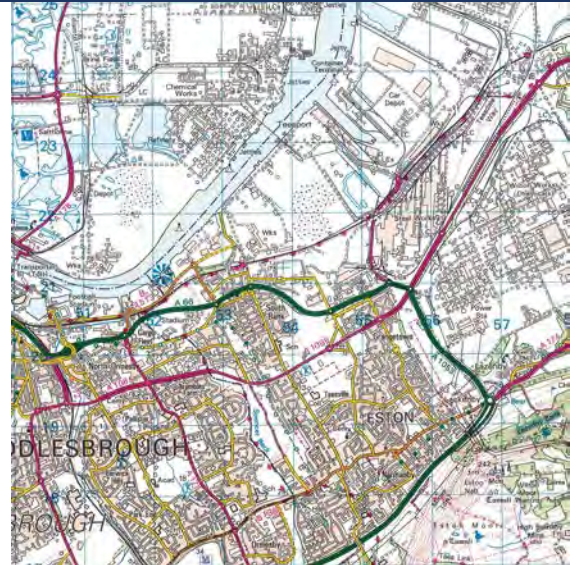


PRAIRIE SITE GROUND INVESTIGATION WORKS



Final Factual Report
(Rev.01)

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Date: November 2020

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REPORT CONTROL SHEET

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1. INTRODUCTION

The site work was commissioned in order to augment previous ground investigation work, and to determine the ground and groundwater conditions on site prior to the proposed remediation works.

Allied Exploration & Geotechnics Limited (AEG) were contracted by the South Tees Development Corporation with Arcadis acting in the capacity of Consulting Engineer to perform a ground investigation at this site in order to provide information on the subsurface ground and groundwater conditions as well as to obtain samples for geotechnical and specialist chemical testing.

1.1 Scope of Works

The investigation works consisted of the following main elements:

- Ten cable percussive boreholes, four of which were advanced using rotary coring techniques.
- One hundred and twenty two machine excavated inspection pits.
- Associated sampling.
- *In-situ* Standard Penetration, Hand Shear Vane, Photo-Ionisation Detector, *In-situ* Water Quality Parameter and Hydraulic Conductivity (Slug) Testing.
- Surface water sampling.
- Continuous groundwater/tidal monitoring.
- Installation of gas/groundwater monitoring instrumentation.
- Post site works gas/groundwater monitoring and groundwater sampling.

Site work was carried out between the 1st April and 5th May 2020 with subsequent post site work monitoring, laboratory testing and reporting thereafter. A factual report only was requested.

The comments and opinions expressed in this report are based on the ground conditions encountered during the site work and on the results of tests carried out in the field and in the laboratory. There may, however, be special conditions prevailing on the site which have not been disclosed by this investigation and which have not been taken into account by this report.

2. THE SITE

2.1 Location

The National Grid Reference of the approximate centre of the site is NZ 544 209. This can be found on Ordnance Survey 1:50,000 Sheet Number 93 (Middlesbrough, Darlington & Hartlepool). Part of this sheet is reproduced as Figure 1, the Site Location Plan.

The site is located approximately 5.00km East North East of Middlesbrough city centre, and 3.00km South of Teesport Docks.

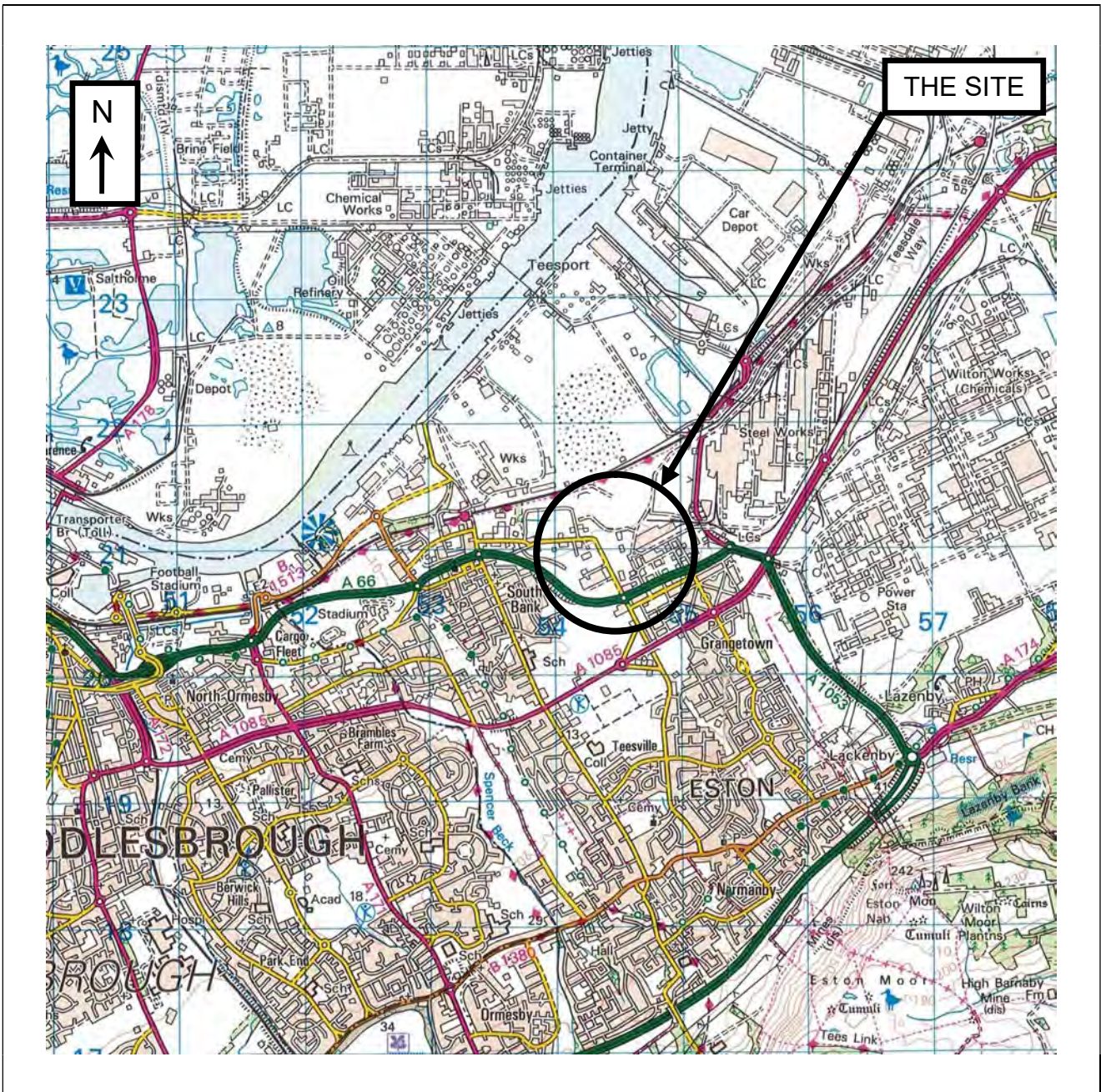


Figure 1: Site Location Plan

Reproduced from the Ordnance Survey 1:50,000 scale Landranger map by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office, Crown Copyright. All rights reserved. Licence number AL 10002282.

2.2 Site Description and Topography

The site is located off the A66 dual carriageway, and is bordered to the west by Eston Road and general industrial land uses on the outskirts of Middlesbrough. To the east, the site is bordered by Tees Dock Road, immediately beyond which is a British Steel Steelmaking Plant. To the south, there is an industrial estate, beyond which is the A66 and Grangetown, part of Middlesbrough's urban sprawl. The site is bounded to the north by the Darlington to Saltburn railway line, to the north of which lies more abandoned industrial land to the south of the River Tees.

The Prairie site can be accessed from Eston Road via the A66. The site previously comprised various heavy industrial uses and incorporated the former Cleveland South Steelworks, Coke Ovens and By-products plant. The infrastructure associated with these activities have all now been cleared to ground level, however significant foundations, infrastructure and base slabs are still in-situ; there areas that are anticipated to hold higher levels of contamination.

3. SITE OPERATIONS

3.1 General

All exploratory hole work, associated sampling, *in-situ* testing and logging was carried out in accordance with techniques outlined in Table 1, as appropriate; at positions as near as practicable to those supplied by the Consulting Engineer. These are shown on the Exploratory Hole Location Plan, Field Data Enclosure 1.

Reference Code Number	Title
BS 1377:1990	Methods of Test for Soils for Civil Engineering Purposes (where not in contravention or superseded by Eurocode references)
BS 5930:2015	Code of Practice for Ground Investigation (where not in contravention or superseded by Eurocode references)
BS EN ISO 14689-1:2003	Identification and Classification of Rock
BS EN ISO 14688-1:2002 & 14688-2:2004	Identification and Classification of Soil
BS 10175:2011+A2:2017	Investigation of Potentially Contaminated Sites
BS EN ISO 22476-3: 2005	Geotechnical investigation and testing - Field testing - Part 3 Standard Penetration Testing

Table 1: British Standard Reference Code Number

The depths of all exploratory holes, descriptions of the material encountered, details of any groundwater encountered, samples taken and *in-situ* testing carried out together with any other relevant information can be found on the Borehole and Trial Pit Records, Field Data Enclosures 2 and 3 respectively. A key to all symbols and abbreviations used throughout the report is included in the Key Sheets.

The primary purpose of ground investigation exploratory holes is to probe the stratified sequences of soil and/or rock. From the results of these probings no conclusion should be drawn concerning the presence of, size, lithological nature, and numbers per unit volume of ground cobbles and boulders in soil types such as glacial till (boulder clay). With respect to rotary coring, driller's records and observations of the recovered core

are used to determine any zones of no recovery (core loss). These zones are based on the interpretation of the logging engineer and are therefore subjective. Refer to the Key Sheets for further information.

3.2 Health & Safety Considerations: Services

Before the commencement of any exploratory hole a search for underground services was conducted as prescribed in HSE publication '*Avoiding Underground Services (HSG47)*' and in accordance with in-house internal safety procedure AEG-14.

Service plans were provided by the Client and were consulted prior to using a service locating device (such as a Cable Avoidance Tool or C.A.T.) to scan a working area around the proposed exploratory hole location. Where no services were indicated a '*Permit-to-Work*' form was issued by the investigation supervisor and, with the exception of trial pits/trenches, the position was commenced with a hand excavated inspection pit. The inspection pit was also scanned during the excavation procedure. It should be noted that the digging of an inspection pit only confirms or guards against the possible presence of underground public utility services within the excavated pit. Where no services were indicated by the scanning procedure or inspection pit the exploratory hole was commenced in accordance with the Contract Specification.

Services were encountered in many of the trial pits. Details of any services uncovered/located during this investigation are given in the relevant Trial Pit Records. If required, the position was relocated in agreement with the Consulting Engineer, otherwise the position was continued with care.

3.3 Exploratory Holes: Boreholes

Ten boreholes were sunk using a Dando 2000 drilling rig, utilising cable percussive (shell and clay cutter) techniques, to depths of between 6.80m (PRAIRIE_AUK_BH109) and 18.40m BGL (PRAIRIE_AUK_BH101). Four boreholes were further advanced using either a Boart Longyear DB540 or a Comacchio GEO 305, utilising rotary coring methods, to depths of between 11.80m (PRAIRIE_AUK_BH109) and 20.80m BGL (PRAIRIE_AUK_BH110).

Rotary coring employed a 'P' (121mm OD) barrel in combination with P.C.D. drill bit together with water flushing medium. This coring assembly was used to recover 92mm lined cylindrical specimens of rock core. The Borehole Records and a summery table of any relevant remarks are presented as Field Data Enclosure 2.

3.4 Exploratory Holes: Mechanically Excavated Trial Pits

One hundred and twenty two trial pits were mechanically excavated using a 360 tracked excavator to depths of between 0.10m (PRAIRIE_AUK_TP146A) and 5.20m BGL (PRAIRIE_AUK_TP199). The Trial Pit Records and a summery table of any relevant remarks are presented as Field Data Enclosure 3.

3.5 Samples

Representative samples of soil, water and rock were obtained from the exploratory holes and were taken to the laboratory for selected geotechnical and specialist chemical testing. Three surface water samples and one soil sample was taken from locations across the site. These are shown on the Exploratory Hole Location Plan, Field Data Enclosure 1.

Environmental samples were taken in accordance with the contract specification during the investigation using an approved selection of container types in order to suit the encountered material properties and designated laboratory analytical parameters. Full chain of custody procedures were in place post sampling and during the transportation stage to the nominated specialist chemical laboratory. Environmental samples were administered appropriately following the best practice guidance provided in the contract specification.

3.6 Groundwater

The comments on groundwater conditions are based on the observations made at the time of investigation. It should be noted that groundwater levels may vary due to seasonal and other effects. Furthermore, water was added during advancement of the boreholes in order to facilitate drilling operations. As a consequence there is a possibility that this could have masked the discrete ingress of natural groundwater into the boreholes, which subsequently may have been sealed as a result of progressing the casing.

Groundwater was encountered in the exploratory holes during the site works operation. Where groundwater observations were made details are given on the relevant Exploratory Hole Record and in greater detail (collectively in tabulated format) as Field Data Enclosure 4: Groundwater Observations Made at the Time of Site Works. Standing groundwater levels were recorded many exploratory holes at the beginning and/or end of each drilling shift. The water level is indicated on the applicable Exploratory Hole Record as part of the boring progress information.

3.7 Instrumentation & Monitoring

All ten boreholes (PRAIRIE_AUK_BH101 to PRAIRIE_AUK_BH110 inclusive) were installed with monitoring instrumentation in accordance with the requirements of the Consulting Engineer. Details of the installations are shown in the Borehole Summary Table within Field Data Enclosure 2.

Instruments were monitored for gas and groundwater on three occasions; one week after the completion of the site works, and two fortnightly thereafter in accordance with the Contract Specification. A record of the readings is presented as Field Data Enclosure 5 (Groundwater Monitoring Results) and Field Data Enclosure 6 (Gas Monitoring Results).

Continuous monitoring was undertaken using a mini diver instrument. The instrument was installed into PRAIRIE_AUK_BH101, PRAIRIE_AUK_BH103 and PRAIRIE_AUK_BH108 on 7th May 2020 in order to assess groundwater fluctuations over the period of a complete tidal cycle. The tidal cycle readings are presented as Field Data Enclosure 7.

3.8 Operative Observations: Potential Contamination

For the purposes of determining the condition of the site, with regard to human health and environmental issues, reference should specifically be made to any specialist chemical testing undertaken as part of the investigation scheme, as well as any supporting desk study and risk assessment documentation. The information given herein collates the observations made by the operatives involved in the investigation only and comments that have been indicated on the engineering records.

Where there was potential evidence of contamination, principally as a consequence of olfactory and visual identification, information is provided in the relevant Borehole and Trial Pit Records.

It should be stressed that the information provided herein is subjective, as it is based on the perceptions of individuals and not specialists routinely involved in the chemical determination of contaminated residues, liquors, vapours or solid contaminants.

3.9 Surveying

The investigation positions were surveyed after completion of site works using a Leica Smartrover (Model ATX 1230+ GNSS) GPS based instrument which provides corrected Ordnance Survey co-ordinates in real time to an accuracy of within $\pm 30\text{mm}$ vertical and $\pm 30\text{mm}$ horizontal. These positions have been subsequently plotted in AutoCAD® software and are shown on the Exploratory Hole Location Plan, Field Data Enclosure 1.

4. IN-SITU TESTING

4.1 General

In-situ testing as specified by the Consulting Engineer was carried out in selected boreholes in accordance with techniques outlined in the relevant British Standard and/or AEG Quality Procedure. The results are presented in the *In-situ* Testing Enclosures with a number of the test results summarised at the relevant depth on the Borehole Records.

4.2 Standard Penetration Test Results

Standard Penetration Testing (SPT) was carried out in the boreholes in accordance with techniques outlined in BS EN ISO 22476-3: 2005 in order to determine the relative density and consistency of the strata encountered. The 'N' value (number of blows per 300mm penetration) or the penetration per blow was recorded for each test. Uncorrected 'N' values or penetration per blow data are provided on the applicable Borehole Records. (Refer to page 6 of the key sheets for further details).

More detailed information concerning the standard penetration testing is given in *In-situ* Testing Enclosure 1 which includes the following;

- Initial exploratory hole conditions prior to the test procedure.

- Calibration and energy ratio (E_m) information for the SPT hammer device used to carry out the test.
- A breakdown of blows for each 75mm penetration interval.
- Rod length (C_R) and energy (C_E) correction ratios.
- Uncorrected 'N' value.
- Corrected 'N₆₀' value that applies the rod (C_R) and energy (C_E) corrections indicated.
- Pertinent remarks corresponding to the test procedure.

In addition to the above, a graph has been prepared for each exploratory hole which plots the uncorrected and corrected 'N' value results against depth. Calibration certificates for the SPT apparatus used during the testing procedure are also presented for reference within this *In-situ* Testing Enclosure.

4.3 Hand Shear Vane

Hand shear vane testing using calibrated Edeco Pilcon Hand Vane equipment was carried out in selected trial pits in accordance to the ground conditions encountered. The results are presented in detail within *In-situ* Testing Enclosure 2 with the average peak and residual shear strength values provided on the applicable Trial Pit Record.

4.4 Photo Ionisation Detector (PID)

Photo-ionisation detector (PID) screening for semi-volatile and volatile organic compounds was conducted on selected environmental samples taken during the investigation using a MiniRAE 2000. The results for the sample based PID tests are recorded in tabular format as *In-situ* Testing Enclosure 3 and, where applicable, on the Borehole and Trial Pit Records.

4.5 Water Quality Parameter Testing

Groundwater sampling was undertaken from all but one (BH102) of the installations during the second round of post site works monitoring in accordance with techniques outlined in the relevant British Standard and/or AEG Quality Procedure. Water Quality Parameters were recorded for the purged water prior to sampling. The parameters tested were pH, temperature, electrical conductivity, redox potential, total dissolved solids and dissolved oxygen. The results are presented in tabular format as *In-situ* Testing Enclosure 4.

