

Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# Geology 1:50,000 scale - Artificial and made ground



#### 15.2 Artificial and made ground (50k)

#### **Records within 500m**

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on page 68

ID	Location	LEX Code	Description	Rock description
1	21m NE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.







#### 15.3 Artificial ground permeability (50k)

# Records within 50m 2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
21m N	Mixed	Very High	Low
21m N	Mixed	Very High	Low

This data is sourced from the British Geological Survey.

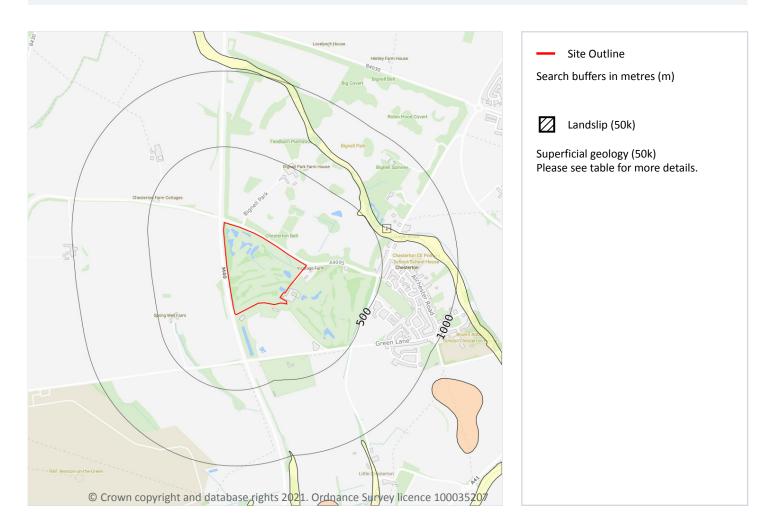






Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# Geology 1:50,000 scale - Superficial



#### 15.4 Superficial geology (50k)

#### **Records within 500m**

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on page 70

ID	Location	LEX Code	Description	Rock description
1	475m NE	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.







#### 15.5 Superficial permeability (50k)

#### **Records within 50m**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

#### 15.6 Landslip (50k)

#### **Records within 500m**

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

#### 15.7 Landslip permeability (50k)

#### Records within 50m

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.





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Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# Geology 1:50,000 scale - Bedrock



# Site Outline Search buffers in metres (m) Sedrock faults and other linear features (50k) Bedrock geology (50k) Please see table for more details.

#### 15.8 Bedrock geology (50k)

#### Records within 500m

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on page 72

ID	Location	LEX Code	Description	Rock age
1	On site	FMB-LSMD	FOREST MARBLE FORMATION - LIMESTONE AND MUDSTONE, INTERBEDDED	BATHONIAN
2	On site	CB-LMST	CORNBRASH FORMATION - LIMESTONE	BATHONIAN
3	On site	FMB-LSMD	FOREST MARBLE FORMATION - LIMESTONE AND MUDSTONE, INTERBEDDED	BATHONIAN







ID	Location	LEX Code	Description	Rock age
4	29m NE	FMB-LSMD	FOREST MARBLE FORMATION - LIMESTONE AND MUDSTONE, INTERBEDDED	BATHONIAN
5	361m NE	FMB-LSMD	FOREST MARBLE FORMATION - LIMESTONE AND MUDSTONE, INTERBEDDED	BATHONIAN
6	392m SW	FMB-LSMD	FOREST MARBLE FORMATION - LIMESTONE AND MUDSTONE, INTERBEDDED	BATHONIAN

This data is sourced from the British Geological Survey.

#### 15.9 Bedrock permeability (50k)

#### Records within 50m

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Very High	Low
On site	Fracture	Very High	Low
On site	Fracture	Very High	Low
On site	Fracture	Very High	High
On site	Fracture	Very High	High
29m N	Fracture	Very High	Low
29m N	Fracture	Very High	Low

This data is sourced from the British Geological Survey.

#### 15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.







Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# **16 Boreholes**



#### 16.1 BGS Boreholes

#### Records within 250m

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on page 74

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	454800 221920	CHESTERTON CUTTING C7 AKEMAN ST TP487	3.0	Ν	<u>336912</u>
2	On site	454750 221820	CHESTERTON CUTTING C7 AKEMAN ST TP487A	1.0	Ν	<u>336911</u>
3	On site	454770 221700	CHESTERTON CUTTING C7 AKEMAN ST TP486	2.0	Ν	<u>336910</u>





Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

ID	Location	Grid reference	Name	Length	Confidential	Web link
Α	On site	454749 221970	M40 BANBURY BYPASS BH821T	1.0	Ν	<u>336971</u>
А	On site	454760 221960	CHESTERTON CUTTING C7 AKEMAN ST BH062	25.0	Ν	<u>336915</u>
4	8m SE	454840 221380	CHESTERTON CUTTING C7 AKEMAN ST TP485	2.0	Ν	<u>336909</u>
В	10m W	454720 221980	M40 BANBURY BYPASS BH212T	10.0	Ν	<u>336962</u>
5	25m W	454718 221730	M40 BANBURY BYPASS BH820T	1.0	Ν	<u>336970</u>
6	30m W	454725 221635	M40 BANBURY BYPASS BH819T	1.0	Ν	<u>336969</u>
В	31m W	454700 221990	CHESTERTON CUTTING C7 AKEMAN ST BH060	10.0	Ν	<u>336914</u>
7	40m N	454770 222010	M40 BUCKNELL LODGE 222	10.0	Ν	<u>336893</u>
В	41m W	454690 221988	M40 BANBURY BYPASS BH213T	10.0	Ν	<u>336963</u>
8	45m N	454820 222000	CHESTERTON CUTTING C7 AKEMAN ST TP490	1.0	Ν	<u>336917</u>
9	106m NW	454650 222050	CHESTERTON CUTTING C7 AKEMAN ST TP489	0.0	Ν	<u>336916</u>
10	109m W	454620 221980	CHESTERTON CUTTING C7 AKEMAN ST TP488	2.0	Ν	<u>336913</u>
11	121m W	454611 222005	M40 BANBURY BYPASS BH822T	1.0	Ν	<u>336972</u>
12	140m N	454720 222120	CHESTERTON CUTTING C7 AKEMAN ST TP491	2.0	Ν	<u>336918</u>
13	198m N	454710 222178	M40 BANBURY BYPASS BH823T	1.0	Ν	<u>336973</u>

This data is sourced from the British Geological Survey.

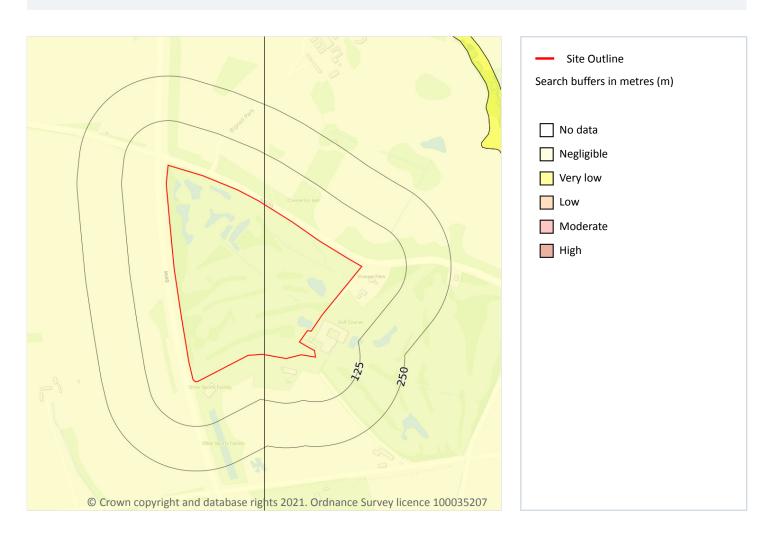






Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# 17 Natural ground subsidence - Shrink swell clays



#### 17.1 Shrink swell clays

#### Records within 50m

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on page 76

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.

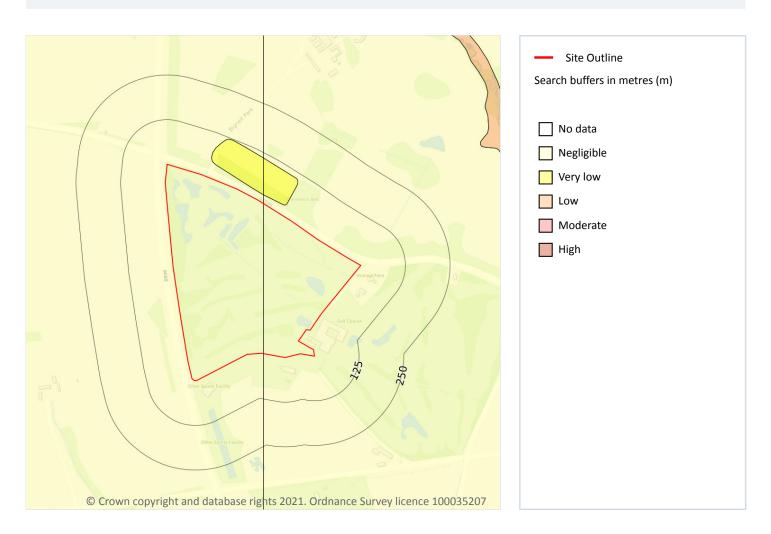






Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# Natural ground subsidence - Running sands



#### 17.2 Running sands

#### Records within 50m

3

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on page 77

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.







Location	Hazard rating	Details
21m NE	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
21m NE	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.







Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# Natural ground subsidence - Compressible deposits



#### **17.3 Compressible deposits**

#### **Records within 50m**

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on page 79

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.







Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

Location	Hazard rating	Details
21m NE	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.







Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# Natural ground subsidence - Collapsible deposits



#### **17.4 Collapsible deposits**

#### Records within 50m

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on page 81

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.

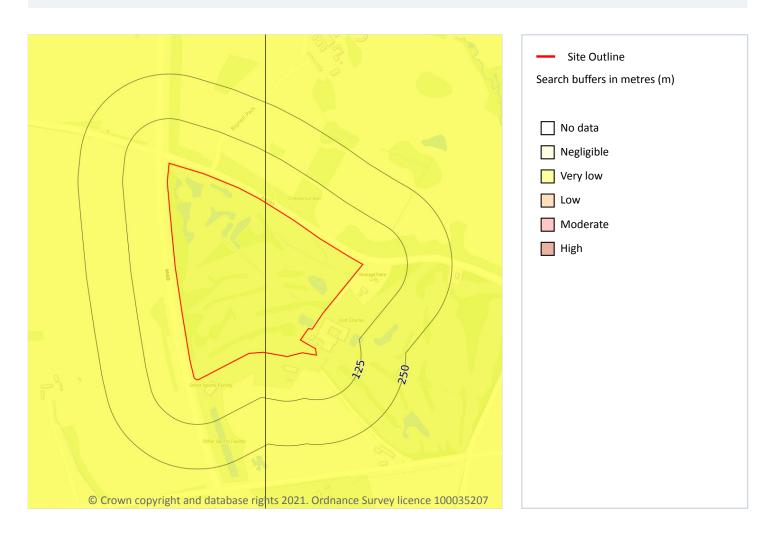






Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# Natural ground subsidence - Landslides



#### **17.5 Landslides**

#### **Records within 50m**

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on page 82

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.







# Natural ground subsidence - Ground dissolution of soluble rocks



#### **17.6 Ground dissolution of soluble rocks**

#### **Records within 50m**

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on page 83

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.







Location	Hazard rating	Details
On site	Very low	Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.
29m NE	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.

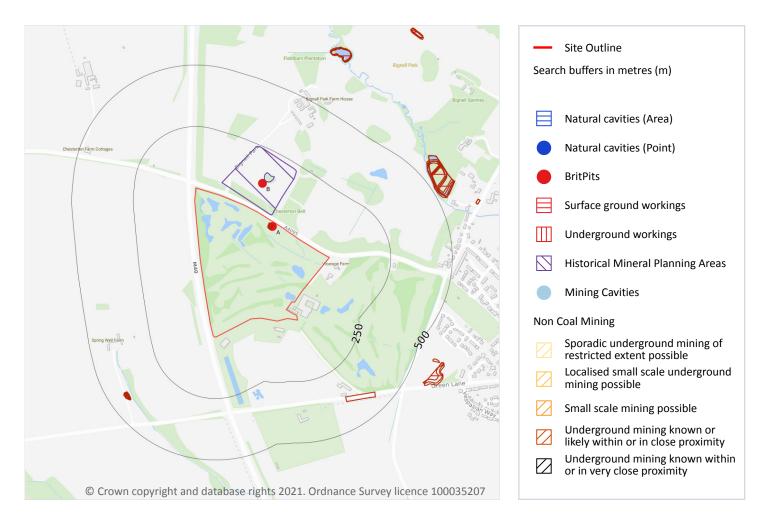






Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# 18 Mining, ground workings and natural cavities



#### **18.1 Natural cavities**

#### Records within 500m

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.







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#### **18.2 BritPits**

#### **Records within 500m**

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining, ground workings and natural cavities map on page 85

ID	Location	Details	Description
Α	On site	Name: Chesterton Belt Address: Chesterton, OXFORD, Oxfordshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
В	113m NE	Name: Chesterton Quarry Address: Chesterton, BICESTER, Oxfordshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

#### 18.3 Surface ground workings

Records within 250m 3	
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Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

#### Features are displayed on the Mining, ground workings and natural cavities map on page 85

ID	Location	Land Use	Year of mapping	Mapping scale
Α	On site	Unspecified Quarry	1923	1:10560
Α	On site	Unspecified Quarry	1923	1:10560
Α	On site	Unspecified Quarry	1966	1:10560

This is data is sourced from Ordnance Survey/Groundsure.







#### **18.4 Underground workings**

#### **Records within 1000m**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

#### **18.5 Historical Mineral Planning Areas**

#### **Records within 500m**

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

Features are displayed on the Mining, ground workings and natural cavities map on page 85

ID	Location	Site Name	Mineral	Туре	Planning Status	Planning Status Date
В	19m NE	Chesterton	Limestone	Surface mineral working	Valid	21/7/51

This data is sourced from the British Geological Survey.

#### **18.6 Non-coal mining**

Records within 1000m 0
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The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

#### **18.7 Mining cavities**

**Records within 1000m** 

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.





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#### **18.8 JPB mining areas**

#### **Records on site**

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

#### **18.9 Coal mining**

#### **Records on site**

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

#### 18.10 Brine areas

#### Records on site

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

#### 18.11 Gypsum areas

#### **Records on site**

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

#### 18.12 Tin mining

#### **Records on site**

#### Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.





