
Bundles 4/5 - Lot 4 - Basin View
Exploratory Hole Location Plan - DWG02
Legend
Cable Percussion Borehole
Trial Pit incorporating Foundation Inspection Pit (FP_)
Slit Trench Extremity (x , y)
Soakaway Test (to BRE365)
Trial Pit
BH08
BH06
TP/FP06
BH07
ST03-1
ST03-0
TP07
TP/FP08
TP/FP09
SA02
BH09
ST06-0
ST06-1
TP10
BH10
TP11
ST07-0
ST07-1
BH11
TP13
BH12
BH13
TP12
SCHOOL KEEP CLEAR
N
70 m
Google Earth