4.6 Hydraulic Conductivity: Slug Tests

Hydraulic conductivity testing was carried out in four selected monitoring standpipes PRAIRIE_AUK_BH101, PRAIRIE_AUK_BH103, PRAIRIE_AUK_BH108 and PRAIRIE_AUK_BH110 using the Displacement (Slug) Test Method. A mini-diver was installed in the standpipes prior to inserting the slug in order to continuously log the groundwater level during the test. A mechanical slug was then used to perform variable head (rising and falling) permeability tests within the instrumentation. The Hydraulic Conductivity (Slug Tests) results are presented in graphical format showing the rising and falling conditions as *In-situ* Testing Enclosure 5.

5. LABORATORY TESTING

5.1 General

Laboratory testing as scheduled by the Consulting Engineer was carried out on selected samples in accordance with techniques outlined in BS 1377:1990, AEG Laboratory Quality Procedures or other appropriate standard as quoted.

5.2 Geotechnical Testing

The results are presented in the Laboratory Enclosures with an outline list of the procedures undertaken given in Table 2.

Test	Procedure
Moisture Content	BS 1377 Part 2 1990 (BS EN ISO 17892-1:2014)
Plasticity Index and Moisture Content	BS 1377 Part 2 1990 (BS EN ISO 17892-1:2014)
Determination of Particle Density	BS 1377 Part 2 1990
Particle Size Distribution Sieving	BS 1377 Part 2 1990
Particle Size Distribution Sedimentation	BS 1377 Part 2 1990
Determination of Calorific Value, Organic Matter Content, Sulphate and pH (Tested externally)	See External Laboratory Certificates
Determination of Dry Density/Moisture Content Relationship	BS 1377 Part 4 1990
Determination of California Bearing Ratio	BS 1377 Part 4 1990
Determination of One Dimensional Consolidation Properties	BS 1377 Part 5 1990
Shear Strength by Hand Vane	BS 1377 Part 7 1990
Undrained Shear Strength in Triaxial Cell without Pore Water Pressure Measurement	BS 1377 Part 7 1990
Determination of Point Load Index	ISRM 1985
Determination of Unconfined Compressive Strength (Tested externally)	ISRM 1985
Slag Analysis (Tested externally)	

Table 2: Geotechnical Testing

5.3 Specialist Chemical Testing

Selected samples have been submitted for chemical analysis as specified the Consulting Engineer, conducted under a subcontract arrangement with Derwentside Environmental Testing Services (DETS). The results of this testing are presented as Appendix I.

5.4 Laboratory Identified Asbestos

Selected samples were analysed for asbestos content as specified by the Consulting Engineer. A number of tested samples were found to contain asbestos the details of which are presented in within the specialist chemical testing results report (see Appendix I for further details).

Key Sheets





Allied Exploration and Geotechnics Limited

Key Sheets



INTRODUCTION

The following explanatory notes define the terminologies, abbreviations and symbols pertaining to each individual column or section of the Exploratory Hole records. 'Exploratory Hole' is used as a general term in this report to comprise borehole, drillhole, and trial pit. All exploratory hole records have been produced using 'gINT®', which is an integrated software environment for the storage and manipulation of subsurface data.

The primary purpose of ground investigation exploratory holes is to probe the stratified sequences of soil and/or rock. From the results of these probings no conclusion should be drawn concerning the presence of, size, lithological nature, and numbers per unit volume of ground cobbles and boulders in soil types such as glacial till (boulder clay). With respect to rotary coring, driller's records and observations of the recovered core are used to determine any zones of no recovery (core loss). These zones are based on the interpretation of the logging engineer and are therefore potentially subjective. In addition, where relevant, every effort is made to highlight material/zones that may relate to suspected old workings. However, it should be noted that this is not straightforward (especially without detailed information regarding anticipated subsurface conditions) and therefore no guarantee can be made with regards to the accuracy of the interpretation of the recovered core.

INFORMATION COMMON TO ALL EXPLORATORY HOLE RECORDS

Status Box

The status box in the top right hand corner of each exploratory hole record gives the status of each individual record i.e. PRELIM1, PRELIM2, PRELIM3 FINAL etc. The date shown relates to the last instance the data was revised. This information is for AEG Quality Assurance only.

Exploratory Hole No

The identity number used throughout the report.

Project

The ground investigation project name. Occasionally the project name may be shortened or abbreviated due to string length restraints imposed by the gINT® computer programme.

Client

Client's name responsible for funding the ground investigation project. The Client's name may be shortened or abbreviated due to string length restraints imposed by the gINT® computer programme.

Location

The exploratory hole position given as either national grid co-ordinates, local grid if specified, or a reference name normally pertaining to the area of investigation.

Method (Equipment)

Represents the drilling, excavation or boring method(s) or equipment used.

Ground Level (m(AOD))

The precise ground level in metres above Ordnance Datum at the exploratory hole location from which the reduced level for each stratigraphic boundary is calculated.

Date

The date relating to the start of the exploratory hole excavation.

Sheet

The sheet number and total number of sheets for the particular record.

Checked By

Printed signature of the person who has carried out the technical quality check on the log.

Logged By

The name of the engineer who has carried out the logging of the exploratory hole.

Contract No.

The Allied Exploration & Geotechnics Limited reference number for the project.



Allied Exploration and Geotechnics Limited

Key Sheets






INFORMATION RELEVANT TO BOREHOLE AND WINDOW/WINDOWLESS SAMPLE HOLE RECORDS

Sample & Tests Columns

Depth	The depth over which a sample or test is taken is shown in depth column of the exploratory hole record in a "from...to" format.
Type No	Indicates the type of sample/test and number given by the driller.
Test Result	Result of the test given in the applicable units.

Water Column

Water Strike	Level of groundwater strike within an exploratory hole. The symbol  denotes a water strike and is suffixed with a number, which indicates the strike order. The corresponding unfilled symbol  is the depth the strike rose to.
Seepage	Groundwater seepage within an exploratory hole is denoted by the  symbol.

Strata Columns

Reduced Level	The corresponding reduced level of each soil or rock boundary in metres Ordnance Datum.
Legend	A graphical representation of the materials encountered using BS 5930:1999 Amendment No.2 (Aug 2010) recommended symbols for soil and rock.
Depth (Thickness)	The depth below ground level of each soil or rock boundary in metres and the thickness of each individual stratigraphic unit (given in brackets).
Description	Engineering description of each individual soil or rock type follows recommendations outlined in Section 6 of BS 5930:1999 Amendment No.2 (Aug 2010) with the following implementation: <ol style="list-style-type: none"> The amendment of section 6 incorporates the guidance indicated in BS EN ISO 14688-1:2002, BS EN ISO 14688-2:2004 and BS EN ISO 14689-1:2003 European Standard with particular emphasis on current UK practice. Supplementary laboratory or in-situ assessed measurements of undrained strength are provided where applicable information is available in parenthesis in accordance with clause 41.3.2 BS 5930:1999 Amendment No.2 (Aug 2010) after the field strength determined consistency. The description based measurement table indicating the quantitative undrained strength classification divisions is provided in Key Sheets Table 1.

Term based on measurement	Undrained strength classification definition cu, in kPa (from BS EN ISO 14688-2:2004, 5.3, Table 5)
Extremely low	<10
Very low	10-20
Low	20-40
Medium	40-75
High	75-150
Very High	150-300
Extremely High	300-600

KEY SHEETS TABLE 1

- Cobble and boulder content is expressed in accordance with the terms provided in EN ISO 14688-2: 2004 where visually identified in trial pit excavations, or inferred/recovered during the drilling operations. The assessment of frequency and spatial occurrence of coarse and very coarse rock material should not be considered as precise, but only an indicator or estimate of the potential conditions. It should be noted that the recovery of coarse or very coarse particles in boreholes is dependent on the limitations imposed by the casing diameter. The terminology used is outlined in Key Sheets Table 2.



Allied Exploration and Geotechnics Limited

Key Sheets



Fraction	Percent by Mass	Term
Boulders	<5	Low boulder content
	5 to 20	Medium boulder content
	>20	High boulder content
Cobbles	<10	Low cobble content
	10 to 20	Medium cobble content
	>20	High cobble content

KEY SHEETS TABLE 2

- 4 Rock Strength based on assessed field or measured unconfined compressive strength follows the classification scheme given in clause 44.2.1 BS5930:1999 Amendment No.2 (Aug 2010) as outlined in Key Sheets Table 3.

Term for use in field or based on measurement	Definition for field use	Definition on basis of Unconfined Compressive Strength measurement (MPa)	Old Classification of rock strength: Terminology (Strength Range MPa)	Old Classification of rock strength: Determination Method
Extremely weak	Can be indented by thumbnail. Gravel sized lumps crush between finger and thumb.	0.6-1.0	Very Weak (<1.25)	Lumps can be crushed between fingers
Very weak	Crumbles under firm blows with point of geological hammer. Can be peeled by a pocket knife.	1-5	Weak (1.25 – 5)	Lumps can be broken with heavy hand pressure
Weak	Can be peeled by a pocket knife with difficulty. Shallow indentations made by firm blow with the point of geological hammer.	5-25	Moderately Weak (5-12.50)	This slab can be broken with heavy pressure
Medium Strong	Cannot be scraped with pocket knife. Can be fractured with a single firm blow of geological hammer.	25-50	Moderately Strong (12.50-50)	Rock can be broken in the hand with a hammer
Strong	Requires more than one blow of geological hammer to fracture.	50-100	Strong (50-100)	Rock can be broken on a flat surface using a hammer
Very Strong	Requires many blows of geological hammer to fracture.	100-250	Very Strong (100-200)	Rock chipped by blows with a hammer
Extremely strong	Can only be chipped with geological hammer.	>250	Extremely Strong (>200)	Rock rings when hit with a hammer
Based on BS EN ISO 14689-1:2003 4.2.7, Table 5			BS5930: 1999 – Section 6 (Superseded Version)	

KEY SHEETS TABLE 3

- 5 Where 'rock weathering classification' can be applied it is 'Approach 4' which will be used. If any other approach is used the factual text of the report will provide details of the applicable specific approach. (Ref.: Figure 19, p143, BS 5930:1999 Amendment No.2 (Aug 2010)). An outline of the 'Approach 4' rock weathering classification scheme is provided as Key Sheets Table 4.

APPROACH 4 CLASSIFICATION INCORPORATING MATERIAL AND MASS FEATURES		
Class	Classifier	Typical characteristics
A	Unweathered	Original strength, colour, fracture spacing
B	Partially weathered	Slightly reduced strength, slightly closer fracture spacing, weathering penetrating in from fractures, brown oxidation
C	Distinctly weathered	Further weathered, much closer fracture spacing grey reduction
D	Destructured	Greatly weakened, mottled, ordered lithorelics in matrix becoming weakened and disordered, bedding disturbed.
E	Residual or reworked	Matrix with occasional altered random or 'apparent' lithorelics, bedding destroyed. Classed as reworked when foreign inclusions are present as a result of transportation.

KEY SHEETS TABLE 4



Allied Exploration and Geotechnics Limited

Key Sheets



Instrument/Backfill Column

A graphical representation of backfill material or instrumentation detail using graphic legends. Its placement in the column is relative to depth in metres and corresponds to the exploratory hole in scale.

Boring Progress and Water Observations Columns

This section provides information on each day's production as a daily log.

Date	Date of shift.
Depth	Depth of hole at the start of the shift.
Casing	Casing's depth at the start of the shift.
Casing Dia	Casing's diameter at the start of the shift.
Water Depth	Water level within the borehole at the start and end of shift.

Chiselling Columns

Indicates where hard strata occurred in the borehole and breaking out was carried out to advance the borehole.

From	The depth commenced.
To	The depth finished.
Hours	The time spent for breaking out.

Water Added Columns

Indicates the depth range where water was added to the borehole to facilitate boring or to prevent stress relief disturbance "blowing/boiling" in granular soils.

From	Depth in metres from where water was added.
To	Depth in metres to where water was added.

General Remarks

Any remarks believed to be relevant to the exploratory hole.

INFORMATION RELEVANT TO PIT/TRENCH RECORDS

The pit/trench records follow the same format as the borehole and window/windowless sample hole records for the Samples & Tests, Water and Strata columns. However, in addition to these there are the following:

Plan

A schematic plan view of the pit showing its excavated dimensions together with its orientation, given as a compass bearing to magnetic north.

Groundwater

Notes on water bearing horizons.

Stability

The engineer's comments outlining the stability of the sides during pit excavation.

General Remarks

The engineer's comments of any other information relevant to construction of the pit.

Additional Information

An indication if a sketch and/or photographs accompany the record.



Allied Exploration and Geotechnics Limited

Key Sheets



Underground Services

Depth	Depth service was encountered.
Orientation	Orientation given as a compass bearing to magnetic north.
Type	Type of service encountered.
Diameter	Diameter of service encountered.
Condition	Condition the service encountered was noticed in.

INFORMATION RELEVANT TO DRILLHOLE RECORDS AND ROTARY CONTINUATION

Run Details Columns

Depth	Each drill run is highlighted by a horizontal line with the top and bottom depths shown in metres. Core diameter (C Dia) is presented also within each run.
TCR (SCR) RQD	Information provided on the total core recovery, solid core recovery and rock quality designation. Refer to Abbreviations for further details.
Fracture Index	Information given relating to the fracture index of the rock.

Strata Columns

As the strata columns for borehole and window/windowless sample hole records except for description which is as follows:

Discontinuities Detail	Information on core discontinuities, localised variations in weathering, lithology, strength and structure follows recommendations outlined in Section 6 BS 5930:1999 Amendment No.2 (Aug 2010): Clause 44.
Main	Engineering description of each individual soil or rock type follows recommendations outlined in Section 6 of BS 5930:1999 Amendment No.2 (Aug 2010).

Instrument/Backfill Column

A graphical representation of backfill material or instrumentation detail using graphic legends. Its placement in the column is relative to depth in metres and corresponds to the exploratory hole in scale.

Drilling Progress and Water Observations Columns

Date	Date of shift.
Depth	Depth of hole at the start of the shift.
Casing	Casing's depth at the start of the shift.
Water Strike	Depth at which water was encountered.
Water Standing	Depth at which water in the hole levelled off.
Water Remarks	Any remarks believed to be relevant to the water e.g. Artesian.

Standard Penetration Test

Depth	The depth commenced.
Type	Type of standard penetration test (SPT).
Result	Result of SPT.

Flush

From	The depth commenced.
To	The depth finished.
Type	Details of the type of flush used. A = Air, F = Foam, W = Water and Pol = Polymer.
Returns	An indication of the percentage of the returned flush material.

General Remarks

Any remarks believed to be relevant to the exploratory hole.



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Key Sheets



SAMPLES

B	Bulk disturbed sample.
ES	Environmental soil sample.
EW	Environmental water sample.
G	Gas sample.
J	Small disturbed sample.
LB	Large bulk disturbed sample.
P	Piston sample.
P*	An attempted but failed undisturbed piston sample.
U	Undisturbed sample.
U*	An attempted but failed general purpose undisturbed sample.
U _(ss)	Sample has been subsampled.
ES _(U)	Brackets following a sample denotes a subsample. The sample information within the brackets is the origin of the subsample.
W	Water sample.

IN-SITU TESTS

CBR	California Bearing Ratio mould sample or test.
HSV	In-situ hand shear vane.
HSV*	An attempted but failed in-situ hand shear vane.
HSV result of e.g 80(20)kPa	Denotes average HSV peak result followed by average HSV residual result (in brackets).
HP	Hand penetrometer test.
K (F)	Falling head permeability test.
K (R)	Rising head permeability test.
K (C)	Constant head permeability test.
K (P)	Packer permeability test.
PT	Pressuremeter test.
PID	Photo ionisation detector test.
FID	Flame ionisation detector test.
S	Standard Penetration Test (SPT) using the split barrel sampler (shoe). The corresponding uncorrected 'N' value is given in the test result column with more detailed information provided in the In-Situ Testing Enclosures where applicable. Testing has been conducted in accordance with BS EN ISO 22476-3: 2005.
C	Denotes SPT test using a solid cone in preference to the split barrel sampler (usually in coarse granular soil) with all other reporting requirements as outlined above for the split barrel sampler.
S/C result of e.g. 1/2.94	Denotes where full penetration has not been achieved during the SPT test. In such cases the penetration (mm) per blow is recorded in the test result column e.g. 1/2.94 is 2.94mm of penetration per single blow.
SV	In-situ down-the-hole shear vane test. The remoulded shear strength is given in brackets.