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Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

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#### 18.13 Clay mining

#### **Records on site**

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

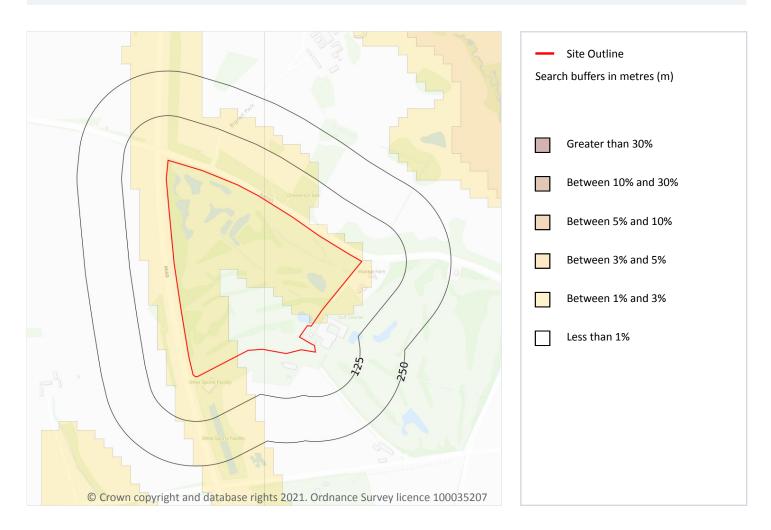






Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# 19 Radon



#### **19.1 Radon**

#### **Records on site**

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on page 90

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 1% and 3%	None
On site	Less than 1%	None**







Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

This data is sourced from the British Geological Survey and Public Health England.







14

# 20 Soil chemistry

#### 20.1 BGS Estimated Background Soil Chemistry

#### **Records within 50m**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km<sup>2</sup>. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km<sup>2</sup>; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
19m NW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
27m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg







Loo	cation	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
29r	m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
29r	m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

### 20.2 BGS Estimated Urban Soil Chemistry

# Records within 50m0Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and<br/>bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from<br/>interpolation of the measured urban topsoil data referred to above and provide information across each city

This data is sourced from the British Geological Survey.

#### 20.3 BGS Measured Urban Soil Chemistry

between the measured sample locations (4 per km<sup>2</sup>).

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The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km<sup>2</sup>.

This data is sourced from the British Geological Survey.







# 21 Railway infrastructure and projects

#### 21.1 Underground railways (London)

#### **Records within 250m**

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

#### 21.2 Underground railways (Non-London)

#### Records within 250m

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

#### 21.3 Railway tunnels

Records within 250m

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

#### **21.4 Historical railway and tunnel features**

Records within 250m

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

#### 21.5 Royal Mail tunnels

#### **Records within 250m**

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.





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This data is sourced from Groundsure/the Postal Museum.

#### **21.6 Historical railways**

# Records within 250m0Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed<br/>lines.This data is sourced from OpenStreetMap.

#### 21.7 Railways

**Records within 250m** 

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. This data is sourced from Ordnance Survey and OpenStreetMap.

#### 21.8 Crossrail 1

#### Records within 500m

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

#### 21.9 Crossrail 2

#### **Records within 500m**

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

#### 21.10 HS2

#### **Records within 500m**

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.





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Ref: CGL01-8377866 Your ref: CG39017 Grid ref: 454974 221704

# Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <u>https://www.groundsure.com/sources-reference</u>.

# **Terms and conditions**

Groundsure's Terms and Conditions can be accessed at this link: <u>https://www.groundsure.com/terms-and-conditions-jan-2020/</u>.





# **APPENDIX D**

BGS Borehole Records from Previous Desk Study

#### Table 1 Great Wolf Lodge Bicester - BGS borehole schedule

BGS Borehole ID	Easting	Northing	Date drilled	Ground level (mAOD)	Borehole depth (m)	Geological sequence	Base of unit depth (m)	Base of unit level (mAOD)	Unit thickness (m)	Water strikes (mbgl)
						Cornbrash	2.6	75.765	2.6	
						Forest Marble	6.1	72.265	3.5	
SP52SW6	454810	221020	1972	78.365	20.18	White Limestone: Bladon Member	9.61	68.755	3.51	-
						White Limestone: Ardley Member	17.05	61.315	7.44	
						White Limestone: Shipton Member	NDE	<58.185	>3.13	
						Cornbrash	0.1	87.227	0.1	
SP52SW7	454770	222010	1972	87.327	10.51	Forest Marble	5.34	81.987	5.24	
JF JZ J VV /	454770	222010	1572	07.527	10.51	White Limestone	7.03	80.297	1.69	_
						Hampen Marly Beds	NDE	<76.817	>3.48	
						Topsoil	0.3	82.99	0.3	
						Cornbrash	6.1	77.19	5.8	
						Forest Marble	14.3	68.99	8.2	
SP52SW8	453190	220640	13/09/1918	83.29	42.67	White Limestone	24.5	58.79	10.2	10.97
						Hampen Marly Beds	28.9	54.39	4.4	
						Taynton Limestone	33	50.29	4.1	
						Swerford and Hook Norton Beds	NDE	<40.62	>9.67	
						Topsoil	0.15	91.29	0.15	
						Cornbrash	3.35	88.09	3.2	
SP52SW9	454300	222420	01/09/1938	91.44	36.58	Forest Marble	9.3	82.14	5.95	9.14
						Great Oolite and Estuarine Series	31.39	60.05	22.09	
						Northampton Sands	NDE	<54.86	>5.19	
						Topsoil	0.25	76.12	0.25	
SP52SW17	454940	221000	28/03/1979	76.37	1.8	Colluvium	0.85	75.52	0.6	0.85
						Cornbrash	NDE	<74.57	>0.95	
						Topsoil	0.4	77.44	0.4	
						Cornbrash	2	75.84	1.6	
SP52SW18	454910	221060	21/06/1979	77.84	20	Forest Marble	4.95	72.89	2.95	1.5
51 525 10	454510	221000	21,00,1575	77.04	20	White Limestone: Bladon Member	9.35	68.49	4.4	1.5
						White Limestone: Ardley Member	16.3	61.54	6.95	
						White Limestone: Shipton Member	NDE	<57.84	>3.7	
						Topsoil	0.2	77.78	0.2	
SP52SW19	454940	221070	15/06/1979	77.98	6	Colluvium	1.35	76.63	1.15	5.6
51 525 115	131310	2210/0	13,00,13,3	77.50	Ū	Cornbrash	2.3	75.68	0.95	5.0
						Forest Marble	NDE	<71.98	>3.7	
						Topsoil	0.2	77.83	0.2	
						Colluvium	1.3	76.73	1.1	
						Cornbrash	2.65	75.38	1.35	
SP52SW20	454970	221070	20/06/1979	78.03	19.6	Forest Marble	5.15	72.88	2.5	4.8
						White Limestone: Bladon Member	10.15	67.88	5	
						White Limestone: Ardley Member	17.2	60.83	7.05	
						White Limestone: Shipton Member	NDE	<58.43	>2.6	

BGS Borehole ID	Easting	Northing	Date drilled	Ground level (mAOD)	Borehole depth (m)	Geological sequence	Base of unit depth (m)	Base of unit level (mAOD)	Unit thickness (m)	Water strikes (mbgl)
						Topsoil	0.5	76.88	0.5	
SP52SW21	454980	221070	21/05/1979	77.38	4.3	Cornbrash	1.25	76.13	0.75	1.2
						Forest Marble	NDE	<73.08	>3.05	
						Topsoil	0.3	77.12	0.3	
SP52SW22	454980	221130	23/05/1979	77.42	0.8	Colluvium	0.6	76.82	0.3	0.4
						Cornbrash	NDE	<76.62	>0.2	
						Topsoil	0.25	80.42	0.25	
SP52SW23	454840	221380	13/06/1979	80.67	2.2	Colluvium	1.55	79.12	1.3	1.1
						Forest Marble	NDE	<78.47	>0.65	
						Topsoil	0.2	84.3	0.2	
SP52SW24	454770	221700	28/03/1979	84.5	2.1	Colluvium	0.6	83.9	0.4	0.2
						Forest Marble	NDE	<82.4	>1.5	
SP52SW25	454750	221820	12/06/1979	85.49	1.8	Topsoil	0.55	84.94	0.55	0.55
585250025	454750	221820	12/06/19/9	85.49	1.8	Forest Marble	NDE	<83.69	>1.25	0.55
SP52SW26	454800	221920	28/03/1979	85.93	3	Topsoil	0.35	85.58	0.35	0.35
5P525W20	454800	221920	28/03/19/9	85.93	3	Forest Marble	NDE	<82.93	>2.65	0.35
						Topsoil	0.4	87.44	0.4	0.6
SP52SW27	454620	221980	28/03/1979	87.84	2.6	Colluvium	0.7	87.14	0.3	2
						Forest Marble	NDE	<85.24	>1.9	
						Topsoil	0.4	86.62	0.4	
						Colluvium	0.75	86.27	0.35	
SP52SW28	454700	221990	04/07/1979	87.02	10	Forest Marble	4.05	82.97	3.3	1.7
						White Limestone: Bladon Member	7.75	79.27	3.7	
						White Limestone: Ardley Member	NDE	<77.02	>2.25	
						Topsoil	0.2	86.21	0.2	
						Forest Marble	4.5	81.91	4.3	
SP52SW29	454760	221960	11/07/1979	86.41	25	White Limestone: Bladon Member	8.5	77.91	4	1
3P323W29	454700	221900	11/07/1979	00.41	25	White Limestone: Ardley Member	15.25	71.16	6.75	1
						White Limestone: Shipton Member	21.5	64.91	6.25	
						Hampen Marly Beds	NDE	<61.41	>3.5	
SP52SW30	454650	222050	11/06/1979	88.47	0.55	Topsoil	0.25	88.22	0.25	
3P523W50	454050	222050	11/06/19/9	00.47	0.55	Forest Marble	NDE	<87.92	>0.3	-
						Topsoil	0.25	87.18	0.25	
SP52SW31	454820	222000	11/06/1979	87.43	1.05	Colluvium	0.7	86.73	0.45	1.05
						Forest Marble	NDE	<86.38	>0.35	
SP52SW32	454720	222120	11/06/1979	88.33	2	Topsoil	0.3	88.03	0.3	1.0
585258832	454720	222120	11/06/19/9	88.33	Z	Forest Marble	NDE	<86.33	>1.7	1.9
						Topsoil	0.2	86.89	0.2	
SP52SW33	454720	222470	12/06/1979	87.09	2.6	Colluvium	0.95	86.14	0.75	-
						White Limestone	NDE	<84.49	>1.65	
						Topsoil	1.1	77.5	1.1	
SP52SW72	454890	221060	31/01/1987	78.6	7.5	Cornbrash	1.8	76.8	0.7	1
353234012	454890	221000	21/01/198/	/8.0	7.5	Forest Marble	6.9	71.7	5.1	1
						White Limestone	NDE	<71.1	>0.6	

BGS Borehole ID	Easting	Northing	Date drilled	Ground level (mAOD)	Borehole depth (m)	Geological sequence	Base of unit depth (m)	Base of unit level (mAOD)	Unit thickness (m)	Water strikes (mbgl)
						Topsoil	1.1	77.5	1.1	
						Cornbrash	2.15	76.45	1.05	
SP52SW73	454875	221060	08/01/1987	78.6	10.4	Forest Marble	7.15	71.45	5	1.1
						Fimbriata:Waltoni Clay	9.2	69.4	2.05	
						White Limestone	NDE	<68.2	>1.2	
005001/74	45 40 75	224.000	10/10/1000	70.0	2.55	Topsoil	0.3	78.3	0.3	1.2
SP52SW74	454875	221060	18/12/1986	78.6	3.55	Cornbrash	NDE	<75.05	>3.25	1.2
						Topsoil	1.4	77.1	1.4	
						Cornbrash	2.5	76	1.1	
SP52SW75	454859	221058	09/11/1986	78.5	9.2	Forest Marble	7.1	71.4	4.6	1.4
						White Limestone	7.8	70.7	0.7	
						Fimbriata:Waltoni Clay	NDE	<69.3	>1.4	
						Topsoil	0.5	86.1	0.5	
						Cornbrash	2.75	83.85	2.25	
SP52SW76	454720	221980	13/11/1986	86.6	10	Forest Marble	6.5	80.1	3.75	5.15
						Fimbriata:Waltoni Clay	8.05	78.55	1.55	
						White Limestone	NDE	<76.6	>1.95	
						Topsoil	0.4	86.3	0.4	
						Cornbrash	2.2	84.5	1.8	
SP52SW77	454690	221988	03/11/1986	86.7	10	Forest Marble	5.95	80.75	3.75	5.15
			,			Fimbriata:Waltoni Clay	8.1	78.6	2.15	
						White Limestone	NDE	<76.7	>1.95	
						Cornbrash	2.5	70.7	2.5	1
						Forest Marble	6.1	67.1	3.6	
SP52SW78	454990	220730	16/01/1987	73.2	20	Fimbriata:Waltoni Clay	7.1	66.1	1	0.6
						White Limestone	NDE	<53.2	>12.9	
						Topsoil	0.3	76.2	0.3	
						River Gravels	0.5	76	0.2	
SP52SW79	454913	220960	27/11/1986	76.5	1.8	Kellaways Formation: Kellaways Clay	1.5	75	1	0.3
						Cornbrash	NDE	<74.7	>0.3	
						Topsoil	0.8	77.8	0.8	
SP52SW80	454905	221060	27/11/1986	78.6	1.1	Alluvium	1	77.6	0.2	1
			, ,			Cornbrash	NDE	<77.5	>0.1	
						Topsoil	0.2	78.4	0.2	
						Made ground	0.6	78	0.4	
SP52SW81	454839	221055	17/11/1986	78.6	1.4	Alluvium	1.3	77.3	0.7	-
						Cornbrash	NDE	<77.2	>0.1	
						Topsoil	0.2	78.6	0.2	
SP52SW82	454759	221040	27/11/1986	78.8	1	Alluvium	0.6	78.2	0.4	0.7
						Cornbrash	NDE	<77.8	>0.4	
				1		Topsoil	0.3	83.5	0.3	
SP52SW83	454725	221635	28/11/1986	83.8	1	Colluvium	0.5	83.3	0.2	0.5
			-,, 30		_	Cornbrash	NDE	<82.8	>0.5	
	1					Topsoil	0.3	82	0.3	
SP52SW84	454718	221730	28/11/1986	82.3	1.1	Colluvium	0.8	81.5	0.5	_

