



Norfolk Partnership Laboratory

Part of the Norse Group

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**Site Investigation
Factual Report
Sheringham
Household Waste Recycling Centre
Holt Road, Sheringham
Norfolk
102894
June 2022**

Client:
Community & Environmental Services
Norfolk County Council
County Hall
Martineau Lane
Norwich
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 Holt Road, Sheringham
 Norfolk
 102894
 June 2022**

| Rev | Date | Originator | Checker | Approver | Description |
|------------|-------------|-------------------|-----------------|-----------------|--------------------|
| A | 09/06/2022 | J Robinson | M L Bumstead | I D Brown | |

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1.0 Executive Summary

| | | | |
|-----------------------------|--|---------------------------------|----------------------|
| Site Location | <ul style="list-style-type: none"> Land located north of the eastern end of the access road to Sheringham Household Waste Recycling Centre (HWRC) on the A148 Holt Road in Sheringham. National Grid Reference 616300,341025 | | |
| Current Land Use | <ul style="list-style-type: none"> The site comprises arable land. | | |
| Historical Land Use | <ul style="list-style-type: none"> The site is shown as a field on the Tithe Map (1836-1850), as it is currently. | | |
| Proposed End Use | <ul style="list-style-type: none"> It is proposed to construct a new Household Waste Recycling Centre. | | |
| Anticipated Geology | Chrono-stratigraphic system | Litho-stratigraphic Unit | Thickness (m) |
| | Pleistocene | Brittons Lane Sand and Gravel | 0-40m |
| | Pleistocene | Bacton Green Till | 10-15m |
| | Pleistocene | Wroxham Crag Formation | 20m |
| Geology Encountered | <ul style="list-style-type: none"> Topsoil – encountered in all Trial Pits and Borehole 09 to a maximum depth of 0.60m bgl, comprising brown, dark brown or dark greyish brown sandy, slightly gravelly Topsoil. Head – encountered in all TP03 to a maximum depth of 0.60m bgl, comprising of dark brown, slightly gravelly, sandy Silt. Brittons Lane Sand and Gravel - encountered in all Trial Pits and Borehole 09, comprising of brown, light brown, orangey brown, yellowish brown and orange gravelly, silty fine to coarse Sand, brown, orangey brown or light brown clayey sandy gravelly Silt and firm orangey brown sandy silty Clay. The maximum depth observed was 8.50m bgl in BH09 Bacton Green Till - encountered Borehole 09, comprising of soft to firm and stiff light brown slightly sandy, slightly gravelly Clay. The maximum depth observed was 15.45m bgl. Crag No encountered during this investigation. | | |
| Groundwater | Not encountered to 15.45 metres depth. Hydrogeological Map of East Anglia indicates that the water table is at approximately 45m AOD, therefore 44m BGL. | | |
| Contamination Issues | None encountered | | |

Table 1: Executive Summary

2.0 Introduction

2.1 Scope and objectives of report

The objective of this Factual Report is to provide geotechnical information for a proposed new residential development, in particular for drainage and pavement design.

The report undertakes an assessment of all geotechnical aspects of the scheme, including:

- The results of recent investigation.

This report is written to conform to the requirements of Eurocode 7: Geotechnical Design, Part 1: General Rules, BS EN 1997-1:2004.

Norfolk Partnership Laboratory provides a service within Norse Highways, a division of Norse Eastern Ltd.

The purpose of this investigation was to ascertain ground conditions so that options for the design of a drainage system can be considered and highways designed.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Although every effort has been made to give a true assessment of the condition of the site, it is possible that different ground conditions may exist in parts of the site that is neither recorded nor visible.

2.2 Description of project

The project is to construct a new household waste recycling centre to replace the existing one located just to the south west. The site is located 3.5 km to the south of Sheringham. The site is centred approximately on Ordnance Survey Grid Reference 616300 341025. The site location is shown on the plan in Appendix A.

2.2.1 *Current Land Use*

The land is currently agricultural and is set aside.

2.2.2 *Surrounding Land Use*

The land is bounded to the north west by an arable field and agricultural storage area and to the south east by an arable field. South of the site is the service road leading to Sheringham Household Waste Recycling Centre, and beyond that the A148 with further arable fields on the other side. To the north, beyond the remainder of the arable field in which the site is situated, is a wooded area which forms part of the Hilltop Outdoor Centre.

2.2.3 *Potential Sources of Contamination*

The potential sources of contamination and background levels of any existing contamination were covered in previous reports by others, comments are made on any potential contamination encountered.

2.3 Geotechnical category of the project

The project is classed as Geotechnical Category 2 under Eurocode 7, which is defined as conventional types of structure and foundations, with no exceptional risk or difficult soil or loading conditions.

2.4 Other Relevant Information

2.4.1 Natural and manmade Cavities

This site is outside the area of known mining activity.

2.4.2 Landslides

Landslides do not pose a major risk at this site.

2.4.3 Erosion and Deposition

No erosion or deposition features were noted within the site.

2.4.4 Seismic

There are no known historical fault lines that affect the site.

3.0 Existing Information

3.1 Previous investigations.

There are no known previous investigations associated with this site.

3.2 Geology

According to British Geological Survey mapping, the geology of the region may be summarised as follows:

| Chrono-stratigraphic system | Litho-stratigraphic Unit | Summary Description | Thickness (m) |
|-----------------------------|------------------------------|---|---------------|
| Holocene | Head | Head comprises poorly sorted and poorly stratified deposits formed by the mass movement of superficial materials on sloping ground. The mass movement processes include hillwash and soil creep as well as solifluction, an important mode of sediment transport in periglacial conditions. Head occurs as a veneer up to a metre or so thick lining the floors and/or lower flanks of the tributary valleys of the district. Head ranges from yellow-brown to dark brown to grey-black and comprises mainly sand with varying proportions of clay, silt, gravel of pebble grade (mostly flint) and sporadic larger rock clasts. | Variable |
| Pleistocene | Britons Lane Sand and Gravel | Briton's Lane Sand and Gravel member consists mainly of planer cross bedding that comprises of gravels and cobbles, with lenses of sand. Lithologically the deposits have a high percentage of flint (78-85%). The parent rock of the Briton's Lane Sand and Gravel is the Briton's Lane Formation, which extends throughout most of north Norfolk. The underlying boundary is well defined with sands and gravels upon the erosional surface of the Sheringham Cliffs Formation. | 0-40 |
| Pleistocene | Bacton Green Till | The Bacton Green Till Member forms an extensive diamicton complex that consists of a stratified assemblage of stony diamicton with beds/laminae of sorted material including sand, silt and clay. It has been interpreted as being a subaqueous till deposited by melt-out and gravity flows (Lunkka, 1994; Lee et al., 2004). The calcium carbonate content of the matrix of the diamicton beds is typically within the region of 10-12% and is some 20% lower than tills from the underlying Lowestoft Formation. | 10-15 |
| Pleistocene | Wroxham Crag | The Wroxham Crag was formed when, after a long period of standing above sea level, the area was submerged by a marine transgression caused by movements of the sea floor during a period of coastal instability in the region. The deposits are a variable series of yellowish or reddish brown sands, laminated clays and pebbly gravels. In places they are highly fossiliferous, shell fragments being especially prolific. | 5-60 |

Table 2: Geological succession of the area of the scheme (based on available literature)

Geology plan extracts from the BGS web site can be found in Appendix B.

3.3 Hydrology and Hydrogeology

According to the Regional Hydrogeology Map of Northern East Anglia, the Norwich Crag is the principle aquifer for the area. The estimated minimum hydrostatic level of the Crag water table in the vicinity of the site is 45 metres above Ordnance Survey Datum. Ground level in the area is around 89 metres above Ordnance Survey Datum. Groundwater is therefore approximately 44 metres below existing ground level.

4.0 Fieldwork

4.1 Description of Fieldwork

As part of the current phase of work, the following investigation took place on the 4 to 6 April 2022, with the Trial pits being excavated on 4 April and the Borehole starting on 5 April.

Eight Trial Pits were excavated to a maximum depth of 3.10 metres. These are referred to as TP01 to TP08.

One Borehole was excavated to a depth of 15.45 metres. This is referred to as BH09

The location of the Trial Pits and Borehole are shown on the location plan in Appendix C.

Within this investigation a number of small, bulk and disturbed samples were taken from the holes, in accordance with BS5930: 2015+A1:2020. The number and depths of these samples along with the details of thickness of strata encountered are set out in Appendices D and E of this report.

4.2 Ground Investigation Report

All data regarding the recent intrusive ground investigation is contained within this report. The Borehole log is located in Appendix D while Trial Pit logs are located in Appendix E of this report

4.3 Geophysical Surveys

No geophysical surveys were carried out as part of this investigation other than Ground Penetrating Radar (GPR) and Cable Avoidance Tool (CAT) scanning for the location of underground utilities

4.4 Pile Tests

No pile testing was undertaken as part of the investigation.

4.5 Other Field Work

No other fieldwork was undertaken.

4.6 Laboratory Investigation

4.6.1 Description of Geotechnical Tests

A laboratory testing schedule were drawn up to assist classification of the soils and to determine their physical and chemical properties. Norfolk Partnership Laboratory is a UKAS TESTING laboratory No. 0920.

The following tests were carried out in-house: -

- a) The determination of Natural Moisture Content by oven drying (BS1377:1990:Part 2: Clause 3).
- b) The determination of Liquid Limit using the four point cone penetrometer method (BS 1377: 1990: Part 2: Clause 4).
- c) The determination of the Plastic Limit (BS1377: 1990: Part 2: Clause 5).
- d) The determination of Plasticity Index (BS 1377: 1990: Part 2: Clause 5).
- e) The determination of Particle Size Distribution by wet sieving (BS1377: 1990: Part 2: Clause 9.2).
- f) The determination of the Moisture Content / Density Relationship (BS1377: Part 4: 1990: Clause 3).
- g) The determination Moisture Condition Value (BS 1377: Part 4: Clause 5)

Copies of the geotechnical test results from the recent phase of investigation are contained within of Appendix F of this report.

4.6.2 Description of Geoenvironmental Tests

- a) Suite ST: Determination of water soluble Ammonium, Chloride, Nitrate, Sulphate and Magnesium; acid soluble Sulphate and total Sulphur. (BRE Digest SD1).
- b) Standard screening suite (Suite SB): Total Sulphate, Boron, Water Soluble, Arsenic, Cadmium, Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Zinc, Acid Soluble Sulphide, Phenols (Monohydric), Total Cyanide, Elemental Sulphur, pH Value, PAH Total, Speciated PAH , Soil Organic Matter (SOM)
- c) Asbestos
- d) Speciated TPH (UKCWG)

5.0 Investigation Results

5.1 Ground conditions

Within this and the following section of the report the geological materials encountered are discussed in turn, and their geotechnical material properties assessed. The ground conditions and material properties derived then form the basis of the geotechnical design criteria described in the Geotechnical Design Report.

5.1.1 *Topsoil*

Topsoil was found as a surface deposit in all excavations. It is generally described as (common variations in brackets):

(Dark, greyish) brown slightly gravelly sandy silty TOPSOIL.

The thickness found was between 0.00 and 0.60 metres in BH09. A mean thickness of 0.33 metres was found to be present in Trial Pits 01 to 08. This material appears visually to be suitable for reuse.

5.1.2 *Head*

Head deposits were positively identified in TP03, beneath the Topsoil. It is described as:

Dark brown, slightly gravelly, sandy SILT.

This horizon was encountered at a depth of 0.35 metres with the base at 0.60 metres, giving a revealed thickness of 0.25 metres.

5.1.3 Britons Lane Sand and Gravel

The Britons Lane Sand and Gravel was encountered in all Trial Pits and BH09. This horizon was encountered below the Topsoil in all excavations except TP03 where it is encountered below the Head. It is described variously as (common variations in brackets) -

(Light, orangey, yellowish) brown or (yellowish, reddish) orange (very) silty, (slightly) gravelly fine to coarse (medium) SAND. Gravel is fine to medium angular to sub rounded flint.

or

Firm orangey brown, sandy, silty CLAY, with large lenses of firm to stiff, light brown, gravelly, very clayey SILT. Gravel is sub-angular to sub -rounded, fine and medium chalk and flint.

Or

(Light) brown (slightly gravelly, clayey) very sandy SILT. Gravel is sub-angular to rounded fine to medium chalk and flint, (with lenses of yellowish brown, fine and medium SAND).

This horizon was encountered at depths of between 0.30 metres in TPs 04, 06, 07 and 08 to 0.60 metres in TP03 and BH09. The base of the horizon was not proven in any of the Trial Pits but was proven in BH09 at 8.50 metres. The maximum revealed thickness was 7.90 metres in BH09.

5.1.3 Bacton Green Till

The Bacton Green Till was only encountered BH09. This horizon was encountered below the Britons Lane Sand and Gravel. It is described as (common variations in brackets) -

Stiff (soft to firm) light brown, slightly sandy, slightly gravelly CLAY. Gravel is sub-angular to sub-rounded, fine to medium chalk and flint, with pockets of orange sand. Occasional chalk boulders were also encountered.

This horizon was encountered at depths of between 0.85 metres and 15.45 metres. The base of the horizon was not proven.

5.2 Engineering properties

5.2.1 *Topsoil*

Topsoil should be removed from beneath all road and housing foundations. Subject to verification it could either be reused on site or disposed of off-site.

5.2.2 *Head*

No geotechnical laboratory testing was carried out on the Head as part of this investigation. Head should be removed from beneath all road and housing foundations.

5.2.3 *Britons Lane Sand and Gravel*

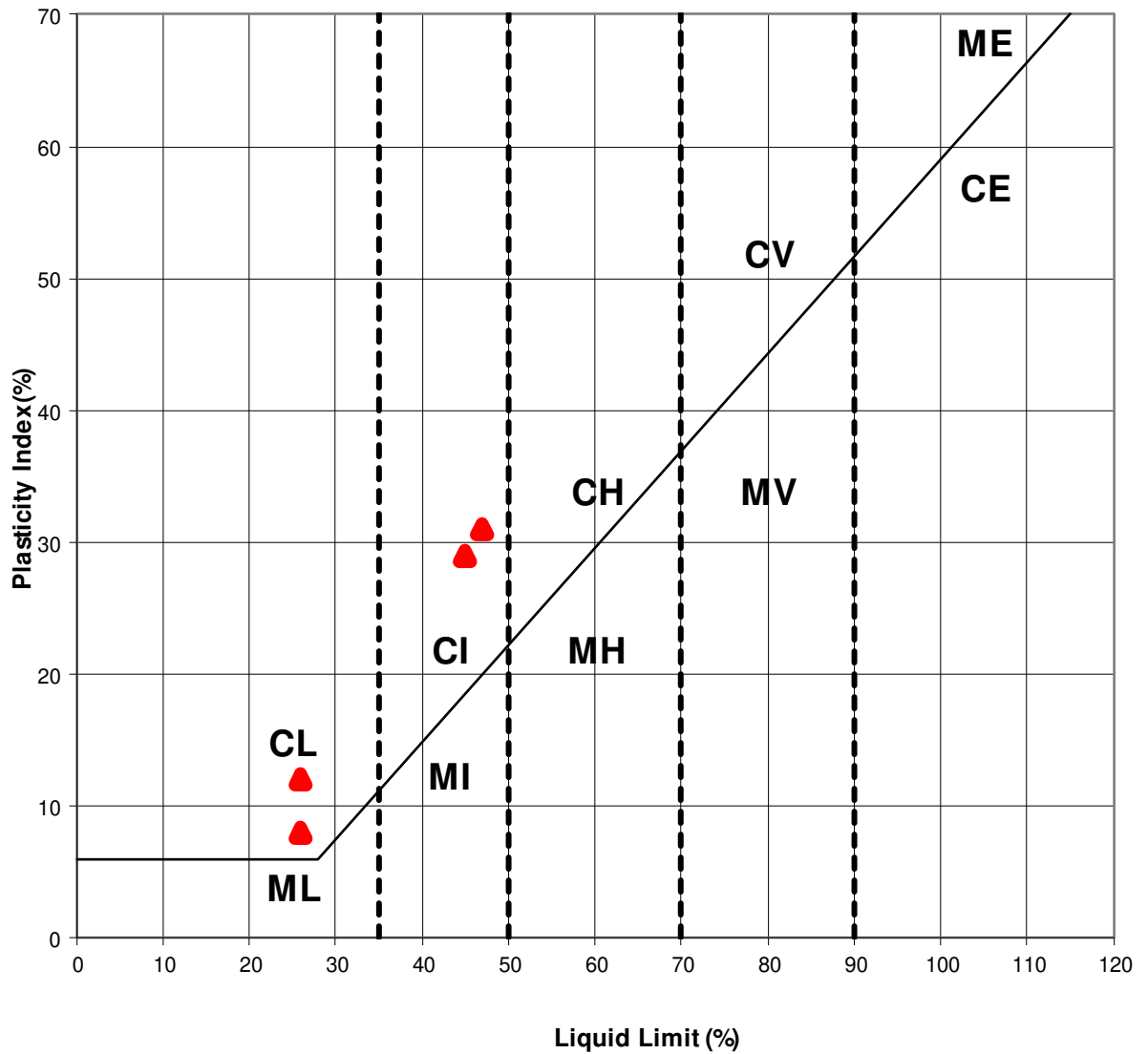
The Britons Lane Sand and Gravel was encountered in all Trial pits and Borehole 9

Four Atterberg Limit test was undertaken on a sample from the Britons Lane Sand and Gravel.

The results are tabulated below:

| Location | Depth (m) | Liquid Limit (%) | Plastic Limit (%) | Plasticity Index (%) | Modified PI (%) | Moisture Content (%) | BS Classification | NHBC Classification |
|----------|-----------|------------------|-------------------|----------------------|-----------------|----------------------|-------------------|---------------------|
| TP02 | 2.7 | 45 | 16 | 29 | 27 | 7.8 | CI | Medium |
| TP03 | 0.6 | 26 | 18 | 8 | 7 | 17 | CL | Non Shrinkable |
| TP03 | 2.7 | 47 | 16 | 31 | 27 | 23 | CI | Medium |
| TP04 | 0.7 | 26 | 14 | 11 | 11 | 14 | CL | Low |

Table 3: Summary of Atterburg Limits in Britons Lane Sand and Gravel.



▲ BRITONS LANE SAND AND GRAVEL

Figure 1: Atterberg Limits A line plot – Britons Lane Sand and Gravel

Twenty two Particle Size Distribution tests were carried out on the Briton's Lane Sand and Gravel and fall within the following grading envelope.

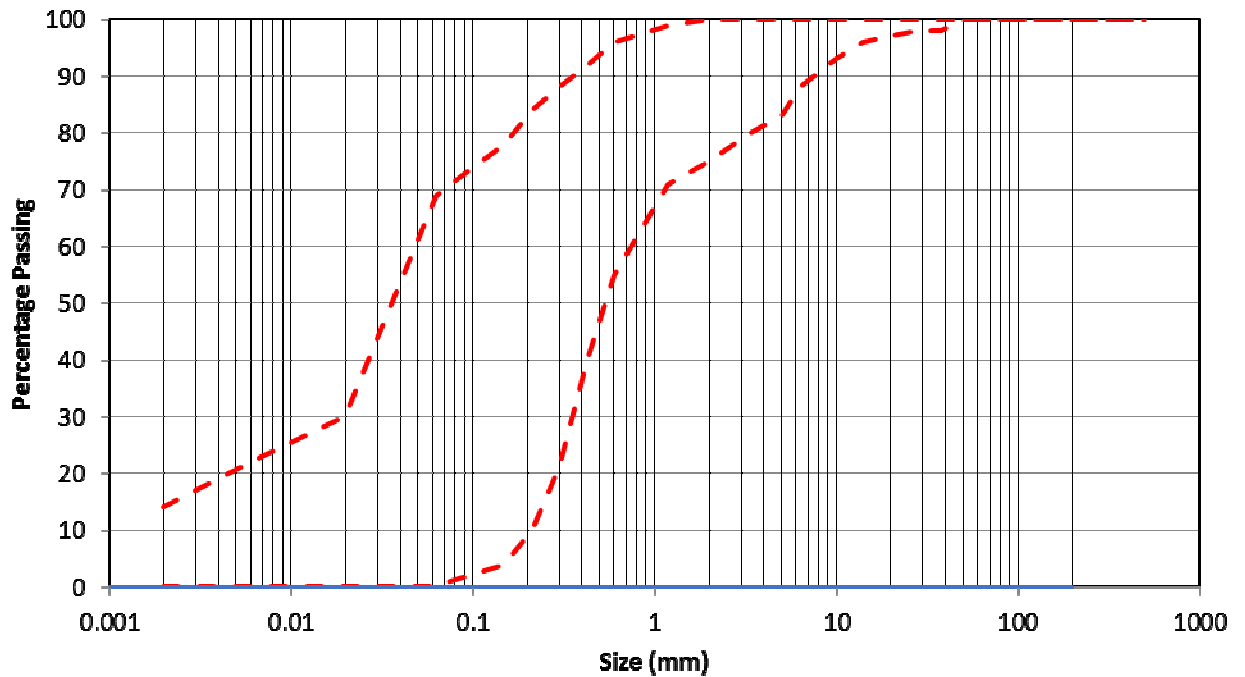


Figure 2: PSD envelope – Britons Lane Sand and Gravel.

Eight CBR tests were carried out in the Britons Lane Sand and Gravel as part of this investigation. Results are summarised below:

| Location | Depth (m) | CBR (Top) (%) | CBR (Bottom) (%) | CBR (Design) (%) |
|----------|-----------|---------------|------------------|------------------|
| TP01 | 0.70 | 14 | 16 | 15 |
| TP02 | 0.70 | 18 | 22 | 21* |
| TP03 | 0.60 | 1.7 | 1.5 | 1.6 |
| TP04 | 0.70 | 4.3 | 5.7 | 5.3* |
| TP05 | 0.70 | 10 | 15 | 14* |
| TP06 | 0.70 | 13 | 19 | 18* |
| TP07 | 0.60 | 13 | 16 | 15* |
| TP08 | 0.70 | 24 | 34 | 32* |

*The design CBR calculation is outside the British Standard where top and bottom values are not within 10%.

Table 4: CBR summary – Britons Lane Sand and Gravel

The CBR values vary from 1.6% to 32%. It is recommended that a design CBR value of 5% is adopted for pavement design, this will however require further investigation of the area around TP03 to delineate both the vertical and horizontal extent of the soft spot. This should then be removed if present at formation and replaced with suitable material to achieve the design CBR value.

The samples were then tested at a series of moisture contents to establish the Dry Density/Moisture Content Relationship. The results are summarised below.

| Location | Depth (m) | Max Dry Density (Mg/m ³) | Optimum Moisture Content (%) |
|----------|-----------|--------------------------------------|------------------------------|
| TP01 | 1.80 | 1.72 | 16.6 |
| TP02 | 0.70 | 1.89 | 12.9 |
| TP03 | 0.60 | 1.87 | 10.0 |
| TP04 | 0.70 | 2.01 | 10.5 |
| TP05 | 1.70 | 1.83 | 15.8 |
| TP06 | 0.70 | 1.73 | 6.7 |
| TP07 | 1.70 | 1.66 | 7.4 |
| TP08 | 1.70 | 1.73 | 8.0 |

Table 5: CBR summary – Britons Lane Sand and Gravel

5.2.3 Bacton Green Till

The Bacton Green Till was only encountered in Borehole 09.

No geotechnical laboratory testing was carried out on the Bacton Green Till as part of this investigation. Head should be removed from beneath all road and housing foundations.

5.3 Geoenvironmental testing

5.3.1 *Geoenvironmental Soils testing*

5.3.1 *Samples tested*

The schedule of geoenvironmental testing can be seen tabulated below.

| Location | Depth (m) | Tests |
|----------|-----------|-----------------------------------|
| 1 | 0.1 | Suite SB, Speciated TPH, Asbestos |
| 1 | 0.7 | Suite ST |
| 2 | 0.1 | Suite SB, Speciated TPH, Asbestos |
| 2 | 1.4 | Suite ST |
| 3 | 0.1 | Suite ST |
| 3 | 0.6 | Suite SB, Speciated TPH, Asbestos |
| 4 | 0.1 | Suite SB, Speciated TPH, Asbestos |
| 4 | 0.7 | Suite ST |
| 5 | 0.1 | Suite SB, Speciated TPH Asbestos |
| 6 | 0.7 | Suite SB, Speciated TPH, Asbestos |
| 6 | 2.4 | Suite ST |
| 7 | 0.1 | Suite SB, Speciated TPH, Asbestos |
| 7 | 0.6 | Suite ST |
| 8 | 0.1 | Suite SB, Speciated TPH, Asbestos |
| 8 | 2.8 | Suite ST |
| 9 | 5.0 - 5.5 | Suite ST |

Table 6: Geoenvironmental soil test schedule summary

Suite SB = General contamination suite including testing for: Total Sulphate, Boron, Water Soluble, Arsenic, Cadmium, Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Zinc, Acid Soluble Sulphide, Phenols (Monohydric), Total Cyanide, Elemental Sulphur, pH Value, PAH Total, Speciated PAH , Soil Organic Matter (SOM).