ROCK QUALITY AND CORE RECOVERY

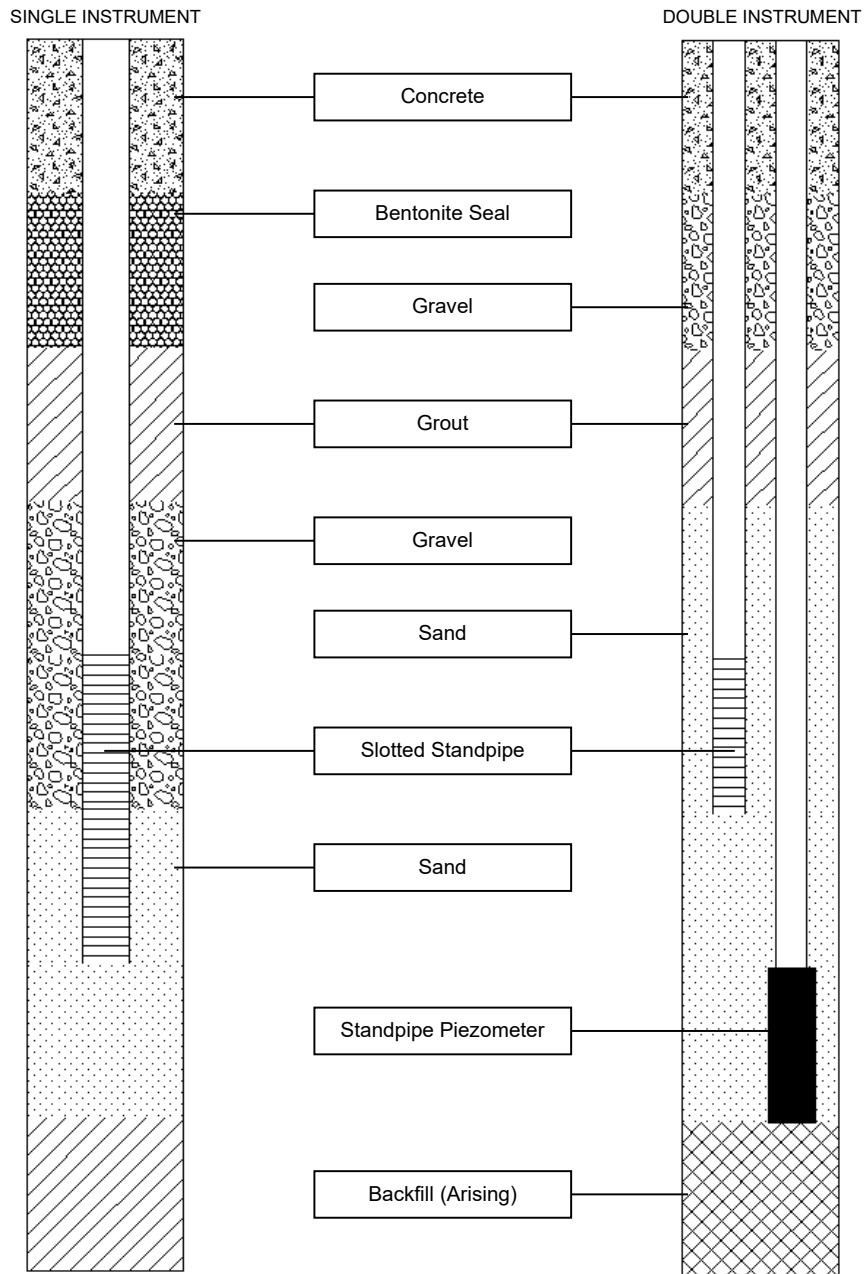
TCR	Total Core Recovery - the length of the recovered core expressed as a percentage of the length of core run.
SCR	Solid Core Recovery - the sum length of all core pieces that are recovered with at least one full diameter, expressed as a percentage of the length of core run.
RQD	Rock Quality Designation - The sum length of all core pieces that are 100mm or longer (measured along the centre of the core), expressed as a percentage of the length of core run.
FI	Fracture Index - The number of fractures per 1000mm length of solid core.
NI	Non-intact - The material recovered in a non-intact state.
NR	No recovery from the core run. These zones are based on the interpretation of the logging engineer and are therefore potentially subjective.



Allied Exploration and Geotechnics Limited Key Sheets



Symbols and Abbreviations: Explanation of Instrumentation Legends Used





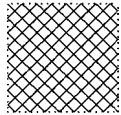
Allied Exploration and Geotechnics Limited

Key Sheets



Symbols and Abbreviations: Explanation of Legends Used

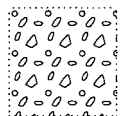
Soils	Rocks		
	<i>Sedimentary</i>	<i>Metamorphic</i>	<i>Igneous</i>



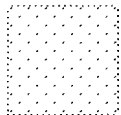
Made Ground



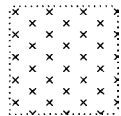
Cobbles and Boulders



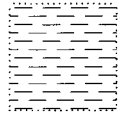
Gravel



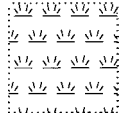
Sand



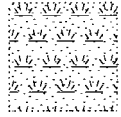
Silt



Clay

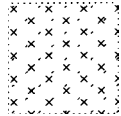


Peat

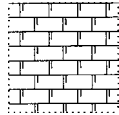


Topsoil

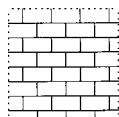
Note: Composite soil types will be signified by combined symbols e.g.



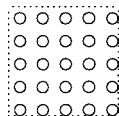
Silty Sand



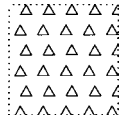
Chalk



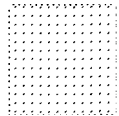
Limestone



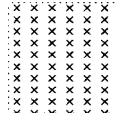
Conglomerate



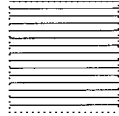
Breccia



Sandstone



Siltstone



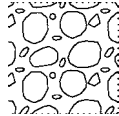
Mudstone



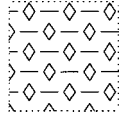
Shale



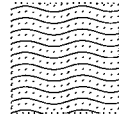
Coal



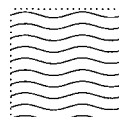
Pyroclastic
(Volcanic Ash)



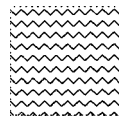
Gypsum



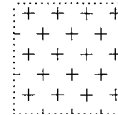
Coarse
Grained



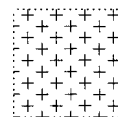
Medium
Grained



Fine Grained



Coarse
Grained



Medium
Grained



Fine Grained




Exploratory Hole Location Plan

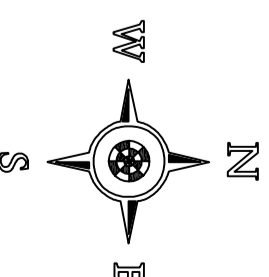




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KEY:

-  BOREHOLE
-  TRIAL PIT
-  SURFACE WATER SAMPLE



Base Plan Supplied by Consulting Engineer

Drawing Title:
ENC 01 : Exploratory Hole Location Plan

Drawing No.:
AEG4251/01

Contract Title:
Prairie Site Ground Investigation Works

Client:
Tees Valley Combined Authority
Teesside Management Office, Trunk Road,
Redcar, TS10 5QW

Consultant:
Arcadis
1 Whitehall Riverside
Leeds, LS1 4BN

Contract No.:
4251




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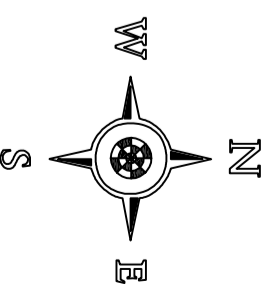
Date:
05/11/2020



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 (Email): enquiries@aeg.ug.net

KEY:

-  BOREHOLE
-  TRIAL PIT
-  SURFACE WATER SAMPLE



Base Plan Supplied by Consulting Engineer

Drawing Title:

ENC 01 : Exploratory Hole Location Plan

Drawing No.:

AEG4251/02

Contract Title:

Prairie Site Ground Investigation Works

Client:

Tees Valley Combined Authority
 Teesside Management Office, Trunk Road,
 Redcar, TS10 5QW

Consultant:

Arcadis
 1 Whitehall Riverside
 Leeds, LS1 4BN

Contract No.:

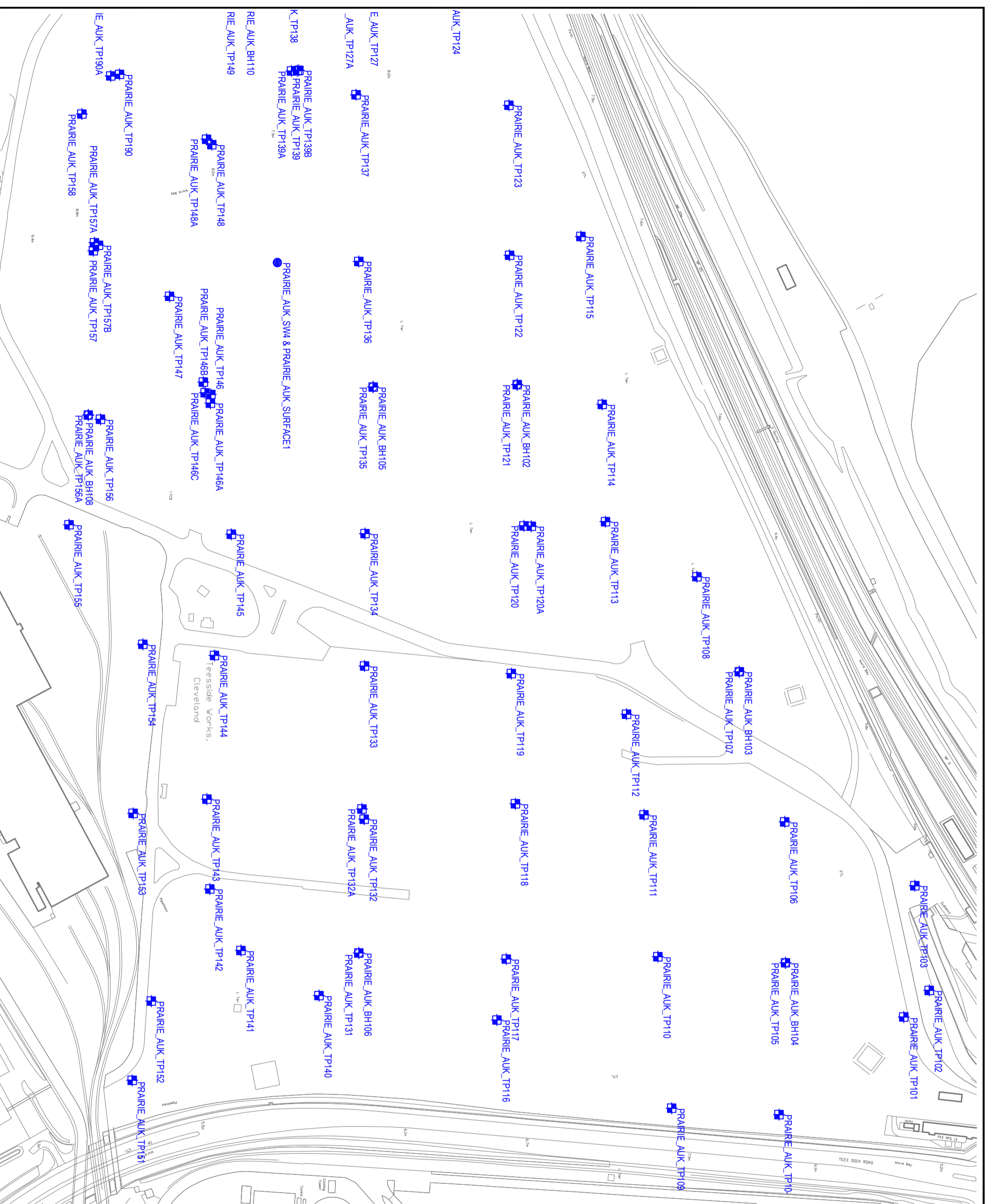
4251

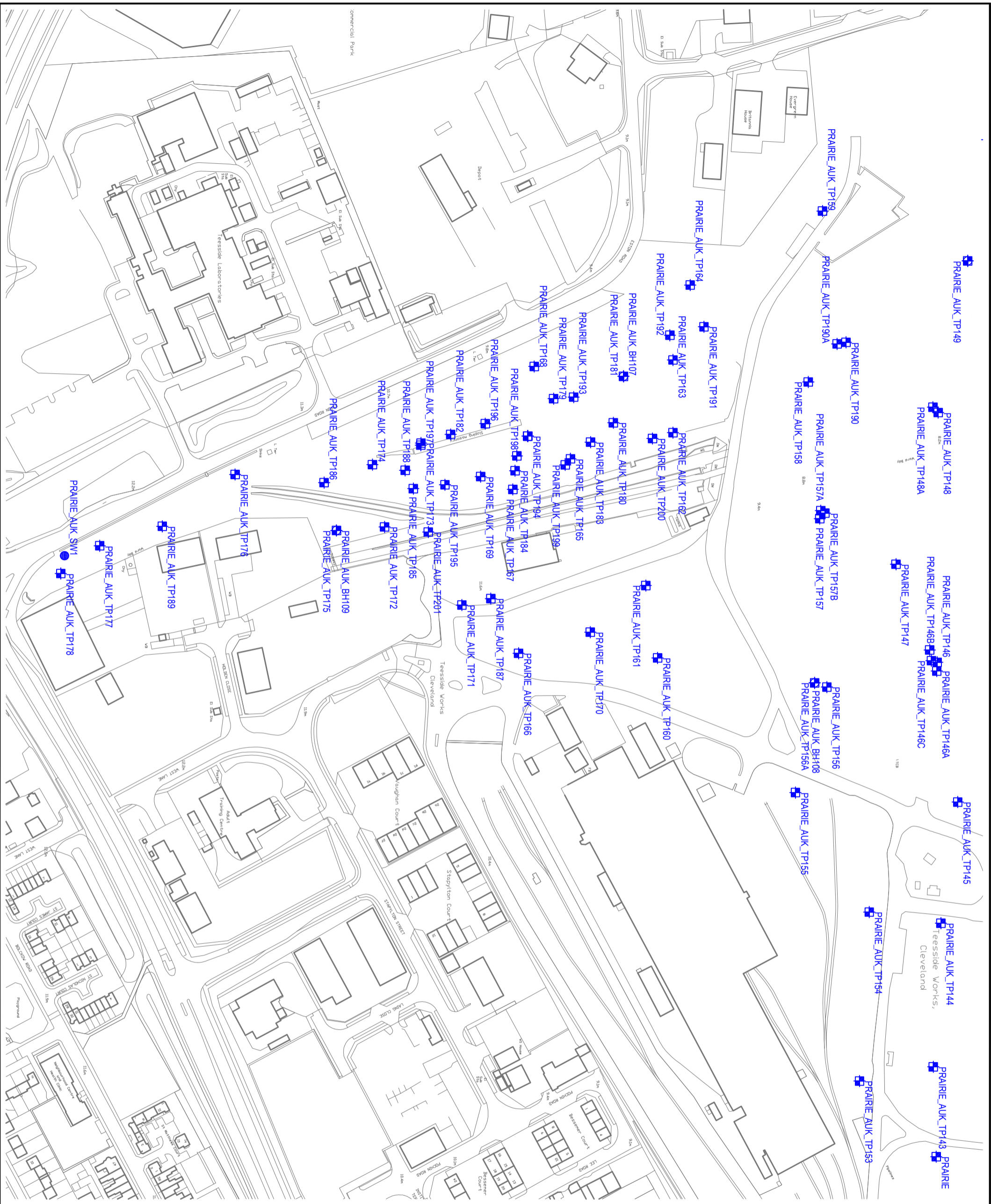
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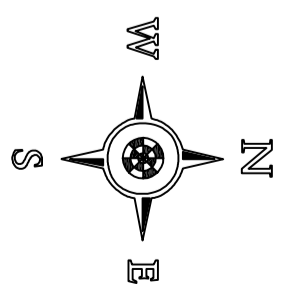
05/11/2020





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- KEY:**
-  BOREHOLE
 -  TRIAL PIT
 -  SURFACE WATER SAMPLE



Base Plan Supplied by Consulting Engineer

Drawing Title:	ENC 01 : Exploratory Hole Location Plan
Drawing No.:	AEG4251/03
Contract Title:	Prairie Site Ground Investigation Works
Client:	Tees Valley Combined Authority Teesside Management Office, Trunk Road, Redcar, TS10 5QW
Consultant:	Acadris 1 Whitehall Riverside Leeds, LS1 4BN
Contract No.:	4251
Scale:	1:2500 @ A3
Date:	05/11/2020

Borehole Records



Borehole Summary Table

Exploratory Hole Number	Drilling Method	Completion Depth (m BGL)	Depth of installation (m BGL)	Diameter/Type of instrumentation	Instrumentation Response zone (m BGL)	Remarks
PRAIRIE_A UK_BH101	CP	18.40	10.00	19mm diameter standpipe piezometer	4.00-10.00	Advanced through PRAIRIE_AUK_TP127A. Advanced to required depth.
			16.50	50mm diameter slotted standpipe	14.50-16.50	
PRAIRIE_A UK_BH102	CP	8.00	7.20	50mm diameter slotted standpipe	2.00-7.20	Advanced through PRAIRIE_AUK_TP121. Advanced to required depth.
PRAIRIE_A UK_BH103	CP	13.80	8.50	50mm diameter slotted standpipe	3.00-8.50	Advanced through PRAIRIE_AUK_TP107. Advanced to required depth.
PRAIRIE_A UK_BH104	CP+RC	18.50	18.50	50mm diameter slotted standpipe	14.50-18.50	Advanced through PRAIRIE_AUK_TP105. Continued by rotary coring from 13.50m BGL. Advanced to required depth.
PRAIRIE_A UK_BH105	CP	12.00	11.00	50mm diameter slotted standpipe	8.00-11.00	Advanced through PRAIRIE_AUK_TP135. Advanced to required depth.
PRAIRIE_A UK_BH106	CP	10.80	10.00	50mm diameter slotted standpipe	4.00-10.00	Advanced through PRAIRIE_AUK_TP131. Advanced to required depth.
PRAIRIE_A UK_BH107	CP	9.50	9.50	50mm diameter slotted standpipe	4.00-8.00	Advanced through PRAIRIE_AUK_TP181. Advanced to required depth.
PRAIRIE_A UK_BH108	CP+RC	14.00	6.00	19mm diameter standpipe piezometer	3.00-6.00	Advanced through PRAIRIE_AUK_TP156A. Continued by rotary coring from 9.50m BGL. Advanced to required depth.
			14.00	50mm diameter slotted standpipe	10.00-14.00	
PRAIRIE_A UK_BH109	CP+RC	11.80	11.80	50mm diameter slotted standpipe	7.80-11.80	Advanced adjacent to PRAIRIE_AUK_TP175. Continued by rotary coring from 6.80m BGL. Advanced to required depth.
PRAIRIE_A UK_BH110	CP+RC	20.80	20.80	50mm diameter slotted standpipe	16.80-20.80	Advanced through PRAIRIE_AUK_TP149. Continued by rotary coring from 15.80m BGL. Advanced to required depth.