Page 3 of 4

BGS Borehole ID	Easting	Northing	Date drilled	Ground level (mAOD)	Borehole depth (m)	Geological sequence	Base of unit depth (m)	Base of unit level (mAOD)	Unit thickness (m)	Water strikes (mbgl)
						Cornbrash	NDE	<81.2	>0.3	
						Topsoil	0.2	86.4	0.2	
SP52SW85	454749	221970	28/11/1986	86.6	1.4	Colluvium	0.7	85.9	0.5	0.8
						Cornbrash	NDE	<85.2	>0.7	
SP52SW86	454611	222005	28/11/1090	00.2	1	Topsoil	0.3	88	0.3	0.0
323230080	454611	222005	28/11/1986	88.3	1	Cornbrash	NDE	<87.3	>0.7	0.9
						Topsoil	0.2	88.8	0.2	
SP52SW87	454710	222178	28/11/1986	89	0.9	Colluvium	0.7	88.3	0.5	-
						Cornbrash	NDE	<88.1	>0.2	
						Cornbrash	2.9	87.1	2.9	
SP52SW90	453700	221600	06/11/1998	90	38.1	Forest Marble	19	71	16.1	11
						Great Oolite	NDE	<51.9	>19.1	
						Topsoil	1.5	81.5	1.5	2.5
SP52SW96	453000	220600	12/07/2005	82 (oct )	55	Cornbrash	9	74	7.5	32
383230090	455000	220000	12/07/2005	83 (est.)	55	Forest Marble	19	64	10	33
						Great Oolite and Estuarine Series	NDE	<28	>36	
						Cornbrash	3.96	74.67	3.96	
						Forest Marble	7.01	71.62	3.05	
						White Limestone: Bladon Member	8.53	70.1	1.52	
SP52SE2	455720	221600	01/10/1955	78.63	39.62	White Limestone: Ardley Member	19.05	59.58	10.52	3.05
3P323E2	455720	221000	01/10/1955	78.05	39.62	White Limestone: Shipton Member	25.6	53.03	6.55	5.05
						Rutland Formation	30.78	47.85	5.18	
						Taynton Limestone	35.97	42.66	5.19	
						Sharp's Hill Formation and 'White Sands'	NDE	<39.01	>3.66	
SP52SE4	455810	221720	-	77.4	39.62	None recorded	-	-	-	8.52
						Topsoil	0.2	74.07	0.2	
SP52SE24	455046	220809	29/03/1979	74.27	1	Colluvium	0.4	73.87	0.2	0.5
						Cornbrash	NDE	<73.27	>0.6	
						Cornbrash	1.8	72.54	1.8	
						Forest Marble	7.2	67.14	5.4	
SP52SE25	455042	220817	14/06/1979	74.34	19.4	White Limestone: Bladon Member	8.2	66.14	1	0.3
						White Limestone: Ardley Member	16.85	57.49	8.65	
						White Limestone: Shipton Member	NDE	<54.94	>2.55	
						Topsoil	0.2	74.62	0.2	
SP52SE26	455000	220857	29/03/1979	74.82	0.85	Colluvium	0.45	74.37	0.25	0.5
						Cornbrash	NDE	<73.97	>0.4	
						Alluvium	1.37	63.63	1.37	
SP52SE28	457450	220860	01/03/1983	65	15.24	Kellaways Formation: Kellaways Clay	5.49	59.51	4.12	0.83
						Great Oolite	NDE	<49.76	>9.75	
						Cornbrash	2.65	70.55	2.65	
						Forest Marble	7.35	65.85	4.7	
SP52SE50	455010	220740	22/01/1987	73.2	20.2	White Limestone: Bladon Member	10.45	62.75	3.1	0.6
						White Limestone: Ardley Member	19.7	53.5	9.25	
						White Limestone: Shipton Member	NDE	<53	>0.5	
SP52SE181	456320	221200	1889	70.1	12.19	None recorded	-	-	-	7.3

# **APPENDIX E**

Risk Assessment Methodology



#### **CGL Risk Assessment Methodology**

The following risk Assessment methodology is based on CIRIA C552 (2001) Contaminated Land Risk Assessment – A Guide to Good Practice<sup>1</sup>, in order to quantify potential risk via risk estimation and risk evaluation, which can be adopted at the Phase I stage. This will then determine an overall risk category which can be used to identify likely actions. This methodology uses qualitative descriptors and therefore is a qualitative approach and is undertaken for each potential pollution linkage (source-pathway-receptor) identified for the site in accordance with Land Condition Risk Management<sup>3</sup>.

The methodology requires the classification of:

- The magnitude of the consequence (severity) of a risk occurring, and
- The magnitude of the probability (likelihood) of a risk occurring.

The potential consequences of contamination risks occurring at this site are classified in accordance with Table 1 below, which is adapted from the CIRIA guidance<sup>1</sup>.

Table 1. Classifications of Consequence ratings

Classification	Definition of Consequence	Examples
Severe	Short-term (acute) risks to human health.	High concentration of cyanide on the surface of an informal recreation area
	Short-term (acute) risk of pollution of sensitive water resource or ecosystem.	Major spillage of contaminants from site into controlled waters
	Catastrophic damage to crops/buildings/property/infrastructure, including off-site soils.	Explosion causing building collapse
Medium	Long-term (chronic) risks to human health	Concentrations of a contaminant from site exceeding the generic or site specific assessment criteria
	Long-term (chronic) pollution of sensitive water resource	Leaching of contaminants from a site into a major or minor aquifer
	Significant change in an ecosystem/contamination of off-site soils	Death of a species within a designated nature reserve
Mild	Pollution of non-sensitive water resource	Pollution of a non-classified groundwater
	Significant damage to crops/ buildings/property/infrastructure	Damage to a building rendering it unsafe to occupy (e.g. foundation damage resulting in instability)
	Damage to an ecosystem or sensitive buildings/structures/services	
Minor	Easily preventable non-permanent health effects	Presence of contamination at concentrations which require the use of personal protective equipment during site work
	Harm, although not necessarily significant harm, which may result in financial loss or expenditure to resolve	Loss of plants in a landscaping scheme/discolouration of concrete
	Easily repairable effects of damage to buildings/structures/services	

<sup>&</sup>lt;sup>1</sup> CIRIA, (2001). Contaminated Land Risk Assessment. A Guide to Good Practice. CIRIA C552.

<sup>&</sup>lt;sup>2</sup> M.J. Carter Associates, (1995). *Prioritisation and Categorisation Procedure for Sites Which May Be Contaminated*. Contaminated Land Report 6. Department of the Environment. C

<sup>&</sup>lt;sup>3</sup> Land Condition Risk Management - https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm



The potential probability of the risks being realised are classified in accordance with the ratings set out in Table 2 which are adapted from the CIRIA guidance<sup>1</sup>. It should be noted that where a pollutant linkage has not been identified the likelihood is considered to be zero.

Classification	Definition
High likelihood	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable in the long term, or there is evidence at the receptor that an event has occurred
Likely	There is a pollution linkage and all the elements are present and in the right place which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place and is less likely in the short term.
Unlikely	There is a pollutant linkage but circumstances are such that it is improbable that an event would occur even in the very long term

In accordance with C552 the risk classification for each pollution linkage are classified in accordance with the matrix for consequence and probability set out in Table 3. The definitions for the risk classifications are presented in Table 4.

#### Table 3. Risk classification matrix

			Consec	quence	
		Severe	Medium	Mild	Minor
	High likelihood	Very High	High	Moderate	Moderate / Low
bility	Likely	High	Moderate	Moderate / Low	Low
Probability	Low likelihood	Moderate	Moderate / Low	Low	Very Low
	Unlikely	Moderate / Low	Low	Very Low	Very Low

Classification	Definition
Very High	There is a high probability that severe harm could arise to a designated receptor from the identified hazard or there is evidence that severe harm is currently happening. This risk, if realised, is likely to result in substantial liability. Urgent investigation (if not already undertaken) and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from the identified hazard. Realisation of the risk is likely to result in substantial liability. Urgent investigation (if not already undertaken) and remediation are likely to be required.
Moderate	It is possible that harm could arise to a designated receptor from the identified hazard. However, it is either relatively unlikely that such harm would be severe or if any harm were to occur it is more likely that the harm would be relatively mild. Urgent investigation (if not already undertaken) is normally required to clarify the potential risk and to determine the potential liability. Some remedial works may be required in the longer term.
Low	It is possible that harm could arise to a designated receptor from the identified hazard, but it is considered likely that this harm, if realised, would at worse normally be mild.
Very Low	There is a low possibility that harm could arise to a designated receptor from the identified hazard. In the event of such harm being realised it is not likely to be severe.

### **APPENDIX F**

CGL Exploratory Hole Records

Project T Cli			l Partnership Ltd					-	tatus: <b>RAFT</b>			Locatio BHC						C	G	
From (m)	Metho To (m)	d and Pla Type	ant Used Plant Used	Strike		indwa ne (min		Location Ty	/pe: Rota	ry cored										
0.00 1.20	1.20 1.70	IP WLS	Hand Tools Comacchio 305				,	Coords: 45	4854.63	DE/22179	96.740N	Level:	84.830m	4		dalm	ning l	hnics I Busine:	s Cen	·
1.70	5.26	RC	Comacchio 305					Ordnance Su National Grid		t Britain	Final	Depth:	5.00 m	-			Goda	ack Wa alming,		
								Orientatio		0°	Incli	ination:	90°				GU	rrey, 7 1XW		
								Date Star		10/2021	Da	ite End:	21/10/2021	┥				gl-uk.co t 1 of		
	Sa	amples & Te	sts	Water	Legend		Level	- Dutte bitai			escription			Rc	otary	S Corin		Fract (mm)	Inst/	
Sample Depth (m)	Type/ Ref	-	Tests/Results	Level (m)	/Cover	Depth (m)	(m)							Core Run	TCR (%)		RQD (%)	min avg max	Backfi	ll (m)
							-	Grass over soft o [TOPSOIL]	lark brow	n CLAY wit	h rootlets	throughou	ıt.			1		Шал		
0.20	ES 1						-	[]												
						0.25	84.58 -	Soft dark brown				ravel is fin	e to coarse sub							의 신
0.40 - 0.60	B 1						-	angular limestor [WEATHERED CC												
							-													
0.60 - 0.70	В 2					0.60	84.23	Firm light brown					Y. Gravel is fine	-						
							-	to coarse sub-an [WEATHERED CO	-			e.								
							_													
1.00 - 1.10	В 3					1.00	83.83													. 1-
								Firm to stiff light slightly sandy CL												
1.20 - 1.55	D 1	SPT(S) 1.20n	n N=50 (1,6/50 for 270mm)					[WEATHERED CC	)RNBRASH	I FORMAT	ION]			-	$\vdash$	╞				
							_													•
							-							1.20 1.60	100	0	0			•
							-													
						1.70	83.13							1.60 1.70	100	0 0	0			
					·	1.70	-	Light brown and rounded limesto			fine to coa	arse sub-ai	ngular to sub-		T	T				
							-	[WEATHERED CC			ION]									
					·	2.00	82.83	Chiff has a serie a serie			AV/			_						2 -
					<u> </u> -		-	Stiff becoming v [FOREST MARBL			.AY.									*   *   *
					F		-													
					E- <u>-</u> -		-		×											* • •
					<u> </u>	-	-							1.70 3.20	100	0 0	0			
					<b>F</b> -	-	-							5.20						•
					<u>E</u> -		-													
							-													
					E															
					<u> </u>	-	-													3-
					<b> </b> -		-													•
		SPT(C) 3.2	20m N=30 (5,3/4,4,7,15)			3.20	81.63	Weak mudstone			of stiff da	rk grey CL	AY.		+	+				
							_	[FOREST MARBL	E FORMAT	fion]										
							-													
						3.60	81.23							3.20	67	40	40			
							-	Weak (?) dark gr [FOREST MARBL						4.70						
																				•
							-										1			
	I	I					l		Strata	a continue	s onto nex	t page			I	I	1	I	<u>.</u> Н.	≗4 -
Notes:										iameter		sing	Hammer In			F		Scale:		
2. Prior to dr	rilling, a ha	nd pit was d	with a CAT scanner by a C lug to a depth of 1.2 m b	gl, and t					Depth (m)	Diam (mm)	Depth (m)	Diam (mm)	Energy Ratio 64%	Serial N ar257				ged By: ked By:	K	(BD
4. Groundwa	ater was no	ot encounter	target depth of 5.00 m b red during drilling. vas installed with a moni		andpipe				1.60 1.70	128 113	1.70	138	64% Install Respo				.pprov	ved By:		
			:. ES = Environmental san			d sample	e. B = Bulk	sample.					Ref From (	m) To (	(m)	1-		ion ID: GL Ref	eren	
													Pipe1 1.00	5.0	00					

Project 1	itle: Bic	ester Gol	f Club					Status:	Locatio	on ID							_
Cl			Partnership Ltd	1				DRAFT	BHC	)1					C	G	L
From (m)	To (m)	d and Pla <sub>Type</sub>	Plant Used	Strike		Indwate	er Rose To	Location Type: Rotary core	d d		-						
0.00	1.20	IP	Hand Tools	SUIKE	(11) 11	ne (min)	NOSE IC	Coords: 454854.630E/2217		84.830m						Limited ss Centr	
1.20 1.70	1.70 5.26	WLS RC	Comacchio 305 Comacchio 305					Ordnance Survey Great Britain			-		W	oolsa	ack Wa	ay,	,
								National Grid	Final Depth:	5.00 m			C		ılming rrey,		
								Orientation: 0°	Inclination:	90°					' 1XW gl-uk.c	h	
								Date Start: 21/10/2022	L Date End:	21/10/2021	1				: 2 of		
	Sa	mples & Tes	ts	Water	Legend	Strata	Level		Description		Ro	tary C			Fract (mm)	 Inst/	Depth
Sample	Type/	٦	ests/Results	Level (m)	/Cover	Depth (m)	(m)				Core Run	TCR (%)	SCR (%)	RQD	min avg	Backfill	(m)
Depth (m)	Ref			. ,			- 1	Neak (?) dark grey MUDSTONE.				(70)	(70)	(70)	max	·.H.	]
								FOREST MARBLE FORMATION]									
							-										
						4.35	80.48 -										
								Strong (?) light grey medium grain	ed LIMESTONE.		1						
								FOREST MARBLE FORMATION]								H	-
																H.	
		SPT(C) 4	.70m N=6 (1,/1,0,2,3)			4.70	80.13	tiff dark grou CLAV								H	
								Stiff dark grey CLAY. FOREST MARBLE FORMATION]			4.70					H	
											4.70 5.00	100	0	0		E.	
		SPT(S) 5.00r	n 50 (8,11/50 for 110mm)		= 7	5.00	79.83										5
								EOH at 5.00m - A	Achieved target depth								
							-										
							-										
							-										· ·
																	· ·
							-										· ·
							-										6
							-										· ·
							-										· ·
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																	.
							]										7
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							1										.
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							1										.
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							1										
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							-										
							-										'
							-										
	•	•					1		-1	1	·	'		. 1			8-
Notes:								Hole Diameter	Casing	Hammer Infor					Scale:		
2. Prior to d	rilling, a ha	nd pit was d	vith a CAT scanner by a Co ug to a depth of 1.2 m bg	gl, and th					Depth Diam (m) (mm)		Serial N				ed By:	KB	D
3. Borehole	was termin	ated at the	target depth of 5.00 m by ed during drilling.	gl.				5.00 116		64%	ar257(	0			ed By: ed By:		

Install Response Zones

From (m)

1.00

To (m)

5.00

Ref

Pipe1

Section ID:

CGL Reference

CG/39017

Groundwater was not encountered during drilling.
 After completion the borehole was installed with a monitoring standpipe.
 SPT = Standard Penetration Test. ES = Environmental sample. D = Disturbed sample. B = Bulk sample.