Suite ST - Determination of water soluble Ammonium, Chloride, Nitrate, Sulphate and Magnesium; acid soluble Sulphate and total Sulphur. (BRE Digest SD1).

A total of eight samples were tested in accordance with BRE Special Digest 1 (SD1) (NPL Suite ST) and a further eight samples were tested as part of Suite SB to check for the presence of sulphates. Results are summarised below:

| Determinant | No of tests | Min | Max | Characteristic value |
|-----------------------------|-------------|-------|------|----------------------|
| pH | 16 | 7.2 | 8.46 | 7.33 |
| Ammonium (mg/l) | 8 | <1.0 | 1.27 | 1.26 |
| Chloride (mg/l) | 8 | <7 | <7 | 7 |
| Nitrate (mg/l) | 8 | <0.4 | 13.3 | 7.4 |
| Sulphate (Water sol) (mg/l) | 16 | <10 | 18 | 13 |
| Sulphate (Acid sol) (%) | 16 | <0.02 | 0.03 | 0.03 |
| Sulphur (%) | 8 | <0.01 | 0.02 | 0.02 |
| Magnesium (mg/l) | 8 | <1 | 13 | 10.5 |

Table 7: BRE SD1 Result summary

Complete geoenvironmental test results are contained in Appendix G.

5.4 Infiltration Testing

Infiltration testing was carried out in two trial pits in accordance with BRE365. Three runs were carried out in all pits. Results are summarised below, full results can be found in Appendix H.

| Location | Run 1 (m/sec) | Run 2 (m/sec) | Run 3 (m/sec) | Accepted result (m/sec) |
|----------|----------------------|----------------------|----------------------|-------------------------|
| TP07 | 8.0×10^{-5} | 4.8×10^{-5} | 4.2×10^{-5} | 4.2×10^{-5} |
| TP08 | 6.5×10^{-5} | 4.8×10^{-5} | 3.5×10^{-5} | 3.5×10^{-5} |

Table 8: Trial Pit Infiltration test summary

5.5 In Situ Tests

No in situ testing was carried out as part of this investigation.

5.6 Groundwater observations

No groundwater was encountered as part of this investigation.

5.7 Ground gas observations

No ground gas monitoring was carried out as part of this investigation.

Norfolk Partnership Laboratory

Site Investigation Section

This report was prepared under the direction of

Lead Engineer



Ian Brown

Report checked by

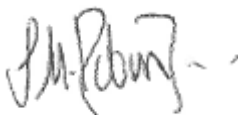
Geotechnical Services Manager



M L Bumstead
MSC BSc FGS

Author of report

Project Engineer



Jill Robinson

Date: 09/06/2022

Appendix A



DRAWING TITLE

SHERINGHAM HWRC
GROUND INVESTIGATION
SITE LOCATION PLAN

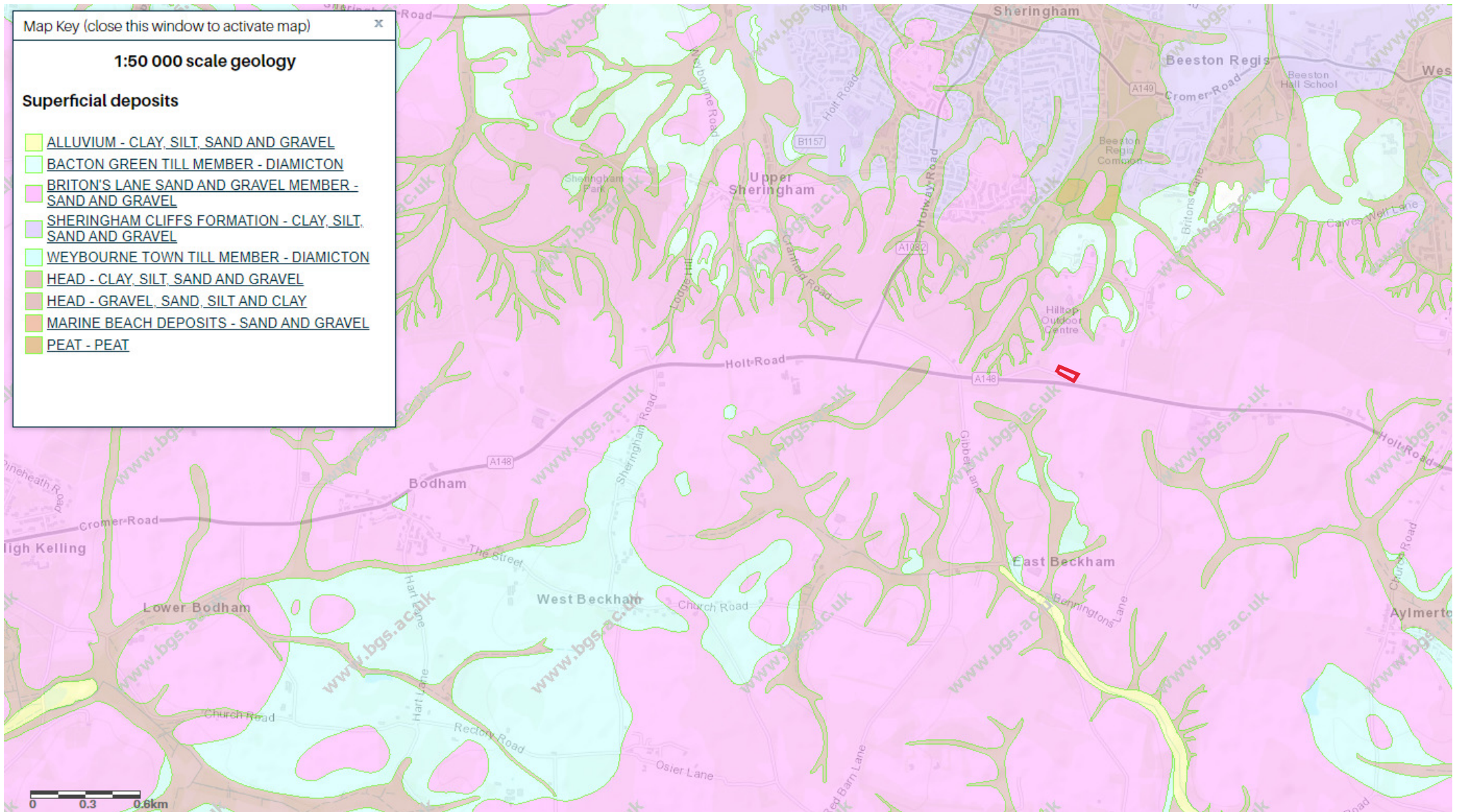
Tom McCabe
Executive Director of
Community and Environmental Services
Norfolk County Council
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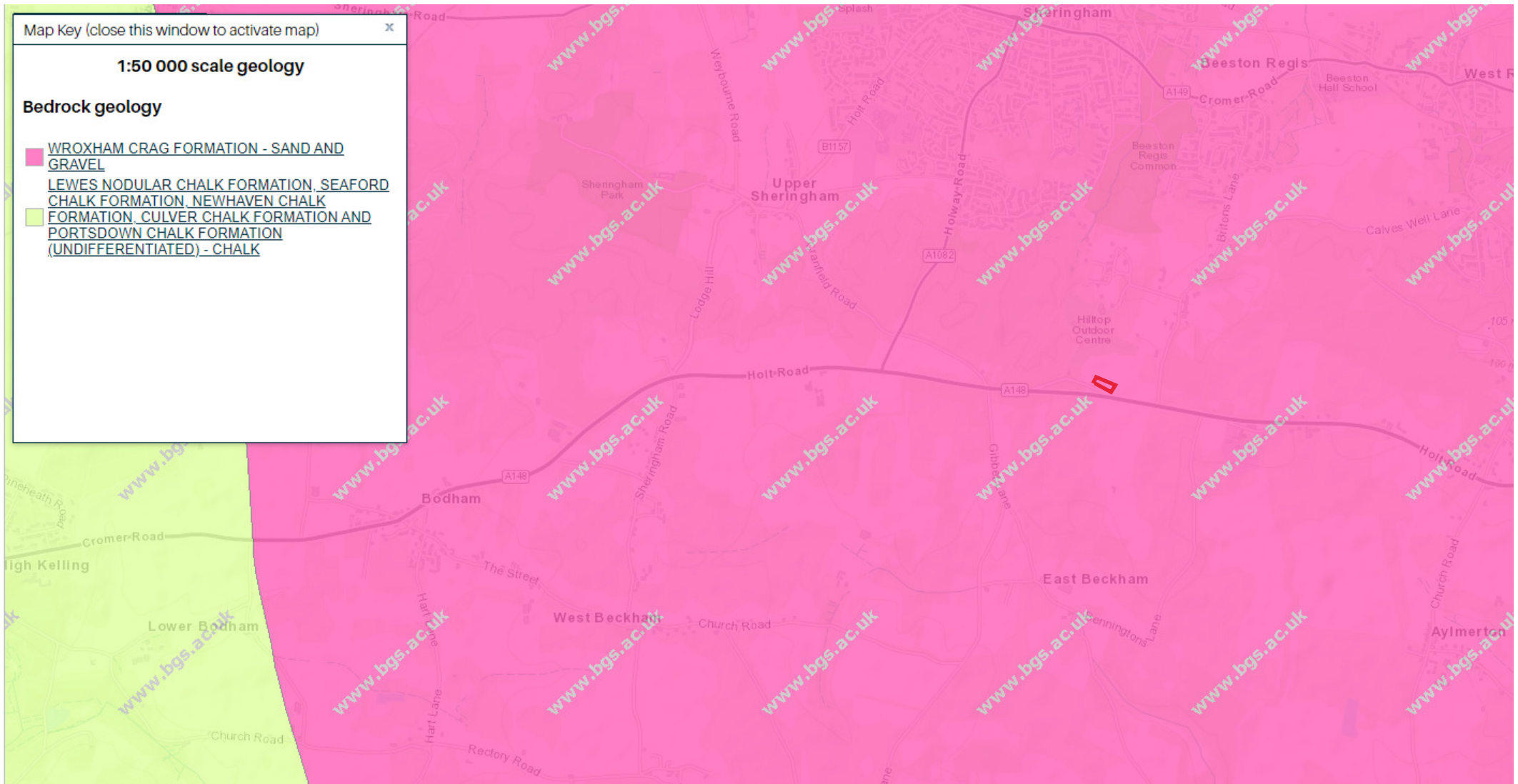
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Appendix B

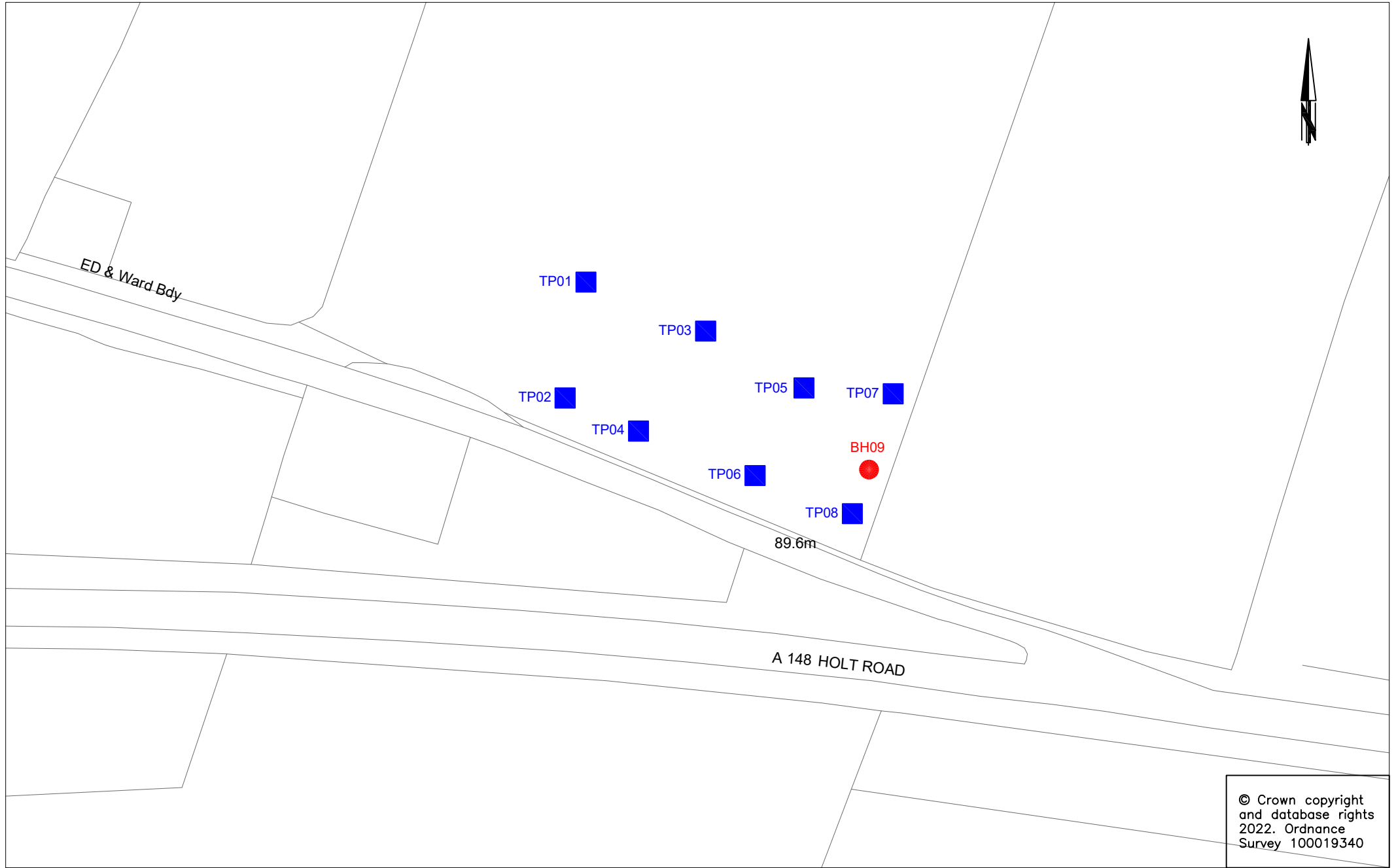


SUPERFICIAL GEOLOGY



BEDROCK GEOLOGY

Appendix C



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DRAWING TITLE
SHERINGHAM HWRC
GROUND INVESTIGATION
TP AND BH LOCATION PLAN

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| CHECKED BY MB | 05/22 | FILE No. 102894 |

Appendix D

Appendix E

Appendix F

Community & Environmental Services

Email: civil.laboratory@norsegroup.co.uk

FAO N Young

Norfolk County Council
County Hall
Martineau Lane
Norwich
NR1 2SG

Our Reference No. NNPL2022040810

Our Project No 102894

Your Sample Ref B4

Your Project or Order No. 708523

Date Report Issued 31 May 2022

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**Determination of Liquid Limit to BS1377-2:1990 CI 4.3 Cone Penetrometer (Definitive Method) (Withdrawn)
and Determination of Plasticity Index to BS1377-2:1990 CI 5 (Withdrawn)**

| | | | |
|---------------------|-----------------|------------------------|-------------|
| Scheme | Sheringham HWRC | | |
| Location | TP02 | Depth | 2.7m |
| Date sampled | 05 Apr 2022 | Date received | 05 Apr 2022 |
| Sampled by | KN (NPL Staff) | Date tested | 27 Apr 2022 |
| Sample type | Bulk Disturbed | Sample Mass (g) | 494 |

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| | | | |
|--------------------|---|--|--|
| Material | Soil | | |
| Description | Firm to stiff light brown, slightly gravelly, silty, very sandy CLAY. Gravel is sub-angular to rounded, fine and medium, flint and chalk. | | |

| | | | |
|-----------------|----------------|---------------|---------|
| Supplier | Not applicable | Source | Ex site |
|-----------------|----------------|---------------|---------|

| | |
|--------------------|----------------------|
| | Test Specimen |
| Location | Not applicable |
| Orientation | Not applicable |

| | |
|---------------------------|----------------------------|
| | Preparation Details |
| Method of Division | Quartering |
| Preparation Method | Wet sieving |
| Retained 425µm (%) | 7.4 |

| | |
|-----------------------------|---------|
| Natural MC (%) | 7.8 |
| Drying Temp. (°C) | 105-110 |
| Liquid Limit (%) | 45 |
| Plastic Limit (%) | 16 |
| Plasticity Index (%) | 29 |
| Modified PI *(%) | 27 |

*BRE Digest 240:1993.

This calculation is outside the scope of UKAS accreditation.

| | |
|-------------------------------|-----|
| BS Soil Classification | C I |
|-------------------------------|-----|

| | |
|----------------|--|
| Remarks | NHBC Volume change potential classification is medium. |
|----------------|--|

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Our Reference No. NNPL2022040812

Our Project No 102894

Your Sample Ref B2

Your Project or Order No. 708523

Date Report Issued 31 May 2022

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**Determination of Liquid Limit to BS1377-2:1990 Cl 4.3 Cone Penetrometer (Definitive Method) (Withdrawn)
and Determination of Plasticity Index to BS1377-2:1990 Cl 5 (Withdrawn)**

| | | | |
|---------------------|-----------------|------------------------|-------------|
| Scheme | Sheringham HWRC | | |
| Location | TP03 | Depth | 0.6m |
| Date sampled | 05 Apr 2022 | Date received | 05 Apr 2022 |
| Sampled by | KN (NPL Staff) | Date tested | 27 Apr 2022 |
| Sample type | Bulk Disturbed | Sample Mass (g) | 496 |

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| | |
|--------------------|--|
| Material | Soil |
| Description | Orangish brown, gravelly, sandy, CLAY. Gravel is angular to subrounded fine flint. |

| | | | |
|-----------------|----------------|---------------|---------|
| Supplier | Not applicable | Source | Ex site |
|-----------------|----------------|---------------|---------|

| | |
|--------------------|----------------------|
| | Test Specimen |
| Location | Not applicable |
| Orientation | Not applicable |

| | |
|---------------------------|----------------------------|
| | Preparation Details |
| Method of Division | Quartering |
| Preparation Method | Wet sieving |
| Retained 425µm (%) | 10.0 |

| | |
|-----------------------------|---------|
| Natural MC (%) | 17 |
| Drying Temp. (°C) | 105-110 |
| Liquid Limit (%) | 26 |
| Plastic Limit (%) | 18 |
| Plasticity Index (%) | 8 |
| Modified PI *(%) | 7 |

*BRE Digest 240:1993.
This calculation is outside the scope of UKAS accreditation.

| | |
|-------------------------------|----|
| BS Soil Classification | CL |
|-------------------------------|----|

| | |
|----------------|---|
| Remarks | NHBC Volume change potential classification is non-shrinkable |
|----------------|---|

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Your Sample Ref B3

Your Project or Order No. 708523

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**Determination of Liquid Limit to BS1377-2:1990 CI 4.3 Cone Penetrometer (Definitive Method) (Withdrawn)
and Determination of Plasticity Index to BS1377-2:1990 CI 5 (Withdrawn)**

| | | | |
|---------------------|-----------------|------------------------|-------------|
| Scheme | Sheringham HWRC | | |
| Location | TP03 | Depth | 2.7m |
| Date sampled | 05 Apr 2022 | Date received | 05 Apr 2022 |
| Sampled by | KN (NPL Staff) | Date tested | 27 Apr 2022 |
| Sample type | Bulk Disturbed | Sample Mass (g) | 456 |

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| | | | |
|--------------------|---|--|--|
| Material | Soil | | |
| Description | Dark reddish brown slightly gravelly slightly sandy silty CLAY. Gravel is angular to subrounded fine chalk and flint. | | |

| | | | |
|-----------------|----------------|---------------|---------|
| Supplier | Not applicable | Source | Ex site |
|-----------------|----------------|---------------|---------|

| | |
|--------------------|----------------------|
| | Test Specimen |
| Location | Not applicable |
| Orientation | Not applicable |

| | |
|---------------------------|----------------------------|
| | Preparation Details |
| Method of Division | Quartering |
| Preparation Method | Wet sieving |
| Retained 425µm (%) | 11.6 |

| | |
|-----------------------------|---------|
| Natural MC (%) | 23 |
| Drying Temp. (°C) | 105-110 |
| Liquid Limit (%) | 47 |
| Plastic Limit (%) | 16 |
| Plasticity Index (%) | 31 |
| Modified PI *(%) | 27 |

*BRE Digest 240:1993.

This calculation is outside the scope of UKAS accreditation.

| | |
|-------------------------------|-----|
| BS Soil Classification | C I |
|-------------------------------|-----|

| | |
|----------------|--|
| Remarks | NHBC Volume change potential classification is medium. |
|----------------|--|

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**Determination of Liquid Limit to BS1377-2:1990 Cl 4.3 Cone Penetrometer (Definitive Method) (Withdrawn)
and Determination of Plasticity Index to BS1377-2:1990 Cl 5 (Withdrawn)**

| | | | |
|---------------------|-----------------|------------------------|-------------|
| Scheme | Sheringham HWRC | | |
| Location | TP04 | Depth | 0.7m |
| Date sampled | 05 Apr 2022 | Date received | 05 Apr 2022 |
| Sampled by | KN (NPL Staff) | Date tested | 14 Apr 2022 |
| Sample type | Bulk Disturbed | Sample Mass (g) | 530 |

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| | |
|--------------------|---|
| Material | Soil |
| Description | Light brown, slightly gravelly very sandy, silty CLAY. Gravel is angular to subrounded fine flint and quartz. |

| | | | |
|-----------------|----------------|---------------|---------|
| Supplier | Not applicable | Source | Ex site |
|-----------------|----------------|---------------|---------|

| | |
|--------------------|----------------------|
| | Test Specimen |
| Location | Not applicable |
| Orientation | Not applicable |

| | |
|---------------------------|----------------------------|
| | Preparation Details |
| Method of Division | Quartering |
| Preparation Method | Wet sieving |
| Retained 425µm (%) | 5.6 |

| | |
|-----------------------------|---------|
| Natural MC (%) | 14 |
| Drying Temp. (°C) | 105-110 |
| Liquid Limit (%) | 26 |
| Plastic Limit (%) | 14 |
| Plasticity Index (%) | 11 |
| Modified PI *(%) | 11 |

*BRE Digest 240:1993.

This calculation is outside the scope of UKAS accreditation.

| | |
|-------------------------------|----|
| BS Soil Classification | CL |
|-------------------------------|----|

| | |
|----------------|---|
| Remarks | NHBC Volume change potential classification is low. |
|----------------|---|

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Your Order No. 708523
Date Tested 18/05/2022
Date Report Issued 24 May 2022

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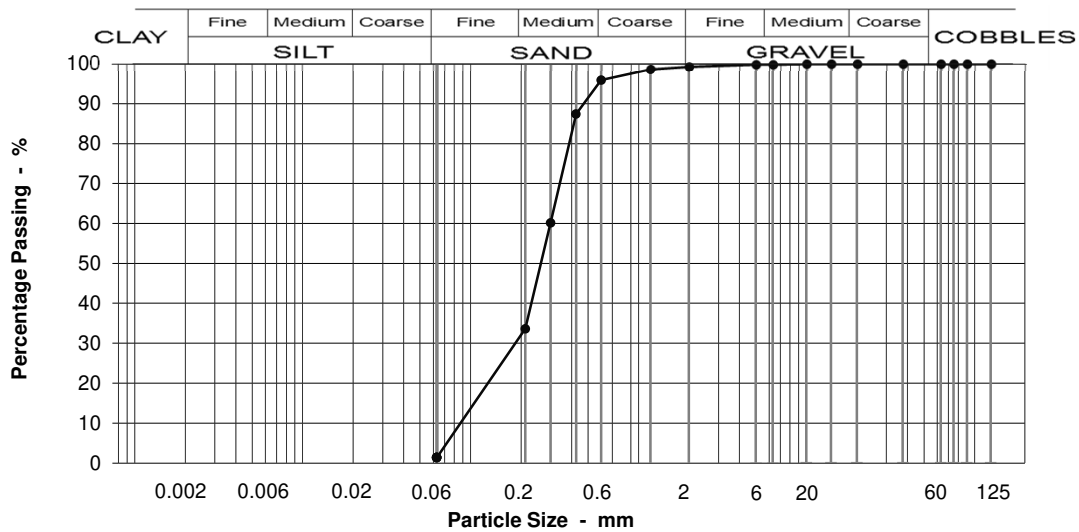
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP01 @ 0.7 - 0.9m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 100 |
| 10 | 100 |
| 6.3 | 100 |
| 5 | 100 |
| 2 | 99 |
| 1.18 | 99 |
| 0.600 | 96 |
| 0.425 | 87 |
| 0.300 | 60 |
| 0.212 | 34 |
| 0.063 | 1 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 3.4
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 0 |
| Fine GRAVEL | 1 |
| Coarse SAND | 3 |
| Medium SAND | 62 |
| Fine SAND | 32 |
| Silt & Clay | 1 |

| Grading Analysis | |
|------------------------|------|
| D100 | 6 |
| D60 | 0.30 |
| D10 | 0.10 |
| Uniformity Coefficient | 3 |

Description
Orangey-brown, fine to medium SAND.