Any relevant photographs are presented after the applicable Borehole Record
 CP = Cable Percussion, RC = Rotary Coring



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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH101	
Client: South Tees Development Corporation		Location: E:454312.599 N:521393.254	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 8.644	Start Date: 27/04/2020
		Sheet: 1 of 3	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
				8.24	(0.40)	0.40	MADE GROUND (Brown grey sand and gravel. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded and includes slag, concrete, macadam and roadstone. Slag content is 0-25%. Slag is vesicular grey green white).	
				6.74	(1.50)	1.90	MADE GROUND (Red brown sandy gravel with medium cobble content and fragments of metal. Gravel is fine to coarse subangular and includes red brick, concrete, slag and refractory brick. Slag content is 0-25%. Slag is vesicular grey green white).	
				5.64	(1.10)	3.00	Firm yellow brown mottled grey sandy CLAY. (Possible Made Ground).	
3.00 3.00-3.45 3.00 3.45	ES1 U2 PID J3	(45) 0.2ppm					Soft to firm thinly laminated brown slightly sandy slightly gravelly silty CLAY with fine yellow brown sand on the laminae. at c.3.00m BGL ... low strength. Clay is of intermediate plasticity.	
4.00-4.45 4.00-4.45	B5 SJ4	N13					at c.4.00m BGL ... slightly sandy silty clay.	
4.50	J6							
5.00-5.45	U7	(60)					at c.5.00m BGL ... low strength. Clay is of intermediate plasticity.	
5.45	J8							
6.00-6.45 6.00-6.45	B10 SJ9	N17						
7.50	J11					(7.60)		

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
27/04/2020	0.00	0.00	200					(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP127A. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP127A. (3) Water strikes at 3.00 and 14.80m - water level rose to 2.58 and 12.36m BGL (20mins) respectively. (4) Double installation: 1No. 19mm diameter standpipe piezometer and 1No. 50mm diameter slotted standpipe installed between 4.00-10.00m and between 14.50-16.50m BGL respectively.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH101	
Client: South Tees Development Corporation		Location: E:454312.599 N:521393.254	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 8.644	Start Date: 27/04/2020
		Sheet: 2 of 3	

SAMPLES & TESTS			STRATA					Instrument/ Backfill	
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description		
8.00-8.45	U12	(65)					Soft to firm thinly laminated brown slightly sandy slightly gravelly silty CLAY with fine yellow brown sand on the laminae. (continued) at c.8.00m BGL ... medium strength.		
8.45	J13								
9.00	J14								
9.50-9.95	B16	N18							
9.50-9.95	SJ15								
10.50	J17			-1.96			10.60		Firm to stiff red brown slightly sandy gravelly CLAY. Gravel is fine to coarse subangular and includes sandstone, mudstone, siltstone and coal. at c.11.00m BGL ... high strength. Clay is of low plasticity.
11.00-11.45	U18	(100)					(1.70)		
11.45	J19								
12.00	J20			-3.66			12.30		Stiff to very stiff brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded and includes sandstone, mudstone and siltstone. at c.12.50m BGL ... with cobbles noted.
12.50-12.95	B22	100/285mm					(2.50)		
12.50-12.95	SJ21								
13.50	J23								
14.00-14.45	B25	100/285mm							
14.00-14.45	SJ24								
15.00	J26		-6.16		14.80	Firm to stiff dark brown very sandy slightly gravelly CLAY. Gravel is fine to coarse subangular and includes sandstone, mudstone and siltstone.			
15.50-15.95	B28	100/245mm			(1.40)				
15.50-15.95	SJ27								

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
27/04/2020	10.50	10.03	200	Dry				(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP127A. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP127A. (3) Water strikes at 3.00 and 14.80m - water level rose to 2.58 and 12.36m BGL (20mins) respectively. (4) Double installation: 1No. 19mm diameter standpipe piezometer and 1No. 50mm diameter slotted standpipe installed between 4.00-10.00m and between 14.50-16.50m BGL respectively.
28/04/2020	10.50	10.03	200	9.82				

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH101	
Client: South Tees Development Corporation		Location: E:454312.599 N:521393.254	
Method (Equipment): Cable Percussion (Dando 2000)	Ground Level (m): 8.644	Start Date: 27/04/2020	Sheet: 3 of 3

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
16.50	J29			-7.56		16.20	Stiff to very stiff dark brown slightly sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded and includes sandstone, mudstone and siltstone. (Driller notes sand interbeds).	
17.00-17.45 17.00-17.45	B31 SJ30	N55				(1.50)		
18.00 18.00 18.00 18.40	J32 B34 SJ33 SJ35	100/25mm 100/20mm		-9.06		17.70	Weak red brown MUDSTONE with gypsum interbeds.	
				-9.76		18.40	Complete at 18.40m BGL.	

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
28/04/2020	17.50	16.80	200	12.06	16.20 - 17.00	3:30		(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP127A. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP127A. (3) Water strikes at 3.00 and 14.80m - water level rose to 2.58 and 12.36m BGL (20mins) respectively. (4) Double installation: 1No. 19mm diameter standpipe piezometer and 1No. 50mm diameter slotted standpipe installed between 4.00-10.00m and between 14.50-16.50m BGL respectively.
29/04/2020	17.50	16.80	200	10.47	17.70 - 18.00	1:00		
29/04/2020	18.40	18.20	200	11.02				

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH102	
Client: South Tees Development Corporation		Location: E:454597.680 N:521503.836	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 8.213	Start Date: 09/04/2020
		Sheet: 1 of 1	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
6.00-7.00	B1			7.31		0.90	MADE GROUND (Brown slightly gravelly sand. Sand is fine to coarse. Gravel is fine to coarse subangular and includes brick and slag).	
7.00-8.00	B2			0.21		8.00	MADE GROUND (Blue grey sandy gravel. Gravel is fine to coarse subangular to subrounded and includes slag. Slag content is 75-100%. Slag is vesicular. Slight hydrocarbon odour noted). at c.7.00-8.00m BGL ... driller notes 'large crushed metal'.	

Complete at 8.00m BGL.

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
09/04/2020	0.00	0.00	200		6.00 - 8.00	6:00		(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP121. Descriptions between 0.00-4.50m BGL derived from PRAIRIE_AUK_TP121. (3) 50mm diameter slotted standpipe installed to 7.20m BGL. (4) Borehole collapsed back from 8.00-7.20m BGL.
09/04/2020	6.00	6.00	200	1.00				
14/04/2020	6.00	6.00	200	1.06				
14/04/2020	8.00	7.20	200	0.96				

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH103	
Client: South Tees Development Corporation		Location: E:454800.537 N:521660.804	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 7.683	Start Date: 07/04/2020
		Sheet: 1 of 2	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
				7.58		0.10	MADE GROUND (Brown sandy gravelly topsoil. Sand is fine to coarse. Gravel is fine to coarse subangular and includes concrete, red brick and roadstone).	
						(1.50)	MADE GROUND (Firm yellow brown mottled grey sandy slightly gravelly clay with medium cobble content and fragments of wood and metal. Gravel is fine to coarse subangular to subrounded and includes red brick and sandstone. Cobbles are subangular and include red brick).	
				6.08		1.60		
						(0.50)	MADE GROUND (Black gravelly sand with medium cobble content. Sand is fine to coarse. Gravel is fine to coarse subangular and includes ash, macadam, coke and slag. Slag content is 25-50%. Slag is iron rich in places (rust). Cobbles are subangular and include fused coke).	
				5.58		2.10		
2.50	ES1					(0.70)	Firm to stiff grey brown slightly sandy CLAY.	
2.50-2.95	U2	(30)		4.88		2.80	at c.2.50m BGL ... medium strength.	
2.50	PID	<0.1ppm						
2.95	J3						Firm laminated grey dark brown sandy silty CLAY with occasional sand lenses. Sand is fine to medium.	
							at c.2.95m BGL ... medium strength.	
3.50	J4							
3.50-3.95	B6	N20						
3.50-3.95	SJ5							
							at c.4.50m BGL ... medium strength.	
4.50	J7	(25)						
4.50-4.95	U8							
4.95	J9							
5.50	J10	N21				(5.50)		
5.50-5.95	B12							
5.50-5.95	SJ11							
							at c.7.00m BGL ... medium strength.	
6.50	J13							
7.00-7.45	U14	(25)						
7.00-7.50	B16							
7.45	J15							

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
08/04/2020	0.00	0.00	200					(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP107. Descriptions between 0.00-2.50m BGL derived from PRAIRIE_AUK_TP107. (3) 50mm diameter slotted standpipe installed between 3.00-8.50m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH103	
Client: South Tees Development Corporation		Location: E:454800.537 N:521660.804	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 7.683	Start Date: 07/04/2020
		Sheet: 2 of 2	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
8.00	J17			-0.62	X X X X	8.30	Firm to stiff brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to medium subrounded and includes sandstone, mudstone and limestone. at c.8.50m BGL ... clay is of low plasticity.	
8.50-8.95 8.50-8.95	B19 SJ18	N37				(2.40)		
9.50	J20							
10.00-10.45	U21	(75)					at c.10.00m BGL ... high strength.	
10.45	J22			-3.02		10.70		
11.00	J23					(2.00)	Stiff to very stiff grey brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subrounded and includes sandstone, mudstone and limestone.	
11.50-11.95 11.50-11.95	B25 SJ24	N80						
12.50	J26			-5.02		12.70	Extremely weak thinly laminated red sandy MUDSTONE residual.	
13.00-13.45 13.00	B28 SJ27	100/200mm				(1.10)	at c.13.00m BGL ... clay fines are low plasticity.	
13.50 13.50	J29 SJ30	100/130mm		-6.12		13.80	Complete at 13.80m BGL.	

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
08/04/2020	11.00	10.80	200	Dry	13.20 - 13.50	1:00		(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP107. Descriptions between 0.00-2.50m BGL derived from PRAIRIE_AUK_TP107. (3) 50mm diameter slotted standpipe installed between 3.00-8.50m BGL.
09/04/2020	11.00	10.80	200	Dry				
09/04/2020	13.80	10.80	200	Dry				

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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH104	
Client: South Tees Development Corporation		Location: E:455006.172 N:521693.493	
Method (Equipment): Percussion/Rotary (Dando 2000/Boart Longyear DB540)		Ground Level (m): 8.696	Start Date: 03/04/2020
		Sheet: 1 of 2	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
				8.65		0.05	MADE GROUND (Brown sandy topsoil. Sand is fine to coarse).	
						(0.55)	MADE GROUND (Strong grey concrete).	
				8.10		0.60	MADE GROUND (Grey brown sandy gravel with medium cobble content. Gravel is fine to coarse subangular to subrounded and includes slag and concrete. Slag content is 50-75%. Slag is vesicular green grey. Cobbles are subangular and include slag).	
						(0.90)		
				7.20		1.50	MADE GROUND (Firm brown slightly sandy slightly gravelly clay with low cobble content. Gravel is fine to coarse subangular and includes sandstone, mudstone, slag and red brick. Cobbles are subangular and include red brick and slag. Slag content is 0-25%. Slag is vesicular grey green white).	
						(2.70)		
				4.50		4.20	MADE GROUND (Firm grey brown slightly sandy slightly gravelly clay with some partially decomposed plant remains. Gravel is fine to coarse subangular and include slag and red brick. Slag content is 0-25%. Slag is vesicular grey green white. Organic odour noted).	
				4.30		4.40	(1) Stiff red brown slightly sandy slightly gravelly CLAY.	
						(1.10)		
				3.20		5.50	Stiff brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subrounded and includes sandstone, mudstone, coal and limestone. at c.5.50m BGL ... high strength. at c.5.95m BGL ... clay is of high plasticity.	
5.50	ES1							
5.50-5.95	U2							
5.50	PID	(100)						
5.95	J3	0.2ppm						
6.50	J4							
7.00-7.45	B6							
7.00-7.45	SJ5	N32						

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
03/04/2020	0.00	0.00	200					(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP105. Descriptions between 0.00-5.50m BGL derived from PRAIRIE_AUK_TP105. (3) 50mm diameter slotted standpipe installed between 14.50-18.50m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No. PRAIRIE_AUK_BH104	
Client: South Tees Development Corporation		Location: E:455006.172 N:521693.493		Sheet: 2 of 2
Method (Equipment): Percussion/Rotary (Dando 2000/Boart Longyear DB540)		Ground Level (m): 8.696	Start Date: 03/04/2020	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
8.00	J7				○	(5.40)	Stiff brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subrounded and includes sandstone, mudstone, coal and limestone. <i>(continued)</i> at c.8.50m BGL ... high strength.	
8.50-8.95	U8	(100)			○			
8.95	J9				○			
9.50	J10				○			
10.00-10.45 10.00-10.45	B12 SJ11	N36			○			
				-2.20	○	10.90	Extremely weak thinly laminated sandy red brown MUDSTONE residual. at c.11.00m BGL ... clay fines are of low plasticity.	
11.00 11.00-11.50	J13 B14				○			
11.50	U*15	(100)			○			
12.00-12.45 12.00-12.45	B17 SJ16	100/270mm			○	(2.60)		
13.00-13.45	SJ18	100/225mm			○			
				-4.81	○	13.50	Boring complete at 13.50m BGL - continued by rotary drilling.	
					○			

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
03/04/2020	13.00	12.30	200	Dry	11.70 - 12.00	0:00		(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP105. Descriptions between 0.00-5.50m BGL derived from PRAIRIE_AUK_TP105. (3) 50mm diameter slotted standpipe installed between 14.50-18.50m BGL.
06/04/2020	13.00	12.30	200	Dry				
06/04/2020	13.50	12.80	200	Dry				

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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DRILLHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH104	
Client: South Tees Development Corporation		Location: E:455006.172 N:521693.493	
Method (Equipment): Percussion/Rotary (Dando 2000/Boart Longyear DB540)		Ground Level (m): 8.696	Start Date: 03/04/2020
		Sheet: 1 of 3	

RUN DETAILS			STRATA					Instrument/ Backfill	
Depth & (Core Ø)	TCR (SCR) RQD	Fracture Index	Water	Reduced Level	Legend	Depth (Thickness)	Description		
							Discontinuity Detail		Main
13.50	100 (50) 50	NI		-4.81		13.50	13.50-13.90m ... non-intact.	Extremely weak thinly and thickly laminated sandy red brown MUDSTONE distinctly weathered to residual.	
		7					13.90-14.50m ... subhorizontal (5-30 degrees) medium spaced undulating rough open clean and infilled (sand and gravel) discontinuities.		
14.50						(2.00)	14.50-15.15m ... non-intact.		
	100 (45) 15	NI					15.15-15.50m ... subhorizontal (5-30 degrees) medium spaced undulating rough moderately open clean discontinuities.		
15.50				-6.80		15.50	15.50-17.00m ... non-intact.	Extremely weak thinly and thickly laminated sandy red brown MUDSTONE residual. (Recovered as firm red brown slightly sandy gravelly clay. Sand is fine to coarse. Gravel is fine to medium angular and includes mudstone). at c. 15.50m ... clay fines are of low plasticity.	
	67 (0) 0	NI							
17.00						(3.00)	17.00-17.50m ... no recovery.		
	0 (0) 0	NR							
17.50									

Drilling Progress and Water Observations				Standard Penetration Test			Flush			General Remarks
Date	Depth	Casing	Water Standing	Depth	Type	Result	From - To	Type	Returns (%)	
07/04/2020	13.50	12.80	Dry				13.50 - 14.50	Water	100	(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP105. Descriptions between 0.00-5.50m BGL derived from PRAIRIE_AUK_TP105. (3) 50mm diameter slotted standpipe installed between 14.50-18.50m BGL.
							14.50 - 15.50	Water	100	
							15.50 - 17.00	Water	100	
							17.00 - 17.50	Water	100	
							17.50 - 18.50	Water	100	

All dimensions in metres Scale 1:25	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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DRILLHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No. PRAIRIE_AUK_BH104		
Client: South Tees Development Corporation		Location: E:455006.172 N:521693.493			Sheet: 2 of 3
Method (Equipment): Percussion/Rotary (Dando 2000/Boart Longyear DB540)		Ground Level (m): 8.696	Start Date: 03/04/2020		

RUN DETAILS			STRATA					Instrument/ Backfill	
Depth & (Core Ø)	TCR (SCR) RQD	Fracture Index	Water	Reduced Level	Legend	Depth (Thickness)	Description		
							Discontinuity Detail		Main
(Ø2mm)	100 (0) 0	NI		-9.80		17.50-18.50m ... non-intact. 18.50	at c. 17.50m ... clay fines are of low plasticity. Extremely weak thinly and thickly laminated sandy red brown MUDSTONE residual. (Recovered as firm red brown slightly sandy gravelly clay. Sand is fine to coarse. Gravel is fine to medium angular and includes mudstone). (continued)		
							Complete at 18.50m BGL.		

Drilling Progress and Water Observations				Standard Penetration Test			Flush			General Remarks
Date	Depth	Casing	Water Standing	Depth	Type	Result	From - To	Type	Returns (%)	
07/04/2020	18.50	13.50	7.23							(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP105. Descriptions between 0.00-5.50m BGL derived from PRAIRIE_AUK_TP105. (3) 50mm diameter slotted standpipe installed between 14.50-18.50m BGL.

All dimensions in metres Scale 1:25	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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DRILLHOLE RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.	
Client: South Tees Development Corporation	Location: E:455006.172 N:521693.493		PRAIRIE_AUK_BH104
Method (Equipment): Percussion/Rotary (Dando 2000/Boart Longyear DB540)	Ground Level (m): 8.696	Start Date: 03/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_BH104.1
13.50-15.50m BGL



Figure PRAIRIE_AUK_BH104.2
15.50-18.50m BGL





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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH105	
Client: South Tees Development Corporation		Location: E:454599.377 N:521402.034	
Method (Equipment): Cable Percussion (Dando 2000)	Ground Level (m): 8.257	Start Date: 16/04/2020	Sheet: 1 of 2

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
				8.16		0.10	MADE GROUND (Brown sandy topsoil).	
						(1.00)	MADE GROUND (Black brown slightly clayey very sandy gravel with medium cobble content and fragments of wood and metal. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded and includes red brick, concrete and slag. Cobbles are subangular and include red brick and concrete. Slag content is 0-25%. Slag is vesicular grey green white).	
				7.16		1.10	MADE GROUND (Black sandy gravel with high cobble content and fragments of wood, paper, tile, glass and metal. Gravel is fine to coarse subangular to subrounded and includes brick, concrete, slag and ash. Cobbles are subangular and include coal and slag. Slag content is 0-25%. Slag is vesicular grey green white).	
				6.66		1.60	Firm light orange brown sandy CLAY.	
				5.76		2.50	Firm to stiff grey brown slightly sandy CLAY.	
				5.26		3.00	Firm laminated grey brown sandy silty CLAY.	
3.00 3.00 3.00 3.45	ES1 U2 PID J3	(80) <0.1ppm	↓					
4.00-4.45 4.00-4.45	B5 SJ4	N13	↓			(3.70)	at c.5.50m BGL ... medium strength.	
5.00-5.45	U6	(80)					at c.5.95m BGL ... clay is of intermediate plasticity.	
5.45	J7							
6.00	J8							
6.50-6.95 6.50-6.95	SJ9 B10	N19		1.56		6.70	Firm to stiff red brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded and includes sandstone, mudstone, coal and limestone.	
7.50	J11					(1.90)		

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
16/04/2020	0.00	0.00	200					(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP135. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP135. (3) 50mm diameter slotted standpipe installed between 8.00-11.00m BGL. (4) Water strikes at 3.00m and 8.60m BGL - water level rose to 2.88m and 4.32m BGL respectively (20 mins).