Project T									St	tatus:			Locatio	n ID							
Cli			od Partnership Ltd Ilant Used		Grou	indwa	ater		DF	RAFT			BHC	)2					C	G	L
From (m)	To (m)	Туре	Plant Used	Strike	e (m) Tin	ne (min	i) Ros		ocation Ty	pe: Rota	ry cored					Car	rd Ge	eotec	hnics Li	mited	9
0.00 0.60	0.60 5.00	IP RC	Hand Dug Tracked Drilling Rig	3.5	50	20	0	.60	Coords: 45	4804.240	DE/22168	84.950N	Level:	84.750m	4	l Go		-	usines ack Wa		re,
0.60 2.00	2.00 5.24	RC RC	Comacchio 305 Comacchio 305						Ordnance Su National Gric		t Britain	Final	Depth:	5.00 m					lming, rey,		
									Orientatior	n:	0°	Incli	nation:	90°				GU7	1XW I-uk.co	m	
									Date Star	t: 22/2	10/2021	Da	te End:	22/10/2021	_				1 of 2		
	Sa	amples & Te		Water Level	Legend /Cover	Strata Depth	Level (m)				Strata De	escription					Corin	-	Fract (mm)	Inst/ Backfill	Depth (m)
Sample Depth (m)	Type/ Ref		Tests/Results	(m)	,	(m)	(11)								Core Run	TCR (%)		RQD (%)	min avg max		(,
						0.10	84.65		s over soft d SOIL]	lark brown	n CLAY wit	h rootlets	throughou	Jt.							
					- <u>-</u>				vn clayey fin ATHERED CO				gular limes	tone GRAVEL.						이 문	
0.30 - 0.40	B 1				- <u>-</u>			-													
0.40	ES 1							-													
0.55 - 0.65	В 2					0.50	84.25		vn slightly sa	andy slight	ly clayey f	ine to coa	rse angula	r limestone					:		
0.60 - 2.00	C1	SPT(C) 0.6	50m 50 (25 for 70mm/50 for 110mm)		<u> </u>	0.60	84.15	GRA	VEL. Sand is ATHERED CO	coarse.			-						• '		-
			Recovery=43%					-	ecovery						_						-
								-											•		
								-											•		
								-											•	E.	1
								-											•		
						1.34	83.41	-							0.60	43	6	0	•		
						1.54	65.41						gular lime	stone gravel.	2.00				•		.
									ATHERED CO	JKNBKASF	FURIVIAL	IONJ							•		-
																			•	8	
																			•		
						-													•		.
						1.92	82.83	- Stro	ng (?) light b	rown and	light grev	medium e	rained LIN	AESTONE. Some	,				•		-
2.00 - 3.50	C 2	SPT(C) 2.0	00m 50 (25 for 65mm/50 for 10mm)			2.00	82.75	whit	e fossils of s RNBRASH FO	hells.											2
			Recovery=67%					1	1.92m bgl To	op of the l	-	core has a	slight ora	nge stain	/				•		-
									<i>and is rough</i> ecovery	n.									•		-
								-											•		-
								-											•		
						2.55	82.20		ng (?) light b	orown med	lium grain	ed thinly b	edded LIN	AESTONE.	_				•		¦.
									tures are slig ning, horizon					ne orange	2.00				•		.
						1		- [COF	RNBRASH FO 2.62m bgl Fr	RMATION	]			ge stain.	2.00 3.50	67	63	0			
						2.90 2.95	81.85 81.80	_	horizontal, r 2.69m bgl Fr	ough, ope	n.								• •		.
						3.05	81.70		rough, open										•		3
								-	2.73m bgl Fr with pieces o	of broken	,								•		-
									drilling indu 2.77m bgl Fr		noderatley	v weathere	ed, no stai	n, infilled					•		-
									with sand ar Potentially d			ontal, roug	h, partly o	open.					•		-
						3.50	81.25		2.82m bgl Fr horizontal, r	racture - s	lightly we	athered, o	range stai	n,					•		-
3.50 - 5.00	C 3	SPT(C) 3	3.50m N=23 (1,1/2,5,9,7) Recovery=100%		×				2.89m bgl Fr			rough, op	en to claye	ey gravel							-
					<u>×_</u>	-		LIME	<i>beneath.</i> ESTONE reco	overed as s	andy claye	ey fine to r	medium sı	ıb-angular					•		
					×	-		_ grav [COF	RNBRASH FO	RMATION	1								•		
					×_^_	3.90	80.85	- Extre	emely weak ly clay?)	(?) light b	rown LIME	STONE. (C	an be bro	ken by hand -					•		
						j			RNBRASH FO			s onto nex	t nage						•	•].	
Notes:											i continue: iameter	1	t page sing	Hammer In	formation				Scale: 1	:20	
1. Borehole l			with a CAT scanner by a C							Depth (m)	Diam (mm)	Depth (m)	Diam (mm)	Energy Ratio	Serial N		1		ed By:	KB	D
3. Borehole v	was termir	nated at the	dug to a depth of 0.6 m bg e target depth of 5.00 m bg I during drilling. at 3.5 m bg	gl.	ne pase ol	i i i e pit	. wds CA	a scanne	u.	(111)	(11111)	2.00	138	64%	ar257	0			ed By:		
5. After com	pletion the	e borehole	was installed with a monit st. ES = Environmental sam	oring sta		d samnl	e. B = R	ulk samnl	e.					Install Respo					ed By: on ID:		
							- 5							Ref         From (           Pipe1         1.00			$\left\{ - \right\}$		iL Refe		
																		C	G/39	017	

	ient: Ell		d Partnership Ltd	1					DRAFT		BHO	)2					C	G	L
From (m) 0.00 0.60 0.60 2.00	Meth To (m) 0.60 5.00 2.00 5.24	od and Pl Type IP RC RC RC RC	ant Used Plant Used Hand Dug Tracked Drilling Rig Comacchio 305 Comacchio 305	Strike		indwa ne (min		To	Location Type: Rotary cored Coords: 454804.240E/2216 Ordnance Survey Great Britain National Grid	584.950N	Level: Depth:	84.750m <b>5.00 m</b>	4	Card	Geo almi Wo	otecl ing B polsa Goda Sur	hnics L usines ack Wa Iming, rrey,	imited s Centi	ł,
									Orientation: 0°	Incl	ination:	90°	_				1XW I-uk.co	m	
									Date Start: 22/10/2022	1 Da	ite End:	22/10/2021			Sł	neet	2 of 2	2	
Sample	S Type/	amples & Te	ests Tests/Results	Water Level		Strata Depth			Strata	Description			Ro Core	tary Co	_	-	Fract (mm) min	Inst/ Backfill	
Depth (m)			Tests/Tesuts	(m)	•••••	(m)			ak (?) grey MUDSTONE. Fractur	oc ara cligh	the weathe	and horizontal	Run	(%)			avg max		
		SPT(C) 5.00	m 50 (25 for 115mm/50 for 120mm)			4.80	80.65 	FC Stift [FC We [FC Strin LIN [FC We	tly open. REST MARBLE FORMATION] 3.20m bgl Fracture - lightly we horiztonal, rough, partly open. 3.30m bgl Fracture - slightly w horiztonal, undulating, partly of f dark grey slightly silty CLAY. <u>REST MARBLE FORMATION]</u> ak (?) grey MUDSTONE. Fractur dium gravel. <u>REST MARBLE FORMATION]</u> 4.54m bgl Fracture - sub-horiz Potentially drilling induced. 4.60m bgl Fracture - slightly w rough, open. ak (?) dark grey slightly silty find REST MARBLE FORMATION] 4.81m bgl Fracture - horizonta between limestone and mudst EOH at 5.00m - A	eathered, s open. ed by SPT? ining, thinly ontal, not w reathered, n e grained M il, rough, pa one.	light brow Broken up bedded fi veathered, o stain, ho UDSTONE rtly opem.	into fine to ine grained open. orizontal,	3.50		73	61			
Prior to di Borehole Groundwa After com	rilling, a ha was termi ater was e pletion th	and pit was nated at the ncountered e borehole v	with a CAT scanner by a C dug to a depth of 0.6 m bg target depth of 5.00 m bg during drilling. at 3.5 m b was installed with a monit t. ES = Environmental sam	gl, and the gl. gl. oring star	e base of ndpipe.	f the pit	t was CAT s	scanr	ed. (m) (mm) 5.00 116	Depth	sing Diam (mm)	Hammer Info Energy Ratio 64% Install Respon	Serial N ar257	0	C Ap	Logg Check	ocale: 1 ed By: ed By: ed By: on ID:	L:20 KB	3D

Pipe1

5.00

1.00

CGL Reference

CG/39017

Project Ti Clie			lf Club d Partnership Ltd					Status:		ion ID <b>103</b>						GL
			ant Used		Grou		-									
From (m) 0.00 1.20 1.20 1.70	To (m) 1.20 5.00 1.70 5.19	Type IP RC WLS RC	Plant Used Hand Dug Tracked Drilling Rig Comacchio 305 Comacchio 305	Strike 1.6 3.5	5	ie (min) 20 -	) Rose T 1.20 1.20	Coords: 454918.030E/2217 Ordnance Survey Great Britain		l: 83.740m <b>5.00 m</b>			lalmi Wo	ng Bu polsad Godal	nics Lim Isiness C ck Way, ming,	· ·
1.70	5.15	ne l						National Grid Orientation: 0°	Inclination:	90°				Surı GU7		
													ww	w.cgl	-uk.com	
				Water	Legend	Strata	Level	Date Start: 25/10/202	L Date End:	25/10/2021	D.				1 of 2	st/ Dep
Sample	Sa Type/	imples & Te	Tests/Results	Level	Ŭ,	Depth	(m)	Strata	Description		Core		SCR	RQD	mm) Ba	ckfill (m
Depth (m)	Ref			(m)		(m)		Grass over soft dark brown CLAY w	ith rootlets through	out.	Run	(%)	(%)		avg max	
								[TOPSOIL]								
0.20	B 1					0.20	83.54	Soft dark brown sandy gravelly CLA	Y. Gravel is fine to c	oarse angular to	-					
0.30 0.30 - 0.40	ES 1 B 1						_	sub-angular LIMESTONE. Sand is co [WEATHERED CORNBRASH FORMA	arse. Some rootlets							
0.40	ES 1					0.40	83.34	Soft dark brown mottled light brov	-	AY with some	-					
0.50 0.55 - 0.65	B 2 B 2							cobbles of sub-angular limestone.							-	
0.55 - 0.65	62							angular to sub-angular limestone. [WEATHERED CORNBRASH FORMA	TION]						. •	
						0.75	82.99									
								Firm to stiff light brown mottled gr Gravel is fine to coarse sub-angula							•	
								[WEATHERED CORNBRASH FORMA		y innestone.					• •	
					 										•	1
															•	
1.20 - 1.65	D 1	SPT(S) 1	.20m N=21 (1,2/4,7,5,5)			1.20	82.54	Stiff light brown mottled grey sand	v slightly gravelly CI	AY Sand is coarse					· -	
								Gravel is fine to medium sub-angu	ar limestone.						•	
								[WEATHERED CORNBRASH FORMA	TION]		1.20				•	
											1.70	100	16	0	•	
							-								•	
1.70 - 1.78	D 3	SPT(S) 1.70	0m 50 (25 for 35mm/50 for			1.70	82.04								•	
1.70 - 3.20	C 4		40mm) Recovery=93%					Weak (?) LIMESTONE recovered as to coarse sub-angular limestone gr		it grey clayey fine					•	
						1.85	81.89	[CORNBRASH FORMATION]							•	
						1.95	81.79	Weak (?) light brown thinly bedder fractures.	i medium grained Li	MESTONE. NO					•	
								[CORNBRASH FORMATION] Extremely weak (?) blue grey slight			/				· -	
							-	[FOREST MARBLE FORMATION]	.,							
							-								÷F	
							-									
							-				1.70 3.20	93	80	67		
							-									
							-									
							_								Ĺ	
							-									
							-									
							-									3
						2.20	- 80.54								•	
3.20 - 3.58 3.20 - 4.70	D 5 C 6	SPT(S) 3.20	0m 50 (1,2/50 for 225mm) Recovery=87%			3.20		No recovery								
							-									
						3.45	80.29									
								Extremely weak (?) dark grey MUD [FOREST MARBLE FORMATION]	STONE.							
							-				3.20 4.70	87	77	77		
3.70	C 6					3.78	79.96									
						5.78	_	Strong (?) light grey thinly bedded	LIMESTONE with gre	een staining.	1					
								[FOREST MARBLE FORMATION]							•*	
	I						L	Strata continu	es onto next page					I	• •	<u>، ل</u> ال
lotes:								Hole Diameter	Casing	Hammer Infor	mation			S	cale: 1:2	0
			with a CAT scanner by a C						Depth Diam	Energy Ratio	Serial N	0.		Logge		KBD
. Borehole w	vas termin	ated at the	dug to a depth of 1.2 m b target depth of 5.00 m b	gl.		τne pit	was CAT so	anned. (m) (mm) 1.70 128	(m) (mm) 1.70 138	64%	ar2570	0		hecke		
. After comp	pletion the	borehole v	during drilling at 1.65 m a was installed with a monit	oring sta	ndpipe.					Install Respons	e Zones			prove		
. SPT = Stan	ndard Pene	etration Tes	t. ES = Environmental san	nple. D =	Disturbed	sample	e. B = Bulk	sample.		Ref From (m)	To (		-	Sectio	n ID: _ Refere	nce
									1	Pipe1 1.00	3.5	-		<u> </u>		