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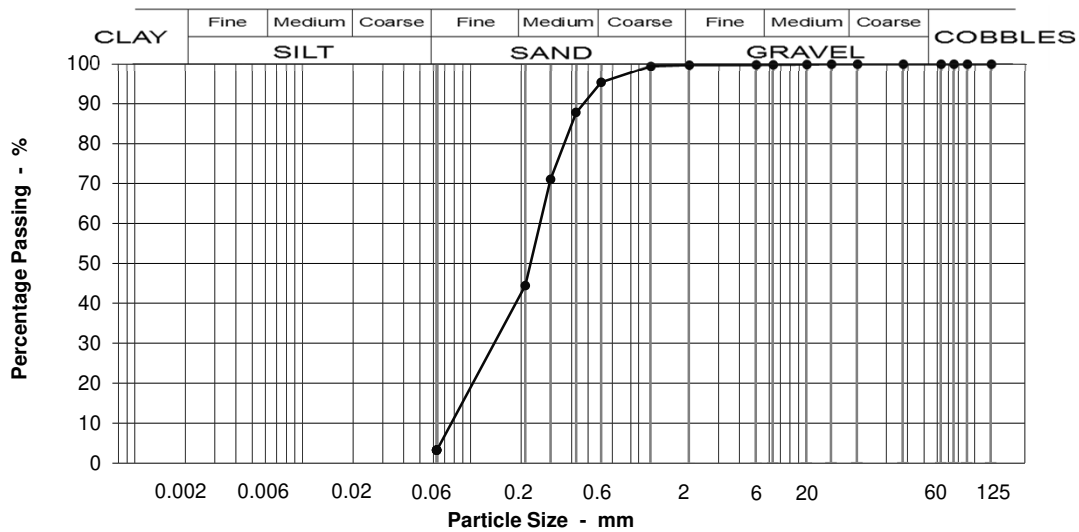
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP01 @ 1.8 - 2m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Particle Size mm | % Passing |
|------------------|-----------|
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 100 |
| 10 | 100 |
| 6.3 | 100 |
| 5 | 100 |
| 2 | 100 |
| 1.18 | 99 |
| 0.600 | 95 |
| 0.425 | 88 |
| 0.300 | 71 |
| 0.212 | 44 |
| 0.063 | 3 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 5
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 0 |
| Fine GRAVEL | 0 |
| Coarse SAND | 4 |
| Medium SAND | 51 |
| Fine SAND | 41 |
| Silt & Clay | 3 |

| Grading Analysis | |
|------------------------|------|
| D100 | 10 |
| D60 | 0.26 |
| D10 | 0.09 |
| Uniformity Coefficient | 3 |

| Description |
|-------------------------------------|
| Orangey-brown, fine to medium SAND. |

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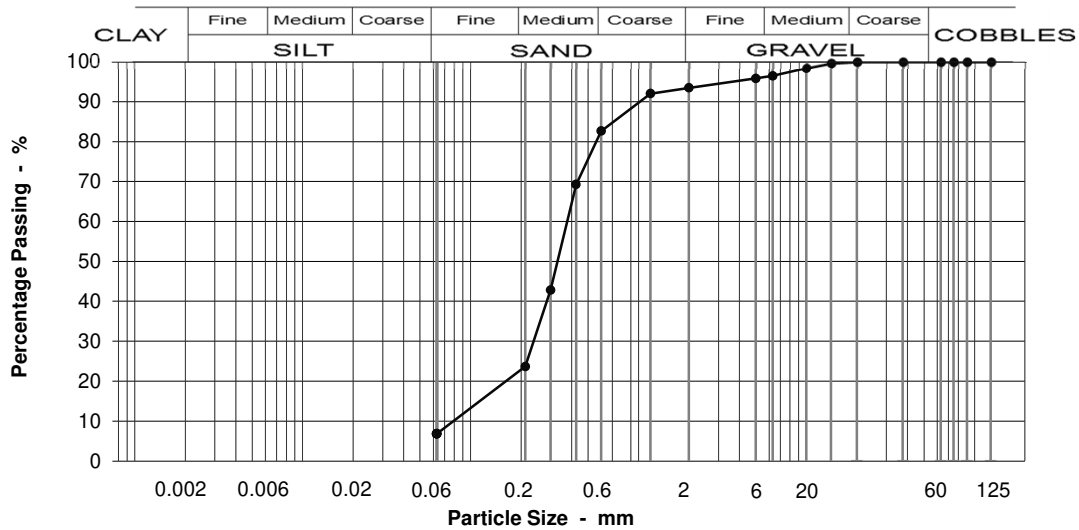
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP02 @ 0.7 - 0.9m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 100 |
| 10 | 98 |
| 6.3 | 96 |
| 5 | 96 |
| 2 | 93 |
| 1.18 | 92 |
| 0.600 | 83 |
| 0.425 | 69 |
| 0.300 | 43 |
| 0.212 | 24 |
| 0.063 | 7 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 4.2
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 4 |
| Fine GRAVEL | 3 |
| Coarse SAND | 11 |
| Medium SAND | 59 |
| Fine SAND | 17 |
| Silt & Clay | 7 |

| Grading Analysis | |
|------------------------|------|
| D100 | 14 |
| D60 | 0.38 |
| D10 | 0.09 |
| Uniformity Coefficient | 4 |

| Description | |
|-------------------------------|--|
| Yellowish brown, medium SAND. | |

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Date Tested 24/05/2022
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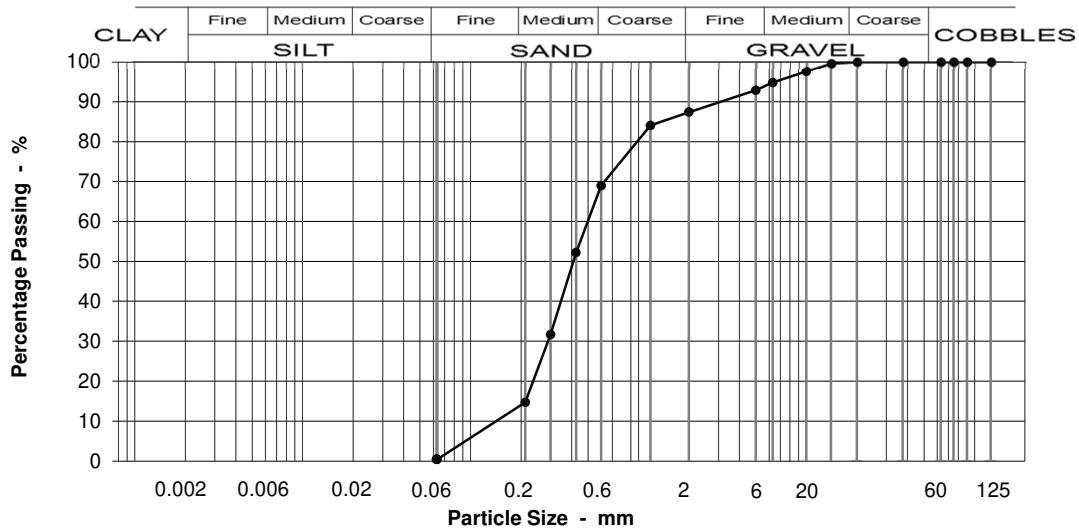
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP02 @ 1.4 - 1.7m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 100 |
| 10 | 98 |
| 6.3 | 95 |
| 5 | 93 |
| 2 | 87 |
| 1.18 | 84 |
| 0.600 | 69 |
| 0.425 | 52 |
| 0.300 | 32 |
| 0.212 | 15 |
| 0.063 | 0 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 4.1
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 5 |
| Fine GRAVEL | 7 |
| Coarse SAND | 18 |
| Medium SAND | 54 |
| Fine SAND | 14 |
| Silt & Clay | 0 |

| Grading Analysis | |
|------------------------|-------|
| D100 | 14 |
| D60 | 0.506 |
| D10 | 0.163 |
| Uniformity Coefficient | 3 |

Description
Yellowish brown, gravelly, medium SAND. Gravel is sub-angular to rounded, fine and medium flint.

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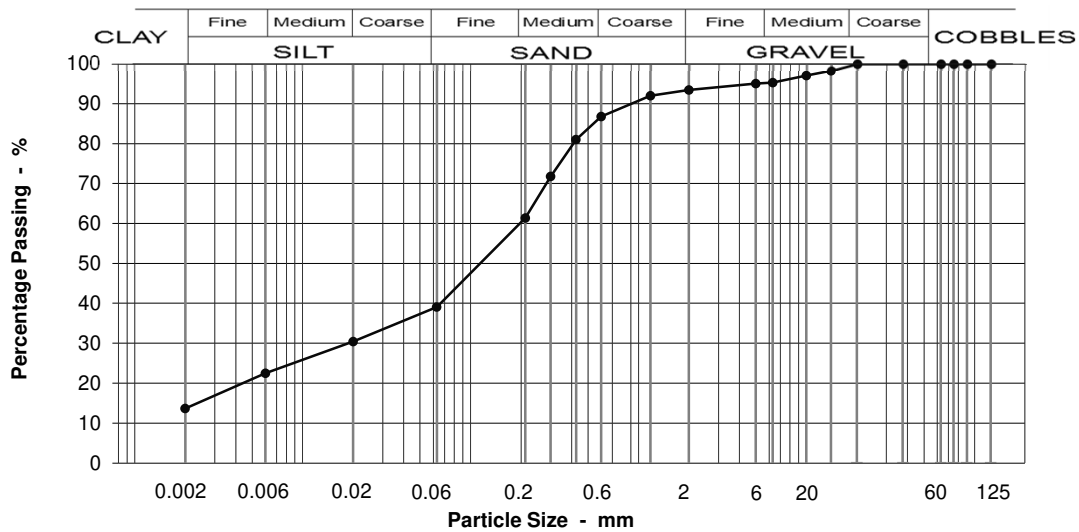
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP02 @ 2.7 - 3m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | | Specification for Highway Works Classification Table 6/2 |
|------------------|-----------|---|
| Particle Size mm | % Passing | |
| 125 | 100 | This material complies with the following material classes 2A/2B, 2A/2B. |
| 90 | 100 | |
| 75 | 100 | |
| 63 | 100 | |
| 37.5 | 100 | |
| 20 | 100 | |
| 14 | 98 | |
| 10 | 97 | |
| 6.3 | 95 | |
| 5 | 95 | |
| 2 | 93 | |
| 1.18 | 92 | |
| 0.600 | 87 | |
| 0.425 | 81 | |
| 0.300 | 72 | |
| 0.212 | 61 | |
| 0.063 | 39 | |
| 0.020 | 30 | |
| 0.006 | 22 | |
| 0.002 | 14 | |
| | | Moisture content % (BS1377-Part 2, 1990) 8.3 |

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 5 |
| Fine GRAVEL | 2 |
| Coarse SAND | 7 |
| Medium SAND | 25 |
| Fine SAND | 22 |
| Silt & Clay | 39 |

| Grading Analysis | |
|-------------------------------------|-------|
| D100 | 14 |
| D60 | 0.203 |
| D10 | 0.002 |
| Uniformity Coefficient [†] | >10 |

| Description | |
|---|--|
| Firm to stiff light brown, slightly gravelly, silty, very sandy CLAY. Gravel is sub-angular to rounded, fine and medium, flint and chalk. | |

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* Uniformity coefficient extrapolated

† UC to Spec. For Highway Works, table 6/1 footnote 5

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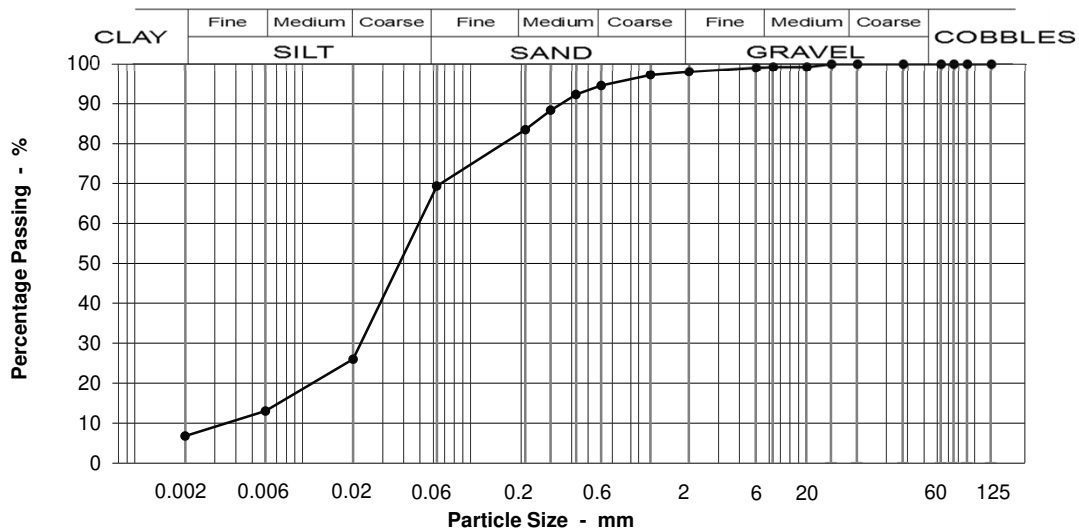
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: Sheringham HWRC

Location: TP03 @ 0.6 - 0.8m

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | | Specification for Highway Works Classification Table 6/2 |
|------------------|-----------|---|
| Particle Size mm | % Passing | |
| 125 | 100 | This material complies with the following material classes 2A/2B, 2A/2B. |
| 90 | 100 | |
| 75 | 100 | |
| 63 | 100 | |
| 37.5 | 100 | |
| 20 | 100 | |
| 14 | 100 | |
| 10 | 99 | |
| 6.3 | 99 | |
| 5 | 99 | |
| 2 | 98 | |
| 1.18 | 97 | |
| 0.600 | 95 | |
| 0.425 | 92 | |
| 0.300 | 88 | |
| 0.212 | 84 | |
| 0.063 | 69 | |
| 0.020 | 26 | |
| 0.006 | 13 | |
| 0.002 | 7 | |
| | | Moisture content % 18 (BS1377-Part 2, 1990) |

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 1 |
| Fine GRAVEL | 1 |
| Coarse SAND | 3 |
| Medium SAND | 11 |
| Fine SAND | 14 |
| Silt & Clay | 69 |

| Grading Analysis | |
|-------------------------------------|-------|
| D100 | 10 |
| D60 | 0.054 |
| D10 | 0.004 |
| Uniformity Coefficient [†] | >10 |

| Description |
|--|
| Orangish brown, gravelly, sandy, CLAY. Gravel is angular to subrounded fine flint. |

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* Uniformity coefficient extrapolated

† UC to Spec. For Highway Works, table 6/1 footnote 5



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Date Tested 27/05/2022
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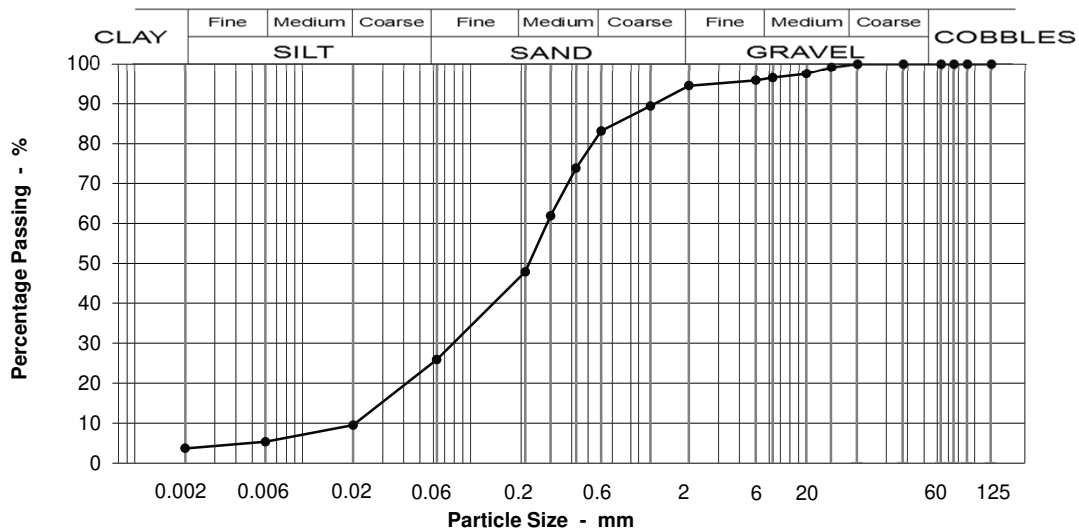
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP03 @ 2.7 - 3m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | | Specification for Highway Works Classification Table 6/2 |
|------------------|-----------|---|
| Particle Size mm | % Passing | |
| 125 | 100 | This material complies with the following material classes 2A/2B, 2A/2B. |
| 90 | 100 | |
| 75 | 100 | |
| 63 | 100 | |
| 37.5 | 100 | |
| 20 | 100 | |
| 14 | 99 | |
| 10 | 98 | |
| 6.3 | 97 | |
| 5 | 96 | |
| 2 | 95 | |
| 1.18 | 89 | |
| 0.600 | 83 | |
| 0.425 | 74 | |
| 0.300 | 62 | |
| 0.212 | 48 | |
| 0.063 | 26 | |
| 0.020 | 9 | |
| 0.006 | 5 | |
| 0.002 | 4 | |
| | | Moisture content % (BS1377-Part 2, 1990) 21 |

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 3 |
| Fine GRAVEL | 2 |
| Coarse SAND | 11 |
| Medium SAND | 35 |
| Fine SAND | 22 |
| Silt & Clay | 26 |

| Grading Analysis | |
|-------------------------------------|-------|
| D100 | 14 |
| D60 | 0.288 |
| D10 | 0.021 |
| Uniformity Coefficient [†] | 13 |

| Description | |
|---|--|
| Dark reddish brown slightly gravelly slightly sandy silty CLAY. Gravel is angular to subrounded fine chalk and flint. | |

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* Uniformity coefficient extrapolated

† UC to Spec. For Highway Works, table 6/1 footnote 5

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Our reference No. NNPL2022040815-612
Our Project No. 102894
Your Sample Ref. 2
Your Order No. 708523
Date Tested 03/05/2022
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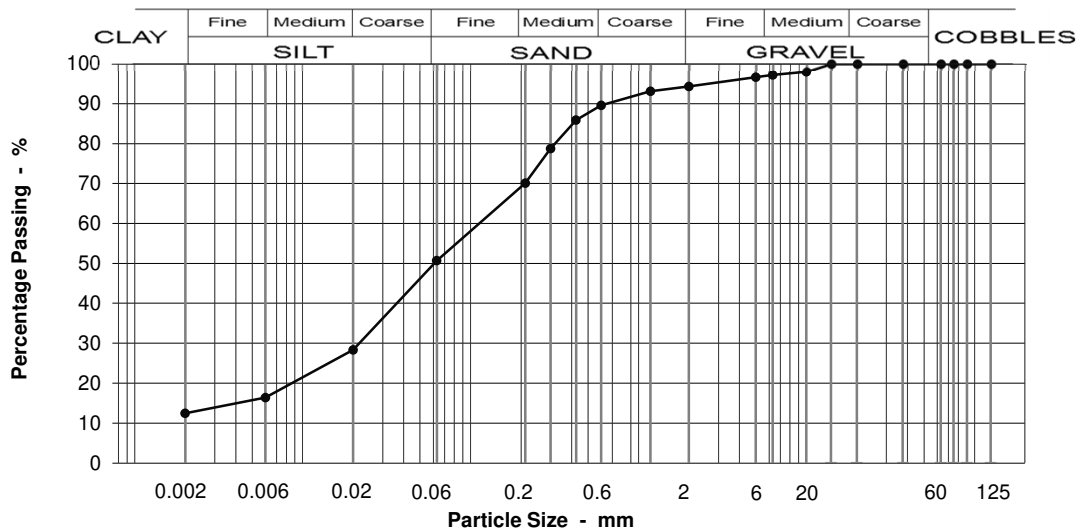
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: Sheringham HWRC

Location: TP04 @ 0.7 - 0.9m

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 100 |
| 10 | 98 |
| 6.3 | 97 |
| 5 | 97 |
| 2 | 94 |
| 1.18 | 93 |
| 0.600 | 90 |
| 0.425 | 86 |
| 0.300 | 79 |
| 0.212 | 70 |
| 0.063 | 51 |
| 0.020 | 28 |
| 0.006 | 16 |
| 0.002 | 12 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 2A/2B, 2A/2B.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 12
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 3 |
| Fine GRAVEL | 3 |
| Coarse SAND | 5 |
| Medium SAND | 19 |
| Fine SAND | 19 |
| Silt & Clay | 51 |

| Grading Analysis | |
|-------------------------------------|-------|
| D100 | 10 |
| D60 | 0.134 |
| D10 | 0.003 |
| Uniformity Coefficient [†] | >10 |

Description
Light brown, slightly gravelly very sandy, silty CLAY. Gravel is angular to subrounded fine flint and quartz.