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH105	
Client: South Tees Development Corporation		Location: E:454599.377 N:521402.034	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 8.257	Start Date: 16/04/2020
		Sheet: 2 of 2	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
8.00-8.45	U12	(90)					Firm to stiff red brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded and includes sandstone, mudstone, coal and limestone. (continued)	
8.45	J13			-0.34		8.60	Very dense grey brown slightly clayey very sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded and includes sandstone, mudstone and limestone.	
9.00-9.50	J14 B15							
9.50-9.95	SJ16 B17	100/185mm				(2.40)		
10.50	J18						Extremely weak dark red MUDSTONE residual with some gypsum interbeds. (Recovered as gravelly sand).	
11.00-11.20	SJ19 B20	100/70mm		-2.74	11.00			
11.20	SJ21	100/55mm			(1.00)			
							Complete at 12.00m BGL.	

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
16/04/2020	11.00	10.80	200	5.09	11.00 - 11.20	1:00		(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP135. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP135. (3) 50mm diameter slotted standpipe installed between 8.00-11.00m BGL. (4) Water strikes at 3.00m and 8.60m BGL - water level rose to 2.88m and 4.32m BGL respectively (20 mins).
17/04/2020	11.00	10.80	200	7.36				
17/04/2020	11.40	11.00	200	7.89				
20/04/2020	11.40	11.00	200	7.82				
20/04/2020	12.00	11.80	200	7.92				

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH106	
Client: South Tees Development Corporation		Location: E:454999.256 N:521391.908	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 8.711	Start Date: 06/04/2020
		Sheet: 1 of 2	

SAMPLES & TESTS			STRATA					
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	Instrument/ Backfill
5.50	ES1	(100) <0.1ppm		8.21		0.50	MADE GROUND (Grass over brown sandy gravelly topsoil. Gravel is fine to coarse subangular and includes brick, slag and concrete).	
5.50-5.95	U2			6.21		2.50	MADE GROUND (Black grey sandy gravel with medium cobble content. Gravel is fine to coarse subangular to subrounded and includes slag, red brick and ash. Slag content is 75-100%. Slag is vesicular grey green white. Cobbles are subangular and include brick and cemented slag).	
5.50	PID			5.21		3.50	MADE GROUND (Firm grey mottled orange brown slightly sandy clay). (Possibly Natural Ground).	
5.95	J3	4.21		4.50		Firm indistinctly laminated grey mottled orange brown slightly sandy CLAY.		
6.50	J4	3.21		5.50		(1) Firm to stiff red brown slightly sandy gravelly CLAY.		
7.00-7.45	SJ5	N27		3.40		Firm to stiff grey brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subrounded and includes sandstone, limestone, mudstone and coal.		
7.00-7.45	B6							

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
06/04/2020	0.00	0.00	200					(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP131. Descriptions between 0.00-4.50m BGL derived from PRAIRIE_AUK_TP131. (3) 50mm diameter slotted standpipe installed to 4.00-10.00m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH106	
Client: South Tees Development Corporation		Location: E:454999.256 N:521391.908	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 8.711	Start Date: 06/04/2020
		Sheet: 2 of 2	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
8.00	J7						Firm to stiff grey brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subrounded and includes sandstone, limestone, mudstone and coal. (continued) at c.8.50m BGL ... very high strength.	
8.50-8.95	U8	(100)		-0.19		8.90		
8.95	J9						Extremely weak thinly to thickly laminated dark grey slightly sandy MUDSTONE residual.	
9.50	J10					(1.90)	at c.9.50m BGL ... clay fines are of low plasticity.	
10.00-10.45 10.00-10.45	B12 SJ11	N52						
10.50 10.50	J13	100/40mm		-2.09		10.80	at c.10.50-10.80m BGL ... blue light grey in colour.	
Complete at 10.80m BGL.								

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
06/04/2020	10.80	10.30	200	Dry	10.20 - 10.50	1:00		(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP131. Descriptions between 0.00-4.50m BGL derived from PRAIRIE_AUK_TP131. (3) 50mm diameter slotted standpipe installed to 4.00-10.00m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH107	
Client: South Tees Development Corporation		Location: E:454402.534 N:521065.535	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 10.158	Start Date: 24/04/2020
		Sheet: 1 of 2	

SAMPLES & TESTS			STRATA				Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	
				10.06		0.10	MADE GROUND (Brown clayey sand with many rootlets. Sand is fine to coarse and includes ash).
				(0.70)			MADE GROUND (Brown very sandy gravel. Sand is fine to coarse and includes ash. Gravel is fine to coarse subangular and includes red brick, concrete, ash, clinker and slag. Slag content is 0-25%).
				9.36		0.80	MADE GROUND (Grey cobbles and boulders. Cobbles are subangular and includes slag. Boulders are subangular and includes slag. Slag content is 100%. Slag is vesicular green grey).
				(0.90)			
				8.46		1.70	Firm becoming stiff brown red grey CLAY with occasional sand lenses and interlaminated silt and clay laminae.
				(1.30)			
3.00	ES1			7.16		3.00	Firm to stiff fissured brown slightly sandy slightly gravelly CLAY. Gravel is fine to medium subangular and includes sandstone. at c.3.00m BGL ... low strength. Clay is of intermediate plasticity.
3.00-3.45	U2	(60)					
3.00	PID	0.1ppm					
3.45	J3						
4.00-4.45	B5						
4.00-4.45	SJ4	N17					
4.50	J6						
5.00-5.45	U7	(65)				(4.10)	at c.5.00m BGL ... medium strength.
5.45	J8						
6.00	J9						
6.50-6.95	SJ10	N17					
6.50-6.95	B11						
				3.06		7.10	Firm to stiff red brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular and includes sandstone, mudstone and siltstone. at c.7.50m BGL ... clay is of low plasticity.
7.50	J12						
7.50-8.00	B13					(1.60)	

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
24/04/2020	0.00	0.00	200					(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP181. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP181. (3) 50mm diameter slotted standpipe installed to 4.00-8.00m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH107	
Client: South Tees Development Corporation		Location: E:454402.534 N:521065.535	
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m): 10.158	Start Date: 24/04/2020
		Sheet: 2 of 2	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
8.00-8.45	U14	(100)					Firm to stiff red brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular and includes sandstone, mudstone and siltstone. (continued)	
8.45	J15			1.46		8.70	Very weak red brown MUDSTONE with bands of white gypsum.	
9.00-9.45 9.00-9.45	SJ16 B17	100/40mm				(0.80) 9.50	Complete at 9.50m BGL.	

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
24/04/2020	9.50	8.80	200	Dry	8.70 - 9.00	1:00		(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP181. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP181. (3) 50mm diameter slotted standpipe installed to 4.00-8.00m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH108	
Client: South Tees Development Corporation		Location: E:454619.192 N:521200.662	
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)		Ground Level (m): 8.863	Start Date: 15/04/2020
		Sheet: 1 of 2	

SAMPLES & TESTS			STRATA					Instrument/ Backfill	
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description		
2.50	ES1	(75) <0.1ppm		8.26		0.60	MADE GROUND (Black gravelly sand. Sand is fine to coarse. Gravel is fine to coarse subangular and includes ash, macadam, concrete).		
2.50-2.95	U2			8.06		0.80			MADE GROUND (Strong dark grey fine grained concrete or slag).
2.50	PID			6.36	2.50		1.70		Firm orange brown mottled grey slightly sandy CLAY.
2.95	J3								
3.50-3.95	SJ4	N13		4.06	4.80	2.30	Firm laminated red dark brown slightly sandy silty CLAY with silt dustings on the laminae. Sand is fine to medium. at c.2.50m BGL ... high strength. Clay is of intermediate plasticity. at c.2.95m BGL ... clay is of high plasticity.		
3.50-3.95	B5								
4.00	J6								
4.50-4.95	U7	(90)		3.06	5.80	1.00	Firm laminated red dark brown sandy slightly gravelly silty CLAY. Sand is fine to medium. Gravel is fine to medium subrounded and includes sandstone, mudstone and limestone. at c.5.00m BGL ... clay is of low plasticity.		
4.95	J8	N49		1.16	7.70	1.90	Stiff to very stiff dark brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular and includes sandstone, mudstone and limestone. at c.6.50m BGL ... clay is of low plasticity.		
5.00	J9								
5.50-5.95	B11	N76							
5.50-5.95	SJ10								
6.50	J12								
7.00-7.45	SJ13								
7.00-7.45	B14								

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
15/04/2020	0.00	0.00	200					(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP156A. Descriptions between 0.00-4.50m BGL derived from PRAIRIE_AUK_TP156A. (3) 1No. 19mm diameter standpipe piezometer and 1No. 50mm diameter slotted standpipe installed to 6.00m and 10.00-14.00m BGL respectively.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH108	
Client: South Tees Development Corporation		Location: E:454619.192 N:521200.662	
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)		Ground Level (m): 8.863	Start Date: 15/04/2020
		Sheet: 2 of 2	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
8.00	J15						Extremely weak thinly laminated grey MUDSTONE destructured with many interlamination of extremely weak gypsum. (Recovered as clayey slightly sandy gravel). (continued) at c.8.00m BGL ... clay fines are of low plasticity.	
8.50-8.95 8.50-8.95	SJ16 B17	100/55mm				(1.80)		
9.00 9.00-9.45	SJ18 B19	100/40mm						
				-0.64		9.50	Boring complete at 9.50m BGL - continued by rotary drilling.	

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
15/04/2020	9.50	8.80	200	Dry	8.70 - 9.00	1:00		(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP156A. Descriptions between 0.00-4.50m BGL derived from PRAIRIE_AUK_TP156A. (3) 1No. 19mm diameter standpipe piezometer and 1No. 50mm diameter slotted standpipe installed to 6.00m and 10.00-14.00m BGL respectively.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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DRILLHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH108	
Client: South Tees Development Corporation		Location: E:454619.192 N:521200.662	
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)		Ground Level (m): 8.863	Start Date: 15/04/2020
		Sheet: 1 of 3	

RUN DETAILS			STRATA					Instrument/ Backfill	
Depth & (Core Ø)	TCR (SCR) RQD	Fracture Index	Water	Reduced Level	Legend	Depth (Thickness)	Description		
							Discontinuity Detail		Main
9.50 (92mm)	0 (0) 0	NR		-0.64		9.50	9.50-11.00m ... no recovery.	(1) Red MUDSTONE. (Driller describes as 'very weak' and broken down).	
10.00 (92mm)	0 (0) 0					(1.50)			
10.50 (92mm)	0 (0) 0								
11.00	80 (35) 18	NI		-2.14		11.00	11.00-11.45m ... non-intact.	Extremely weak red brown MUDSTONE residual. (Recovered as sandy clay).	
		12		-2.59		11.45	11.45-11.80m ... horizontal to subhorizontal (0-10 degrees) closely to very closely spaced undulating rough stained (brown) discontinuities.	Medium strong to strong red brown MUDSTONE partially weathered to unweathered with many interbeds of gypsum.	
		NR					11.80-12.00m ... no recovery.		
12.00	100 (55) 44	12					12.00-12.30m ... horizontal to subhorizontal (0-10 degrees) closely to very closely spaced undulating rough stained (brown) discontinuities.		
		NI				(2.15)	12.30-12.86m ... non-intact.		
13.00	52 (52) 52	12					12.86-13.60m ... horizontal to subhorizontal (0-10 degrees) closely to very closely spaced undulating rough stained (brown) discontinuities.		

Drilling Progress and Water Observations				Standard Penetration Test			Flush			General Remarks
Date	Depth	Casing	Water Standing	Depth	Type	Result	From - To	Type	Returns (%)	
04/05/2020	9.50	9.00	Dry				9.50 - 10.00	W	50	(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP156A. Descriptions between 0.00-4.50m BGL derived from PRAIRIE_AUK_TP156A. (3) 1No. 19mm diameter standpipe piezometer and 1No. 50mm diameter slotted standpipe installed to 6.00m and 10.00-14.00m BGL respectively.
							10.00 - 10.50	W	50	
							10.50 - 11.00	W	50	
							11.00 - 12.00	W	50	
							12.00 - 13.00	W	50	
							13.00 - 14.00	W	100	

All dimensions in metres Scale 1:25	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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DRILLHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH108	
Client: South Tees Development Corporation		Location: E:454619.192 N:521200.662	
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)		Ground Level (m): 8.863	Start Date: 15/04/2020
		Sheet: 2 of 3	

RUN DETAILS				STRATA				Instrument/ Backfill	
Depth & (Core Ø)	TCR (SCR) RQD	Fracture Index	Water	Reduced Level	Legend	Depth (Thickness)	Description		
							Discontinuity Detail		Main
(92mm)	NR			-4.74		13.60	13.60-14.00m ... no recovery.	(1) Red MARL/SANDSTONE with gypsum.	
						(0.40)			
				-5.14		14.00	Complete at 14.00m BGL.		

Drilling Progress and Water Observations				Standard Penetration Test			Flush			General Remarks
Date	Depth	Casing	Water Standing	Depth	Type	Result	From - To	Type	Returns (%)	
04/05/2020	14.00	11.00	10.86							(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP156A. Descriptions between 0.00-4.50m BGL derived from PRAIRIE_AUK_TP156A. (3) 1No. 19mm diameter standpipe piezometer and 1No. 50mm diameter slotted standpipe installed to 6.00m and 10.00-14.00m BGL respectively.

All dimensions in metres Scale 1:25	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: J. Myall	Contract No. 4251
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DRILLHOLE RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454619.192 N:521200.662		PRAIRIE_AUK_BH108
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)	Ground Level (m): 8.863	Start Date: 15/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_BH108.1
9.00-13.00m BGL



Figure PRAIRIE_AUK_BH108.2
13.00-14.00m BGL





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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454511.473 N:520862.590	PRAIRIE_AUK_BH109
Method (Equipment): Percussion/Rotary (Dando 2000/Boart Longyear DB540)	Ground Level (m): 12.085	Start Date: 23/04/2020
		Sheet: 1 of 1

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
0.30	J1			11.69		(0.40) 0.40	MADE GROUND (Dark brown sandy topsoil with some rootlets).	
0.50	ES2					(0.80)	MADE GROUND (Firm to stiff orange brown mottled grey and black slightly sandy clay. Strong hydrocarbon odour noted). (Possibly Natural Ground). at c.0.50m BGL ... clay is of intermediate plasticity.	
0.50	J3							
0.50-1.00	PID	2.9ppm						
1.00	B4							
1.00	ES5			10.89		(1.20) 1.20	Firm indistinctly laminated grey brown slightly sandy slightly gravelly CLAY. Gravel is firm to coarse subangular to subrounded and includes sandstone. Strong hydrocarbon odour noted. at c.1.20m BGL ... clay is of intermediate plasticity. at c.1.65m BGL ... clay is of intermediate plasticity.	
1.20-1.65	PID	12.8ppm (75)						
1.65	J7					(1.10)	Firm thinly laminated brown slightly sandy CLAY with fine yellow brown sandy on the laminae. at c.3.00m BGL ... medium strength. at c.3.45m BGL ... clay is of intermediate plasticity.	
1.70	ES8							
1.70	PID	27.6ppm N15						
2.00-2.45	SJ9			9.79				
2.50	J12					(2.50)	Firm thinly laminated brown slightly sandy CLAY with fine yellow brown sandy on the laminae. at c.3.00m BGL ... medium strength. at c.3.45m BGL ... clay is of intermediate plasticity.	
2.50	J12							
2.50	PID	10.8ppm						
3.00-3.45	U13	(60)						
3.45	J14					(2.50)	Firm thinly laminated brown slightly sandy CLAY with fine yellow brown sandy on the laminae. at c.3.00m BGL ... medium strength. at c.3.45m BGL ... clay is of intermediate plasticity.	
3.50	ES15							
3.50	PID	26.1ppm						
4.00-4.45	SJ16							
4.00-4.45	B17	N21					(1) Firm to stiff laminated red brown silty CLAY. at c.5.00m BGL ... medium to high strength.	
4.50	J18			7.29		4.80		
5.00-5.45	U19	(90)				(0.50) 5.30	Stiff red brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded and includes sandstone, mudstone and siltstone.	
5.45	J20							
5.50-5.80	B21			6.29		(0.50) 5.80	Very weak dark blue grey MUDSTONE.	
6.00-6.45	SJ22							
6.00-6.45	B23	100/110mm				(1.00)	Boring complete at 6.80m BGL - continued by rotary drilling.	
6.50	SJ24	100/45mm		5.28		6.80		

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
23/04/2020	0.00	0.00	200		6.20 - 6.50	1:00		(1) Description derived from drillers daily report. (2) Advanced adjacent to trial pit PRAIRIE_AUK_TP175. (3) 50mm diameter slotted standpipe installed between 7.80-11.80m BGL.
23/04/2020	6.80	5.80	200	Dry				

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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DRILLHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH109	
Client: South Tees Development Corporation		Location: E:454511.473 N:520862.590	
Method (Equipment): Percussion/Rotary (Dando 2000/Boart Longyear DB540)		Ground Level (m): 12.085	Start Date: 23/04/2020
		Sheet: 1 of 3	