Project T			l Club Partnership Ltd				Status:	Locatio							iL
		d and Pla		Gr	roundw	vater	DRAFT	BHC	13						
From (m) 0.00 1.20 1.20 1.70	To (m) 1.20 5.00 1.70 5.19	Type IP RC WLS RC	Plant Used Hand Dug Tracked Drilling Rig Comacchio 305 Comacchio 305	Strike (m)	Time (m	in) Rose To	Location Type: Rotary corec Coords: 454918.030E/2217 Ordnance Survey Great Britain National Grid Orientation: 0°	26.240N Level: Final Depth: Inclination:	83.740m <b>5.00 m</b> 90°	4 	Goda	almin Woo Go Go www	g Bus olsack odalm Surre U7 12 v.cgl-u	y, XW ik.com	
							Date Start: 25/10/2021		25/10/2021					of 2	
Sample Depth (m)	Type/	amples & Tes	sts Tests/Results	Water Lege Level /Cov (m)	nd Strat ver Dept (m)	:h (m)	Strata I	Description		Ro Core Run	TCR (%)	SCR R	(m 2D m %) a	act Ins im) Back vg iax	
4.70 - 5.00	С7	SPT(C) 4.70n F	n N=50 (1,2/50 for 250mm) Recovery=133%			) 79.14	trong (?) light grey thinly bedded FOREST MARBLE FORMATION] Veak (?) dark grey MUDSTONE. FOREST MARBLE FORMATION]	LIMESTONE with gree	n staining.						
5.00 - 5.19	D 8	SPT/S) 5.00n	n 50 (25 for 145mm/50 for		5.00	- - - 78.74				4.70 5.00	133	100 1	00		
			40mm)					chieved target depth							6 -
Notor							Hole Diameter	Casing	Hammeric						7-
2. Prior to di 3. Borehole	rilling, a ha was termir	nd pit was d ated at the	with a CAT scanner by a Co lug to a depth of 1.2 m bg target depth of 5.00 m bg during drilling at 1.65 m a	l, and the bas I.	e of the p		ing. Depth Diam	Casing Depth Diam (m) (mm)	Hammer Infor Energy Ratio 64% Install Respons	Serial N ar257	io. 0	Ch	SCa ogged ecked roved	By:	KBD

From (m)

1.00 4.00

To (m)

3.50 5.00

Ref

Pipe1 Pipe2

Section ID:

CGL Reference

CG/39017

Groundwater was enumered at the target depth of 300 m bg.
 Groundwater was encountered during drilling at 1.65 m and 3.50 m bgl.
 After completion the borehole was installed with a monitoring standpipe.
 SPT = Standard Penetration Test. ES = Environmental sample. D = Disturbed sample. B = Bulk sample.

Project Ti Cli			lf Club d Partnership Ltd					Status:		tion ID <b>104</b>						GL
,			ant Used		Groun	dwat	er			104						
From (m)	To (m) 0.70	Type IP	Plant Used Hand Dug	Strike	(m) Time	(min)	Rose To								hnics Lir: Business	,
0.70	20.00 1.50	RC WLS	Tracked Drilling Rig Comacchio 305					Coords: 454833.110E/221 Ordnance Survey Great Britain		el: 83.520m	- 4	GOC	W	ools	ack Way,	
1.50 3.50	3.50 13.14	RC RC	Comacchio 305 Comacchio 305					National Grid	Final Depth	: 20.00 m				Su	alming, rrey,	
3.50	13.00	RC	Comacchio 305					Orientation: 0°	Inclination	: 90°					7 1XW gl-uk.con	n
								Date Start: 27/10/202	1 Date End	: 28/10/2021			S	hee	t 1 of 5	
	1	mples & Te		Water Level	Legend S /Cover D	trata epth	Level (m)	Strata	Description		Ro Core	tary (	-	-		inst/ Dept ackfill (m)
Sample Depth (m)	Type/ Ref		Tests/Results	(m)		(m)		Cross quar soft dark brown groual	u condu CLAV with r	ants and reatlats	Run	(%)	(%)	(%)	avg max	
							1	Grass over soft dark brown gravell hroughout. Sand is medium to co	arse. Gravel is fine t						1.00	
0.15	ES 1					0.20	83.32	angular to sub-rounded limestone TOPSOIL]								
0.30 - 0.40	B 1							Soft brown sandy gravelly CLAY. Gr angular limestone. Sand is coarse.	avel is fine to coars	e sub-angular to						
							_	WEATHERED CORNBRASH FORMA	TION]							
0.50 0.50 - 0.60	ES 2 B 2					0.50	83.02	Brown to orange brown sandy clay	vey fine to coarse su	b-angular to	-				: •	
							1	angular grey limestone GRAVEL. Sa imestone.	and is coarse. Some	cobbles of					.*	
						0.70		WEATHERED CORNBRASH FORMA		NV CLAY Gravel of					·	
							11	ine to coarse sub-angular to angu	lar grey limestone.							
							-	WEATHERED CORNBRASH FORM	ATIONJ						•	
															•	
1.20 - 1.65	D 1	SPT(S) 1	20m N=29 (5,7/7,5,6,11)												•	
											0.70 2.00	100	0	0		
1.50	C 1		Recovery=110%												· ·	
1.50 - 2.50	С 3															
							-									
															•	
						1.95	81.57								•	
								As above recovered as clayey sand angular to angular limestone	y GRAVEL of fine to	coarse sub-	1.50 2.50	110 100	0 0	0	•-	2 -
2.10	С 3					2.10	81.42	CORNBRASH FORMATION] Medium strong (?) light brown to	ainkich orango mott	lod grow thinly	2.10	100	Ū	0	••	
							- 1	pedded medium grained LIMESTO								
								nfilled with gravel. CORNBRASH FORMATION]			2.10 2.50	100	70	0		
							-								•	
2.50 - 3.50	C 4	SPT(C) 2	.50m N=20 (3,5/5,5,5,5) Recovery=25%			2.55	80.97	Stiff dark grey CLAY.			-					
								FOREST MARBLE FORMATION]								
							-								•	
							-								•	
							-				2.50	25			•-	-
											3.50					
											2.50					
							_				2.50 4.00	97	10	10		
							-								••	
3.50 - 3.95 3.50 - 3.95	D 2 D 5		.50m N=16 (1,1/2,2,5,7) Recovery=100%				_				-					
3.50 - 3.95 3.50 - 4.50	C 6						-									
						3.70	79.82	Neak (?) light grey very fine graine	ed MUDSTONE. No	fractures.	-					
								FOREST MARBLE FORMATION]							•	-
						4.00	70.50									
	1			I		4.00	79.52	Strata continu	les onto next page			<u> </u>	1			4- 4-
Notes:						1.00		Hole Diameter	Casing	Hammer Info					Scale: 1:	
drilling, a har	nd pit was	dug to a de	with a CAT scanner by a C pth of 0.7 m bgl, and the	base of t	the pit was (	CAT sca	anned. 3. E	orehole was (m) (mm)	Depth Diam (m) (mm	)	Serial N				ged By: ked By:	KBD/IKL
completion t	he boreho	le was insta	20.00 m bgl.4. Groundwa alled with a monitoring st	andpipe.						64%	ar257				ved By:	
Environment	aı sample.	ບ = Disturb	bed sample. B = Bulk sam	pie.						Install Response	-				ion ID:	
										Pipe1 1.50	4.0	0	1		GL Refe	
										Pipe2 5.50	10.	UU	1	(	G/39	01/

Project Ti Cli			lf Club d Partnership Ltd						tatus: <b>RAFT</b>			Locatio BH(							C	G	L
From (w)			ant Used Plant Used	Strike		indwa ne (mir	-			iry cored											
From (m) 0.00 0.70	To (m) 0.70 20.00	Type IP RC	Hand Dug Tracked Drilling Rig	5trike 7.0		ne (min 20	1) Rose	0 Coords: 45	4833.11	0E/22156	1.800N	Level:	83.52	Om	4		dalm	ning	chnics I Busines ack Wa	ss Cent	·
1.20 1.50	1.50 3.50	WLS RC	Comacchio 305 Comacchio 305					Ordnance Su National Gri		it Britain	Final	Depth:	20.	00 m					alming, irrey,		
3.50 3.50	13.14 13.00	RC RC	Comacchio 305 Comacchio 305					Orientatio	n:	0°	Incli	nation:	ç	90°				GU	7 1XW		
								Date Star	rt: 27/	10/2021	Dat	e End:	28/1	0/2021	_				gl-uk.co		
	Sa	l Imples & Te	ests	Water	Legend					Strata De	escription				Ro	otary	Corir		Fract (mm)	Inst/	Dept
Sample Depth (m)	Type/ Ref		Tests/Results	Level (m)	/Cover	Depth (m)	(m)								Core Run	TCF (%)	R SCR (%)	RQD (%)	min avg	Backfill	(m)
4.50 - 4.75	D 3	SPT(S) 4.1	50m №=36 (3,4/10,12,8,6)			4.30	79.22	Soft to firm dark coarse, sub-rour [FOREST MARBL Stiff to very stiff [FOREST MARBL 4.43m bgl F	dark grey E FORMA dark grey E FORMA	stone. TION] sandy CLA TION] sub-horizor	Y ntal, undulo	ating, rou	igh, clos	ed.	3.50 4.50	100	)		max		
4.50 - 4.95 4.50 - 5.50	D 7 C 8		Recovery=70%			4.90	78.62	Weak (?) greeni: MUDSTONE. [FOREST MARBL Light grey clayey	E FORMA	TION]					4.00 5.50						
						5.10	78.42	GRAVEL. [FOREST MARBL between 4.5 Weak light grey [FOREST MARBL	E FORMA 90 and 5.1 very fine	TION] Om bgl Mu grained MU	idstone lith	norelics			4.50 5.50	70					5 -
5.50 - 5.83 5.50 - 7.00	D 9 C 10		0m 50 (6,8/50 for 175mm) Recovery=100%			5.70	77.82	between 5.5 mudstone tr angular gra Strong light grey white fossils. No (FOREST MARBL	o be recov vel. thinly be fractures	ered as fin dded medi	e to coarse	e sub-ang	ular to		_				-		6 -
6.50	C 6					6.15 6.25 6.30	77.37	Weak light brow [FOREST MARBI] Weak dark brow [FOREST MARBI] Weak light brow [FOREST MARBI] Weak light greet Fractures are dr [FOREST MARBI] 6.40m bgl F weak grey r 6.75m bgl F	E FORMA (n/black fi E FORMA (n fine gra E FORMA nish grey v illing indu E FORMA (racture - 1 mudstone	TION] ne grained TION] ined MUD: TION] very thinly ced along b TION] horizontal, - potential	MUDSTON STONE. No bedded fin bedding pla open and i ly drilling in	NE. No fra fractures e grainec anes. infilled winduced.	ictures. 5. I MUDS		5.50 7.00	100	) 84	84			
7.00 - 7.26 7.00 - 8.50	D 11 C 12		0m 50 (8,8/50 for 110mm) Recovery=100%			7.00	76.52	Light grey MUD						ub-					-		7.
						7.35	76.17	\[FOREST MARBL Stiff dark blue C [FOREST MARBL Stiff green slight grey mudstone. [FOREST MARBL	LAY. E FORMA ly gravelly E FORMA	TION] • CLAY. Grav			n sub-ai	ngular	7.00	100	) 40	34			
						7.90	75.62	Extremely weak [FOREST MARBL	(?) green	slightly silt	y MUDSTC	DNE.									
						7.98	75.54	Strong light brow	wn and da	rk grey me	dium grair	ned LIMES	STONE.								
									1	a continue:								-			- 8-
Notes: 1. Borehole l	ocation w	as scanned	with a CAT scanner by a C	GL Engi	neer prior	to drilli	ing comm	encing 2 Prior to	Hole Depth	iameter Diam	Cas Depth	ing Diam	-	ammer Info / Ratio	rmation Serial N		-		Scale: ged By:		)/IKL
drilling, a har	nd pit was	dug to a de	pth of 0.7 m bgl, and the 20.00 m bgl.4. Groundwar	base of	the pit wa	is CAT s	canned. 3	. Borehole was	(m)	(mm)	(m)	(mm)		/ Katio	ar257			-	ked By:	кDL	7 INL
completion t	he boreho	le was insta	alled with a monitoring sta	andpipe							4.20	138							, ved By:		
Environment	ai sample.	ບ = Disturb	oed sample. B = Bulk samp	ne.									Ref	From (m					tion ID:		
													Pipe1	1.50	4.0	00	1		GL Ref		
													Pipe2	5.50	10.	.00	1	(	CG/3	9017	'