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* Uniformity coefficient extrapolated

† UC to Spec. For Highway Works, table 6/1 footnote 5



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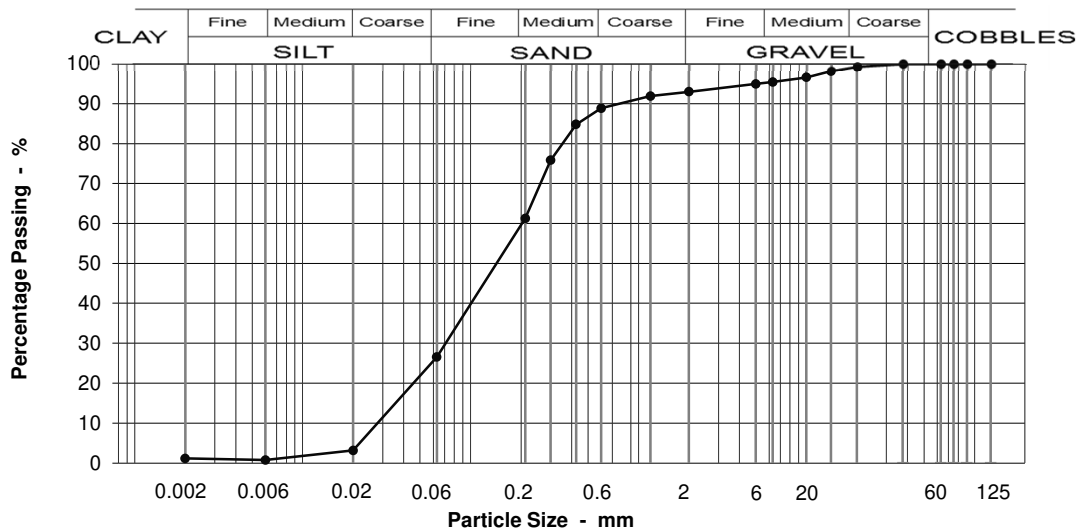
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP04 @ 1.7 - 1.9m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | | Specification for Highway Works Classification Table 6/2 |
|------------------|-----------|--|
| Particle Size mm | % Passing | |
| 125 | 100 | This material complies with the following material classes 2A/2B. |
| 90 | 100 | |
| 75 | 100 | |
| 63 | 100 | |
| 37.5 | 100 | |
| 20 | 99 | |
| 14 | 98 | |
| 10 | 97 | |
| 6.3 | 95 | |
| 5 | 95 | |
| 2 | 93 | |
| 1.18 | 92 | |
| 0.600 | 89 | |
| 0.425 | 85 | |
| 0.300 | 76 | |
| 0.212 | 61 | |
| 0.063 | 27 | |
| 0.020 | 3 | |
| 0.006 | 1 | |
| 0.002 | 1 | |
| | | Moisture content % 10 (BS1377-Part 2, 1990) |

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 1 |
| Medium GRAVEL | 4 |
| Fine GRAVEL | 2 |
| Coarse SAND | 4 |
| Medium SAND | 28 |
| Fine SAND | 35 |
| Silt & Clay | 27 |

| Grading Analysis | |
|-------------------------------------|-------|
| D100 | 20 |
| D60 | 0.207 |
| D10 | 0.033 |
| Uniformity Coefficient [†] | 6 |

| Description | |
|--|--|
| Light brown, gravelly, slightly silty, fine to medium SAND. Gravel is sub-rounded to rounded, fine and medium flint. | |

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* Uniformity coefficient extrapolated

† UC to Spec. For Highway Works, table 6/1 footnote 5

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Date Tested 14/05/2022
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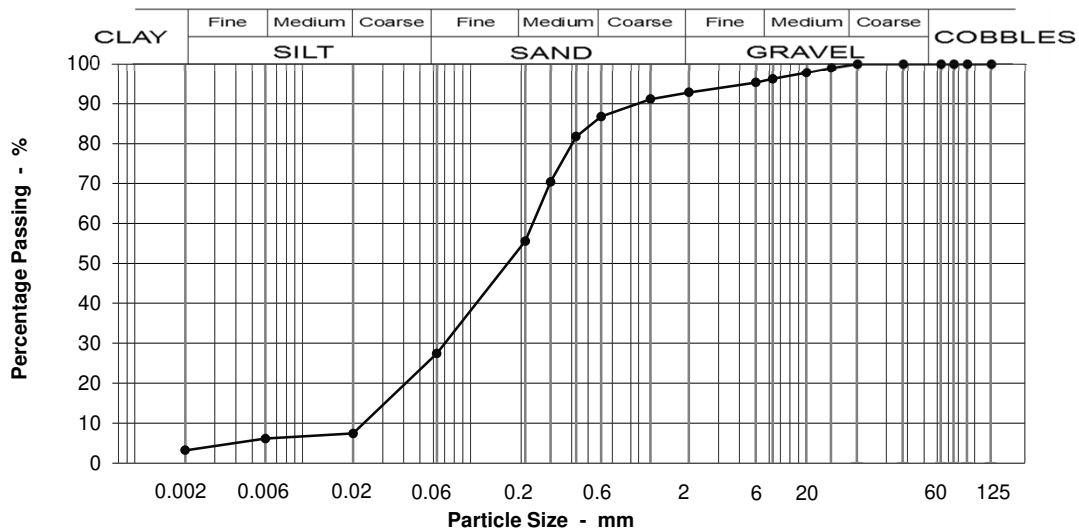
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: Sheringham HWRC

Location: TP04 @ 2.7 - 3m

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | | Specification for Highway Works Classification Table 6/2 |
|---------------------------|-----------|---|
| Particle Size mm | % Passing | |
| 125 | 100 | This material complies with the following material classes 2A/2B, 2A/2B. |
| 90 | 100 | |
| 75 | 100 | |
| 63 | 100 | |
| 37.5 | 100 | |
| 20 | 100 | |
| 14 | 99 | |
| 10 | 98 | |
| 6.3 | 96 | |
| 5 | 95 | |
| 2 | 93 | |
| 1.18 | 91 | |
| 0.600 | 87 | |
| 0.425 | 82 | |
| 0.300 | 70 | |
| 0.212 | 56 | |
| 0.063 | 27 | |
| 0.020 | 7 | |
| 0.006 | 6 | |
| 0.002 | 3 | |
| Moisture content % | | 10 |
| (BS1377-Part 2, 1990) | | |

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 4 |
| Fine GRAVEL | 3 |
| Coarse SAND | 6 |
| Medium SAND | 31 |
| Fine SAND | 28 |
| Silt & Clay | 27 |

| Grading Analysis | |
|-------------------------------------|-------|
| D100 | 14 |
| D60 | 0.238 |
| D10 | 0.026 |
| Uniformity Coefficient [†] | 9 |

| Description | |
|---|--|
| Orangey brown, slightly gravelly, silty, fine and medium SAND. Gravel is sub-rounded to rounded, fine and medium flint. | |

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* Uniformity coefficient extrapolated

† UC to Spec. For Highway Works, table 6/1 footnote 5

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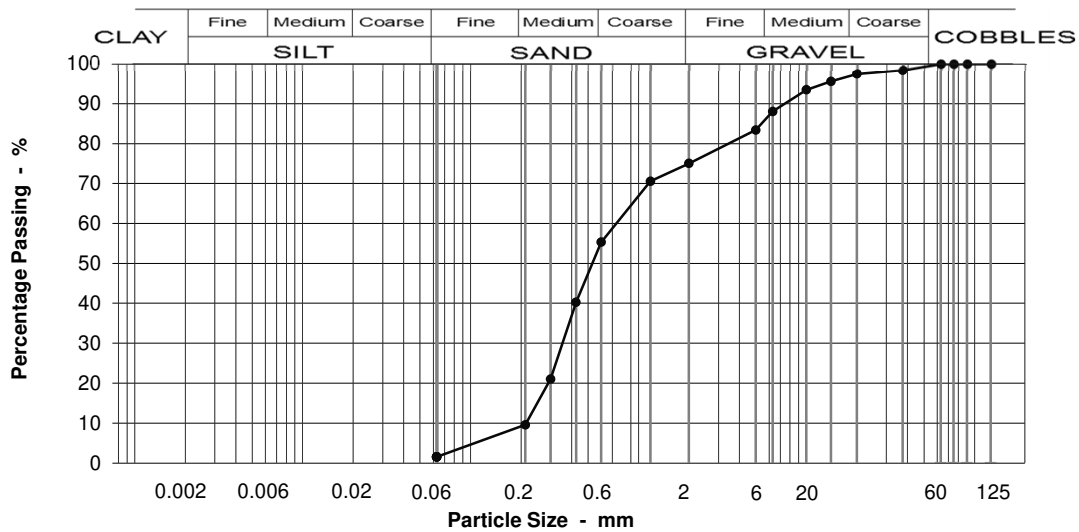
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP05 @ 0.7 - 0.9m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 98 |
| 20 | 97 |
| 14 | 96 |
| 10 | 93 |
| 6.3 | 88 |
| 5 | 83 |
| 2 | 75 |
| 1.18 | 71 |
| 0.600 | 55 |
| 0.425 | 40 |
| 0.300 | 21 |
| 0.212 | 10 |
| 0.063 | 2 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 3.2
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 3 |
| Medium GRAVEL | 9 |
| Fine GRAVEL | 13 |
| Coarse SAND | 20 |
| Medium SAND | 46 |
| Fine SAND | 8 |
| Silt & Clay | 2 |

| Grading Analysis | |
|------------------------|-------|
| D100 | 38 |
| D60 | 0.778 |
| D10 | 0.215 |
| Uniformity Coefficient | 4 |

Description
Orange, very gravelly, medium SAND. Gravel is angular to sub-rounded, fine to medium flint.

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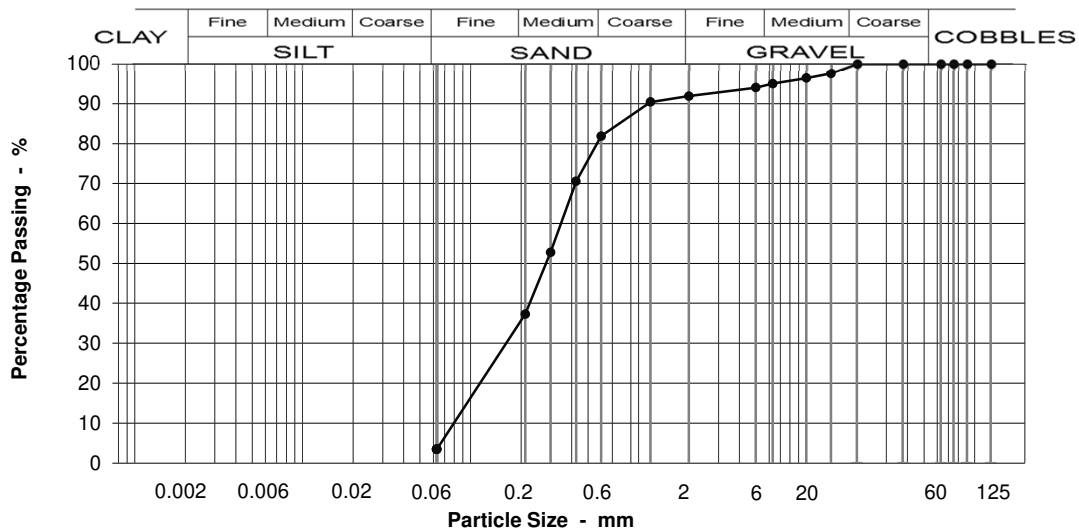
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP05 @ 2.2 - 2.4m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 98 |
| 10 | 96 |
| 6.3 | 95 |
| 5 | 94 |
| 2 | 92 |
| 1.18 | 90 |
| 0.600 | 82 |
| 0.425 | 71 |
| 0.300 | 53 |
| 0.212 | 37 |
| 0.063 | 3 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 5.9
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 5 |
| Fine GRAVEL | 3 |
| Coarse SAND | 10 |
| Medium SAND | 45 |
| Fine SAND | 34 |
| Silt & Clay | 3 |

| Grading Analysis | |
|------------------------|------|
| D100 | 14 |
| D60 | 0.35 |
| D10 | 0.09 |
| Uniformity Coefficient | 4 |

Description
Yellowish-brown, slightly gravelly, fine to medium SAND. Gravel is angular to sub-rounded, fine to medium flint.

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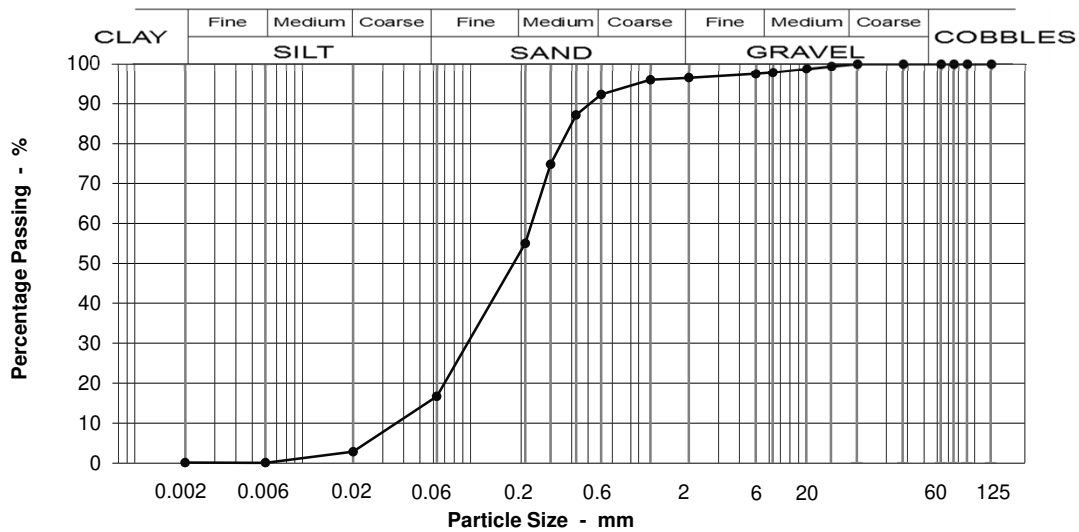
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP06 @ 0.7 - 0.9m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Particle Size mm | % Passing |
|------------------|-----------|
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 99 |
| 10 | 99 |
| 6.3 | 98 |
| 5 | 98 |
| 2 | 97 |
| 1.18 | 96 |
| 0.600 | 92 |
| 0.425 | 87 |
| 0.300 | 75 |
| 0.212 | 55 |
| 0.063 | 17 |
| 0.020 | 3 |
| 0.006 | 0 |
| 0.002 | 0 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 2A/2B.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 4.9
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 2 |
| Fine GRAVEL | 1 |
| Coarse SAND | 4 |
| Medium SAND | 37 |
| Fine SAND | 38 |
| Silt & Clay | 17 |

| Grading Analysis | |
|-------------------------------------|-------|
| D100 | 14 |
| D60 | 0.234 |
| D10 | 0.042 |
| Uniformity Coefficient [†] | 6 |

Description
Orange, silty fine to medium SAND.

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* Uniformity coefficient extrapolated

† UC to Spec. For Highway Works, table 6/1 footnote 5



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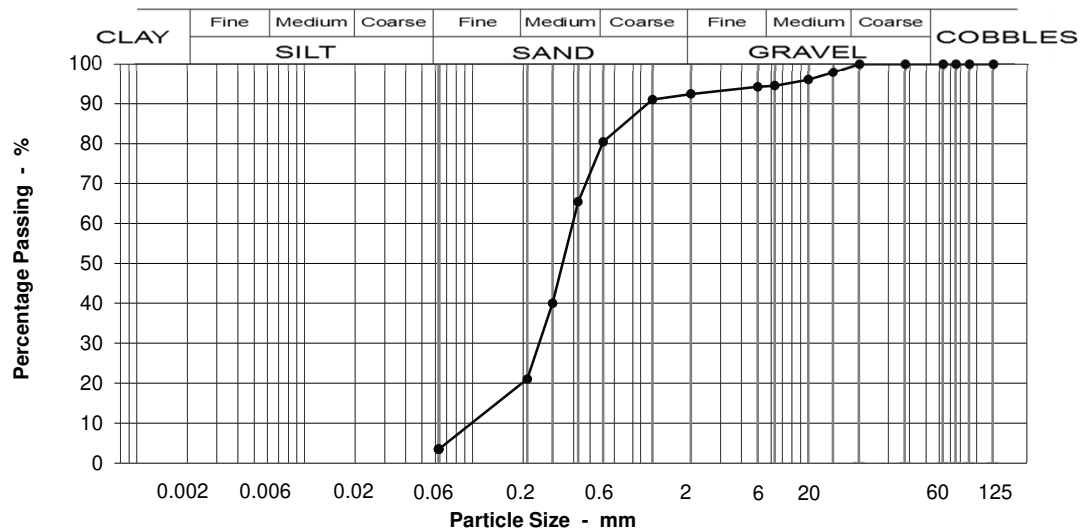
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP06 @ 2.4 - 2.6m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 98 |
| 10 | 96 |
| 6.3 | 95 |
| 5 | 94 |
| 2 | 92 |
| 1.18 | 91 |
| 0.600 | 80 |
| 0.425 | 65 |
| 0.300 | 40 |
| 0.212 | 21 |
| 0.063 | 3 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 3.7
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 5 |
| Fine GRAVEL | 2 |
| Coarse SAND | 12 |
| Medium SAND | 59 |
| Fine SAND | 18 |
| Silt & Clay | 3 |

| Grading Analysis | |
|------------------------|------|
| D100 | 14 |
| D60 | 0.40 |
| D10 | 0.12 |
| Uniformity Coefficient | 3 |

Description
Orange, slightly gravelly, medium SAND. Gravel is angular to rounded, fine to medium flint.

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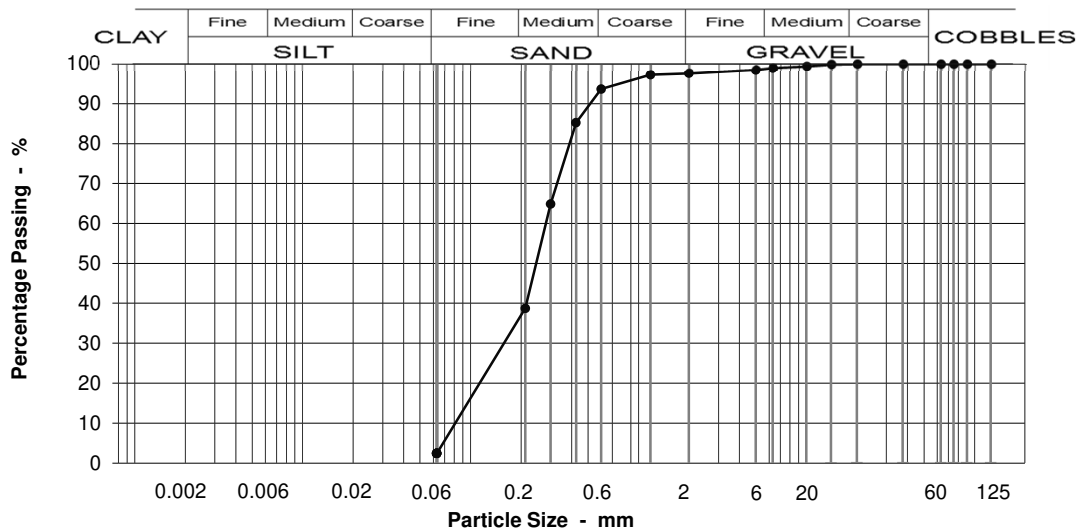
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP07 @ 0.6 - 0.8m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | | Specification for Highway Works Classification Table 6/2 |
|---|-----------|--|
| Particle Size mm | % Passing | |
| 125 | 100 | This material complies with the following material classes 1B, 6E/6R, 6M. |
| 90 | 100 | |
| 75 | 100 | |
| 63 | 100 | |
| 37.5 | 100 | |
| 20 | 100 | |
| 14 | 100 | |
| 10 | 99 | |
| 6.3 | 99 | |
| 5 | 98 | |
| 2 | 98 | |
| 1.18 | 97 | |
| 0.600 | 94 | |
| 0.425 | 85 | |
| 0.300 | 65 | |
| 0.212 | 39 | |
| 0.063 | 2 | |
| Moisture content % (BS1377-Part 2, 1990) | | 3.6 |

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 1 |
| Fine GRAVEL | 1 |
| Coarse SAND | 4 |
| Medium SAND | 55 |
| Fine SAND | 36 |
| Silt & Clay | 2 |

| Grading Analysis | |
|------------------------|------|
| D100 | 14 |
| D60 | 0.28 |
| D10 | 0.09 |
| Uniformity Coefficient | 3 |

| Description | |
|------------------------------|--|
| Orange, fine to medium SAND. | |

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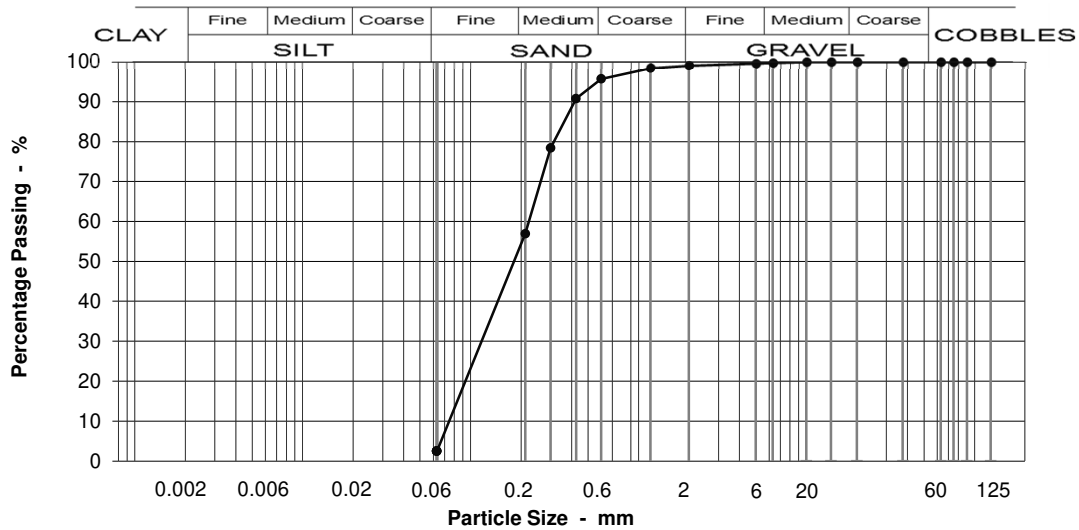
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: Sheringham HWRC

Location: TP07 @ 2.7 - 2.9m

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 100 |
| 10 | 100 |
| 6.3 | 100 |
| 5 | 100 |
| 2 | 99 |
| 1.18 | 98 |
| 0.600 | 96 |
| 0.425 | 91 |
| 0.300 | 78 |
| 0.212 | 57 |
| 0.063 | 2 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 3.4
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 0 |
| Fine GRAVEL | 1 |
| Coarse SAND | 3 |
| Medium SAND | 39 |
| Fine SAND | 54 |
| Silt & Clay | 2 |

| Grading Analysis | |
|------------------------|------|
| D100 | 6 |
| D60 | 0.22 |
| D10 | 0.08 |
| Uniformity Coefficient | 3 |

Description
Yellow, fine to medium SAND.

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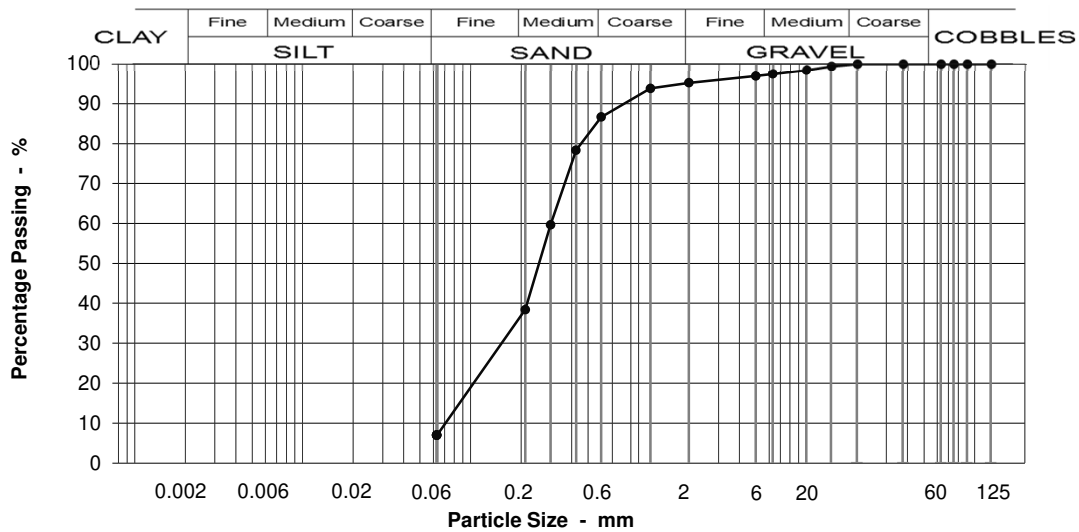
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP08 @ 0.7 - 0.9m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | | Specification for Highway Works Classification Table 6/2 |
|---|-----------|--|
| Particle Size mm | % Passing | |
| 125 | 100 | This material complies with the following material classes 1B, 6E/6R, 6M. |
| 90 | 100 | |
| 75 | 100 | |
| 63 | 100 | |
| 37.5 | 100 | |
| 20 | 100 | |
| 14 | 99 | |
| 10 | 98 | |
| 6.3 | 97 | |
| 5 | 97 | |
| 2 | 95 | |
| 1.18 | 94 | |
| 0.600 | 87 | |
| 0.425 | 78 | |
| 0.300 | 60 | |
| 0.212 | 38 | |
| 0.063 | 7 | |
| Moisture content % (BS1377-Part 2, 1990) | | 5.5 |

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 3 |
| Fine GRAVEL | 2 |
| Coarse SAND | 9 |
| Medium SAND | 48 |
| Fine SAND | 31 |
| Silt & Clay | 7 |

| Grading Analysis | |
|------------------------|------|
| D100 | 14 |
| D60 | 0.30 |
| D10 | 0.08 |
| Uniformity Coefficient | 4 |

| Description |
|-------------------------------------|
| Orangey-brown, fine to medium SAND. |

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NR1 2SG

Our reference No. **NNPL2022040832-612**
Our Project No. 102894
Your Sample Ref. 4
Your Order No. 708523
Date Tested 03/05/2022
Date Report Issued 24 May 2022

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Page 1 of 1

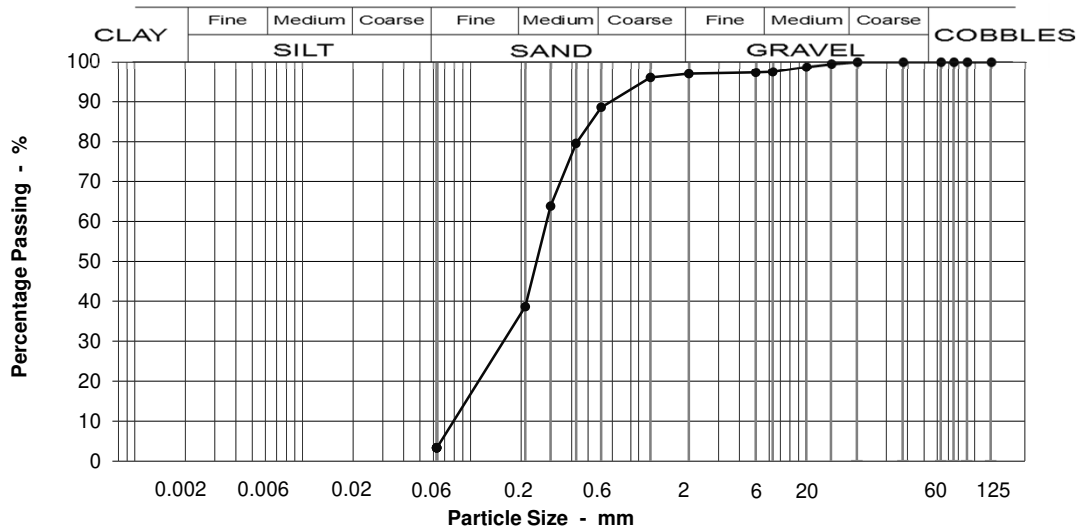
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: **Sheringham HWRC**