RUN DETAILS			STRATA					Instrument/ Backfill	
Depth & (Core Ø)	TCR (SCR) RQD	Fracture Index	Water	Reduced Level	Legend	Depth (Thickness)	Description		
							Discontinuity Detail		Main
6.80 (140mm)	0 (0) 0	NR		5.28		6.80	6.80-7.30m ... no recovery.	Weak locally very weak dark blue grey MUDSTONE distinctly weathered locally destructured.	
7.30 (140mm)	100 (10) 0	15				7.30-7.55m ... non-intact. 7.30-8.70m ... horizontal to subhorizontal (0-10 degrees) closely to very closely spaced planar to undulating smooth locally stained (grey) discontinuities.			
7.80 (140mm)	100 (50) 10					7.64-7.68m ... non-intact. 7.70-7.85m ... non-intact.			
8.80 (140mm)	73 (54) 34	7		3.39		8.70	7.95-8.22m ... 1No. vertical (85 degrees) undulating smooth stained (grey) discontinuity. 8.22-8.35m ... non-intact. 8.35-8.42m ... 1No. subvertical (80 degrees) planar smooth stained (grey) discontinuity. 8.52-8.65m ... 2No. subvertical (80 degrees) extremely closely spaced planar smooth discontinuities.	Moderately weak to medium strong light grey SILTSTONE unweathered locally partially weathered.	
10.30 (140mm)	0 (0) 0	NR				3.10	8.70-8.90m ... 1No. vertical (85 degrees) planar locally undulating rough stained (grey) discontinuity. 8.70-9.90m ... horizontal to subhorizontal (0-10 degrees) medium locally closely spaced planar locally undulating rough locally smeared (clay) and stained (grey) discontinuities. 9.38-9.54m ... 1No. vertical (85 degrees) planar rough open stained (grey) discontinuity. 9.83-9.90m ... 1No. subvertical (80 degrees) planar rough stained (red brown) discontinuity. 9.90-10.80m ... no recovery.		
10.80 (140mm)	0 (0) 0								

Drilling Progress and Water Observations				Standard Penetration Test			Flush			General Remarks
Date	Depth	Casing	Water Standing	Depth	Type	Result	From - To	Type	Returns (%)	
30/04/2020	6.80	6.80	Dry				6.80 - 7.30	Water	80	(1) Description derived from drillers daily report. (2) Advanced adjacent to trial pit PRAIRIE_AUK_TP175. (3) 50mm diameter slotted standpipe installed between 7.80-11.80m BGL.
							7.30 - 7.80	Water	80	
							7.80 - 8.80	Water	80	
							8.80 - 10.30	Water	80	
							10.30 - 10.80	Water	80	
							10.80 - 11.80	Water	80	

All dimensions in metres Scale 1:25	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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DRILLHOLE RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No. PRAIRIE_AUK_BH109		
Client: South Tees Development Corporation		Location: E:454511.473 N:520862.590			
Method (Equipment): Percussion/Rotary (Dando 2000/Boart Longyear DB540)		Ground Level (m): 12.085	Start Date: 23/04/2020	Sheet: 2 of 3	

RUN DETAILS				STRATA					Instrument/ Backfill
Depth & (Core Ø)	TCR (SCR) RQD	Fracture Index	Water	Reduced Level	Legend	Depth (Thickness)	Description		
							Discontinuity Detail	Main	
(140mm)	100 (67) 57	7		0.29	x x	11.80	10.80-10.85m ... non-intact. 10.80-11.80m ... horizontal to subhorizontal (0-10 degrees) medium locally closely spaced planar locally undulating rough locally smeared (clay) and stained (grey) discontinuities. 10.85-11.05m ... 1No. subvertical (80 degrees) planar locally undulating rough smooth stained (orange brown) discontinuity. 11.13-11.20m ... non-intact.	Moderately weak to medium strong light grey SILTSTONE unweathered locally partially weathered. <i>(continued)</i>	
Complete at 11.80m BGL.									

Drilling Progress and Water Observations				Standard Penetration Test			Flush			General Remarks
Date	Depth	Casing	Water Standing	Depth	Type	Result	From - To	Type	Returns (%)	
30/04/2020	11.80	6.80	9.37							

All dimensions in metres Scale 1:25	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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DRILLHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454511.473 N:520862.590		PRAIRIE_AUK_BH109
Method (Equipment): Percussion/Rotary (Dando 2000/Boart Longyear DB540)	Ground Level (m): 12.085	Start Date: 23/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_BH109.1
6.80-8.80m BGL



Figure PRAIRIE_AUK_BH109.2
8.80-11.80m BGL





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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH110	
Client: South Tees Development Corporation		Location: E:454320.946 N:521308.856	
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)		Ground Level (m): 7.798	Start Date: 20/04/2020
		Sheet: 1 of 2	

SAMPLES & TESTS			STRATA					Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
3.00 3.00-3.45 3.00 3.45	ES1 U2 PID J3	(35) <0.1ppm		6.30		1.50	MADE GROUND (Black clayey very sandy gravel with medium cobble content. Sand is fine to coarse. Gravel is fine to coarse subangular and includes slag, coal, coke, sinter and clinker. Cobbles are subangular and include concrete, slag and red brick. Slag content is 0-25%. Slag is vesicular grey green. Slight diesel odour noted).	
				4.80		3.00	Firm indistinctly laminated orange brown mottled grey slightly sandy CLAY.	
4.00 4.00-4.45	J4 B5			2.80		5.00	Firm thinly laminated brown slightly sandy CLAY with fine yellow brown sand on the laminae. at c.3.00m BGL ... low strength. Clay is of intermediate plasticity. at c.4.00m BGL ... slightly sandy slightly gravelly clay.	
5.00-5.45 5.45	U6 J7	(45)		0.50		7.30	Soft to firm thinly laminated dark brown slightly sandy CLAY with fine yellow brown sand on the laminae. at c.5.00m BGL ... medium strength. Clay is of intermediate plasticity.	
6.00 6.50-6.95 6.50-6.95	SJ9 B10	N13					Firm to stiff red brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular and includes sandstone, mudstone, siltstone and coal.	
7.50	J11							

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
20/04/2020	0.00	0.00	200					(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP149. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP149. (3) Water strike at 10.30m - water level rose to 8.47m BGL (20 mins). (4) 50mm diameter standpipe installed between 16.80-20.80m BGL.
20/04/2020	5.00	4.80	200	Dry				
21/04/2020	5.00	4.80	200	4.36				

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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BOREHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454320.946 N:521308.856	PRAIRIE_AUK_BH110
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)	Ground Level (m): 7.798	Start Date: 20/04/2020
		Sheet: 2 of 2

SAMPLES & TESTS			STRATA					Instrument/ Backfill	
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description		
8.00-8.45	U12	(75)				(2.00)	Firm to stiff red brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular and includes sandstone, mudstone, siltstone and coal. (continued) at c.8.00m BGL ... medium strength.		
8.45	J13								
9.00	J14								
9.50-9.95	SJ15	N59			-1.50		9.30		Stiff to very stiff (friable) red brown sandy slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded and includes sandstone, mudstone, siltstone and coal. at c.9.50m BGL ... clay is of low plasticity.
9.50-9.95	B16								
10.50	J17						(2.90)		
11.00-11.45	U18	(100)							at c.11.00m BGL ... extremely high strength.
11.45	J19								
12.00	J20								
12.50-12.95	SJ21	N98			-4.40		12.20		Stiff to very stiff dark red brown sandy gravelly CLAY. Gravel is fine to coarse subangular and includes sandstone, mudstone, and siltstone.
12.50-12.95	B22						(0.80)		
13.50	J23						(1.40)		Stiff (friable) dark red brown sandy slightly gravelly CLAY with cobbles noted. Gravel is fine to coarse subangular and includes sandstone, mudstone and siltstone. Cobbles are subangular and includes sandstone and mudstone. at c.13.50m BGL ... clay is of low plasticity.
14.00-14.45	B25	100/220mm							
14.00	SJ24								-6.60
14.50	J26								Very weak red brown MUDSTONE destructured with interbeds of gypsum.
15.00-15.45	B28	100/70mm							
15.00	SJ27						(1.40)		
15.50	SJ29	100/50mm							
15.80-16.30	C30					-8.00	15.80	Boring complete at 15.80m BGL - continued by rotary drilling.	

Boring Progress and Water Observations					Chiselling		Water Added	General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From - To	Duration (hh:mm)	From - To	
21/04/2020	13.00	12.80	200	Dry	13.00 - 15.50	6:00		
22/04/2020	13.00	12.80	200	6.74				
22/04/2020	15.80	15.30	200	7.39				

(1) Description derived from drillers daily report.
 (2) Advanced through trial pit PRAIRIE_AUK_TP149. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP149.
 (3) Water strike at 10.30m - water level rose to 8.47m BGL (20 mins).
 (4) 50mm diameter standpipe installed between 16.80-20.80m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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DRILLHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH110	
Client: South Tees Development Corporation		Location: E:454320.946 N:521308.856	
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)		Ground Level (m): 7.798	Start Date: 20/04/2020
		Sheet: 1 of 3	

RUN DETAILS			STRATA					Instrument/ Backfill	
Depth & (Core Ø)	TCR (SCR) RQD	Fracture Index	Water	Reduced Level	Legend	Depth (Thickness)	Description		
							Discontinuity Detail	Main	
15.80 (92mm)	0 (0) 0	NR		-8.00		15.80	15.80-17.00m ... no recovery.	(1) Red MUDSTONE/SANDSTONE. (Driller describes as 'very weak').	
16.30 (92mm)	0 (0) 0					(1.20)			
16.80 (92mm)	80 (32) 21	10		-9.20		17.00	17.00-17.07m ... non-intact. 17.00-17.60m ... horizontal to subhorizontal (0-10 degrees) closely to very closely spaced undulating rough stained (red brown) discontinuities. 17.07-17.20m ... 1No. subvertical (80 degrees) undulating rough stained (red brown) discontinuity. 17.20-17.35m ... non-intact.	Moderately weak to strong red brown MUDSTONE partially weathered, locally destructured, with many interbeds of gypsum.	
17.80 (92mm)	100 (37) 23	10					17.60-17.90m ... non-intact.		
17.80 (92mm)		NI					17.90-18.40m ... horizontal to subhorizontal (0-10 degrees) closely to very closely spaced undulating rough stained (red brown) discontinuities. 17.96-18.07m ... non-intact. 18.14-18.30m ... 1No. subvertical (80 degrees) planar smooth closed stained (red brown) discontinuity.		
17.80 (92mm)		10					18.40-18.70m ... non-intact.		
19.30 (92mm)	67 (35) 27	NR				(3.80)	18.70-18.80m ... 1No. subvertical (80 degrees) planar smooth open stained (red brown) discontinuity. 18.70-19.30m ... horizontal to subhorizontal (0-10 degrees) closely to very closely spaced undulating rough stained (red brown) discontinuities. 18.80-18.95m ... non-intact.		
19.30							19.30-19.80m ... no recovery.		

Drilling Progress and Water Observations				Standard Penetration Test			Flush			General Remarks
Date	Depth	Casing	Water Standing	Depth	Type	Result	From - To	Type	Returns (%)	
01/05/2020	15.80	15.80	14.28				15.80 - 16.30	W	100	(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP149. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP149. (3) Water strike at 10.30m - water level rose to 8.47m BGL (20 mins). (4) 50mm diameter standpipe installed between 16.80-20.80m BGL.
01/05/2020	19.30	15.80	12.37				16.30 - 16.80	W	100	
04/05/2020	19.30	15.80					16.80 - 17.80	W	100	
							17.80 - 19.30	W	100	
							19.30 - 20.80	W	100	

All dimensions in metres Scale 1:25	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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DRILLHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_BH110
Client: South Tees Development Corporation	Location: E:454320.946 N:521308.856	
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)	Ground Level (m): 7.798	Start Date: 20/04/2020
		Sheet: 2 of 3

RUN DETAILS			STRATA					Instrument/ Backfill	
Depth & (Core Ø)	TCR (SCR) RQD	Fracture Index	Water	Reduced Level	Legend	Depth (Thickness)	Description		
							Discontinuity Detail		Main
(92mm)		10		-13.00	[Legend symbols]	20.80	19.80-20.06m ... non-intact. 19.80-20.80m ... horizontal to subhorizontal (0-10 degrees) closely to very closely spaced undulating rough stained (red brown) discontinuities.	Moderately weak to strong red brown MUDSTONE partially weathered, locally destructured, with many interbeds of gypsum. (continued)	[Backfill symbols]
							20.13-20.20m ... 1No. oblique (30 degrees) undulating rough open stained (red brown) discontinuity.		
							20.62-20.72m ... non-intact.		
							Complete at 20.80m BGL.		

Drilling Progress and Water Observations				Standard Penetration Test			Flush			General Remarks
Date	Depth	Casing	Water Standing	Depth	Type	Result	From - To	Type	Returns (%)	
04/05/2020	20.80	15.80	15.20							(1) Description derived from drillers daily report. (2) Advanced through trial pit PRAIRIE_AUK_TP149. Descriptions between 0.00-3.00m BGL derived from PRAIRIE_AUK_TP149. (3) Water strike at 10.30m - water level rose to 8.47m BGL (20 mins). (4) 50mm diameter standpipe installed between 16.80-20.80m BGL.

All dimensions in metres Scale 1:25	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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DRILLHOLE RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454320.946 N:521308.856		PRAIRIE_AUK_BH110
Method (Equipment): Percussion/Rotary (Dando 2000/Comacchio Geo 305)	Ground Level (m): 7.798	Start Date: 20/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_BH110.1
15.80-19.30m BGL



Figure PRAIRIE_AUK_BH110.2
19.30-20.80m BGL



Trial Pit Records



Trial Pit Summary Table

Exploratory Hole Number	Excavation Method	Completion Depth (m BGL)	Remarks
PRAIRIE_AUK_TP101	Machine excavated	4.50	Advanced to required depth.
PRAIRIE_AUK_TP102	Machine excavated	4.30	Advanced to required depth
PRAIRIE_AUK_TP103	Machine excavated	1.70	Terminated due to close proximity to sewer.
PRAIRIE_AUK_TP104	Machine excavated	4.00	Advanced to required depth.
PRAIRIE_AUK_TP105	Machine excavated	4.40	Continued as PRAIRIE_AUK_BH104. Terminated due to slow progress.
PRAIRIE_AUK_TP106	Machine excavated	3.50	Advanced to required depth.
PRAIRIE_AUK_TP107	Machine excavated	3.00	Continued as PRAIRIE_AUK_BH103. Advanced to required depth.
PRAIRIE_AUK_TP108	Machine excavated	4.00	Terminated due to possible concrete.
PRAIRIE_AUK_TP109	Machine excavated	3.10	Advanced to required depth.
PRAIRIE_AUK_TP110	Machine excavated	4.50	Advanced to required depth.
PRAIRIE_AUK_TP111	Machine excavated	3.20	Advanced to required depth.
PRAIRIE_AUK_TP112	Machine excavated	3.40	Advanced to required depth.
PRAIRIE_AUK_TP113	Machine excavated	3.80	Terminated due to concrete plinth and groundwater ingress.
PRAIRIE_AUK_TP114	Machine excavated	2.00	Terminated due to water ingress and instability.
PRAIRIE_AUK_TP115	Machine excavated	3.10	Terminated due to water ingress.
PRAIRIE_AUK_TP116	Machine excavated	3.90	Advanced to required depth.
PRAIRIE_AUK_TP117	Machine excavated	3.30	Terminated due to instability.
PRAIRIE_AUK_TP118	Machine excavated	3.00	Advanced to required depth.
PRAIRIE_AUK_TP119	Machine excavated	3.20	Advanced to required depth.
PRAIRIE_AUK_TP120	Machine excavated	1.50	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP120A	Machine excavated	2.90	Advanced to required depth.
PRAIRIE_AUK_TP121	Machine excavated	4.50	Continued as PRAIRIE_AUK_BH102. Advanced to required depth.
PRAIRIE_AUK_TP122	Machine excavated	1.20	Terminated due to fast water ingress.
PRAIRIE_AUK_TP123	Machine excavated	2.80	Terminated due to brick structure.
PRAIRIE_AUK_TP124	Machine excavated	3.00	Advanced to required depth.
PRAIRIE_AUK_TP125	Machine excavated	0.20	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP125A	Machine excavated	1.20	Terminated due to concrete base.
PRAIRIE_AUK_TP126	Machine excavated	2.70	Terminated due to concrete base.
PRAIRIE_AUK_TP127	Machine excavated	1.70	Terminated due to concrete base.
PRAIRIE_AUK_TP127A	Machine excavated	3.00	Continued as PRAIRIE_AUK_BH101. Advanced to required depth.
PRAIRIE_AUK_TP128	Machine excavated	1.10	Terminated due to services.



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Exploratory Hole Number	Excavation Method	Completion Depth (m BGL)	Remarks
PRAIRIE_AUK_TP129	Machine excavated	2.30	Advanced to required depth.
PRAIRIE_AUK_TP130	Machine excavated	2.40	Advanced to required depth.
PRAIRIE_AUK_TP131	Machine excavated	4.50	Continued as PRAIRIE_AUK_BH106. Advanced to required depth.
PRAIRIE_AUK_TP132	Machine excavated	2.30	Terminated due to concrete channel.
PRAIRIE_AUK_TP132A	Machine excavated	1.60	Terminated due to concrete structure and metal cables.
PRAIRIE_AUK_TP133	Machine excavated	2.00	Advanced to required depth.
PRAIRIE_AUK_TP134	Machine excavated	2.60	Advanced to required depth.
PRAIRIE_AUK_TP135	Machine excavated	3.00	Continued as PRAIRIE_AUK_BH105. Advanced to required depth.
PRAIRIE_AUK_TP136	Machine excavated	3.10	Advanced to required depth.
PRAIRIE_AUK_TP137	Machine excavated	2.90	Advanced to required depth.
PRAIRIE_AUK_TP138	Machine excavated	2.60	Terminated due to instability.
PRAIRIE_AUK_TP139	Machine excavated	1.20	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP139A	Machine excavated	0.30	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP139B	Machine excavated	4.00	Advanced to required depth.
PRAIRIE_AUK_TP140	Machine excavated	2.60	Advanced to required depth.
PRAIRIE_AUK_TP141	Machine excavated	3.00	Terminated due to concrete base.
PRAIRIE_AUK_TP142	Machine excavated	1.70	Terminated due to concrete base.
PRAIRIE_AUK_TP143	Machine excavated	1.80	Terminated due to water ingress.
PRAIRIE_AUK_TP144	Machine excavated	1.20	Terminated due to concrete base.
PRAIRIE_AUK_TP145	Machine excavated	3.50	Advanced to required depth.
PRAIRIE_AUK_TP146	Machine excavated	0.30	Terminated due to concrete base.
PRAIRIE_AUK_TP146A	Machine excavated	0.10	Terminated due to concrete base.
PRAIRIE_AUK_TP146B	Machine excavated	0.60	Terminated due to concrete base.
PRAIRIE_AUK_TP146C	Machine excavated	3.00	Advanced to required depth.
PRAIRIE_AUK_TP147	Machine excavated	1.80	Terminated due to concrete base.
PRAIRIE_AUK_TP148	Machine excavated	1.20	Terminated due to concrete base.
PRAIRIE_AUK_TP148A	Machine excavated	2.00	Terminated due to concrete/slag base.
PRAIRIE_AUK_TP149	Machine excavated	3.00	Continued as PRAIRIE_AUK_BH110. Advanced to required depth.
PRAIRIE_AUK_TP150	Machine excavated	2.20	Terminated due to service.
PRAIRIE_AUK_TP151	Machine excavated	4.20	Advanced to required depth.
PRAIRIE_AUK_TP152	Machine excavated	2.10	Advanced to required depth.
PRAIRIE_AUK_TP153	Machine excavated	2.40	Advanced to required depth.