Project Ti Clie	ent: Elli	ott Woo	d Partnership Ltd						tatus: <b>RAFT</b>			Locatio BHC						C	G	L
From (m) 0.00	Metho To (m) 0.70	od and Pl Type IP	Plant Used	Strike		indwa ne (min)	-			ry cored					Cai	rd Ge	eotec	hnics L	_imited,	,
0.00 0.70 1.20	0.70 20.00 1.50	RC WLS	Hand Dug Tracked Drilling Rig Comacchio 305					Coords: 45			51.800N	Level:	83.520m		1 Go	W	/ools	ack Wa		·е,
1.50	3.50	RC RC	Comacchio 305					Ordnance Su National Gri		t Britain	Final	Depth:	20.00 m					alming, rrey,		
3.50 3.50	13.14 13.00	RC	Comacchio 305 Comacchio 305					Orientatio	n:	0°	Incli	nation:	90°			w		7 1XW gl-uk.co	om	
								Date Star	rt: 27/	10/2021	Dat	e End:	28/10/2021			S	hee	t 3 of .	5	
	r	amples & Te		Water Level	Legend /Cover	Strata Depth	Level (m)			Strata De	escription			_	<u> </u>	Corir	ng RQD	Fract (mm) min	Inst/ Backfill	Depti (m)
Sample Depth (m)	Type/ Ref		Tests/Results	(m)		(m)								Core Run	TCF (%)			avg max		1
						8.10	75.42	Strong light brov	E FORMA	FION]	-			_					$\square$	1
								Weak dark grey [FOREST MARBL	E FORMA	FION]								4		
							-	8.00m bgl F rough, oper		lightly wea	athered, ho	orizontal,	planar,					4		
							-	Strong light grey small (<1 cm)wh	/ thinly be		-	d LIMEST	ONE with some					4		
8.50 - 10.00	C 13		0m 50 (25 for 70mm/50 for 5mm)		×	8.50	75.02	FOREST MARBL	E FORMA	FION]	103.							4		1
			Recovery=100%		×_×_	8.65	74.87	Firm dark green	E FORMA	FION]								4		
							-	between 8.5 Strong light grey					ssils. Fractures							
							-	are straight, pla quartz.	nar, rough	, potentiall	ly drilling in	nduced. R	are pockets of							
							-	FOREST MARBL		-	oken un int	o aravel						4		9-
								between b.	50 unu 0.5	oni byi bic	nen up in	o graver							Ħ	
																		4		
														8.50 10.00	107	7 93	83	4		1
																		4		
							-												$\square$	
							-													
						9.75	73.77											4		
						9.85	73.67	Medium strong silty LIMESTONE				lium grair	ed weathered					4		
						10.00	73.52	[FOREST MARBL Strong light grey			ONE with	occasiona	al fossils and						E	
10.00 - 11.50	C 14		00m 50 (25 for 45mm/50 for 5mm)		× · · ·	10.00	/3.52	quartz inclusion	s.										<u>· · []</u>	10 -
			Recovery=100%		×	10.15	73.37	Firm dark grey s			avel is fine	to coarse	angular							
							-	limestone. [FOREST MARBL		-										
							-	between 10 Strong light grey					ve fossils.							
								[FOREST MARBL	E FORMA	FION]										
							-							10.00						
						10.85	72.67							11.50		87	84			
							-	Medium strong Small dark greer				s hatched	d fracturing.							
						11.00	72.52	[FOREST MARBL Strong to very st	E FORMA	FION]		dium gra	ined LIMESTONE	-1						11 -
							-	with sub-horizor	ntal undul	ating fractu		-								
							-	[FOREST MARBL	E FURIVIA	IIONJ										
							-													
11.50 - 13.00	C 15	SPT(C) 11 5	50m 50 (25 for 75mm/50 for			11.50	72.02													
11.50 - 15.00	015		15mm) Recovery=100%		× <u>~</u>		_	Firm dark grey s limestone.	ilty gravel	y CLAY. Gra	avel is fine	to coarse	angular							
						11.65	71.87	[FOREST MARBL between 11		-	Fractured I	ov SPT								
							]	Strong to very st	trong light	grey to gre	ey fine to r	nedium g	rained	-						
							-	LIMESTONE with [FOREST MARBL			ai iracture	э.								
						j			Strata	a continues	s onto next	page				I				12 -
Notes:									1	iameter	Cas		Hammer Inf	ormation				Scale:	1:20	
			with a CAT scanner by a C epth of 0.7 m bgl, and the						Depth (m)	Diam (mm)	Depth (m)	Diam (mm)	Energy Ratio	Serial N	lo.			ged By:	KBD/	/IKL
terminated a completion tl	it the targo he boreho	et depth of ole was insta	20.00 m bgl.4. Groundwa alled with a monitoring st	ter was r andpipe.	not encou	ntered o	during dril	ling. 5. After					64%	ar257				ked By: ved By:		
Environment	al sample	. D = Disturk	bed sample. B = Bulk sam	ole.									Install Respo		s (m)	-		ion ID:		
													Pipe1 1.50	4.	00				erence	
													Pipe2 5.50	10	.00		C	.0/3	9017	

Project T			lf Club d Partnership Ltd					Status:		Location							GI	
			ant Used		Grou	undwat	ter	DRAFT		BHO	4							
From (m)	To (m)	Type	Plant Used	Strike	(m) Tin	ne (min)	Rose 1	Tocation Type: Rotary	cored							iics Lin		
0.00 0.70	0.70 20.00	IP RC	Hand Dug Tracked Drilling Rig					Coords: 454833.110E	/221561	.800N Level:	83.520m	4	God		-	siness « Way,	Centre	5
1.20 1.50	1.50 3.50	WLS RC	Comacchio 305 Comacchio 305					Ordnance Survey Great E National Grid	Britain	Final Depth:	20.00 m				iodalm Surre	ning,		
3.50 3.50	13.14 13.00	RC RC	Comacchio 305 Comacchio 305						)°	Inclination:	90°	1			GU7 1	XW		
5.50	13.00	ne						Date Start: 27/10	)/2021	Date End:	28/10/2021				-	uk.com	۱	
		mples & Te	ete	Water	Legend	Strata	Level		Strata Desc		20/10/2021	De	tary C			act	nst/	Depth
Sample	Type/		Tests/Results	Level (m)		Depth (m)	(m)		Strata Desc	enption		Core Run	· ·	SCR I	ROD n			(m)
Depth (m)	Ref					12.70		Strong to very strong light gr LIMESTONE with occasional [FOREST MARBLE FORMATIC	horizontal		ained	11.50	20		70	nax		
		SPT(C) 13.0	0m 50 (25 for 65mm/50 for 75mm)			13.00	70.52	LIMESTONE recovered as da angular to angular limestone angular to angular limestone [FOREST MARBLE FORMATIC Strong to very strong fine gr. Faint horizontal bedding and [FOREST MARBLE FORMATIC	e COBBLES e. DN] ained LIME I banding.	6. Gravel is fine to c	oarse sub-	13.00	103	87	87			13
						14.50	69.02 	Light grey LIMESTONE recov [FOREST MARBLE FORMATIC Strong to very strong light gr bivalve fossils (1-3 cm) and c [FOREST MARBLE FORMATIC Medium strong dark grey fin horizontal, planar, smooth, c [FOREST MARBLE FORMATIC Strong to very strong light gr	DN] rey fine gra quartz inclu DN] e grained closed - po DN]	ained LIMESTONE v usions. LIMESTONE. Fractu	vith frequent ires are duced.	14.50 16.00	100	84	79			
						15.65	67.87 - - - 67.62	bivalve fossils (1-3 cm) and c [FOREST MARBLE FORMATIC Dark grey weakly cemented [FOREST MARBLE FORMATIC	uartz inclu DN] thinly bed DN]	usions. ided MUDSTONE		_						-
						16.00	67.52	Strong light grey fine grained	LIMESTO	NE with occasional	shell fossils.							16
		-	1							onto next page							1	10
Notes:	location	c connod	with a CAT scanner by a C	GI Englis	oor prio-	to drilli-	a .com -	Hole Diar ncing.2. Prior to Depth	neter Diam	Casing Depth Diam	Hammer Info	mation Serial N				ale: 1:		
drilling, a ha	nd pit was	dug to a de	pth of 0.7 m bgl, and the	base of t	he pit wa	as CAT sc	anned. 3.	Borehole was (m)	(mm)	(m) (mm)					Logged hecked		KBD/II	νL.
completion t	the boreho	le was insta	20.00 m bgl.4. Groundwa alled with a monitoring sta	andpipe.					116		64%	ar257			proved			
Environment	tal sample.	D = Disturb	oed sample. B = Bulk samp	ole.							Install Respons	1			Sectior			
											Ref         From (m)           Pipe1         1.50	To (				Refer	ence	
1											Pipe1 1.50 Pipe2 5.50	10.			CG	/390	017	

Project Ti Clie			lf Club d Partnership Ltd					Status:	Locati							G	
			ant Used		Grou	undwa	ater		ВН	04	_ /						
From (m) 0.00 0.70	To (m) 0.70 20.00	Type IP RC	Plant Used Hand Dug Tracked Drilling Rig	Strike	(m) Tir	me (min	i) Rose T	Location Type: Rotary core           Coords: 454833.110E/221		: 83.520m	4		lalm	ing B		Limited, ss Centr	·
1.20 1.50	1.50 3.50	WLS RC	Comacchio 305 Comacchio 305					Ordnance Survey Great Britain National Grid	Final Depth:	20.00 m	]			Goda	Iming rrey,		
3.50 3.50	13.14 13.00	RC RC	Comacchio 305 Comacchio 305					Orientation: 0°	Inclination:	90°	1			GU7	1XW		
								Date Start: 27/10/202	1 Date End:	28/10/2021	1—				l-uk.c		
	Sa	mples & Te	sts	Water	Legend			Strata	Description		Ro	tary (			Fract (mm)	Inst/	Depth
Sample Depth (m)	Type/ Ref		Tests/Results	Level (m)	/Cover	(m)	(m)				Core Run	TCR (%)			min avg max	Backfill	(m)
						16.10	67.42	Strong light grey fine grained LIMI [FOREST MARBLE FORMATION]	STONE with occasion	al shell fossils.	Ι						
								Light grey LIMESTONE recovered a [FOREST MARBLE FORMATION]	as fine to coarse sub-a	ingular gravel.	Λ						-
						16.35		Strong to very strong light grey LII [FOREST MARBLE FORMATION]	AESTONE with occasion	onal shells.							-
								Medium strong to strong dark gre [FOREST MARBLE FORMATION]	y fine grained MUDST	ONE.	1						
							-	between 16.35 and 16.77m b	gl Some lighter bands	of							-
							-	bioturbation and burrows. 16.36m bgl Fracture - planar,	smooth, closed.								-
						16.77					16.00 17.50	105	71	71			-
								Stiff to very stiff dark grey CLAY. [FOREST MARBLE FORMATION]									
																	17
						17.07	66.45	Strong to very strong light grey LI	AESTONE with occasion	onal shells and	-						-
								quartzite. [FOREST MARBLE FORMATION]									-
								17.20m bgl Fracture - planar,	smooth, closed.								
					H												-
						17.50	66.02 65.92	17.45m bgl Fracture - slightly Light grey LIMESTONE recovered a			$\square$						
						-		fractured by SPT. [FOREST MARBLE FORMATION]			1						
							-	Strong to very strong light grey fin fossils. No fractures.	e grained LIMESTONE	with occasional							
						17.88	65.64	[FOREST MARBLE FORMATION] Weak dark grey thinly bedded fine	grained MUDSTONE		-						
								[FOREST MARBLE FORMATION] between 17.96 and 18.42m b									18
							-	planar, smooth and potential planes at 17.96, 18.05, 18.42,	y drilling induced alor								-
							-	planes at 17.50, 10.05, 10.42,	10.20, unu 10.42		17.50 19.00		95	83			-
							-				15.00						-
						18.42	65.10	Strong to very strong light grey LI	MESTONE with light b	rown patches -	-						-
						-		possible reduction spots. [FOREST MARBLE FORMATION]									
																	-
						-											-
						-	-	18.88m bgl Fracture - slightly	weathered, slightly u	ndulating,							-
						19.00	64.52	smooth, partly open. Weak dark grey MUDSTONE - frac	tured by SPT								19
						19.16		[FOREST MARBLE FORMATION]									-
							-	Strong to very strong light grey LII possible reduction spots.	VIESTONE with light b	rown patches -							-
						-	-	[FOREST MARBLE FORMATION]									
								19.40m bgl Fracture - planar, induced.	smooth, closed. Poter	ntially drilling	19.00 20.00	100	100	100			_
						-					20.00						-
						1											-
						20.00	-										-
	I	l				20.00	63.52	EOH at 20.00m -	Achieved target depth			1	I				20
Notes:	ocation	c coopead .	with a CAT scanner by a C	GI Engin	oor pris-	to dell'	ng comm	Hole Diameter	Casing Depth Diam	Hammer Infor Energy Ratio	mation Serial N				Scale:		/121
drilling, a han	nd pit was	dug to a de	pth of 0.7 m bgl, and the 20.00 m bgl.4. Groundwat	base of t	the pit wa	as CAT s	canned. 3.	Borehole was (m) (mm)		64%	ar257		0		ed By: ed By:	KBD/	INL
completion th	he boreho	le was insta	lled with a monitoring sta ed sample. B = Bulk samp	ndpipe.						Install Respons			A		ed By:		
										Ref From (m)	To (	m)			ion ID: GL Ref	erence	2
1										Pipe1 1.50 Pipe2 5.50	4.0 10.					9017	