Location: **TP08 @ 2.8 - 3m**

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | | Specification for Highway Works Classification Table 6/2 | Sample Proportions | |
|---------------------------|-----------|--|-------------------------|------|
| Particle Size mm | % Passing | | | |
| 125 | 100 | This material complies with the following material classes 1B, 6E/6R, 6M. Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation. | BOULDERS | 0 |
| 90 | 100 | | COBBLES | 0 |
| 75 | 100 | | Coarse GRAVEL | 0 |
| 63 | 100 | | Medium GRAVEL | 2 |
| 37.5 | 100 | | Fine GRAVEL | 0 |
| 20 | 100 | | Coarse SAND | 8 |
| 14 | 99 | | Medium SAND | 50 |
| 10 | 99 | | Fine SAND | 35 |
| 6.3 | 98 | | Silt & Clay | 3 |
| 5 | 97 | | Grading Analysis | |
| 2 | 97 | | D100 | 14 |
| 1.18 | 96 | | D60 | 0.29 |
| 0.600 | 89 | | D10 | 0.09 |
| 0.425 | 80 | Uniformity Coefficient | 3 | |
| 0.300 | 64 | Description | | |
| 0.212 | 39 | Yellow, fine to medium SAND. | | |
| 0.063 | 3 | | | |
| Moisture content % | | 4.5 | | |
| (BS1377-Part 2, 1990) | | | | |

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Our reference No. 0000-BH09-B4-612
Our Project No. 102894
Your Sample Ref. 4
Your Order No. 708523
Date Tested 19/05/2022
Date Report Issued 24 May 2022

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Page 1 of 1

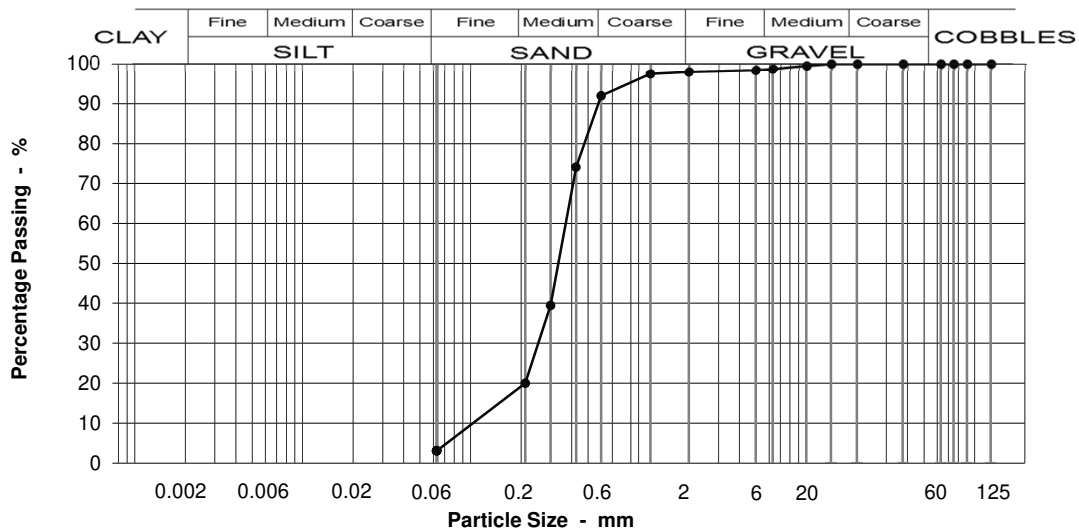
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: Sheringham HWRC

Location: BH09 @ 2 - 2.5m

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 100 |
| 10 | 100 |
| 6.3 | 99 |
| 5 | 98 |
| 2 | 98 |
| 1.18 | 98 |
| 0.600 | 92 |
| 0.425 | 74 |
| 0.300 | 39 |
| 0.212 | 20 |
| 0.063 | 3 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 1051
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 1 |
| Fine GRAVEL | 1 |
| Coarse SAND | 6 |
| Medium SAND | 72 |
| Fine SAND | 17 |
| Silt & Clay | 3 |

| Grading Analysis | |
|------------------------|------|
| D100 | 10 |
| D60 | 0.37 |
| D10 | 0.12 |
| Uniformity Coefficient | 3 |

Description
Yellowish-orange, medium SAND.

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Our reference No. **0000-BH09-B8-612**
Our Project No. 102894
Your Sample Ref. 8
Your Order No. 708523
Date Tested 09/05/2022
Date Report Issued 24 May 2022

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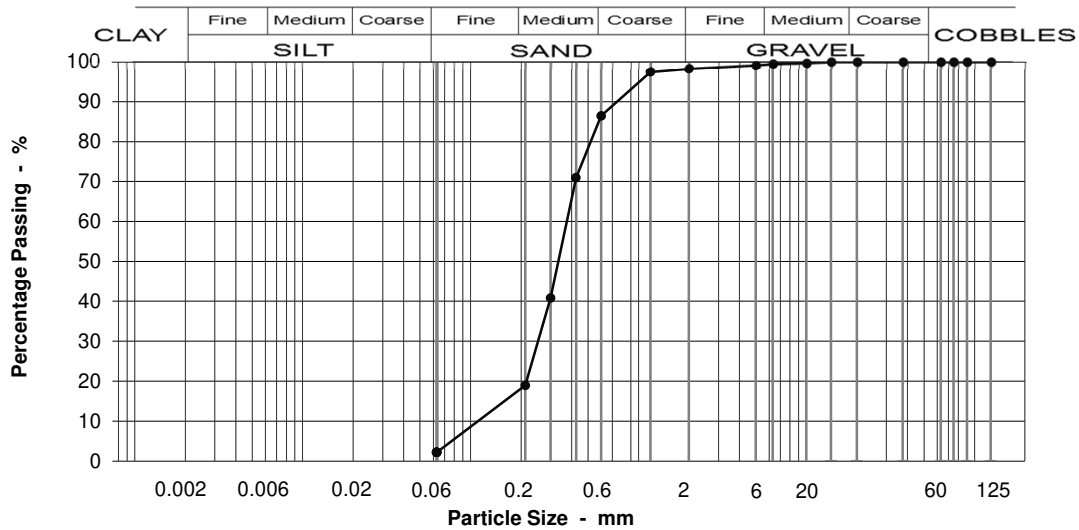
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: Sheringham HWRC

Location: BH09 @ 4 - 4.5m

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 100 |
| 10 | 100 |
| 6.3 | 99 |
| 5 | 99 |
| 2 | 98 |
| 1.18 | 97 |
| 0.600 | 86 |
| 0.425 | 71 |
| 0.300 | 41 |
| 0.212 | 19 |
| 0.063 | 2 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 5.6
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 1 |
| Fine GRAVEL | 1 |
| Coarse SAND | 12 |
| Medium SAND | 68 |
| Fine SAND | 17 |
| Silt & Clay | 2 |

| Grading Analysis | |
|------------------------|------|
| D100 | 10 |
| D60 | 0.38 |
| D10 | 0.13 |
| Uniformity Coefficient | 3 |

Description
Yellowish-orange, medium SAND.

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Our reference No. 0000-BH09-B12-612
Our Project No. 102894
Your Sample Ref. 12
Your Order No. 708523
Date Tested 03/05/2022
Date Report Issued 09 Jun 2022

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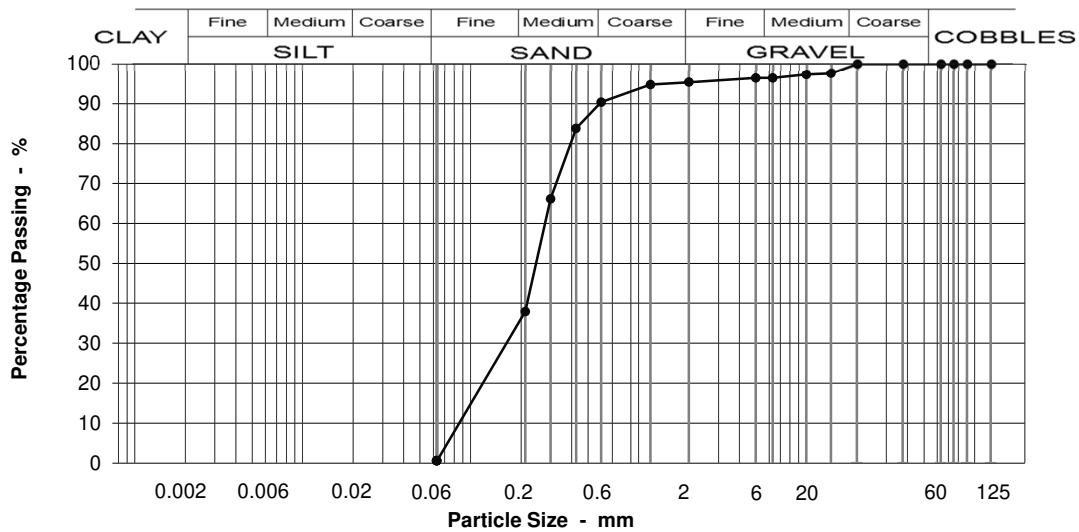
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: Sheringham HWRC

Location: BH09 @ 6 - 6.5m

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 98 |
| 10 | 97 |
| 6.3 | 96 |
| 5 | 96 |
| 2 | 95 |
| 1.18 | 95 |
| 0.600 | 90 |
| 0.425 | 84 |
| 0.300 | 66 |
| 0.212 | 38 |
| 0.063 | 1 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 16
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 4 |
| Fine GRAVEL | 1 |
| Coarse SAND | 5 |
| Medium SAND | 52 |
| Fine SAND | 37 |
| Silt & Clay | 1 |

| Grading Analysis | |
|------------------------|-------|
| D100 | 14 |
| D60 | 0.281 |
| D10 | 0.101 |
| Uniformity Coefficient | 3 |

Description
Light brown, slightly gravelly, fine and medium SAND. Gravel is sub-angular to sub-rounded, fine and medium flint.

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NR1 2SG

Our reference No. 0000-BH09-B16-612
Our Project No. 102894
Your Sample Ref. 16
Your Order No. 708523
Date Tested 03/05/2022
Date Report Issued 24 May 2022

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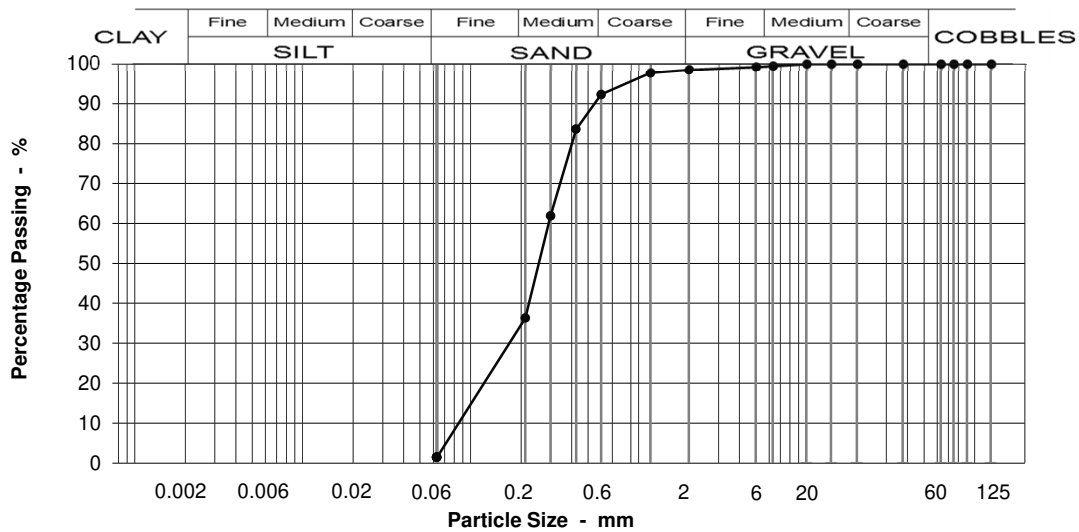
Particle Size Distribution to BS 1377 : Part 2 :1990 Section 9 (Withdrawn)

Scheme: Sheringham HWRC

Location: BH09 @ 8 - 8.5m

Location and orientation within sample not applicable

Bulk disturbed sample



If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| Sieving | |
|------------------|-----------|
| Particle Size mm | % Passing |
| 125 | 100 |
| 90 | 100 |
| 75 | 100 |
| 63 | 100 |
| 37.5 | 100 |
| 20 | 100 |
| 14 | 100 |
| 10 | 100 |
| 6.3 | 99 |
| 5 | 99 |
| 2 | 99 |
| 1.18 | 98 |
| 0.600 | 92 |
| 0.425 | 84 |
| 0.300 | 62 |
| 0.212 | 36 |
| 0.063 | 1 |

Specification for Highway Works Classification
Table 6/2
This material complies with the following material classes 1B, 6E/6R, 6M.

Please be aware that we only report compliance with specifications using 'simple acceptance' as a guide as the specifications for the material as well as the methodology for testing are well established and take into account uncertainty in their formulation.

Moisture content % 24
(BS1377-Part 2, 1990)

| Sample Proportions | |
|--------------------|----|
| BOULDERS | 0 |
| COBBLES | 0 |
| Coarse GRAVEL | 0 |
| Medium GRAVEL | 1 |
| Fine GRAVEL | 1 |
| Coarse SAND | 6 |
| Medium SAND | 56 |
| Fine SAND | 35 |
| Silt & Clay | 1 |

| Grading Analysis | |
|------------------------|------|
| D100 | 6 |
| D60 | 0.29 |
| D10 | 0.10 |
| Uniformity Coefficient | 3 |

| Description | |
|---------------------------|--|
| Red, fine to medium SAND. | |

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Our Project No 102894
Our Report and sample No NNPL202204085-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 01 June 2022
Date Tested 24 May 2022

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Page 1 of 1

Determination of the California Bearing Ratio to BS 1377 : Part 4 : 1990 (Withdrawn)

| | | | |
|---|-------------------------------------|----------------------|----------------|
| Scheme | Sheringham HWRC | | |
| Location | TP01 @ 0.7m | Specimen: 1 | |
| Date sampled | 05 April 2022 | Date received | 05 April 2022 |
| Sampled by | KN (NPL Staff) | Sample Mass | 17.545kg |
| If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested. | | | |
| Material | Soil | Sample type | Bulk Disturbed |
| Description | Orangey-brown, fine to medium SAND. | | |
| Supplier | Not applicable | Source | Ex site |

Test Specimen Preparation details

| | | | |
|-------------------------|-------------------|-------------------------------|-----------------------------------|
| Location | Not applicable | Method of Division | Quartering |
| Orientation | Not applicable | Preparation Method | Sieving, Natural Moisture Content |
| Retained 37.5mm | 0.0 % | Retained 20mm | 0.0 % |
| BS Method | 3.4, 2.5kg Rammer | Grading zone | 1 |
| Number of layers | 3 | Bulk Density | 1.72 Mg/m ³ |
| Blows per layer | 62 Blows | Dry Density | 1.66 Mg/m ³ |
| Condition | Unsoaked | Init. Moisture Content | 3.7 % |

Test Results

| | CBR Value | Surface Modulus \$ | |
|--------------------------------|------------------------|------------------------------|--|
| | % | Mpa | |
| Top | 14 | >85 | \$ The calculation of Surface Modulus is not covered by UKAS accreditation |
| Bottom | 16 | >85 | |
| Mean Value | 15 | >85 | |
| Moisture Content Method | Oven dried @ 105-110°C | | |
| Moisture Content Top | % 3.5 | Moisture Cont. Bottom | % 3.3 |

Remarks

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NR1 2SG

Our Project No 102894
Our Report and sample No NNPL202204088-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 01 June 2022
Date Tested 13 May 2022

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Page 1 of 1

Determination of the California Bearing Ratio to BS 1377 : Part 4 : 1990 (Withdrawn)

| | | | |
|---|-------------------------------|----------------------|----------------|
| Scheme | Sheringham HWRC | | |
| Location | TP02 @ 0.7m | Specimen: 1 | |
| Date sampled | 05 April 2022 | Date received | 05 April 2022 |
| Sampled by | KN (NPL Staff) | Sample Mass | 25.82kg |
| If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested. | | | |
| Material | Soil | Sample type | Bulk Disturbed |
| Description | Yellowish brown, medium SAND. | | |
| Supplier | Not applicable | Source | Ex site |

Test Specimen Preparation details

| | | | |
|-------------------------|-------------------|-------------------------------|-----------------------------------|
| Location | Not applicable | Method of Division | Quartering |
| Orientation | Not applicable | Preparation Method | Sieving, Natural Moisture Content |
| Retained 37.5mm | 0.0 % | Retained 20mm | 0.0 % |
| BS Method | 3.4, 2.5kg Rammer | Grading zone | 1 |
| Number of layers | 3 | Bulk Density | 1.89 Mg/m ³ |
| Blows per layer | 62 Blows | Dry Density | 1.80 Mg/m ³ |
| Condition | Unsoaked | Init. Moisture Content | 4.7 % |

Test Results

| | CBR Value | Surface Modulus \$ | |
|---------------|-----------|--------------------|--|
| | % | Mpa | |
| Top | 18 | >85 | \$ The calculation of Surface Modulus is not covered by UKAS accreditation |
| Bottom | 22 | >85 | |

| | | | |
|--------------------------------|------------------------|------------|---|
| Moisture Content Method | Oven dried @ 105-110°C | | |
| Moisture Content Top | % | 4.7 | Moisture Cont. Bottom % 4.7 |

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Our Report and sample No NNPL2022040812-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 01 June 2022
Date Tested 26 April 2022

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Determination of the California Bearing Ratio to BS 1377 : Part 4 : 1990 (Withdrawn)

| | | | |
|---|--|----------------------|----------------|
| Scheme | Sheringham HWRC | | |
| Location | TP03 @ 0.6m | Specimen: 2 | |
| Date sampled | 05 April 2022 | Date received | 05 April 2022 |
| Sampled by | KN (NPL Staff) | Sample Mass | 20.01kg |
| If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested. | | | |
| Material | Soil | Sample type | Bulk Disturbed |
| Description | Orangish brown, gravelly, sandy, CLAY. Gravel is angular to subrounded fine flint. | | |
| Supplier | Not applicable | Source | Ex site |

Test Specimen Preparation details

| | | | |
|-------------------------|-------------------|-------------------------------|-----------------------------------|
| Location | Not applicable | Method of Division | Quartering |
| Orientation | Not applicable | Preparation Method | Sieving, Natural Moisture Content |
| Retained 37.5mm | 0.0 % | Retained 20mm | 1.1 % |
| BS Method | 3.4, 2.5kg Rammer | Grading zone | 2 |
| Number of layers | 3 | Bulk Density | 2.15 Mg/m ³ |
| Blows per layer | 62 Blows | Dry Density | 1.82 Mg/m ³ |
| Condition | Soaked | Init. Moisture Content | 18 % |

Test Results

| | CBR Value | Surface Modulus \$ | |
|--------------------------------|------------------------|--------------------|--|
| | % | Mpa | |
| Top | 1.7 | <25 | \$ The calculation of Surface Modulus is not covered by UKAS accreditation |
| Bottom | 1.5 | <25 | |
| Mean Value | 1.6 | <25 | |
| Moisture Content Method | Oven dried @ 105-110°C | | |
| Moisture Content Top | % | 18 | Moisture Cont. Bottom % 18 |

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NR1 2SG

Our Project No 102894
Our Report and sample No NNPL2022040815-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 17 May 2022
Date Tested 26 April 2022

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Page 1 of 1

Determination of the California Bearing Ratio to BS 1377 : PART 4 : 1990 (Withdrawn)

| | | | |
|---|--------------------------|----------------------|----------------|
| Scheme | Sheringham HWRC | | |
| Location | TP04 @ 0.7m | Specimen: 2 | |
| Date sampled | 05 April 2022 | Date received | 05 April 2022 |
| Sampled by | KN (NPL Staff) | Sample Mass | 22.86kg |
| If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested. | | | |
| Material | Soil | Sample type | Bulk Disturbed |
| Description | Light brown, sandy SILT. | | |
| Supplier | Not applicable | Source | Ex site |

Test Specimen Preparation details

| | | | |
|-------------------------|-------------------|-------------------------------|-----------------------------------|
| Location | Not applicable | Method of Division | Quartering |
| Orientation | Not applicable | Preparation Method | Sieving, Natural Moisture Content |
| Retained 37.5mm | 0.0 % | Retained 20mm | 0.0 % |
| BS Method | 3.4, 2.5kg Rammer | Bulk Density | 2.19 Mg/m ³ |
| Number of layers | 3 | Dry Density | 1.94 Mg/m ³ |
| Blows per layer | 62 Blows | Init. Moisture Content | 14 % |
| Condition | Soaked | | |

Test Results

| | CBR Value | Surface Modulus \$ | |
|---------------|------------|--------------------|--|
| | % | Mpa | |
| Top | 4.3 | 45 | \$ The calculation of Surface Modulus is not covered by UKAS accreditation |
| Bottom | 5.7 | 54 | |

| | | | |
|--------------------------------|------------------------|-----------|--|
| Moisture Content Method | Oven dried @ 105-110°C | | |
| Moisture Content Top | % | 13 | Moisture Cont. Bottom % 13 |

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Our Project No 102894
Our Report and sample No NNPL2022040819-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 01 June 2022
Date Tested 24 May 2022

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Page 1 of 1

Determination of the California Bearing Ratio to BS 1377 : Part 4 : 1990 (Withdrawn)

| | | | |
|---|---|----------------------|----------------|
| Scheme | Sheringham HWRC | | |
| Location | TP05 @ 0.7m | Specimen: 1 | |
| Date sampled | 05 April 2022 | Date received | 05 April 2022 |
| Sampled by | KN (NPL Staff) | Sample Mass | 21.215kg |
| If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested. | | | |
| Material | Soil | Sample type | Bulk Disturbed |
| Description | Orange, very gravelly, medium SAND. Gravel is angular to sub-rounded, fine to medium flint. | | |
| Supplier | Not applicable | Source | Ex site |

Test Specimen Preparation details

| | | | |
|-------------------------|-------------------|-------------------------------|-----------------------------------|
| Location | Not applicable | Method of Division | Quartering |
| Orientation | Not applicable | Preparation Method | Sieving, Natural Moisture Content |
| Retained 37.5mm | 4.8 % | Retained 20mm | 6.7 % |
| BS Method | 3.4, 2.5kg Rammer | Grading zone | 4 |
| Number of layers | 3 | Bulk Density | 1.83 Mg/m ³ |
| Blows per layer | 62 Blows | Dry Density | 1.78 Mg/m ³ |
| Condition | Unsoaked | Init. Moisture Content | 3.0 % |

Test Results

| | CBR Value | Surface Modulus \$ | |
|---------------|-------------|--------------------|--|
| | % | Mpa | |
| Top | 10.0 | 77 | \$ The calculation of Surface Modulus is not covered by UKAS accreditation |
| Bottom | 15 | >85 | |

| | | | |
|--------------------------------|------------------------|------------|---|
| Moisture Content Method | Oven dried @ 105-110°C | | |
| Moisture Content Top | % | 2.9 | Moisture Cont. Bottom % 2.9 |

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Our Project No 102894
Our Report and sample No NNPL2022040823-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 01 June 2022
Date Tested 24 May 2022

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Page 1 of 1

Determination of the California Bearing Ratio to BS 1377 : Part 4 : 1990 (Withdrawn)

| | | | |
|---|------------------------------------|----------------------|----------------|
| Scheme | Sheringham HWRC | | |
| Location | TP06 @ 0.7m | Specimen: 1 | |
| Date sampled | 05 April 2022 | Date received | 05 April 2022 |
| Sampled by | KN (NPL Staff) | Sample Mass | 19.035kg |
| If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested. | | | |
| Material | Soil | Sample type | Bulk Disturbed |
| Description | Orange, silty fine to medium SAND. | | |
| Supplier | Not applicable | Source | Ex site |

Test Specimen Preparation details

| | | | |
|-------------------------|-------------------|-------------------------------|-----------------------------------|
| Location | Not applicable | Method of Division | Quartering |
| Orientation | Not applicable | Preparation Method | Sieving, Natural Moisture Content |
| Retained 37.5mm | 0.0 % | Retained 20mm | 0.0 % |
| BS Method | 3.4, 2.5kg Rammer | Grading zone | 1 |
| Number of layers | 3 | Bulk Density | 1.73 Mg/m ³ |
| Blows per layer | 62 Blows | Dry Density | 1.65 Mg/m ³ |
| Condition | Unsoaked | Init. Moisture Content | 5.5 % |

Test Results

| | CBR Value | Surface Modulus \$ | |
|---------------|-----------|--------------------|--|
| | % | Mpa | |
| Top | 13 | >85 | \$ The calculation of Surface Modulus is not covered by UKAS accreditation |
| Bottom | 19 | >85 | |

| | | | |
|--------------------------------|------------------------|------------|---|
| Moisture Content Method | Oven dried @ 105-110°C | | |
| Moisture Content Top | % | 4.9 | Moisture Cont. Bottom % 4.9 |

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Our Project No 102894
Our Report and sample No NNPL2022040826-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 01 June 2022
Date Tested 13 May 2022

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Determination of the California Bearing Ratio to BS 1377 : Part 4 : 1990 (Withdrawn)

| | | | |
|---|------------------------------|----------------------|----------------|
| Scheme | Sheringham HWRC | | |
| Location | TP07 @ 0.6m | Specimen: 1 | |
| Date sampled | 05 April 2022 | Date received | 05 April 2022 |
| Sampled by | KN (NPL Staff) | Sample Mass | 18.925kg |
| If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested. | | | |
| Material | Soil | Sample type | Bulk Disturbed |
| Description | Orange, fine to medium SAND. | | |
| Supplier | Not applicable | Source | Ex site |

Test Specimen Preparation details

| | | | |
|-------------------------|-------------------|-------------------------------|-----------------------------------|
| Location | Not applicable | Method of Division | Quartering |
| Orientation | Not applicable | Preparation Method | Sieving, Natural Moisture Content |
| Retained 37.5mm | 0.0 % | Retained 20mm | 0.0 % |
| BS Method | 3.4, 2.5kg Rammer | Grading zone | 1 |
| Number of layers | 3 | Bulk Density | 1.79 Mg/m ³ |
| Blows per layer | 62 Blows | Dry Density | 1.71 Mg/m ³ |
| Condition | Unsoaked | Init. Moisture Content | 4.5 % |

Test Results

| | CBR Value | Surface Modulus \$ | |
|---------------|-----------|--------------------|--|
| | % | Mpa | |
| Top | 13 | >85 | \$ The calculation of Surface Modulus is not covered by UKAS accreditation |
| Bottom | 16 | >85 | |

| | | | |
|--------------------------------|------------------------|------------|---|
| Moisture Content Method | Oven dried @ 105-110°C | | |
| Moisture Content Top | % | 4.5 | Moisture Cont. Bottom % 4.6 |

Remarks

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Test Code =644



Jim Elliott (Lead Technical Support Tech.)