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Exploratory Hole Number	Excavation Method	Completion Depth (m BGL)	Remarks
PRAIRIE_AUK_TP154	Machine excavated	3.10	Advanced to required depth.
PRAIRIE_AUK_TP155	Machine excavated	2.20	Advanced to required depth.
PRAIRIE_AUK_TP156	Machine excavated	0.60	Terminated due to concrete base.
PRAIRIE_AUK_TP156A	Machine excavated	2.50	Continued as PRAIRIE_AUK_BH108. Advanced to required depth.
PRAIRIE_AUK_TP157	Machine excavated	1.10	Terminated due to concrete base.
PRAIRIE_AUK_TP157A	Machine excavated	1.30	Terminated due to concrete base.
PRAIRIE_AUK_TP157B	Machine excavated	3.50	Terminated due to concrete boulders.
PRAIRIE_AUK_TP158	Machine excavated	3.20	Advanced to required depth.
PRAIRIE_AUK_TP159	Machine excavated	2.50	Advanced to required depth.
PRAIRIE_AUK_TP160	Machine excavated	2.10	Terminated due to service.
PRAIRIE_AUK_TP161	Machine excavated	2.70	Advanced to required depth.
PRAIRIE_AUK_TP162	Machine excavated	4.00	Advanced to required depth.
PRAIRIE_AUK_TP163	Machine excavated	2.40	Advanced to required depth.
PRAIRIE_AUK_TP164	Machine excavated	3.80	Advanced to required depth.
PRAIRIE_AUK_TP165	Machine excavated	3.30	Terminated due to concrete base.
PRAIRIE_AUK_TP166	Machine excavated	1.50	Advanced to required depth.
PRAIRIE_AUK_TP167	Machine excavated	2.60	Terminated due to concrete base.
PRAIRIE_AUK_TP168	Machine excavated	2.10	Advanced to required depth.
PRAIRIE_AUK_TP169	Machine excavated	2.20	Terminated due to concrete base.
PRAIRIE_AUK_TP170	Machine excavated	1.80	Advanced to required depth.
PRAIRIE_AUK_TP171	Machine excavated	2.10	Advanced to required depth.
PRAIRIE_AUK_TP172	Machine excavated	2.10	Terminated due to instability and concrete obstruction.
PRAIRIE_AUK_TP173	Machine excavated	2.70	Advanced to required depth.
PRAIRIE_AUK_TP174	Machine excavated	2.60	Advanced to required depth.
PRAIRIE_AUK_TP175	Machine excavated	4.50	Continued as PRAIRIE_AUK_BH109. Advanced to required depth.
PRAIRIE_AUK_TP176	Machine excavated	2.00	Advanced to required depth.
PRAIRIE_AUK_TP177	Machine excavated	2.30	Terminated due to instability and proximity to services.
PRAIRIE_AUK_TP178	Machine excavated	4.50	Advanced to required depth.
PRAIRIE_AUK_TP179	Machine excavated	2.00	Advanced to required depth.
PRAIRIE_AUK_TP180	Machine excavated	0.40	Terminated due to concrete base.
PRAIRIE_AUK_TP181	Machine excavated	2.70	Advanced to required depth.
PRAIRIE_AUK_TP182	Machine excavated	2.70	Continued as PRAIRIE_AUK_BH107. Advanced to required depth.



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Exploratory Hole Number	Excavation Method	Completion Depth (m BGL)	Remarks
PRAIRIE_AUK_TP183	Machine excavated	4.10	Terminated due to concrete slab.
PRAIRIE_AUK_TP184	Machine excavated	1.10	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP185	Machine excavated	4.50	Advanced to required depth.
PRAIRIE_AUK_TP186	Machine excavated	1.80	Terminated due to concrete slab.
PRAIRIE_AUK_TP187	Machine excavated	1.80	Advanced to required depth.
PRAIRIE_AUK_TP188	Machine excavated	2.10	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP189	Machine excavated	3.00	Advanced to required depth.
PRAIRIE_AUK_TP190	Machine excavated	1.00	Terminated due to possible service.
PRAIRIE_AUK_TP190A	Machine excavated	3.00	Advanced to required depth.
PRAIRIE_AUK_TP191	Machine excavated	2.10	Advanced to required depth.
PRAIRIE_AUK_TP192	Machine excavated	2.10	Advanced to required depth.
PRAIRIE_AUK_TP193	Machine excavated	1.00	Advanced to required depth.
PRAIRIE_AUK_TP193A	Machine excavated	4.60	Advanced to required depth.
PRAIRIE_AUK_TP194A	Machine excavated	2.20	Advanced to required depth.
PRAIRIE_AUK_TP194B	Machine excavated	2.80	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP194C	Machine excavated	1.20	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP194D	Machine excavated	1.70	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP194E	Machine excavated	1.20	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP195	Machine excavated	2.10	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP196A	Machine excavated	2.00	Advanced to required depth.
PRAIRIE_AUK_TP196B	Machine excavated	2.90	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP197	Machine excavated	2.80	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP198	Machine excavated	2.60	Terminated due to concrete obstruction.
PRAIRIE_AUK_TP199	Machine excavated	5.20	Advanced to required depth.
PRAIRIE_AUK_TP200A	Machine excavated	2.80	Advanced to required depth.
PRAIRIE_AUK_TP200B	Machine excavated	3.50	Terminated due to concrete/brick base.
PRAIRIE_AUK_TP201	Machine excavated	4.40	Advanced to required depth.





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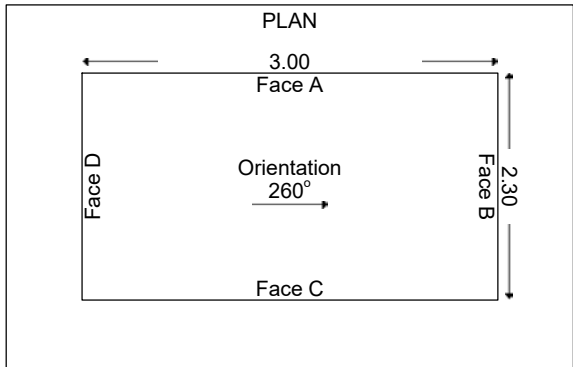
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TRIAL PIT RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_TP101
Client: South Tees Development Corporation	Location: E:455044.456 N:521777.057	
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 8.864	Start Date: 01/04/2020
		Sheet: 1 of 3

SAMPLES & TESTS			STRATA					
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description	
0.10 0.20	J1 B2		Water	8.56	[Cross-hatch pattern]	0.30	MADE GROUND (Black sandy gravel. Gravel is fine to coarse subangular to subrounded and includes roadstone and concrete).	
0.60	J3							MADE GROUND (Black gravelly sand with low cobble content and fragments of tile. Sand is fine to coarse. Gravel is fine to coarse subangular and includes slag, red brick and ash. Cobbles are subangular and include slag. Slag content is 50-75%. Slag is vesicular grey green).
0.90 1.00 1.00	B4 PID ES5	<0.1ppm					(1.50)	
1.80 1.80 1.80 2.10 2.20 2.20 2.50	HSV J6 B7 J8 PID ES9 J10	68 (32)kPa <0.1ppm		Water	7.06	[Cross-hatch pattern]	1.80	MADE GROUND (Firm grey mottled brown slightly sandy clay).
					6.86			2.00
2.80 3.00	HSV B11	53 (22)kPa			6.56	[Horizontal line pattern]	2.30	Firm grey mottled brown slightly sandy CLAY. at c.2.50m BGL ... clay is of high plasticity.
3.50	J12						(2.00)	
4.00	B13							
4.40 4.40 4.50	HSV J14 B15	47 (18)kPa			4.56 4.36	[Dotted pattern]	4.30 4.50	Grey black slightly organic slightly sandy slightly gravelly SILT with many partially decomposed plant remains. Organic odour noted. Complete at 4.50m BGL.



GROUNDWATER
 Groundwater seepage at 2.00m BGL.

STABILITY
 Pit sides stable throughout excavation.

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

GENERAL REMARKS
 n/a

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:455044.456 N:521777.057		PRAIRIE_AUK_TP101
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 8.864	Start Date: 01/04/2020	Sheet: 2 of 3

Figure PRAIRIE_AUK_TP101.1
PRAIRIE_AUK_TP101



Figure PRAIRIE_AUK_TP101.2
PRAIRIE_AUK_TP101





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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:455044.456 N:521777.057		PRAIRIE_AUK_TP101
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 8.864	Start Date: 01/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_TP101.3
PRAIRIE_AUK_TP101 - Spoil



Figure PRAIRIE_AUK_TP101.4
PRAIRIE_AUK_TP101 - Reinstatement





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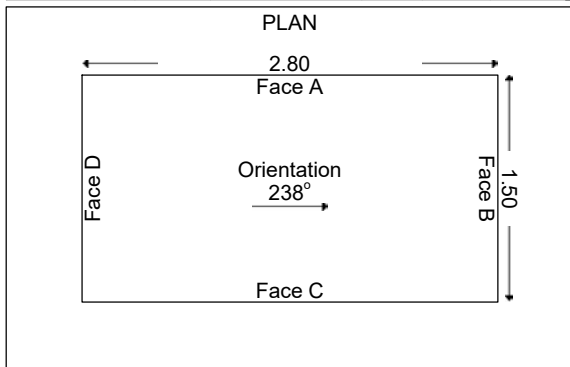
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TRIAL PIT RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_TP102
Client: South Tees Development Corporation	Location: E:455025.690 N:521795.056	
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 8.634	Start Date: 21/04/2020
		Sheet: 1 of 3

SAMPLES & TESTS			Water	STRATA		
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)
0.10 0.20	J1 B2				0.30	MADE GROUND (Grass over topsoil).
0.50 0.50	J3 PID	<0.1ppm			(1.00)	MADE GROUND (Grey black sandy gravel with low cobble and boulder content. Gravel is fine to coarse subangular and includes ash and slag. Slag content is 75-100%. Slag is vesicular green white. Cobbles and boulders are angular and include slag).
1.00 1.00 1.00	ES4 B5 PID	<0.1ppm			1.30	MADE GROUND (Firm, locally thinly laminated, orange red brown mottled grey slightly sandy slightly gravelly clay with fragments of wood. Gravel is fine to coarse subangular and includes mudstone, cement and slag).
1.50 1.50	J6 PID	0.1ppm				at c.1.50m BGL ... clay is of low plasticity.
2.00 2.00 2.00	ES7 B8 PID	0.1ppm				
2.50 2.50	J9 PID	0.2ppm			(3.00)	between c. 2.50-3.50m BGL ... wet clay with rancid stale water odour noted.
3.00 3.00 3.00	B10 ES11 PID	0.4ppm				
3.50 3.50	J12 PID	0.7ppm				
4.00	B13				4.30	at c.4.00m BGL ... whole glass bottle.
Complete at 4.30m BGL.						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides and base stable throughout excavation.

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

GENERAL REMARKS

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:455025.690 N:521795.056		PRAIRIE_AUK_TP102
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 8.634	Start Date: 21/04/2020	Sheet: 2 of 3

Figure PRAIRIE_AUK_TP102.1
PRAIRIE_AUK_TP102



Figure PRAIRIE_AUK_TP102.2
PRAIRIE_AUK_TP102





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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.	
Client: South Tees Development Corporation	Location: E:455025.690 N:521795.056		PRAIRIE_AUK_TP102
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 8.634	Start Date: 21/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_TP102.3
PRAIRIE_AUK_TP102 - Spoil





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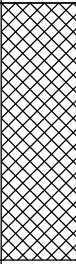
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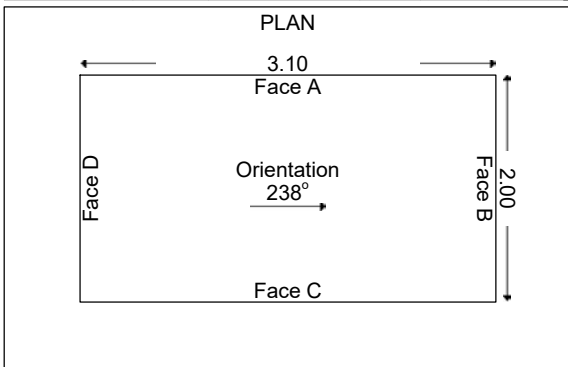
TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454951.742 N:521784.855	PRAIRIE_AUK_TP103
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.692	Start Date: 21/04/2020
		Sheet: 1 of 4

SAMPLES & TESTS			STRATA			
Depth	Type No	Test Result	Water	Reduced Level	Legend	Description
0.50 0.50 0.80 1.00 1.00	J1 PID B2 ES3 PID	<0.1ppm <0.1ppm				MADE GROUND (Black brown sandy gravel with high cobble and medium boulder content. Gravel is fine to coarse subangular to subrounded and includes ash, macadam, concrete, slag, coal and coke. Slag content is 25-50%. Slag is vesicular grey green white with rust (iron) particles. Cobbles and boulders are subangular and include concrete, macadam and slag).
1.50 1.50 1.70	J4 PID J5	<0.1ppm		5.99	1.70	at c.1.70m BGL ... yellow brown sand. Terminated at 1.70m BGL - due to close proximity to sewer.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Face C unstable throughout excavation.

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

GENERAL REMARKS

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454951.742 N:521784.855		PRAIRIE_AUK_TP103
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.692	Start Date: 21/04/2020	Sheet: 2 of 4

Figure PRAIRIE_AUK_TP103.1
PRAIRIE_AUK_TP103



Figure PRAIRIE_AUK_TP103.2
PRAIRIE_AUK_TP103





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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.	
Client: South Tees Development Corporation	Location: E:454951.742 N:521784.855		PRAIRIE_AUK_TP103
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.692	Start Date: 21/04/2020	

Figure PRAIRIE_AUK_TP103.3
PRAIRIE_AUK_TP103



Figure PRAIRIE_AUK_TP103.4
PRAIRIE_AUK_TP103 - Spoil





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TRIAL PIT RECORD

Status:-

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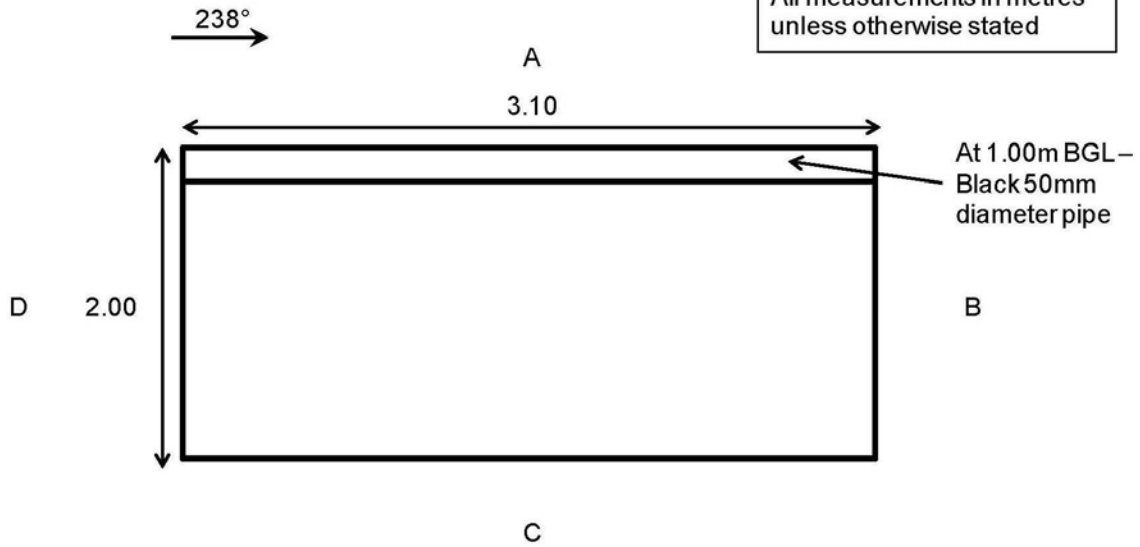
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Client: South Tees Development Corporation	Location: E:454951.742 N:521784.855		PRAIRIE_AUK_TP103
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.692	Start Date: 21/04/2020	Sheet: 4 of 4

Figure PRAIRIE_AUK_TP103.5
PRAIRIE_AUK_TP103 Sketch

PLAN VIEW

Not to scale

All measurements in metres
unless otherwise stated





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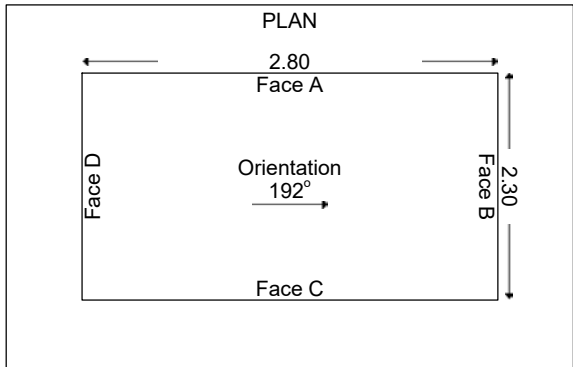
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TRIAL PIT RECORD

Status:-
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Project: Prairie Site Ground Investigation Works		Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:455113.453 N:521688.905	PRAIRIE_AUK_TP104
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 9.251	Start Date: 01/04/2020
		Sheet: 1 of 3