Project T Cli	ent: Elli	ott Wood	Partnership Ltd					Status:	Locatio BHC							G	L
From (m)	Metho To (m)	d and Pla Type	Plant Used	Strike		ndwat	er Rose To	Leastion Type: Deteny perced									_
0.00	1.20	IP RC	Hand Dug	SUIKE		ie (min)	Kose to	Coords: 454945.450E/2216		82.300m	4		almir	ng Bu	sines	miteo Cent	·
1.20	13.00	NC.	Tracked Drilling Rig					Ordnance Survey Great Britain	Final Depth:	13.00 m				olsac odalr		Ι,	
								National Grid Orientation: 0°	Inclination:	90°	-		(	Surro GU7 1			
								Date Start: 26/10/2021		27/10/2021	-			w.cgl-			
	Sa	mples & Te	sts	Water	Legend	Strata	Level		Date End:	27/10/2021	Ro	tary C			ract	Inst/	Dept
Sample	Type/	-	Tests/Results	Level (m)	/Cover	Depth (m)	(m)				Core Run		SCR F	200 1	nm) nin avg	, Backfil	
Depth (m)	Ref							Grass over soft dark brown sandy C	LAY with roots and ro	otlets		(,,,)	(70)	1 (0,1)	nax		
0.10	ES 1					0.20		hroughout. TOPSOIL]									
0.20 - 0.30	B 1				<u></u>		5	oft brown mottled light brown san oarse sub-angular LIMESTONE. Sar			1						
								WEATHERED CORNBRASH FORMAT 0.25m bgl Cobble of sub-angula	ION]								
						0.50	81.80			AV. C							
0.55 - 0.65	B 2						- 0	tiff light brown mottled orange bro oarse. Gravel is fine to coarse sub-	angular limestone.	AY. Sand is							
						0.70	81.60	WEATHERED CORNBRASH FORMAT Brown to light brown sandy clayey f	-	gular grey and	-						
0.80 - 0.90	В 3				ـــــــــــــــــــــــــــــــــــــ		- 1	ight brown limestone GRAVEL. WEATHERED CORNBRASH FORMAT		Jener 8. ey ene							
															•	E	1
1 20 1 55						1.20	81.10								•	H	
1.20 - 1.65	D 1						1	Veak grey mottled orangish brown vith 30 mm spherical nodules/conc							•		
						1.40	80.90 S	ized grains are predominantly oolit CORNBRASH FORMATION]			1.20 1.50	100	67	67	•		
						1.50	80.80 L	ight brown and yellow sandy fine t bove but recovered as gravel).	o medium sub-angul	ar GRAVEL. (As					•		
							-\[	CORNBRASH FORMATION]		/					•		
							14	trong (?) orange brown mottled w IMESTONE. Fractures are slightly w	veathered rough to ur						•		
								o close with some orange staining. CORNBRASH FORMATION]							•		•
							-	1.55m bgl Fracture - slightly we horizontal, rough, open.	eathered with orange	staining,	1.50				•		
						2.10	80.20	1.60m bgl Fracture - no staining between 1.60 and 1.62m bgl Fr			2.50	110	75	42	•		2
							-	coarse angular to sub-angular 1.62m bal Fracture - slightly we	gravel.						•	Ħ	
						2.30	80.00	yellow staining, horiztonal, rou 1.64m bgl Fracture - slightly we	gh, closed.						•		[
						2.45	79.85	yellow staining, horiztonal, rou 1.73m bgl Fracture - orange sta	gh, open.						•		
						2.50	79.80	1.75m bgl Fracture - orange sto			<u> </u>				•		* 
							1	tiff dark grey CLAY. CORNBRASH FORMATION]									
							ſ	Veak (?) to medium strong grey MI FOREST MARBLE FORMATION]	JDSTONE.								
								/ery stiff dark grey CLAY. FOREST MARBLE FORMATION]									
								lo recovery FOREST MARBLE FORMATION]			2.50	25	0	0			
							]	-			3.50		5	Ĩ			
						2.25	70.05										
					×	3.25		itiff grey slightly silty CLAY FOREST MARBLE FORMATION]			1						
					<u>×_×</u> _ ×_×_		-										
					×	3.50		tiff grey CLAY becoming very stiff f	rom 4.0 m					-			
							- [	FOREST MARBLE FORMATION]									
							-										
							]										
4.00	C 5										]						4
otes:								Strata continue Hole Diameter	es onto next page Casing	Hammer Infor	nation			50	ale: 1	·20	
Borehole l			vith a CAT scanner by a Co					ing.2. Prior to Depth Diam	Depth Diam		Serial N	о.	1	.ogged			BD
rminated a	at the targe	t depth of 5	pth of 1.2 m bgl, and the 5.00 m bgl.4. Groundwate	r was en	countere	d during	drilling at 3	3.50 m bgl. 5.	(m) (mm)	%				necked			
			installed with a monitori ed sample. B = Bulk samp		μιμе. 6.	əri = Sta	muara Pen			Install Response	1			proved Section			
										Ref         From (m)           Pipe2         1.00	To (			CGL	Refe	renc	
										Pipe1 4.20	10.			C	i/39	017	1

	Title: Bic lient: Elli		olf Club d Partnership Ltd					-	tatus: RAFT			Locatio BH0						CC	
From ( )			lant Used	C 4-21	- r	ndwate	1	Location Ty		rv cored			-						
From (m) 0.00 1.20	To (m) 1.20 13.00	Type IP RC	Plant Used Hand Dug Tracked Drilling Rig	Strike	(m) Tim	e (min)	Rose To	Coords: 45	4945.450	)E/22161	0.860N	Level:	82.300m	4		lalm W	ning E /ools:	hnics Limi Business C ack Way,	,
								Ordnance Su National Grid		t Britain	Final	Depth:	13.00 m			1	Su	alming, rrey,	
								Orientatio	n:	0°	Inclir	nation:	90°			ww		7 1XW gl-uk.com	
								Date Star	t: 26/	10/2021	Dat	e End:	27/10/2021			S	hee	t 2 of 4	
Sample	Sa Type/	imples & T	ests Tests/Results	Water Level	Legend /Cover	Depth	Level (m)			Strata De	scription			Rc Core	tary (	-	ng RQD	Fract In: (mm) Bac	st/ Dept kfill (m)
Depth (m			lesis/nesuits	(m)		(m)	5	tiff grey CLAY b	ecoming	erv stiff fro	om 4.0 m			Run	(%)			avg max	
							78.20 [  S	FOREST MARBL	E FORMAT	ION] bedded fir		LIMESTON	NE. No fractures.	3.50 4.50	100	40	40		
						4.80	77.50 N	lo recovery FOREST MARBL Yery stiff dark gr	ey gravell	y sandy CL									
							[] [ V fi	rown fine to mo FOREST MARBL Veak (?) dark gr ractures. FOREST MARBL	E FORMAT ey mottle	TION] d light grey				4.50 5.50	70	60	60		5 -
							76.40 S	ub-angular muc FOREST MARBL Veak (?) light gr veathered, close FOREST MARBL	dstone gra <u>E FORMAT</u> rey fine gra e, rough, h E FORMAT	vel. TON] hined MUD horizontal. TON]	DSTONE. Fr	acture is s	fine to medium slightly zontal, open.	5.50	100	63	57		6-
							75.65 [I	Veak (?) dark gr FOREST MARBL 'ery stiff dark bl FOREST MARBL	E FORMAT	ION] mally mott		LAY.		_					
					· · · · · · · · · · · · · · · · · · ·		- S [1 75.05	Yery stiff green g ub-rounded gre FOREST MARBL	ey mudsto E FORMAT	ne. ION]									7 -
							L 0	trong (?) light g IMESTONE with pen, rough. FOREST MARBL 7.25m bgl Fi horizontal, c 7.40m bgl Fi rough, jagge	E FORMAT racture - s open. Bour racture - r	ite fossils o TON] lightly wea ndary betw ot weathe	of shells. For athered, gr veen clay a red, no sta	ractures a reen staini and limesta aining, hor	re horizontal, ing, rough, one.	7.00 8.50	93	77	70		
							74.40 [	Veak (?) dark gr FOREST MARBL Veak (?) light gr	ey fine gra E FORMAT	ained MUD ION]	STONE wi		fossils.	_				*** *** ****	
NL -	•	•	I						1		onto next	• •				I			
Notes: 1. Borehole	e location wa	as scanned	with a CAT scanner by a C	GL Engin	eer prior t	o drillins	g commenc	ing.2. Prior to	Depth	ameter Diam	Cas Depth	ing Diam	Hammer Info Energy Ratio	rmation Serial N		-		Scale: 1:20 ged By:	) KBD
drilling, a h terminated	and pit was at the targe	dug to a d t depth of	epth of 1.2 m bgl, and the 5.00 m bgl.4. Groundwate	base of t r was en	he pit was countered	CAT sca d during	nned. 3. Bo drilling at 3	orehole was .50 m bgl. 5.	(m)	(mm)	(m)	(mm)	%				Check	ed By:	
			as installed with a monitori bed sample. B = Bulk samp		pipe. 6. S	SPT = Sta	indard Pene	etration Test. ES =					Install Respon	se Zones	5	A		ed By:	
													Ref         From (m           Pipe2         1.00	i) To (		╞		GL Refere	nce
													Pipe2 1.00 Pipe1 4.20	10.			C	G/390	17

Project T	itle: Bic	ester Go	lf Club					St	tatus:			Locatio	on ID								
Cl			d Partnership Ltd		Curry			DI	RAFT			BH	05								
From (m)	To (m)	d and Pl Type	ant Used Plant Used	Strike		indwa ne (min		Location Ty	pe: Rota	ry cored						Carr	16~	tech	nics Lim	ted	
0.00 1.20	1.20 13.00	IP RC	Hand Dug Tracked Drilling Rig			,		Coords: 45	4945.450	)E/22161	.0.860N	Level:	82.300r	n			lalmi	ng Bu	siness C Way,		
								Ordnance Su National Grid		t Britain	Final	Depth:	13.0	) m				odaln Surre	ning,		
								Orientatio	n:	0°	Incli	nation:	90	0				GU7 1			
								Date Star	t: 26/2	LO/2021	Da	te End:	27/10/	2021				eet 3			
	Sa	I Imples & Te	sts	Water	Legend /Cover					Strata De	escription				Ro	tary C	Coring	Fi (r	nm) In		epth
Sample Depth (m)	Type/ Ref		Tests/Results	Level (m)	/Cover	Depth (m)	(m)								Core Run	TCR (%)	SCR (%)	NQD	nin Bao Ivg nax	KIIII	(m)
								Weak (?) light gr [FOREST MARBL			OSTONE.										
						8.20	74.10	8.17m bgl Fi	racture - n	o stainina	, horizonta	ıl, rough,	open.								
						8.25	74.05	8.19m bgl Fi Rock is fract							/				•		
							1 11	Weak (?) dark gr [FOREST MARBL	ey fine gra	ined MU		.,	9	·	1				Ŷ	Ħ	
						8.50 8.55	73.80	Strong (?) light g	rey fine gr	ained LIM	ESTONE w	ith abund	dant white	fossils.	'			_		E	
						-	1	[FOREST MARBL LIMESTONE reco	vered as f	ine to coa	rse sub-an	gular ligh	it grey lim	estone							
						8.75	73.55	gravel. Drilling in [FOREST MARBL	E FORMAT	ION]					]						
						8.90		Strong (?) light g [FOREST MARBL			ESTONE w	ith abund	dant white	fossils.	1						
								8.55m bgl Fl Strong light grey							J						0
						1		LIMESTONE with	abundan	t white qu			0.31								, <b>-</b>
						1		8.75m bgl Fi rough, open	racture - s	lightly we					8.50					E	
							-	fracture.							10.00	103	100	100			
								Strong grey thinl white quartz (?)	fossils.	-	rained LIN	IESTONE	with abun	dant					Ŷ		
						9.57	72.73	[FOREST MARBL between 9.1			coming ma	ottled ligh	nt grey and	1							
								fine grained 9.55m bgl Fl		orizontal.	rouah. op	en.			1				•		
						9.70	72.60	Weak (?) green b MUDSTONE.					ack slightly	sandy					Ŷ	Ħ	
								[FOREST MARBL Very strong light			a a di una are	ain ad LIN		.i+b	]					E	
						-		abundant white	fossils. No	fractures.	-			/1011							10 -
						10.05	72.25	[FOREST MARBL Very strong grey			MESTONE.				_						10 -
						10.19	/2.11	[FOREST MARBL Strong light grey			no grainos				_						
						-		abundant fossils	. Fractures	are sub-v											
						-	-	[FOREST MARBL	E FORMAT	ION]											
								10.49m bgl	Fracture -	slightly we	eathered,	rough, ho	orizontal,								
						10.58 10.65	71.72	partly open. Strong blue grey				of limest	one.		1						
							-	[FOREST MARBL 10.58m bgl		-	eathered	undulatin	a sub-		10.00 11.50	97	97	84			
						10.85	71.45	horizontal, c	losed.				-	ranco	]						
						]		fine grained LIM	ESTONE w	ith abund			aca ahhes	ance							11
								[FOREST MARBL between 10.	.65 and 10	.65m bgl i		• •									11 -
						11.15		sub-horizon grey/blue cl	ay.			-									
								Strong light grey white fossils.	thinly bea	lded fine រួ	grained LIN	<b>AESTONE</b>	with abur	ndant							
								[FOREST MARBL 10.98m bgl		-	eathered v	vith greei	n stainina,								
						11.50	70.80	<i>sub-horizon</i> Grey mottled lig	tal, rough,	closed. In	filled with	clay.			J <u>├</u>			-			
						11.64		with green stain [FOREST MARBL	ing within	the rock.	uu	- aramet									
							-	11.15m bgl	Fracture -	undulatin		,									
						1		11.28m bgl horizontal, c	open.												
						]		LIMESTONE reco gravel. Fractured		ine to coa	rse angula	r light gre	ey limesto	ne							12
									1		s onto nex				-						12 -
Notes: L. Borehole	location wa	as scanned v	with a CAT scanner by a C	GL Engin	eer prior	to drilli	ing commer	ncing.2. Prior to	Hole D Depth	ameter Diam	Ca: Depth	ing Diam	Harr Energy F	mer Info atio	rmation Serial N	0.		Sc. Logged	ale: 1:2 By:	0 KBD	
drilling, a ha erminated a	nd pit was at the targe	dug to a de et depth of S	pth of 1.2 m bgl, and the 5.00 m bgl.4. Groundwate	base of t er was er	the pit wa ncountere	as CAT s ed durin	canned. 3. g drilling at	Borehole was 3.50 m bgl. 5.	(m)	(mm)	(m)	(mm)	%					hecked			
			s installed with a monitori oed sample. B = Bulk samp		lpipe. 6.	SPT = S	tandard Pe	netration Test. ES =					Insta	l Respon	se Zones			proved Sectior			
													Ref Pipe2	From (m <b>1.00</b>	) To (				Refere	nce	
													Pipe2 Pipe1	4.20	10.0			CG	/390	17	