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FAO N Young
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County Hall
Martineau Lane
Norwich
NR1 2SG

Our Project No 102894
Our Report and sample No NNPL2022040830-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 01 June 2022
Date Tested 24 May 2022

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Page 1 of 1

Determination of the California Bearing Ratio to BS 1377 : Part 4 : 1990 (Withdrawn)

| | | | |
|---|-------------------------------------|----------------------|----------------|
| Scheme | Sheringham HWRC | | |
| Location | TP08 @ 0.7m | Specimen: 1 | |
| Date sampled | 05 April 2022 | Date received | 05 April 2022 |
| Sampled by | KN (NPL Staff) | Sample Mass | 21.535kg |
| If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested. | | | |
| Material | Soil | Sample type | Bulk Disturbed |
| Description | Orangey-brown, fine to medium SAND. | | |
| Supplier | Not applicable | Source | Ex site |

Test Specimen Preparation details

| | | | |
|-------------------------|-------------------|-------------------------------|-----------------------------------|
| Location | Not applicable | Method of Division | Quartering |
| Orientation | Not applicable | Preparation Method | Sieving, Natural Moisture Content |
| Retained 37.5mm | 4.0 % | Retained 20mm | 4.9 % |
| BS Method | 3.4, 2.5kg Rammer | Grading zone | 4 |
| Number of layers | 3 | Bulk Density | 1.89 Mg/m ³ |
| Blows per layer | 62 Blows | Dry Density | 1.79 Mg/m ³ |
| Condition | Unsoaked | Init. Moisture Content | 6.0 % |

Test Results

| | CBR Value | Surface Modulus \$ | |
|---------------|-----------|--------------------|--|
| | % | Mpa | |
| Top | 24 | >85 | \$ The calculation of Surface Modulus is not covered by UKAS accreditation |
| Bottom | 34 | >85 | |

| | | | |
|--------------------------------|------------------------|------------|---|
| Moisture Content Method | Oven dried @ 105-110°C | | |
| Moisture Content Top | % | 5.5 | Moisture Cont. Bottom % 5.4 |

Remarks

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Test Code =644



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Our Project No 102894

Our Report No. No 04086-

Your Sample Ref B3

Your Project or Order No 708523

Date Report Issued 09 Jun 2022

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Page 1 of 1

Determination of Dry Density/Moisture Content Relationship to BS 1377- 4 : 1990 : Section 3 (Withdrawn)

Scheme Sheringham HWRC

Location TP01

Depth 1.8m

Date received 05 April 2022

Date tested 09 May 2022

Sample type Bulk Disturbed

Sample Mass 12kg

Date Sampled 05 April 2022

Sampled by KN (NPL Staff)

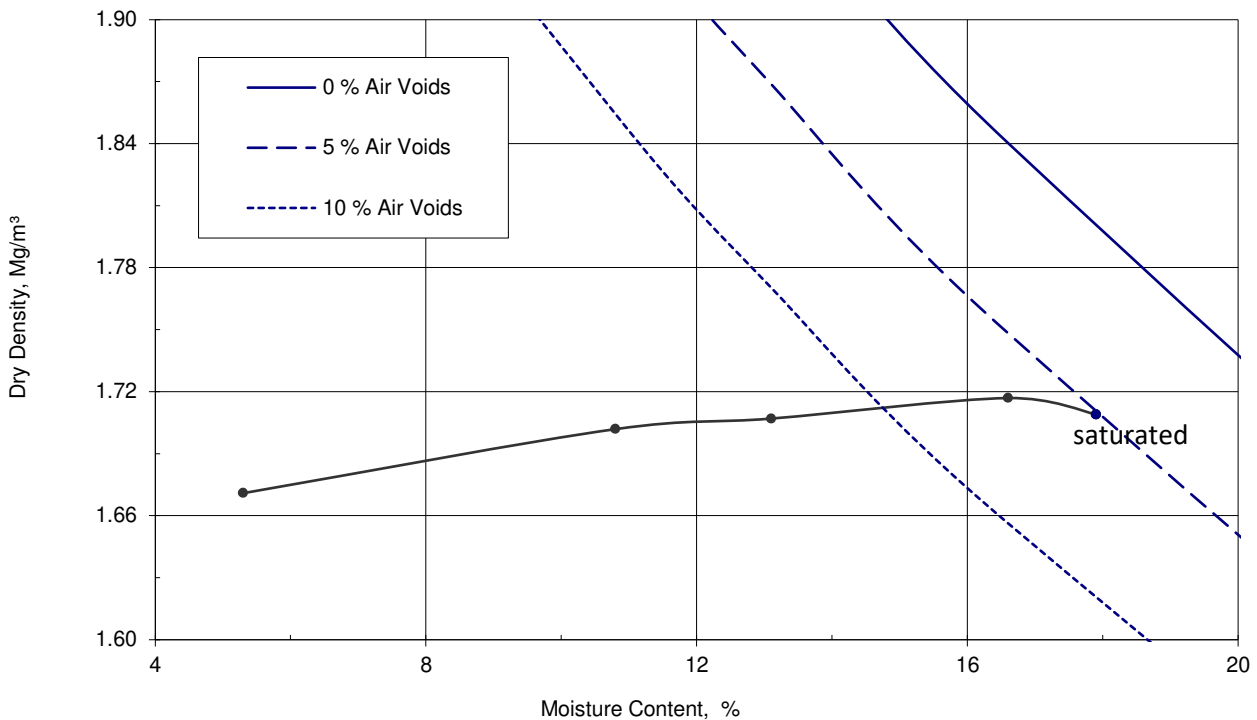
Grading zone 1

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

Description Orangey-brown, fine to medium SAND.

Supplier NCC

Source Ex site



| | | | | |
|---------------------------|------------|-----------------------------------|-------|------|
| Method of division | Quartering | Retained on 37.5 mm Sieve | % | 0.0 |
| Preparation | Natural | Retained on 20.0 mm Sieve | % | 0.0 |
| Test Method | 3.3 2.5kg | Particle Density (Assumed) | Mg/m³ | 2.65 |
| Mould Type | 1 litre | Maximum Dry Density | Mg/m³ | 1.72 |
| Samples Used | Separate | Optimum Moisture Content | % | 16.6 |

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Remarks



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Our Project No 102894
Our Report No. No 04088-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 26 Apr 2022

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Page 1 of 1

Determination of Dry Density/Moisture Content Relationship to BS 1377 : Part 4 : 1990 : Section 3

Scheme Sheringham HWRC

Location TP02

Depth 0.7m

Date received 05 April 2022

Date tested 22 April 2022

Sample type Bulk Disturbed

Sample Mass 15kg

Date Sampled 05 April 2022

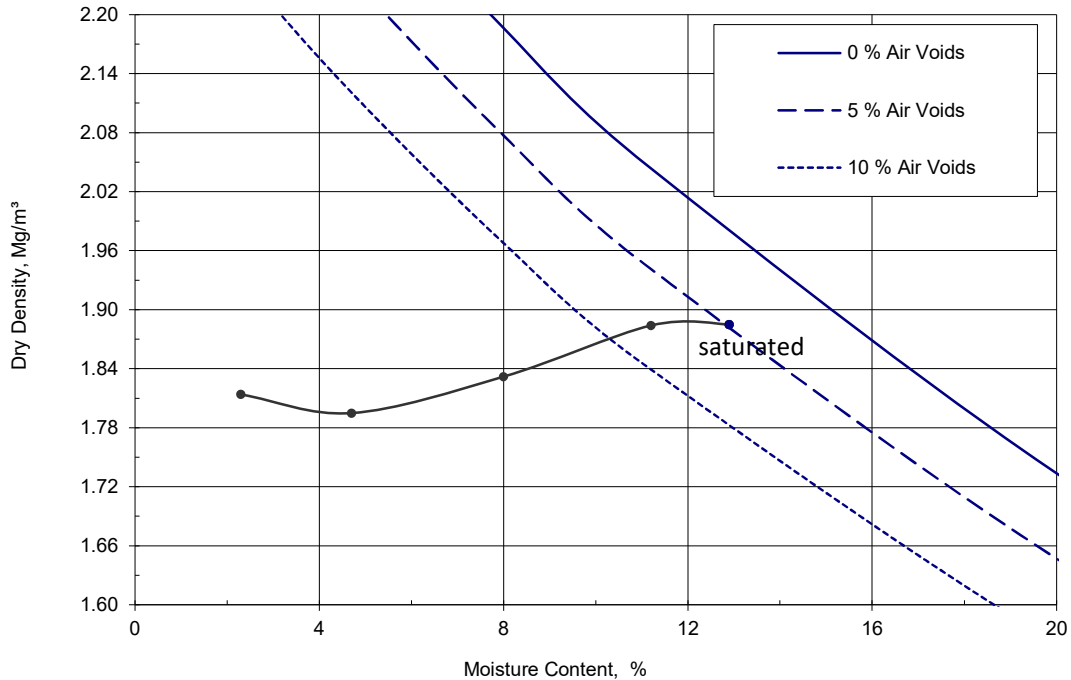
Sampled by KN (NPL Staff)

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

Description Yellowish brown fine and medium SAND

Supplier NCC

Source Ex site



| | | | | |
|---------------------------|------------|-----------------------------------|-------------------|------|
| Method of division | Quartering | Retained on 37.5 mm Sieve | % | 0.0 |
| Preparation | Natural | Retained on 20.0 mm Sieve | % | 0.0 |
| Test Method | 3.3 2.5kg | Particle Density (Assumed) | Mg/m ³ | 2.65 |
| Mould Type | 1 litre | Maximum Dry Density | Mg/m ³ | 1.89 |
| Samples Used | Separate | Optimum Moisture Content | % | 12.9 |

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Remarks



Test Code = 640

Simon Holden (Operations Manager)

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Our Project No 102894

Our Report No. No 40812-

Your Sample Ref B2

Your Project or Order No 708523

Date Report Issued 09 Jun 2022

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Page 1 of 1

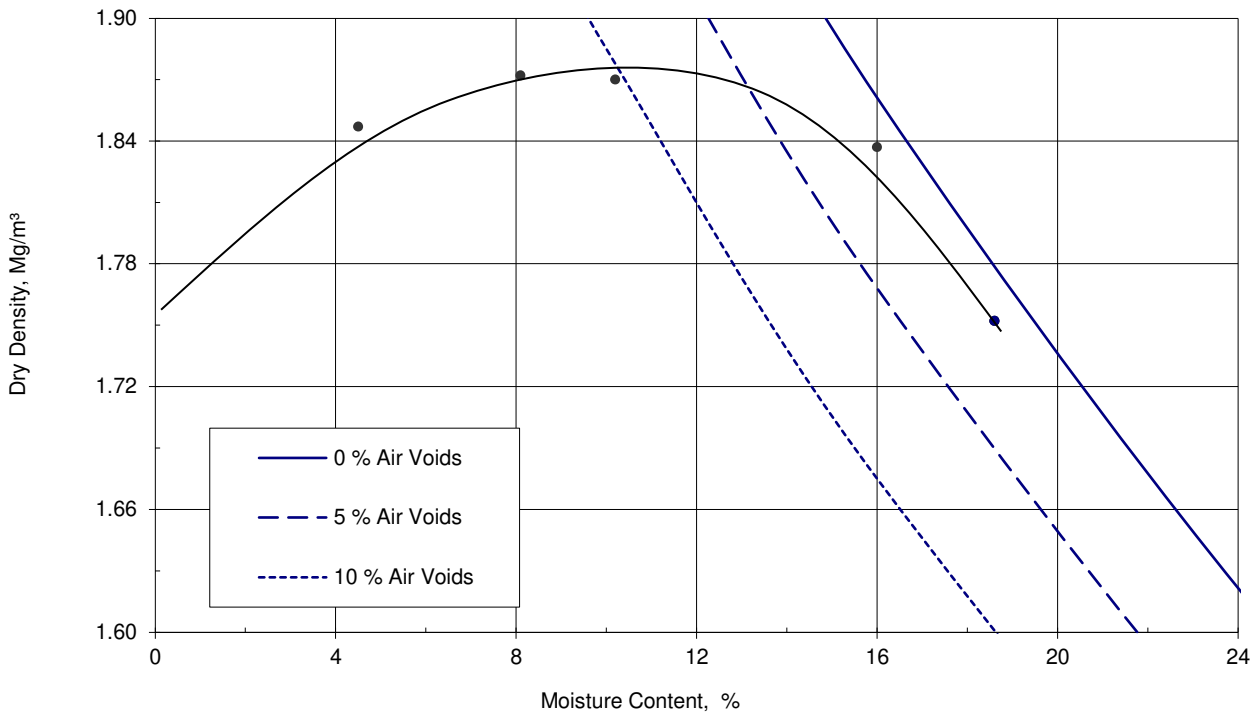
Determination of Dry Density/Moisture Content Relationship to BS 1377- 4 : 1990 : Section 3 (Withdrawn)

| | | | |
|----------------------|-----------------|----------------------|----------------|
| Scheme | Sheringham HWRC | Depth | 0.6m |
| Location | TP03 | Date received | 05 April 2022 |
| Date received | 05 April 2022 | Date tested | 04 May 2022 |
| Sample type | Bulk Disturbed | Sample Mass | 0kg |
| Date Sampled | 05 April 2022 | Sampled by | KN (NPL Staff) |
| Grading zone | 1 | | |

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

Description Orangish brown, gravelly, sandy, CLAY. Gravel is angular to sub-rounded fine flint.

Supplier NCC **Source** Ex site



| | | | | |
|---------------------------|------------|-----------------------------------|-------|------|
| Method of division | Quartering | Retained on 37.5 mm Sieve | % | 0.0 |
| Preparation | Natural | Retained on 20.0 mm Sieve | % | 0.0 |
| Test Method | 3.3 2.5kg | Particle Density (Assumed) | Mg/m³ | 2.65 |
| Mould Type | 1 litre | Maximum Dry Density | Mg/m³ | 1.87 |
| Samples Used | Separate | Optimum Moisture Content | % | 10.0 |

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Remarks



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Martineau Lane
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Our Project No 102894
Our Report No. No 40815-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 09 Jun 2022

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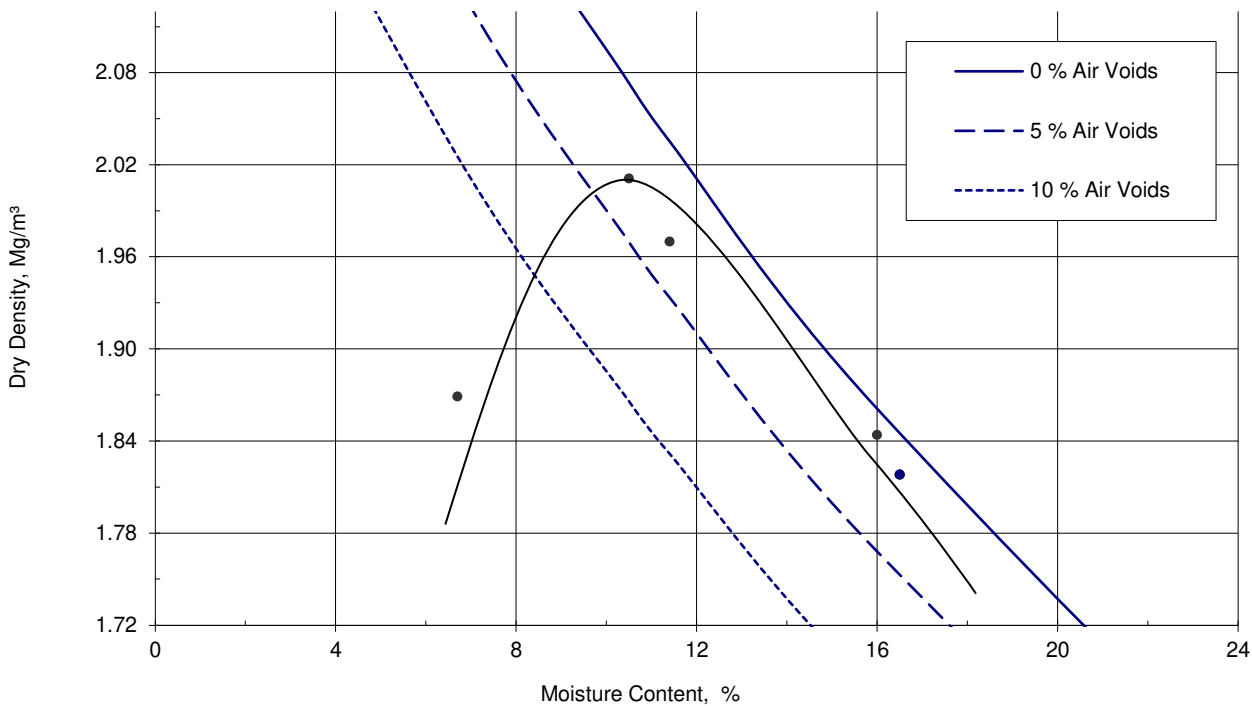
Page 1 of 1

Determination of Dry Density/Moisture Content Relationship to BS 1377- 4 : 1990 : Section 3 (Withdrawn)

| | | | |
|----------------------|-----------------|----------------------|----------------|
| Scheme | Sheringham HWRC | Depth | 0.7m |
| Location | TP04 | Date received | 05 April 2022 |
| Date received | 05 April 2022 | Date tested | 24 April 2022 |
| Sample type | Bulk Disturbed | Sample Mass | 15kg |
| Date Sampled | 05 April 2022 | Sampled by | KN (NPL Staff) |
| Grading zone | 1 | | |

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| | | | |
|--------------------|--|---------------|---------|
| Description | Light brown, slightly gravelly very sandy, silty CLAY. Gravel is angular to sub-rounded fine flint and quartz. | | |
| Supplier | NCC | Source | Ex site |



| | | | | |
|---------------------------|------------|-----------------------------------|-------|------|
| Method of division | Quartering | Retained on 37.5 mm Sieve | % | 0.0 |
| Preparation | Natural | Retained on 20.0 mm Sieve | % | 0.0 |
| Test Method | 3.3 2.5kg | Particle Density (Assumed) | Mg/m³ | 2.65 |
| Mould Type | 1 litre | Maximum Dry Density | Mg/m³ | 2.01 |
| Samples Used | Separate | Optimum Moisture Content | % | 10.5 |

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Our Project No 102894
Our Report No. No 40820-
Your Sample Ref B3
Your Project or Order No 708523
Date Report Issued 09 Jun 2022

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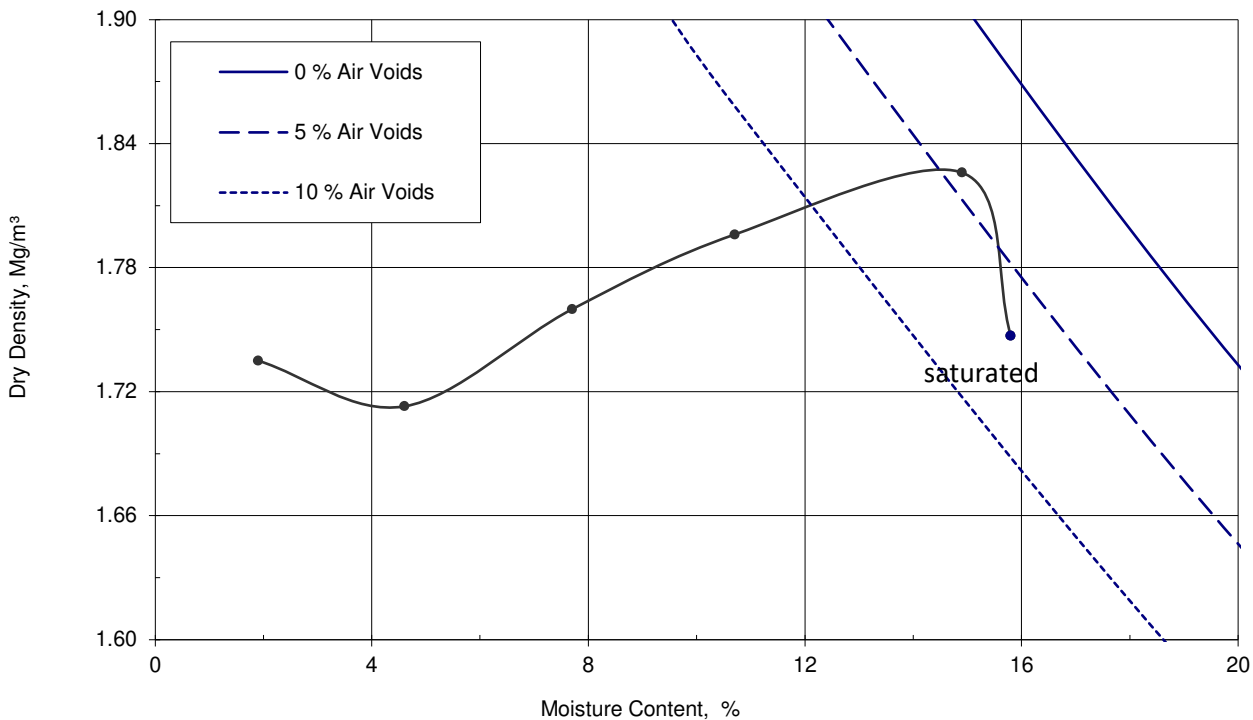
Page 1 of 1

Determination of Dry Density/Moisture Content Relationship to BS 1377- 4 : 1990 : Section 3 (Withdrawn)

| | | | |
|----------------------|-----------------|----------------------|----------------|
| Scheme | Sheringham HWRC | Depth | 1.7m |
| Location | TP05 | Date received | 05 April 2022 |
| Date received | 05 April 2022 | Date tested | |
| Sample type | Bulk Disturbed | Sample Mass | 0kg |
| Date Sampled | 05 April 2022 | Sampled by | KN (NPL Staff) |
| Grading zone | 1 | | |