SAMPLES & TESTS			STRATA				
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description
0.00-4.00 0.00-4.00 0.20 0.30	B14 B15 J1 B2			8.85	[Cross-hatch pattern]	(0.40) 0.40	MADE GROUND (Brown sandy gravelly topsoil. Sand is fine to coarse. Gravel is fine to coarse subangular and includes concrete and slag).
0.80 1.00	J3 B4				[Cross-hatch pattern]	(1.20)	MADE GROUND (Grey brown sandy gravel with low cobble content. Gravel is fine to coarse subangular to subrounded and includes slag, concrete, dolomite, red brick and ash. Cobbles are subangular and include red brick and cemented slag. Slag content is 50-75%. Slag is vesicular grey and green, iron rich in places (rust)).
1.50 1.50 1.65 1.65 2.00	PID ES5 J6 B7 J8	<0.1ppm		7.65 7.55	[Cross-hatch pattern]	1.60 1.70	from c. 1.30m BGL ... high cobble content. Cobbles are subangular and include red and yellow brick and concrete.
2.50	B9			6.45	[Cross-hatch pattern]	(1.10) 2.80	MADE GROUND (Firm fissured brown mottled grey slightly sandy clay). MADE GROUND (Firm grey brown slightly sandy clay with some partially decomposed plant remains. Organic odour noted). (Possibly Natural Ground). at c.2.00m BGL ... clay is of intermediate plasticity.
3.00 3.00	HSV J10	87 (22)kPa			[Horizontal lines pattern]	(0.90)	Firm to stiff blue grey mottled brown slightly sandy CLAY.
3.50	B11			5.55	[Horizontal lines pattern]	3.70	
3.80 3.90 4.00	J12 HSV B13	86 (32)kPa		5.25	[Horizontal lines pattern]	4.00	Firm to stiff indistinctly laminated red brown slightly sandy slightly gravelly CLAY with thin laminations of fine yellow sand. Gravel is fine to coarse subangular and includes sandstone, mudstone and siltstone. <i>Complete at 4.00m BGL.</i>



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

GENERAL REMARKS
(1) Samples B14 and B15 taken within spoil by client.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:455113.453 N:521688.905		PRAIRIE_AUK_TP104
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 9.251	Start Date: 01/04/2020	Sheet: 2 of 3

Figure PRAIRIE_AUK_TP104.1
PRAIRIE_AUK_TP104



Figure PRAIRIE_AUK_TP104.2
PRAIRIE_AUK_TP104





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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:455113.453 N:521688.905		PRAIRIE_AUK_TP104
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 9.251	Start Date: 01/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_TP104.3
PRAIRIE_AUK_TP104 - Spoil



Figure PRAIRIE_AUK_TP104.4
PRAIRIE_AUK_TP104 - Reinstatement





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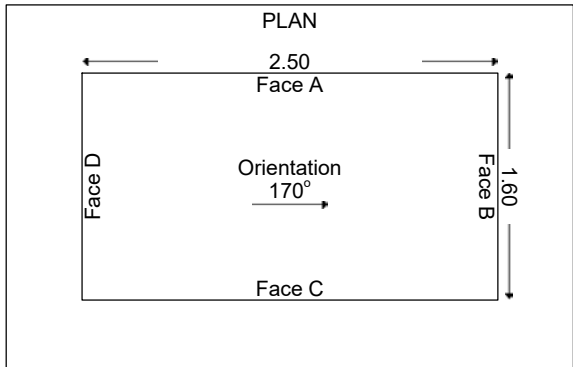
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TRIAL PIT RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_TP105
Client: South Tees Development Corporation	Location: E:455006.172 N:521693.493	
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 8.696	Start Date: 01/04/2020
		Sheet: 1 of 3

SAMPLES & TESTS			STRATA			
Depth	Type No	Test Result	Water	Reduced Level	Legend	Description
0.80	J1			8.65		MADE GROUND (Brown sandy topsoil. Sand is fine to coarse).
1.00	B2					MADE GROUND (Strong grey concrete).
1.20	PID	<0.1ppm		8.10		MADE GROUND (Grey brown sandy gravel with medium cobble content. Gravel is fine to coarse subangular to subrounded and includes slag and concrete. Slag content is 50-75%. Slag is vesicular green grey. Cobbles are subangular and include slag).
1.20	ES3					
1.80	J4					MADE GROUND (Firm brown slightly sandy slightly gravelly clay with low cobble content. Gravel is fine to coarse subangular and includes sandstone, mudstone, slag and red brick. Cobbles are subangular and include red brick and slag. Slag content is 0-25%. Slag is vesicular grey green white). at c.1.80m BGL ... clay is of high plasticity.
2.00	HSV	60 (20)kPa				
2.00	B5					at c.2.00m BGL ... engineer notes red brick dust coating on clay.
2.50	PID	<0.1ppm				
2.50	ES11					
2.80	ES6					
3.00	HSV	64 (24)kPa				
3.00	B7					from c.3.50m BGL ... becoming yellow brown gravelly.
3.80	J8					
4.20	J9			4.50		MADE GROUND (Firm grey brown slightly sandy slightly gravelly clay with some partially decomposed plant remains. Gravel is fine to coarse subangular and include slag and red brick. Slag content is 0-25%. Slag is vesicular grey green white. Organic odour noted). Terminated at 4.40m BGL - due to slow progress.
4.20	B10			4.30		



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

GENERAL REMARKS

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.	
Client: South Tees Development Corporation	Location: E:455006.172 N:521693.493		PRAIRIE_AUK_TP105
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 8.696	Start Date: 01/04/2020	

Figure PRAIRIE_AUK_TP105.1
PRAIRIE_AUK_TP105



Figure PRAIRIE_AUK_TP105.2
PRAIRIE_AUK_TP105





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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:455006.172 N:521693.493		PRAIRIE_AUK_TP105
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 8.696	Start Date: 01/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_TP105.3
PRAIRIE_AUK_TP105 - Spoil



Figure PRAIRIE_AUK_TP105.4
PRAIRIE_AUK_TP105 - Reinstatement





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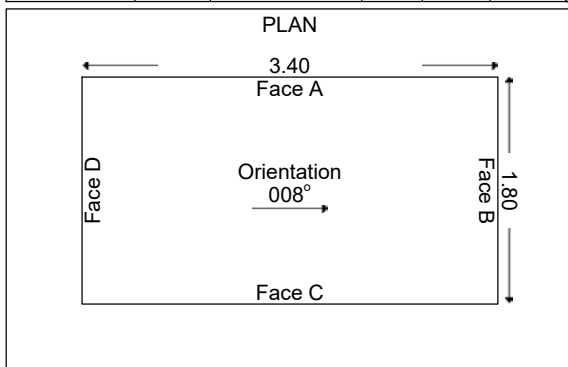
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TRIAL PIT RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454906.605 N:521692.903	PRAIRIE_AUK_TP106
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.889	Start Date: 23/04/2020
		Sheet: 1 of 3

SAMPLES & TESTS			STRATA			
Depth	Type No	Test Result	Water	Reduced Level	Legend	Description
0.50 0.50	J1 PID	<0.1ppm				MADE GROUND (Brown clayey sandy gravel with high cobble and boulder content and fragments of metal, wire, wood, metal spanner and plastic. Gravel is fine to coarse subangular and includes concrete, refractory brick, red brick and slag. Cobbles are subangular and include red brick and concrete. Boulders are subangular and include concrete. Slag content is 0-25%. Slag is vesicular grey green white).
1.00 1.00	B2 ES3 PID	<0.1ppm		(1.80)		
1.50 1.50	J4 PID	<0.1ppm		6.09		
2.00 2.00	B5 HSV	70 (26)kPa				Firm and stiff yellow brown mottled grey slightly sandy CLAY. at c.2.50m BGL ... clay is of high plasticity.
2.50 2.50	J6 PID	<0.1ppm		5.09		
3.00 3.00	B7 HSV	130 kPa				Stiff to very stiff orange slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular and includes sandstone, mudstone, coal and siltstone. at c.3.50m BGL ... clay is of intermediate plasticity. Complete at 3.50m BGL.
3.50 3.50	J8 PID	<0.1ppm		4.39		



GROUNDWATER
 No groundwater inflow observed.

STABILITY
 Pit sides and base unstable between 0.00-1.80m BGL..

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

GENERAL REMARKS

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.	
Client: South Tees Development Corporation	Location: E:454906.605 N:521692.903		PRAIRIE_AUK_TP106
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.889	Start Date: 23/04/2020	Sheet: 2 of 3

Figure PRAIRIE_AUK_TP106.1
PRAIRIE_AUK_TP106



Figure PRAIRIE_AUK_TP106.2
PRAIRIE_AUK_TP106





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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.	
Client: South Tees Development Corporation	Location: E:454906.605 N:521692.903		PRAIRIE_AUK_TP106
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.889	Start Date: 23/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_TP106.3
PRAIRIE_AUK_TP106 - Spoil





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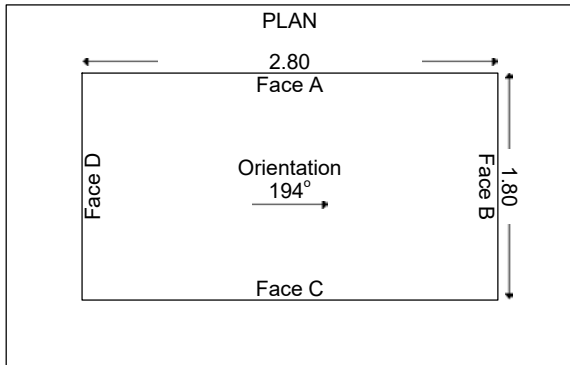
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TRIAL PIT RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_TP107
Client: South Tees Development Corporation	Location: E:454800.537 N:521660.804	
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.683	Start Date: 06/04/2020
		Sheet: 1 of 3

SAMPLES & TESTS			STRATA						
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	Description		
0.05	J1		↓	7.58	[Cross-hatch pattern]	0.10	MADE GROUND (Brown sandy gravelly topsoil. Sand is fine to coarse. Gravel is fine to coarse subangular and includes concrete, red brick and roadstone).		
0.05	B2								
0.50	J3							MADE GROUND (Firm yellow brown mottled grey sandy slightly gravelly clay with medium cobble content and fragments of wood and metal. Gravel is fine to coarse subangular to subrounded and includes red brick and sandstone. Cobbles are subangular and include red brick).	
0.80	PID	<0.1ppm					1.50		
0.80	ES11								
1.00	HSV	72 (34)kPa						at c.0.50m BGL ... clay is of intermediate plasticity.	
1.00	B4								
1.70	J5					6.08		1.60	MADE GROUND (Black gravelly sand with medium cobble content. Sand is fine to coarse. Gravel is fine to coarse subangular and includes ash, macadam, coke and slag. Slag content is 25-50%. Slag is iron rich in places (rust). Cobbles are subangular and include fused coke).
1.80	PID	<0.1ppm					0.50		
1.80	ES6								
2.00	B7			5.58		2.10	Firm to stiff grey brown slightly sandy CLAY. at c.2.30m BGL ... clay if of high plasticity.		
2.30	J8					0.90			
2.50	HSV	67 (34)kPa							
2.50	B9								
2.80	PID	<0.1ppm							
2.80	ES10			4.68		3.00	Complete at 3.00m BGL.		



GROUNDWATER
Water strike at 2.00m BGL.

STABILITY
Pit sides slightly unstable between 1.60-2.10m BGL.

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

GENERAL REMARKS

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No.	
Client: South Tees Development Corporation	Location: E:454800.537 N:521660.804		PRAIRIE_AUK_TP107
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.683	Start Date: 06/04/2020	Sheet: 2 of 3

Figure PRAIRIE_AUK_TP107.1
PRAIRIE_AUK_TP107



Figure PRAIRIE_AUK_TP107.2
PRAIRIE_AUK_TP107





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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454800.537 N:521660.804		PRAIRIE_AUK_TP107
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.683	Start Date: 06/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_TP107.3
PRAIRIE_AUK_TP107 - Spoil





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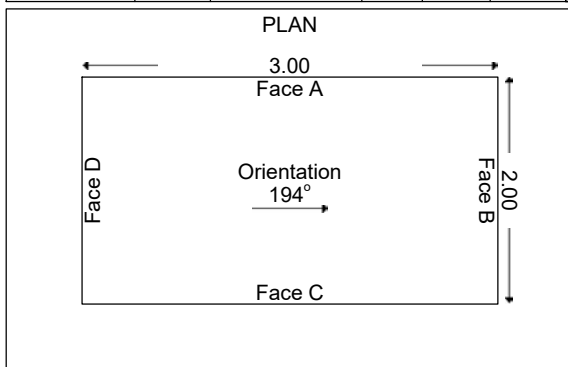
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TRIAL PIT RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works		Exploratory Hole No. PRAIRIE_AUK_TP108	
Client: South Tees Development Corporation		Location: E:454733.443 N:521630.866	
Method (Equipment): Machine Excavated (360 Tracked Excavator)		Ground Level (m): 7.991	Start Date: 06/04/2020
		Sheet: 1 of 3	

SAMPLES & TESTS			Water	STRATA		
Depth	Type No	Test Result		Reduced Level	Legend	Description
0.30	J1				MADE GROUND (Grey sandy gravel. Gravel is fine to coarse subangular and includes roadstone).	
0.50	B2		7.39			
0.80	J3				MADE GROUND (Black grey slightly clayey sandy gravel with high cobble and boulder content and fragments of metal. Gravel is fine to coarse subangular and includes roadstone, slag and coal. Slag content is 50-75%. Slag is vesicular, grey green. Cobbles and boulders are subangular and include slag and partially cemented slag).	
0.90	B4					
1.00	PID	<0.1ppm	6.79			
1.00	ES5					
1.80	J6				MADE GROUND (Grey sandy gravel with high cobble content and fragments of metal, wood and glass. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded and includes slag, red and yellow brick, sinter, concrete, ash and coal. Slag content is 50-75%. Slag is vesicular, grey green white and iron rich in places (rust). Cobbles are subangular and include red brick and yellow refractory brick. Slight hydrocarbon odour). from 2.00m BGL ... 50% cobbles and bricks.	
1.90	B7					
2.00	PID	1.7ppm				
2.00	ES8					
2.80	J9				at c.3.00m BGL ... oily sheen noted.	
2.90	B10					
3.00	PID	0.6ppm				
3.00	ES11					
			3.99		at c.4.00m BGL ... engineer notes possible concrete. <i>Terminated at 4.00m BGL - due to possible concrete.</i>	



GROUNDWATER
 Water strike at 2.30m BGL.

STABILITY
 Pit sides stable throughout excavation.

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

GENERAL REMARKS

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454733.443 N:521630.866		PRAIRIE_AUK_TP108
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.991	Start Date: 06/04/2020	Sheet: 2 of 3

Figure PRAIRIE_AUK_TP108.1
PRAIRIE_AUK_TP108



Figure PRAIRIE_AUK_TP108.2
PRAIRIE_AUK_TP108





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TRIAL PIT RECORD

Status:-

FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:454733.443 N:521630.866		PRAIRIE_AUK_TP108
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 7.991	Start Date: 06/04/2020	Sheet: 3 of 3

Figure PRAIRIE_AUK_TP108.3
PRAIRIE_AUK_TP108 - Spoil



Figure PRAIRIE_AUK_TP108.4
PRAIRIE_AUK_TP108 - Reinstatement





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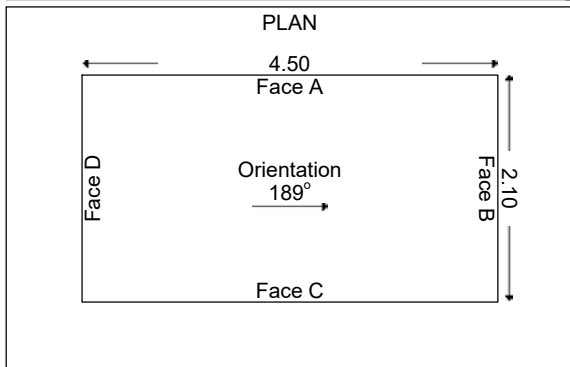
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TRIAL PIT RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No. PRAIRIE_AUK_TP109	
Client: South Tees Development Corporation		Location: E:455108.905 N:521613.046		Sheet: 1 of 3
Method (Equipment): Machine Excavated (360 Tracked Excavator)		Ground Level (m): 9.164	Start Date: 21/04/2020	

SAMPLES & TESTS			STRATA			
Depth	Type No	Test Result	Water	Reduced Level	Legend	Description
0.50 0.50	J1 PID	<0.1ppm	Water	7.36		MADE GROUND (Grey brown sandy gravel with high cobble content. Gravel is fine to coarse subangular to subrounded and includes slag, red brick, concrete and ash. Slag content is 75-100%. Slag is vesicular grey green white. Cobbles are subangular and include slag, red brick and refractory bricks).
1.00 1.00	B2 ES3 PID	0.1ppm				1.80
1.50 1.50 1.70	J4 PID B5	0.1ppm	Water	6.06		Firm to stiff indistinctly laminated orange brown mottled grey slightly sandy CLAY. between c.1.80-1.85m BGL ... possible relict topsoil (plant material).
2.00 2.00 2.00	J6 HSV PID	82 (40)kPa <0.1ppm				1.30
2.70	B7					
3.00 3.00 3.00	J8 HSV PID	103 (40)kPa <0.1ppm				Complete at 3.10m BGL.



GROUNDWATER
 No groundwater inflow observed.

STABILITY
 Pit sides and base moderately stable throughout excavation.

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

GENERAL REMARKS

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W</i>	Logged by: K. Russell-Clamp	Contract No. 4251
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TRIAL PIT RECORD

Status:-
FINAL

Project: Prairie Site Ground Investigation Works			Exploratory Hole No.
Client: South Tees Development Corporation	Location: E:455108.905 N:521613.046		PRAIRIE_AUK_TP109
Method (Equipment): Machine Excavated (360 Tracked Excavator)	Ground Level (m): 9.164	Start Date: 21/04/2020	Sheet: 2 of 3

Figure PRAIRIE_AUK_TP109.1
PRAIRIE_AUK_TP109



Figure PRAIRIE_AUK_TP109.2
PRAIRIE_AUK_TP109