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| | | | |
|--------------------|--|---------------|---------|
| Description | Yellowish-brown, slightly gravelly, fine to medium SAND. Gravel is angular to sub-rounded, fine to medium flint. | | |
| Supplier | NCC | Source | Ex site |



| | | | | |
|---------------------------|------------|-----------------------------------|-------|------|
| Method of division | Quartering | Retained on 37.5 mm Sieve | % | 0.0 |
| Preparation | Natural | Retained on 20.0 mm Sieve | % | 0.0 |
| Test Method | 3.3 2.5kg | Particle Density (Assumed) | Mg/m³ | 2.65 |
| Mould Type | 1 litre | Maximum Dry Density | Mg/m³ | 1.83 |
| Samples Used | Separate | Optimum Moisture Content | % | 15.8 |

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Remarks



Community & Environmental Services

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Our Project No 102894
Our Report No. No 40823-
Your Sample Ref B2
Your Project or Order No 708523
Date Report Issued 26 Apr 2022

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Page 1 of 1

Determination of Dry Density/Moisture Content Relationship to BS 1377 : Part 4 : 1990 : Section 3

Scheme Sheringham HWRC

Location TP06

Depth 0.7m

Date received 05 April 2022

Date tested 22 April 2022

Sample type Bulk Disturbed

Sample Mass 15kg

Date Sampled 05 April 2022

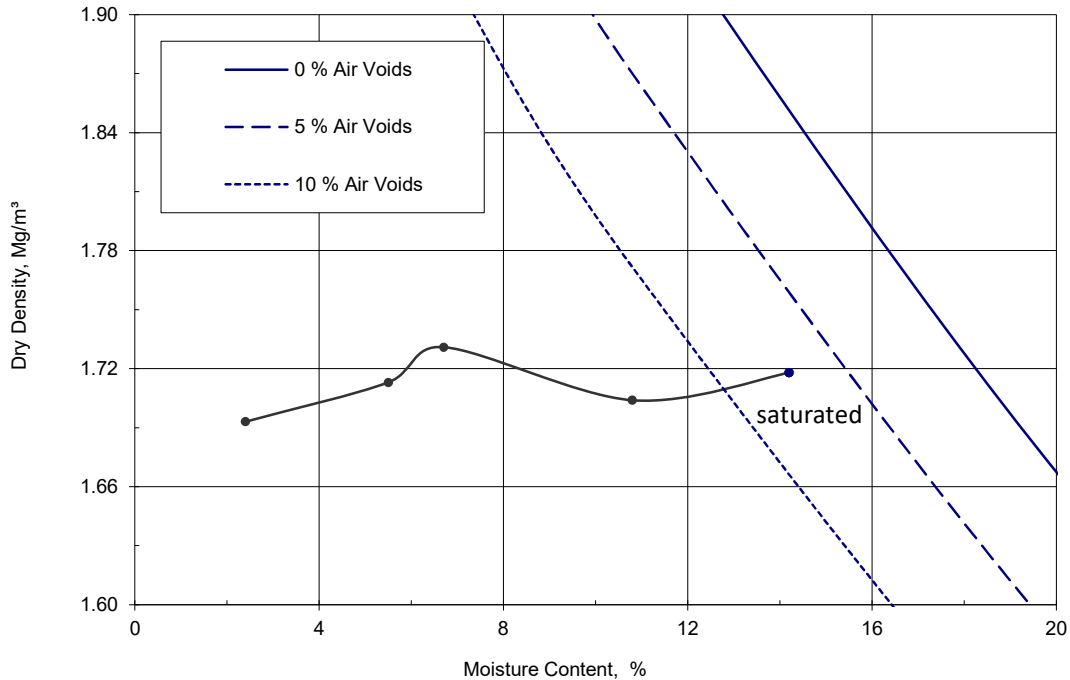
Sampled by KN (NPL Staff)

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

Description Orange slightly gravelly fine to coarse SAND. Gravel is angular to rounded fine to coarse flint.

Supplier NCC

Source Ex site



| | | | | |
|---------------------------|------------|-----------------------------------|-------------------|------|
| Method of division | Quartering | Retained on 37.5 mm Sieve | % | 0.0 |
| Preparation | Natural | Retained on 20.0 mm Sieve | % | 0.5 |
| Test Method | 3.3 2.5kg | Particle Density (Assumed) | Mg/m ³ | 2.60 |
| Mould Type | 1 litre | Maximum Dry Density | Mg/m ³ | 1.73 |
| Samples Used | Separate | Optimum Moisture Content | % | 6.7 |

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Remarks



Test Code = 640

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Our Project No 102894
Our Report No. No 40827-
Your Sample Ref B3
Your Project or Order No 708523
Date Report Issued 09 Jun 2022

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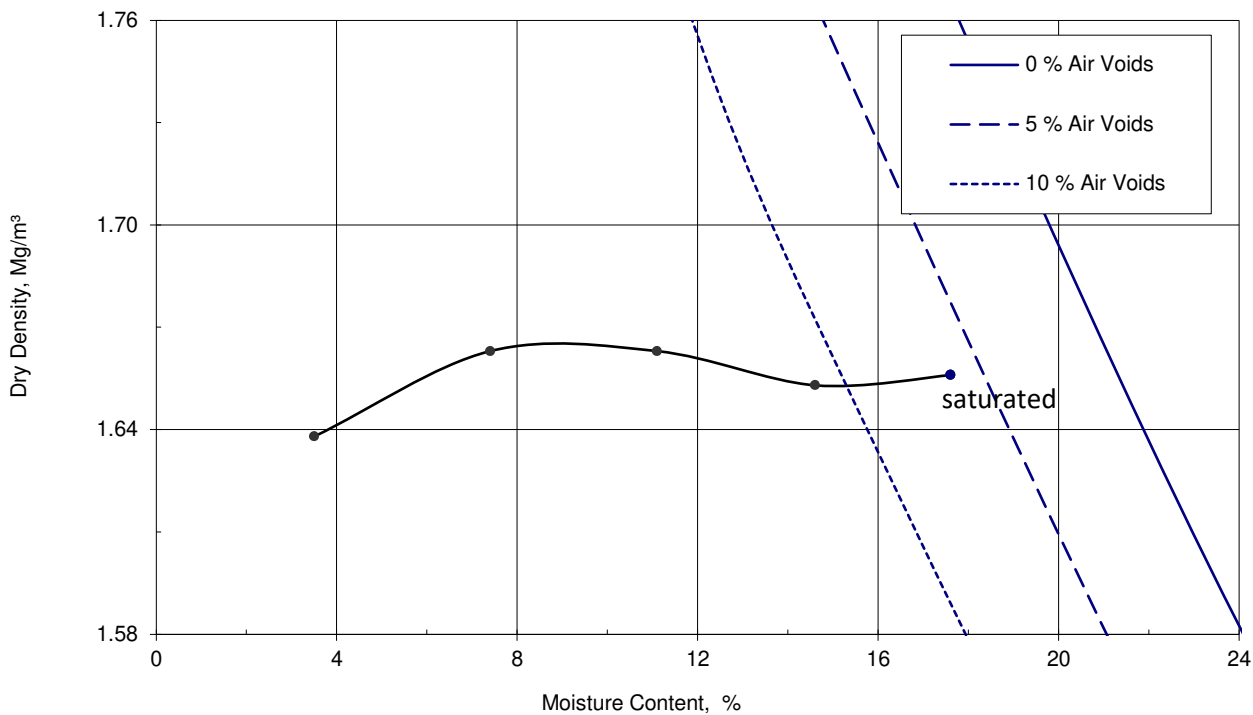
Page 1 of 1

Determination of Dry Density/Moisture Content Relationship to BS 1377- 4 : 1990 : Section 3 (Withdrawn)

| | | | |
|----------------------|-----------------|----------------------|----------------|
| Scheme | Sheringham HWRC | Depth | 1.7m |
| Location | TP07 | Date received | 05 April 2022 |
| Date received | 05 April 2022 | Date tested | 04 May 2022 |
| Sample type | Bulk Disturbed | Sample Mass | 13kg |
| Date Sampled | 05 April 2022 | Sampled by | KN (NPL Staff) |
| Grading zone | 1 | | |

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

| | | | |
|--------------------|--|---------------|---------|
| Description | Yellowish-brown slightly gravelly fine to coarse SAND. Gravel is angular to sub-rounded fine and medium flint. | | |
| Supplier | NCC | Source | Ex site |



| | | | | |
|---------------------------|------------|-----------------------------------|-------|------|
| Method of division | Quartering | Retained on 37.5 mm Sieve | % | 0.0 |
| Preparation | Natural | Retained on 20.0 mm Sieve | % | 0.0 |
| Test Method | 3.3 2.5kg | Particle Density (Assumed) | Mg/m³ | 2.65 |
| Mould Type | 1 litre | Maximum Dry Density | Mg/m³ | 1.66 |
| Samples Used | Separate | Optimum Moisture Content | % | 7.4 |

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Remarks



Community & Environmental Services

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Martineau Lane
Norwich
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Our Project No 102894

Our Report No. No 40831-

Your Sample Ref B3

Your Project or Order No 708523

Date Report Issued 09 Jun 2022

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Page 1 of 1

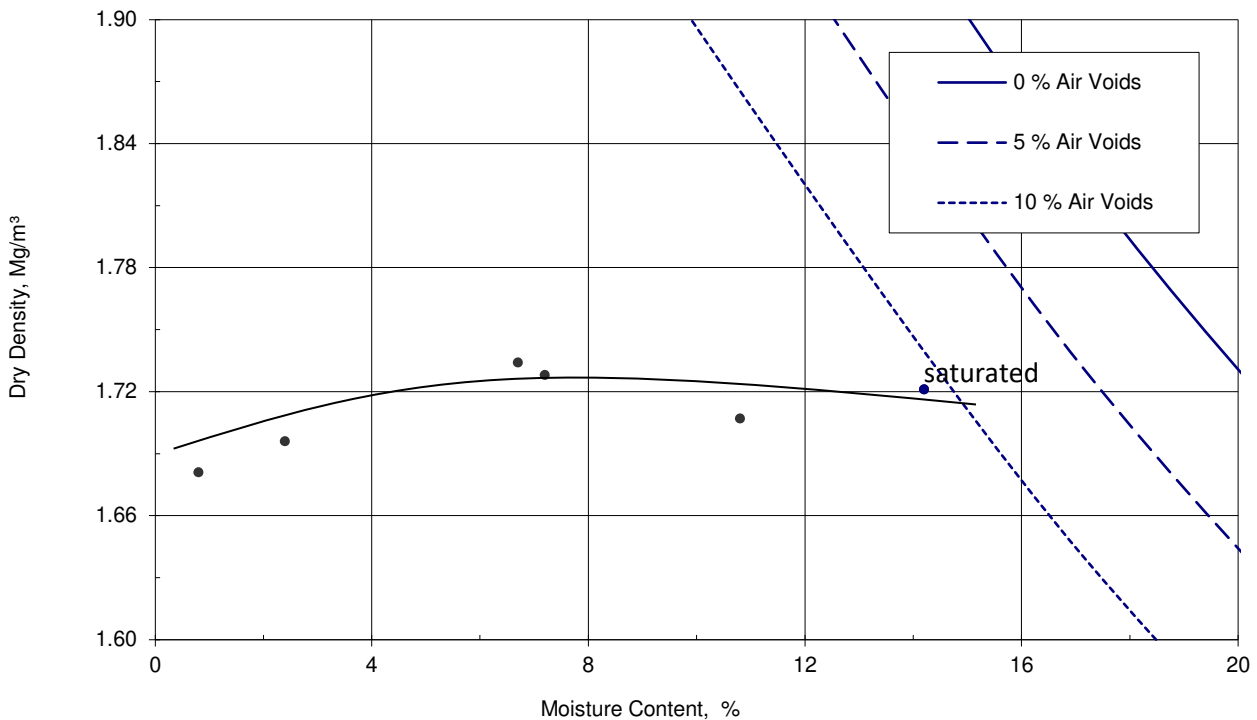
Determination of Dry Density/Moisture Content Relationship to BS 1377- 4 : 1990 : Section 3 (Withdrawn)

| | | | |
|----------------------|-----------------|----------------------|----------------|
| Scheme | Sheringham HWRC | Depth | 1.7m |
| Location | TP08 | Date received | 05 April 2022 |
| Date received | 05 April 2022 | Date tested | 13 May 2022 |
| Sample type | Bulk Disturbed | Sample Mass | 11kg |
| Date Sampled | 05 April 2022 | Sampled by | KN (NPL Staff) |
| Grading zone | 2 | | |

If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

Description Orangey-brown slightly gravelly fine and medium SAND. Gravel is angular to sub-angular fine and medium flint.

Supplier NCC **Source** Ex site



| | | | | |
|---------------------------|------------|-----------------------------------|-------|------|
| Method of division | Quartering | Retained on 37.5 mm Sieve | % | 0.0 |
| Preparation | Natural | Retained on 20.0 mm Sieve | % | 1.3 |
| Test Method | 3.3 2.5kg | Particle Density (Assumed) | Mg/m³ | 2.65 |
| Mould Type | 1 litre | Maximum Dry Density | Mg/m³ | 1.73 |
| Samples Used | Separate | Optimum Moisture Content | % | 6.7 |

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Remarks



Appendix G

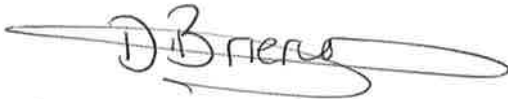
FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 22/03570
Issue Number: 1
Date: 25 April, 2022

Client: Norse Eastern Ltd t/a Norse Highways
280 Fifers Lane
Norwich
Norfolk
NR6 6EQ

Project Manager: Josh Thompson/Sharon Woods; Simon Holden
Project Name: Sheringham HWRC
Project Ref: 102894
Order No: PN05037679
Date Samples Received: 12/04/22
Date Instructions Received: 12/04/22
Date Analysis Completed: 25/04/22

Approved by:



Danielle Brierley
Deputy Client Services Supervisor

Envirolab Job Number: 22/03570

Client Project Name: Sheringham HWRC

Client Project Ref: 102894

| Lab Sample ID | 22/03570/1 | 22/03570/2 | 22/03570/3 | 22/03570/4 | 22/03570/5 | 22/03570/6 | 22/03570/7 | Units | Limit of Detection | Method ref |
|---|------------|------------|------------|------------|------------|------------|------------|-------|--------------------|-------------|
| Client Sample No | 1 | 2 | 1 | 3 | 1 | 2 | 1 | | | |
| Client Sample ID | TP01 | TP01 | TP02 | TP02 | TP03 | TP03 | TP04 | | | |
| Depth to Top | 0.10 | 0.70 | 0.10 | 1.40 | 0.10 | 0.60 | 0.10 | | | |
| Depth To Bottom | | | | | | | | | | |
| Date Sampled | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | | | |
| Sample Type | Soil - ES | Soil - B | Soil - ES | Soil - B | Soil - ES | Soil - B | Soil - ES | | | |
| Sample Matrix Code | 6AE | 1 | 6A | 1A | 6A | 6 | 6AE | | | |
| % Stones >10mm _A | <0.1 | <0.1 | 10.7 | <0.1 | 3.8 | <0.1 | <0.1 | | | |
| Asbestos in soil _D [#] | NAD | - | NAD | - | - | NAD | NAD | | | A-T-045 |
| Asbestos Matrix (visual) _D | - | - | - | - | - | - | - | | | A-T-045 |
| Asbestos Matrix (microscope) _D | - | - | - | - | - | - | - | | | A-T-045 |
| Asbestos ACM - Suitable for Water Absorption Test? _D | N/A | - | N/A | - | - | N/A | N/A | | | A-T-045 |
| pH _D ^{M#} | 7.65 | - | 7.69 | - | - | 8.11 | 7.37 | pH | 0.01 | A-T-031s |
| pH BRE _D ^{M#} | - | 8.18 | - | 8.14 | 7.74 | - | - | pH | 0.01 | A-T-031s |
| Ammonium NH4 BRE (water sol 2:1) _D | - | <1.00 | - | <1.00 | 1.25 | - | - | mg/l | 1 | A-T-033s |
| Chloride BRE, SO4 equiv. (water sol 2:1) _D ^{M#} | - | <7 | - | <7 | <7 | - | - | mg/l | 7 | A-T-026s |
| Nitrate BRE, SO4 equiv. (water sol 2:1) _D | - | <0.4 | - | 0.8 | 13.3 | - | - | mg/l | 0.4 | A-T-026s |
| Sulphate (water sol 2:1) _D ^{M#} | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | g/l | 0.01 | A-T-026s |
| Sulphate BRE (water sol 2:1) _D ^{M#} | - | <10 | - | <10 | <10 | - | - | mg/l | 10 | A-T-026s |
| Sulphate (acid soluble) _D ^{M#} | 230 | - | <200 | - | - | <200 | 280 | mg/kg | 200 | A-T-028s |
| Sulphate BRE (acid sol) _D ^{M#} | - | <0.02 | - | <0.02 | 0.03 | - | - | % w/w | 0.02 | A-T-028s |
| Sulphur BRE (total) _D | - | <0.01 | - | <0.01 | 0.02 | - | - | % w/w | 0.01 | A-T-024s |
| Magnesium BRE (water sol 2:1) _D | - | 2 | - | 2 | 13 | - | - | mg/l | 1 | A-T-SOLMETS |
| Cyanide (total) _A ^{M#} | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-042sTCN |
| Phenols - Total by HPLC _A | <0.2 | - | <0.2 | - | - | <0.2 | <0.2 | mg/kg | 0.2 | A-T-050s |
| Sulphide _A | <5 | - | <5 | - | - | <5 | <5 | mg/kg | 5 | A-T-043-s |
| Sulphur (elemental) _D ^{M#} | <5 | - | <5 | - | - | <5 | <5 | mg/kg | 5 | A-T-029s |
| Organic matter Default _D ^{M#} | 1.3 | - | 1.0 | - | - | 0.5 | 1.8 | % w/w | 0.1 | A-T-032 OM |
| Arsenic _D ^{M#} | 3 | - | 3 | - | - | 3 | 4 | mg/kg | 1 | A-T-024s |
| Boron (water soluble) _D | <1.0 | - | <1.0 | - | - | <1.0 | <1.0 | mg/kg | 1 | A-T-027s |
| Cadmium _D ^{M#} | <0.5 | - | <0.5 | - | - | <0.5 | <0.5 | mg/kg | 0.5 | A-T-024s |
| Copper _D ^{M#} | 9 | - | 5 | - | - | 5 | 12 | mg/kg | 1 | A-T-024s |
| Chromium _D ^{M#} | 9 | - | 7 | - | - | 13 | 9 | mg/kg | 1 | A-T-024s |
| Chromium (hexavalent) _D | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-040s |
| Lead _D ^{M#} | 14 | - | 11 | - | - | 9 | 19 | mg/kg | 1 | A-T-024s |
| Mercury _D | <0.17 | - | <0.17 | - | - | <0.17 | <0.17 | mg/kg | 0.17 | A-T-024s |
| Nickel _D ^{M#} | 5 | - | 4 | - | - | 8 | 6 | mg/kg | 1 | A-T-024s |
| Selenium _D ^{M#} | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-024s |
| Zinc _D ^{M#} | 35 | - | 23 | - | - | 32 | 42 | mg/kg | 5 | A-T-024s |

Envirolab Job Number: 22/03570

Client Project Name: Sheringham HWRC

Client Project Ref: 102894

| Lab Sample ID | 22/03570/1 | 22/03570/2 | 22/03570/3 | 22/03570/4 | 22/03570/5 | 22/03570/6 | 22/03570/7 | Units | Limit of Detection | Method ref |
|--|------------|------------|------------|------------|------------|------------|------------|-------|--------------------|------------|
| Client Sample No | 1 | 2 | 1 | 3 | 1 | 2 | 1 | | | |
| Client Sample ID | TP01 | TP01 | TP02 | TP02 | TP03 | TP03 | TP04 | | | |
| Depth to Top | 0.10 | 0.70 | 0.10 | 1.40 | 0.10 | 0.60 | 0.10 | | | |
| Depth To Bottom | | | | | | | | | | |
| Date Sampled | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | | | |
| Sample Type | Soil - ES | Soil - B | Soil - ES | Soil - B | Soil - ES | Soil - B | Soil - ES | | | |
| Sample Matrix Code | 6AE | 1 | 6A | 1A | 6A | 6 | 6AE | | | |
| PAH-16MS | | | | | | | | | | |
| Acenaphthene _A ^{M#} | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-019s |
| Acenaphthylene _A ^{M#} | <0.01 | - | <0.01 | - | - | <0.01 | 0.02 | mg/kg | 0.01 | A-T-019s |
| Anthracene _A ^{M#} | <0.02 | - | <0.02 | - | - | <0.02 | 0.04 | mg/kg | 0.02 | A-T-019s |
| Benzo(a)anthracene _A ^{M#} | <0.04 | - | 0.12 | - | - | <0.04 | 0.19 | mg/kg | 0.04 | A-T-019s |
| Benzo(a)pyrene _A ^{M#} | <0.04 | - | 0.14 | - | - | <0.04 | 0.25 | mg/kg | 0.04 | A-T-019s |
| Benzo(b)fluoranthene _A ^{M#} | <0.05 | - | 0.17 | - | - | <0.05 | 0.32 | mg/kg | 0.05 | A-T-019s |
| Benzo(ghi)perylene _A ^{M#} | <0.05 | - | 0.08 | - | - | <0.05 | 0.14 | mg/kg | 0.05 | A-T-019s |
| Benzo(k)fluoranthene _A ^{M#} | <0.07 | - | <0.07 | - | - | <0.07 | 0.13 | mg/kg | 0.07 | A-T-019s |
| Chrysene _A ^{M#} | <0.06 | - | 0.15 | - | - | <0.06 | 0.25 | mg/kg | 0.06 | A-T-019s |
| Dibenzo(ah)anthracene _A ^{M#} | <0.04 | - | <0.04 | - | - | <0.04 | <0.04 | mg/kg | 0.04 | A-T-019s |
| Fluoranthene _A ^{M#} | <0.08 | - | 0.27 | - | - | <0.08 | 0.42 | mg/kg | 0.08 | A-T-019s |
| Fluorene _A ^{M#} | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-019s |
| Indeno(123-cd)pyrene _A ^{M#} | <0.03 | - | 0.09 | - | - | <0.03 | 0.15 | mg/kg | 0.03 | A-T-019s |
| Naphthalene _A ^{M#} | <0.03 | - | <0.03 | - | - | <0.03 | <0.03 | mg/kg | 0.03 | A-T-019s |
| Phenanthrene _A ^{M#} | <0.03 | - | 0.09 | - | - | <0.03 | 0.14 | mg/kg | 0.03 | A-T-019s |
| Pyrene _A ^{M#} | <0.07 | - | 0.23 | - | - | <0.07 | 0.35 | mg/kg | 0.07 | A-T-019s |
| Total PAH-16MS _A ^{M#} | <0.08 | - | 1.34 | - | - | <0.08 | 2.40 | mg/kg | 0.01 | A-T-019s |

Envirolab Job Number: 22/03570

Client Project Name: Sheringham HWRC

Client Project Ref: 102894

| Lab Sample ID | 22/03570/1 | 22/03570/2 | 22/03570/3 | 22/03570/4 | 22/03570/5 | 22/03570/6 | 22/03570/7 | Units | Limit of Detection | Method ref |
|--|------------|------------|------------|------------|------------|------------|------------|-------|--------------------|------------|
| Client Sample No | 1 | 2 | 1 | 3 | 1 | 2 | 1 | | | |
| Client Sample ID | TP01 | TP01 | TP02 | TP02 | TP03 | TP03 | TP04 | | | |
| Depth to Top | 0.10 | 0.70 | 0.10 | 1.40 | 0.10 | 0.60 | 0.10 | | | |
| Depth To Bottom | | | | | | | | | | |
| Date Sampled | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | | | |
| Sample Type | Soil - ES | Soil - B | Soil - ES | Soil - B | Soil - ES | Soil - B | Soil - ES | | | |
| Sample Matrix Code | 6AE | 1 | 6A | 1A | 6A | 6 | 6AE | | | |
| TPH UKCWG with Clean Up *C1 | | | | | | | | | | |
| Ali >C5-C6 _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |
| Ali >C6-C8 _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |
| Ali >C8-C10 _A | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-055s |
| Ali >C10-C12 _A ^{M#} | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-055s |
| Ali >C12-C16 _A ^{M#} | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-055s |
| Ali >C16-C21 _A ^{M#} | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-055s |
| Ali >C21-C35 _A ^{M#} | 6 | - | 2 | - | - | <1 | 7 | mg/kg | 1 | A-T-055s |
| Ali >C35-C44 _A | <1 | - | <1 | - | - | <1 | 1 | mg/kg | 1 | A-T-055s |
| Total Aliphatics _A | 6 | - | 2 | - | - | <1 | 8 | mg/kg | 1 | A-T-055s |
| Aro >C5-C7 _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |
| Aro >C7-C8 _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |
| Aro >C8-C10 _A | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-055s |
| Aro >C10-C12 _A | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-055s |
| Aro >C12-C16 _A | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-055s |
| Aro >C16-C21 _A ^{M#} | <1 | - | <1 | - | - | <1 | 7 | mg/kg | 1 | A-T-055s |
| Aro >C21-C35 _A | <1 | - | 4 | - | - | <1 | 27 | mg/kg | 1 | A-T-055s |
| Aro >C35-C44 _A | <1 | - | <1 | - | - | <1 | <1 | mg/kg | 1 | A-T-055s |
| Total Aromatics _A | <1 | - | 4 | - | - | <1 | 34 | mg/kg | 1 | A-T-055s |
| TPH (Ali & Aro >C5-C44) _A | 6 | - | 6 | - | - | <1 | 42 | mg/kg | 1 | A-T-055s |
| BTEX - Benzene _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |
| BTEX - Toluene _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |
| BTEX - Ethyl Benzene _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |
| BTEX - m & p Xylene _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |
| BTEX - o Xylene _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |
| MTBE _A [#] | <0.01 | - | <0.01 | - | - | <0.01 | <0.01 | mg/kg | 0.01 | A-T-022s |

Envirolab Job Number: 22/03570

Client Project Name: Sheringham HWRC

Client Project Ref: 102894

| Lab Sample ID | 22/03570/8 | 22/03570/9 | 22/03570/10 | 22/03570/11 | 22/03570/12 | 22/03570/13 | 22/03570/14 | Units | Limit of Detection | Method ref |
|---|------------|------------|-------------|-------------|-------------|-------------|-------------|-------|--------------------|-------------|
| Client Sample No | 2 | 1 | 2 | 3 | 1 | 2 | 1 | | | |
| Client Sample ID | TP04 | TP05 | TP06 | TP06 | TP07 | TP07 | TP08 | | | |
| Depth to Top | 0.70 | 0.10 | 0.70 | 2.40 | 0.10 | 0.60 | 0.10 | | | |
| Depth To Bottom | | | | | | | | | | |
| Date Sampled | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | | | |
| Sample Type | Soil - B | Soil - ES | Soil - B | Soil - B | Soil - ES | Soil - B | Soil - ES | | | |
| Sample Matrix Code | 6A | 6AE | 1 | 1A | 6AE | 1 | 6AE | | | |
| % Stones >10mm _A | <0.1 | 7.6 | <0.1 | <0.1 | 9.2 | <0.1 | 8.9 | | | |
| Asbestos in soil _D [#] | - | NAD | NAD | - | NAD | - | NAD | | | A-T-045 |
| Asbestos Matrix (visual) _D | - | - | - | - | - | - | - | | | A-T-045 |
| Asbestos Matrix (microscope) _D | - | - | - | - | - | - | - | | | A-T-045 |
| Asbestos ACM - Suitable for Water Absorption Test? _D | - | N/A | N/A | - | N/A | - | N/A | | | A-T-045 |
| pH _D ^{M#} | - | 7.20 | 8.08 | - | 7.41 | - | 7.73 | pH | 0.01 | A-T-031s |
| pH BRE _D ^{M#} | 8.11 | - | - | 8.21 | - | 7.96 | - | pH | 0.01 | A-T-031s |
| Ammonium NH4 BRE (water sol 2:1) _D | <1.00 | - | - | 1.27 | - | 1.17 | - | mg/l | 1 | A-T-033s |
| Chloride BRE, SO4 equiv. (water sol 2:1) _D ^{M#} | <7 | - | - | <7 | - | <7 | - | mg/l | 7 | A-T-026s |
| Nitrate BRE, SO4 equiv. (water sol 2:1) _D | 1.5 | - | - | 0.4 | - | <0.4 | - | mg/l | 0.4 | A-T-026s |
| Sulphate (water sol 2:1) _D ^{M#} | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | g/l | 0.01 | A-T-026s |
| Sulphate BRE (water sol 2:1) _D ^{M#} | <10 | - | - | <10 | - | <10 | - | mg/l | 10 | A-T-026s |
| Sulphate (acid soluble) _D ^{M#} | - | <200 | <200 | - | <200 | - | 200 | mg/kg | 200 | A-T-028s |
| Sulphate BRE (acid sol) _D ^{M#} | <0.02 | - | - | <0.02 | - | <0.02 | - | % w/w | 0.02 | A-T-028s |
| Sulphur BRE (total) _D | <0.01 | - | - | <0.01 | - | <0.01 | - | % w/w | 0.01 | A-T-024s |
| Magnesium BRE (water sol 2:1) _D | 8 | - | - | 2 | - | 6 | - | mg/l | 1 | A-T-SOLMETS |
| Cyanide (total) _A ^{M#} | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-042sTCN |
| Phenols - Total by HPLC _A | - | <0.2 | <0.2 | - | <0.2 | - | <0.2 | mg/kg | 0.2 | A-T-050s |
| Sulphide _A | - | <5 | <5 | - | 10 | - | 95 | mg/kg | 5 | A-T-043-s |
| Sulphur (elemental) _D ^{M#} | - | <5 | <5 | - | <5 | - | <5 | mg/kg | 5 | A-T-029s |
| Organic matter Default _D ^{M#} | - | 1.0 | <0.1 | - | 1.2 | - | 0.9 | % w/w | 0.1 | A-T-032 OM |
| Arsenic _D ^{M#} | - | 4 | 5 | - | 4 | - | 4 | mg/kg | 1 | A-T-024s |
| Boron (water soluble) _D | - | <1.0 | <1.0 | - | <1.0 | - | <1.0 | mg/kg | 1 | A-T-027s |
| Cadmium _D ^{M#} | - | <0.5 | <0.5 | - | <0.5 | - | <0.5 | mg/kg | 0.5 | A-T-024s |
| Copper _D ^{M#} | - | 10 | 2 | - | 9 | - | 8 | mg/kg | 1 | A-T-024s |
| Chromium _D ^{M#} | - | 6 | 4 | - | 7 | - | 6 | mg/kg | 1 | A-T-024s |
| Chromium (hexavalent) _D | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-040s |
| Lead _D ^{M#} | - | 12 | 2 | - | 12 | - | 13 | mg/kg | 1 | A-T-024s |
| Mercury _D | - | <0.17 | <0.17 | - | <0.17 | - | <0.17 | mg/kg | 0.17 | A-T-024s |
| Nickel _D ^{M#} | - | 4 | 4 | - | 5 | - | 5 | mg/kg | 1 | A-T-024s |
| Selenium _D ^{M#} | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-024s |
| Zinc _D ^{M#} | - | 31 | 9 | - | 31 | - | 26 | mg/kg | 5 | A-T-024s |

Envirolab Job Number: 22/03570

Client Project Name: Sheringham HWRC

Client Project Ref: 102894

| Lab Sample ID | 22/03570/8 | 22/03570/9 | 22/03570/10 | 22/03570/11 | 22/03570/12 | 22/03570/13 | 22/03570/14 | Units | Limit of Detection | Method ref |
|--|------------|------------|-------------|-------------|-------------|-------------|-------------|-------|--------------------|------------|
| Client Sample No | 2 | 1 | 2 | 3 | 1 | 2 | 1 | | | |
| Client Sample ID | TP04 | TP05 | TP06 | TP06 | TP07 | TP07 | TP08 | | | |
| Depth to Top | 0.70 | 0.10 | 0.70 | 2.40 | 0.10 | 0.60 | 0.10 | | | |
| Depth To Bottom | | | | | | | | | | |
| Date Sampled | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | | | |
| Sample Type | Soil - B | Soil - ES | Soil - B | Soil - B | Soil - ES | Soil - B | Soil - ES | | | |
| Sample Matrix Code | 6A | 6AE | 1 | 1A | 6AE | 1 | 6AE | | | |
| PAH-16MS | | | | | | | | | | |
| Acenaphthene _A ^{M#} | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-019s |
| Acenaphthylene _A ^{M#} | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-019s |
| Anthracene _A ^{M#} | - | <0.02 | <0.02 | - | <0.02 | - | <0.02 | mg/kg | 0.02 | A-T-019s |
| Benzo(a)anthracene _A ^{M#} | - | <0.04 | <0.04 | - | <0.04 | - | 0.05 | mg/kg | 0.04 | A-T-019s |
| Benzo(a)pyrene _A ^{M#} | - | <0.04 | <0.04 | - | <0.04 | - | 0.06 | mg/kg | 0.04 | A-T-019s |
| Benzo(b)fluoranthene _A ^{M#} | - | <0.05 | <0.05 | - | <0.05 | - | 0.09 | mg/kg | 0.05 | A-T-019s |
| Benzo(ghi)perylene _A ^{M#} | - | <0.05 | <0.05 | - | <0.05 | - | <0.05 | mg/kg | 0.05 | A-T-019s |
| Benzo(k)fluoranthene _A ^{M#} | - | <0.07 | <0.07 | - | <0.07 | - | <0.07 | mg/kg | 0.07 | A-T-019s |
| Chrysene _A ^{M#} | - | <0.06 | <0.06 | - | <0.06 | - | 0.07 | mg/kg | 0.06 | A-T-019s |
| Dibenzo(ah)anthracene _A ^{M#} | - | <0.04 | <0.04 | - | <0.04 | - | <0.04 | mg/kg | 0.04 | A-T-019s |
| Fluoranthene _A ^{M#} | - | <0.08 | <0.08 | - | <0.08 | - | 0.12 | mg/kg | 0.08 | A-T-019s |
| Fluorene _A ^{M#} | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-019s |
| Indeno(123-cd)pyrene _A ^{M#} | - | <0.03 | <0.03 | - | <0.03 | - | 0.04 | mg/kg | 0.03 | A-T-019s |
| Naphthalene _A ^{M#} | - | <0.03 | <0.03 | - | <0.03 | - | <0.03 | mg/kg | 0.03 | A-T-019s |
| Phenanthrene _A ^{M#} | - | <0.03 | <0.03 | - | <0.03 | - | 0.05 | mg/kg | 0.03 | A-T-019s |
| Pyrene _A ^{M#} | - | <0.07 | <0.07 | - | <0.07 | - | 0.10 | mg/kg | 0.07 | A-T-019s |
| Total PAH-16MS _A ^{M#} | - | <0.08 | <0.08 | - | <0.08 | - | 0.58 | mg/kg | 0.01 | A-T-019s |

Envirolab Job Number: 22/03570

Client Project Name: Sheringham HWRC

Client Project Ref: 102894

| Lab Sample ID | 22/03570/8 | 22/03570/9 | 22/03570/10 | 22/03570/11 | 22/03570/12 | 22/03570/13 | 22/03570/14 | Units | Limit of Detection | Method ref |
|--|------------|------------|-------------|-------------|-------------|-------------|-------------|-------|--------------------|------------|
| Client Sample No | 2 | 1 | 2 | 3 | 1 | 2 | 1 | | | |
| Client Sample ID | TP04 | TP05 | TP06 | TP06 | TP07 | TP07 | TP08 | | | |
| Depth to Top | 0.70 | 0.10 | 0.70 | 2.40 | 0.10 | 0.60 | 0.10 | | | |
| Depth To Bottom | | | | | | | | | | |
| Date Sampled | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | 05-Apr-22 | | | |
| Sample Type | Soil - B | Soil - ES | Soil - B | Soil - B | Soil - ES | Soil - B | Soil - ES | | | |
| Sample Matrix Code | 6A | 6AE | 1 | 1A | 6AE | 1 | 6AE | | | |
| TPH UKCWG with Clean Up *C1 | | | | | | | | | | |
| Ali >C5-C6 _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |
| Ali >C6-C8 _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |
| Ali >C8-C10 _A | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-055s |
| Ali >C10-C12 _A ^{M#} | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-055s |
| Ali >C12-C16 _A ^{M#} | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-055s |
| Ali >C16-C21 _A ^{M#} | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-055s |
| Ali >C21-C35 _A ^{M#} | - | 3 | 3 | - | 3 | - | 2 | mg/kg | 1 | A-T-055s |
| Ali >C35-C44 _A | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-055s |
| Total Aliphatics _A | - | 3 | 3 | - | 3 | - | 2 | mg/kg | 1 | A-T-055s |
| Aro >C5-C7 _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |
| Aro >C7-C8 _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |
| Aro >C8-C10 _A | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-055s |
| Aro >C10-C12 _A | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-055s |
| Aro >C12-C16 _A | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-055s |
| Aro >C16-C21 _A ^{M#} | - | <1 | <1 | - | <1 | - | 2 | mg/kg | 1 | A-T-055s |
| Aro >C21-C35 _A | - | <1 | <1 | - | <1 | - | 2 | mg/kg | 1 | A-T-055s |
| Aro >C35-C44 _A | - | <1 | <1 | - | <1 | - | <1 | mg/kg | 1 | A-T-055s |
| Total Aromatics _A | - | <1 | <1 | - | <1 | - | 4 | mg/kg | 1 | A-T-055s |
| TPH (Ali & Aro >C5-C44) _A | - | 3 | 3 | - | 4 | - | 6 | mg/kg | 1 | A-T-055s |
| BTEX - Benzene _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |
| BTEX - Toluene _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |
| BTEX - Ethyl Benzene _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |
| BTEX - m & p Xylene _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |
| BTEX - o Xylene _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |
| MTBE _A [#] | - | <0.01 | <0.01 | - | <0.01 | - | <0.01 | mg/kg | 0.01 | A-T-022s |

Envirolab Job Number: 22/03570

Client Project Name: Sheringham HWRC

Client Project Ref: 102894

| Lab Sample ID | 22/03570/15 | | | | | | | | | |
|---|-------------|--|--|--|--|--|--|-------|--------------------|-------------|
| Client Sample No | 4 | | | | | | | | | |
| Client Sample ID | TP08 | | | | | | | | | |
| Depth to Top | 2.80 | | | | | | | | | |
| Depth To Bottom | | | | | | | | | | |
| Date Sampled | 05-Apr-22 | | | | | | | | | |
| Sample Type | Soil - B | | | | | | | | | |
| Sample Matrix Code | 1A | | | | | | | | | |
| | | | | | | | | Units | Limit of Detection | Method ref |
| % Stones >10mm _A | <0.1 | | | | | | | % w/w | 0.1 | A-T-044 |
| pH BRE _D ^{M#} | 8.13 | | | | | | | pH | 0.01 | A-T-031s |
| Ammonium NH4 BRE (water sol 2:1) _D | <1.00 | | | | | | | mg/l | 1 | A-T-033s |
| Chloride BRE, SO4 equiv. (water sol 2:1) _D ^{M#} | <7 | | | | | | | mg/l | 7 | A-T-026s |
| Nitrate BRE, SO4 equiv. (water sol 2:1) _D | 0.5 | | | | | | | mg/l | 0.4 | A-T-026s |
| Sulphate BRE (water sol 2:1) _D ^{M#} | <10 | | | | | | | mg/l | 10 | A-T-026s |
| Sulphate BRE (acid sol) _D ^{M#} | <0.02 | | | | | | | % w/w | 0.02 | A-T-026s |
| Sulphur BRE (total) _D | <0.01 | | | | | | | % w/w | 0.01 | A-T-024s |
| Magnesium BRE (water sol 2:1) _D | 2 | | | | | | | mg/l | 1 | A-T-SOLMET5 |

REPORT NOTES

General

This report shall not be reproduced, except in full, without written approval from Envirolab.

The results reported herein relate only to the material supplied to the laboratory.

The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample, 9 = INCINERATOR ASH.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

EPH CWG results have humics mathematically subtracted through instrument calculation

TPH results "with Cleanup" indicates results cleaned up with Silica during extraction

EPH CWG GCxGC ID from TPH CWG

Where we have identified humic substances in any ID's from TPH CWG with Clean Up please note that the concentration of these humic substances is not included in the quantified results and are included in the ID for information.

Please contact us if you need any further information.

Envirolab Analysis Dates

| Lab Sample ID | 22/03570/1 | 22/03570/2 | 22/03570/3 | 22/03570/4 | 22/03570/5 | 22/03570/6 | 22/03570/7 | 22/03570/8 | 22/03570/9 | 22/03570/10 | 22/03570/11 | 22/03570/12 |
|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|
| Client Sample No | 1 | 2 | 1 | 3 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 1 |
| Client Sample ID/Depth | TP01 0.10m | TP01 0.70m | TP02 0.10m | TP02 1.40m | TP03 0.10m | TP03 0.60m | TP04 0.10m | TP04 0.70m | TP05 0.10m | TP06 0.70m | TP06 2.40m | TP07 0.10m |
| Date Sampled | 05/04/22 | 05/04/22 | 05/04/22 | 05/04/22 | 05/04/22 | 05/04/22 | 05/04/22 | 05/04/22 | 05/04/22 | 05/04/22 | 05/04/22 | 05/04/22 |
| A-T-019s | 20/04/2022 | | 20/04/2022 | | | 20/04/2022 | 20/04/2022 | | 20/04/2022 | 20/04/2022 | | 20/04/2022 |
| A-T-022s | 21/04/2022 | | 21/04/2022 | | | 21/04/2022 | 21/04/2022 | | 21/04/2022 | 21/04/2022 | | 21/04/2022 |
| A-T-024s | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 |
| A-T-026s | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 |
| A-T-027s | 22/04/2022 | | 22/04/2022 | | | 22/04/2022 | 22/04/2022 | | 22/04/2022 | 22/04/2022 | | 22/04/2022 |
| A-T-028s | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 | 22/04/2022 |
| A-T-029s | 21/04/2022 | | 21/04/2022 | | | 20/04/2022 | 20/04/2022 | | 21/04/2022 | 21/04/2022 | | 21/04/2022 |
| A-T-031s | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 | 21/04/2022 |
| A-T-032 OM | 22/04/2022 | | 22/04/2022 | | | 22/04/2022 | 22/04/2022 | | 22/04/2022 | 22/04/2022 | | 22/04/2022 |
| A-T-033s | | 25/04/2022 | | 25/04/2022 | 25/04/2022 | | | 25/04/2022 | | | 25/04/2022 | |
| A-T-040s | 22/04/2022 | | 22/04/2022 | | | 22/04/2022 | 22/04/2022 | | 22/04/2022 | 22/04/2022 | | 22/04/2022 |
| A-T-042sTCN | 21/04/2022 | | 21/04/2022 | | | 21/04/2022 | 21/04/2022 | | 21/04/2022 | 21/04/2022 | | 21/04/2022 |
| A-T-043-s | 22/04/2022 | | 22/04/2022 | | | 22/04/2022 | 22/04/2022 | | 22/04/2022 | 22/04/2022 | | 22/04/2022 |
| A-T-044 | 14/04/2022 | 14/04/2022 | 14/04/2022 | 14/04/2022 | 14/04/2022 | 14/04/2022 | 14/04/2022 | 14/04/2022 | 14/04/2022 | 14/04/2022 | 14/04/2022 | 14/04/2022 |
| A-T-045 | 14/04/2022 | | 14/04/2022 | | | 14/04/2022 | 14/04/2022 | | 14/04/2022 | 14/04/2022 | | 14/04/2022 |
| A-T-050s | 20/04/2022 | | 20/04/2022 | | | 20/04/2022 | 20/04/2022 | | 20/04/2022 | 20/04/2022 | | 20/04/2022 |
| A-T-055s | 21/04/2022 | | 21/04/2022 | | | 21/04/2022 | 21/04/2022 | | 21/04/2022 | 21/04/2022 | | 21/04/2022 |
| A-T-SOLMETS | | 21/04/2022 | | 21/04/2022 | 21/04/2022 | | | 21/04/2022 | | | 21/04/2022 | |

| Lab Sample ID | 22/03570/13 | 22/03570/14 | 22/03570/15 |
|------------------------|-------------|-------------|-------------|
| Client Sample No | 2 | 1 | 4 |
| Client Sample ID/Depth | TP07 0.60m | TP08 0.10m | TP08 2.80m |
| Date Sampled | 05/04/22 | 05/04/22 | 05/04/22 |
| A-T-019s | | 20/04/2022 | |
| A-T-022s | | 21/04/2022 | |
| A-T-024s | 21/04/2022 | 21/04/2022 | 21/04/2022 |
| A-T-026s | 22/04/2022 | 22/04/2022 | 25/04/2022 |
| A-T-027s | | 22/04/2022 | |
| A-T-028s | 22/04/2022 | 22/04/2022 | 22/04/2022 |
| A-T-029s | | 21/04/2022 | |
| A-T-031s | 21/04/2022 | 21/04/2022 | 21/04/2022 |
| A-T-032 OM | | 22/04/2022 | |
| A-T-033s | 25/04/2022 | | 25/04/2022 |
| A-T-040s | | 22/04/2022 | |
| A-T-042sTCN | | 21/04/2022 | |
| A-T-043-s | | 22/04/2022 | |
| A-T-044 | 14/04/2022 | 14/04/2022 | 14/04/2022 |
| A-T-045 | | 14/04/2022 | |
| A-T-050s | | 20/04/2022 | |
| A-T-055s | | 21/04/2022 | |
| A-T-SOLMETS | 21/04/2022 | | 21/04/2022 |

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

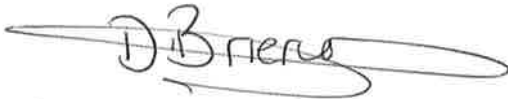
FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 22/03873
Issue Number: 1
Date: 04 May, 2022

Client: Norse Eastern Ltd t/a Norse Highways
280 Fifers Lane
Norwich
Norfolk
NR6 6EQ

Project Manager: Civil Lab/Josh Thompson/Sharon Woods; Simon Holden
Project Name: Sheringham HWRC
Project Ref: 102894
Order No: PN05037954
Date Samples Received: 22/04/22
Date Instructions Received: 22/04/22
Date Analysis Completed: 04/05/22

Approved by:



Danielle Brierley
Deputy Client Services Supervisor

Envirolab Job Number: 22/03873

Client Project Name: Sheringham HWRC

Client Project Ref: 102894

| Lab Sample ID | 22/03873/1 | | | | | | | Units | Limit of Detection | Method ref |
|---|------------|--|--|--|--|--|--|-------|--------------------|-------------|
| Client Sample No | 10 | | | | | | | | | |
| Client Sample ID | 09 | | | | | | | | | |
| Depth to Top | 5 | | | | | | | | | |
| Depth To Bottom | 5.5 | | | | | | | | | |
| Date Sampled | 05-Apr-22 | | | | | | | | | |
| Sample Type | Soil - B | | | | | | | | | |
| Sample Matrix Code | 1A | | | | | | | | | |
| % Stones >10mm _A | <0.1 | | | | | | | | | |
| pH BRE _D ^{M#} | 8.46 | | | | | | | pH | 0.01 | A-T-031s |
| Ammonium NH ₄ BRE (water sol 2:1) _D | <1.00 | | | | | | | mg/l | 1 | A-T-033s |
| Chloride BRE, SO ₄ equiv. (water sol 2:1) _D ^{M#} | <7 | | | | | | | mg/l | 7 | A-T-026s |
| Nitrate BRE, SO ₄ equiv. (water sol 2:1) _D | <0.4 | | | | | | | mg/l | 0.4 | A-T-026s |
| Sulphate BRE (water sol 2:1) _D ^{M#} | 18 | | | | | | | mg/l | 10 | A-T-026s |
| Sulphate BRE (acid sol) _D ^{M#} | <0.02 | | | | | | | % w/w | 0.02 | A-T-028s |
| Sulphur BRE (total) _D | <0.01 | | | | | | | % w/w | 0.01 | A-T-024s |
| Magnesium BRE (water sol 2:1) _D | <1 | | | | | | | mg/l | 1 | A-T-SOLMETs |

REPORT NOTES

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Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

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Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

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Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

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EPH CWG results have humics mathematically subtracted through instrument calculation

TPH results "with Cleanup" indicates results cleaned up with Silica during extraction

EPH CWG GCxGC ID from TPH CWG

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Envirolab Analysis Dates

| | |
|-------------------------------|------------|
| Lab Sample ID | 22/03873/1 |
| Client Sample No | 10 |
| Client Sample ID/Depth | 09 5-5.5m |
| Date Sampled | 05/04/22 |
| A-T-024s | 28/04/2022 |
| A-T-026s | 04/05/2022 |
| A-T-028s | 03/05/2022 |
| A-T-031s | 27/04/2022 |
| A-T-033s | 29/04/2022 |
| A-T-044 | 28/04/2022 |
| A-T-SOLMETS | 03/05/2022 |

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

Appendix H