Project	Title: Bic	ester Go	lf Club					Status:			Locatio	on ID							_
C			d Partnership Ltd	1	-	1 .		DRAFT			BHC	)5					C	G	L
From (m)	Metho To (m)	d and Pl Type	lant Used Plant Used	Strike		Indwat	er Rose To	Location Type: Rota	ry cored					Cert	4.0.	oto -'	hnice	imit-	
0.00	1.20	IP	Hand Dug Tracked Drilling Rig			( )		Coords: 454945.450	)E/22161	L0.860N	Level:	82.300m			dalm	ing B	lusine	imited s Centi	
1.20	13.00	RC	Iracked Drilling Rig					Ordnance Survey Great			Depth:	13.00 m					ack Wa Iming,		
								National Grid	0°			90°					rrey, 1XW		
								Orientation:			nation:						l-uk.co	om	
								Date Start: 26/1	LO/2021		te End:	27/10/2023					4 of Fract		
Sample	Sa Type/	mples & Te	ests Tests/Results	Water Level	Legend /Cover	Depth	Level (m)		Strata De	escription			Core	TCR	Corin; SCR	RQD	(mm) min	Inst/ Backfill	
Depth (m)				(m)		(m)		IMESTONE recovered as f	ine to coa	rse angula	r light gre	v limestone	Run	(%)	(%)	(%)	avg max		
							-\g	ravel. Fractured by SPT.		ise angula	i light gre	y infestone	1						
								OREST MARBLE FORMAT 1edium strong - strong (?)		to mediur	n grained	(black medium	<u> </u>						
						12.30		rains) LIMESTONE. Becom epth.	ning more	medium g	rained an	d darker with							
								OREST MARBLE FORMAT 11.82m bgl Fracture -		I rough p	anar ono								
							-	12.10m bgl Fracture -					11.50 13.00	100	93	87			
							s	<i>closed.</i> trong (?) light grey mottle	d dark gre	ey thinly b	edded fine	e to medium							
						12.78	0	rained LIMESTONE. FOREST MARBLE FORMAT											
							69.47	12.31m bgl Fracture -	horizonta			nfilled with							
					╞╧┯	13.00	- 69.30	dark grey slightly sand 12.54m bgl Fracture -	undulatin			ed - infilled	A						
						13.00		with dark grey sandy of Weak very dark grey to bla		TONE. Frac	tures are	horizontal,							13 -
							- r	ough, partly open. FOREST MARBLE FORMAT											
							S	trong dark grey becoming		y from 12.9	0 LIMEST	ONE with whit	e						
								ossils of shells. FOREST MARBLE FORMAT											
								EOH at 13.00r	n - Termina	ted upon cli	ent instruct	ion							
						Ť	1												
							]												
																			14
																			-
							_												
							_												
							-												
							-												
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							_												15 -
							-												
							-												
							4												
							-												
							-												
							4												
							-												
							J												16 -
Notes:								Hole Di	ameter	Car	sing	Hammer li	nformation			c	Scale:	1:20	
1. Borehole			with a CAT scanner by a C					ing.2. Prior to Depth	Diam	Depth	Diam	Energy Ratio	Serial N				ed By:	1.20 KB	3D
terminated	at the targe	t depth of	epth of 1.2 m bgl, and the 5.00 m bgl.4. Groundwate	r was ei	ncountere	d during	drilling at 3	.50 m bgl. 5.	(mm)	(m)	(mm)	%					ed By:		
			is installed with a monitori bed sample. B = Bulk samp		dpipe. 6.	SPT = Sta	ndard Pene	etration Test. ES =				Install Resp	onse Zone	5			ed By:		
Ì										1		Ref From	(m) To		1	Secti	on ID:		

CGL Reference

CG/39017

Ref

Pipe2 Pipe1

From (m)

1.00 4.20

To (m)

2.50 10.00

,		ester Gol ott Wood	f Club I Partnership Ltd					Status:				Locatio BH0							C	GI
		od and Pla				indwa		Leastion Type, D				5110	•							
rom (m) 0.00 0.90	To (m) 0.90 2.00	Type IP WLS	Plant Used Hand Tools Comacchio 305	Strike	(m) Tin	ne (min	) Rose T	Coords: 455036			660N	Level:	82.190	Im	4		lalm	ing B	usines	imited, ss Centre,
2.00	5.35	RC	Comacchio 305					Ordnance Survey ( National Grid	Great Britai	n [	Final (	Depth:	5.0	0 m				Godal	ck Wa Iming,	
								Orientation:	0°		Inclir	ation:	9	0°				GU7	rey, 1XW	
								Date Start:	20/10/20	21	Dat	e End:	20/10	/2021				-	l-uk.co 1 of	
	Sa	amples & Tes	sts	Water	Legend	Strata				a Descr			,	,	Rc	tary (			Fract (mm)	Inst/ D
Sample Depth (m)	Type/ Ref	-	Tests/Results	Level (m)	/Cover	Depth (m)	(m)								Core Run	TCR (%)	SCR (%)	RQD (%)	min avg	Backfill
0.20	ES 1							Grass over soft dark b Sand is fine to mediun [TOPSOIL]	-	sandy	( CLAY w	ith rootle	s throu	ghout.					max	
0.40 - 0.60	B 1					0.40	-	Soft orangish brown sa angular to angular lim	estone. Sa	nd is fi	ne to me		coarse	sub-	-					
0.60 - 0.80	В 2					0.60	81.59	[WEATHERED CORNBF Brown and orange san limestone GRAVEL. Sa [WEATHERED CORNBF	ndy clayey f Ind is fine to	ine to o medi	coarse s ium.	ub-angula	ar to an	gular	-					* * . *
			) 0.90m N=30 (25 for 10mm/14,6,3,7)			0.90	81.29	between 0.80 and very hard to dig. Light brown and grey s	d 0.90m bg	Becor	ning ver				_					•
						1.15	81.04	angular to angular lim [WEATHERED CORNBR	RASH FORM	AVEL. S	Sand is fi N]	ne to me	dium.							
								Stiff light brown mottl CLAY. Sand is fine to m limestone. [WEATHERED CORNBF	nedium. Gra	avel is	fine to n								,	
1.70	C1						-	between 1.50 and to coarse SAND. G						um	0.90	100	0	0	, , ,	
		SPT(S) 2.00	m 50 (25 for 75mm/50 for 45mm)			2.00	80.19	Brown slightly clayey s	slightly san	dy fine	e to coars	se sub-an	gular to	angular						
								limestone GRAVEL [CORNBRASH FORMAT	TION]					-					,	
						2.60	79.59 _	Strong (?) light grey m weathered, rough, ope [CORNBRASH FORMAT 2.65m bgl Fractur	en. TION]						2.00 3.50	87	15	0		
						2.90	79.29 _	rough, open. 2.67m bgl Fractur undualting, partly 2.75m bgl Fractur rough, open.	re - slightly v open.	weath	nered, su	b-horiztoi	nal,							
							-	between 2.77 and 2.82m bgl Fractur horiztonal to sub- Stiff light brown becor medium to coarse. Gra	re - slightly horiztonal, ming brown	weath <u>undul</u> n slight	ered, inj ating to tly grave	filled with rough, pa lly sandy	brown rtly ope CLAY. Sa	n. nd is						
		SPT(S) 3.50n	n 50 (25 for 120mm/50 for 15mm)				-	[CORNBRASH FORMAT Very stiff grey CLAY/Ex [FOREST MARBLE FOR	tremely w	eak Mi	UDSTON	E.								
						3.70		Strong (?) dark grey m slightly weathered, un [FOREST MARBLE FOR between 3.85 and	ndulating, p RMATION]	artly o	open.									
									itrata conti			-								
otes: Borehole k	ocation w	as scanned v	vith a CAT scanner by a C	GI Engin	eer nrior	to drilli	ng comme		ole Diameter oth Diar		Casi Depth	ng Diam	Ha Energy	mmer Infor Ratio	mation Serial N				icale: ed By:	1:20 KBD
Prior to dri	illing, a ha	nd pit was d	ug to a depth of 0.9 m b target depth of 5.00 m b	gl, and th				•	n) (mn	1)	(m) 1.90	(mm) 138	64		ar257		0		ed By: ed By:	νDU
Groundwa	ter was no	ot encounter	red during drilling. /as installed with a moni	-	ndpipe.			2.0		-	1.50	100		all Respons			Ap		ed By:	
			. ES = Environmental san			d sample	e. B = Bulk	sample.					Ref	From (m)	To (	m)	<u> </u>		on ID:	erence
													Pipe1	1.00	5.0	00				9017

Project Ti								Status:		Locatio								
		ott wood od and Pla	Partnership Ltd ant Used		Grou	Indwat	er	DRAFT		BHO	6					CC		-
From (m)	To (m)	Туре	Plant Used	Strike	- I	ne (min)	Rose To	Location Type: Rotary o	cored				Card	l Geo	otech	nics Lim	ited,	
0.00 0.90	0.90 2.00	IP WLS	Hand Tools Comacchio 305					Coords: 455036.770E/	221630	0.660N Level:	82.190m	4	God			usiness ( ck Way,	entre,	
2.00	5.35	RC	Comacchio 305					Ordnance Survey Great Br National Grid	itain	Final Depth:	5.00 m				iodal	ming,		
								Orientation: 0°		Inclination:	90°					1XW		
								Date Start: 20/10/	2021	Date End:	20/10/2021					-uk.com		
	Sa	amples & Tes	sts	Water	Legend	Strata	Level		trata Des		20/ 10/ 2021	Ro	tary C					epth
Sample Depth (m)	Type/ Ref	-	Tests/Results	Level (m)	/Cover	Depth (m)	(m)					Core Run	TCR (%)	SCR   (%)		min Ba avg	ckfill	(m)
4.50	C3						78.09 S	<ul> <li>trong (?) dark grey medium t</li> <li>trong (?) dark grey medium t</li> <li>lightly weathered, undulating</li> <li>FOREST MARBLE FORMATION</li> <li>between 3.85 and 3.95m</li> <li>drilling induced.</li> <li>4.05m bgl Fracture - sub-i</li> <li>drilling induced.</li> </ul> Weak (?) grey to light grey ML ome drilling induced fracture FOREST MARBLE FORMATION <ul> <li>4.66m bgl Fracture - horiz</li> <li>4.70m bgl Fracture - horiz</li> <li>4.86m bgl Fracture - horiz</li> <li>induced.</li> </ul>	g, partly N] bgl Frac horizont JJDSTON 25. N] zontal, r zontal, c	open. cture - vertical, oper tal, rough, stepped, IE. Fractures are hor ough, closed to part losed.	n. Likely open. Likely izontal, closed. tly open.	3.50	87	62	7			
		SPT(C) 5.00	m 50 (11,9/50 for 195mm)			5.00	77.19	4.92m bgl Fracture - horiz	ontal, r	ough, open. Likely a	Irilling					•*. [	1.	5 —
								EOH at 5.00	0m - Achi	ieved target depth								-
																		6
																		7
Notori								11-1- BS	ater	Caring	Lanana 1 - 1	armatic -			-	alo: 1.2	0	
			vith a CAT scanner by a C						Diam	Casing Depth Diam	Hammer Inf Energy Ratio	ormation Serial N	o.			cale: 1:2 d By:	0 KBD	
3. Borehole v	was termir	nated at the	ug to a depth of 0.9 m b target depth of 5.00 m b		ne base of	f the pit w	vas CAT sca		mm) 116	(m) (mm)	64%	ar257	с			d By:		
5. After comp	pletion the	e borehole w	red during drilling. /as installed with a moni								Install Respo	nse Zones				d By:		
6. SPT = Star	ndard Pene	etration Test	. ES = Environmental san	nple. D =	Disturbed	d sample.	B = Bulk sa	imple.			Ref From (r	n) To (				n ID: L Refere	nce	

CG/39017

Pipe1

1.00

5.00

Project T								Status:	Locatio	n ID	Τ					
Cli			d Partnership Ltd ant Used		Grou	ndwa	ter	DRAFT	BHC	7					U	GL
From (m)	To (m)	Туре	Plant Used	Strike		ne (min)		Location Type: Rotary corec	l			Car	d Ge	otec	hnics	Limited.
0.00 0.60	0.60 1.60	IP WLS	Hand Dug Comacchio 305					Coords: 454836.030E/2214	83.970N Level:	81.830m	_ ⊿	l Goo			Busine ack W	ss Centre,
0.60 1.60	5.00 5.22	RC RC	Tracked Drilling Rig Comacchio 305					Ordnance Survey Great Britain National Grid	Final Depth:	5.00 m	1			Goda	Iming	
								Orientation: 0°	Inclination:	90°	1			GU7	rrey, '1XW	
								Date Start: 29/10/2021	Date End:	29/10/2021	1			-	l-uk.c	
	Sa	Imples & Te	ests	Water	Legend	Strata	Level		Description	23/ 10/ 2021	Rc	otary	SI Corin		Fract (mm)	Inst/ Dept
Sample Depth (m)	Type/ Ref		Tests/Results	Level (m)	/Cover	Depth (m)	(m)				Core Run	TCR (%)	SCR (%)	RQD (%)	min avg	Backfill (m)
0.00 - 0.20	B 1					0.10		Grass over soft dark brown slightly			-				max	8
0.15	ES 1				×///×//	0.10		rootlets throughout. Gravel is fine t imestone.	o coarse sub-angular	to sub-rounded						경문
0.20 - 0.30	B 2				×××	0.27	01 EC	TOPSOIL] Light brown to brown slightly silty s	lightly gravelly fine to	coarse SAND.	/					방 것 -
0.30	ES 2						-\-	Gravel is fine to medium sub-round	led flint and mudston		1					
0.40 - 0.60	В 3						1	WEATHERED CORNBRASH FORMA Brown gravelly fine to coarse SAND		ent. Gravel is						
						0.60		ine to coarse sub-angular mudstor nudstone.	e. Cobbles are weak	sub-angular grey						
0.60	D 1	SPT(C) (	0.60m N=6 (7,3/2,1,2,1)				N	WEATHERED CORNBRASH FORMA		(Crouplis fine						
					· · · · · · · ·		1	ight brown to orange slightly sand o medium angular to sub-angular.	flint (?).	r. Graver is line						
							-	WEATHERED CORNBRASH FORMA	FION]							
							-									
							-				0.60	400	0	0		
											1.60	100	0	U		
				$\leq$		1.30	- 80.53									
						1.40		light brown to beige dense clayey s coarse. Gravel is oolitic limestone li		Sand is fine to						
1.50 - 1.60	D 2	SPT(S) 1 50	0m 50 (25 for 75mm/50 for				$\uparrow$	CORNBRASH FORMATION]			4					
1.60 - 2.60	C 4		25mm) Recovery=100%			1.60		ight brown to beige dense gravelly ithorelics.	SAND. Gravel is oolit	c limestone						
1.00 - 2.00	C4		Kelovery-100%					CORNBRASH FORMATION] .ight brown slightly clayey slightly s	andy fine to coarse s	ıb-angular	/					
							1	GRAVEL of oolitic limestone lithore								
						1.90	79.93	[CORNBRASH FORMATION]								
								Medium strong to strong light brov LIMESTONE.	n fine grained slightly	fractured						2
						2.05	70 70	CORNBRASH FORMATION] 1.95m bgl Fracture - horiztona	smooth planar clos	ad	1.60	100	64	0		
							1	Potentially drilling induced.			2.60					
							1	2.01m bgl Fracture - horizonta closed.	, slightly undulating, .	smooth,						
						2.35		Medium strong to strong light brov LIMESTONE.	nish orange fine to m	edium grained						
						2.55	1	CORNBRASH FORMATION]								
2.60 - 3.60	C 5		.60m N=29 (6,9/9,7,6,7)			2.55	79.28 - 79.23	between 2.26 and 2.33m bgl C 2.28, and 2.33 m.	ccasional bands of gr	avel at 2.26,						
			Recovery=110%		<u> </u>			Medium strong to strong light brov LIMESTONE.	n fine grained slightly	fractured						
					F			CORNBRASH FORMATION]		12.50						
					<u> </u>			between 2.38 and 2.50m bgl F horizontal, slightly weathered,	,							
					<u>L</u> -		]	between 2.47 and 2.53m bgl D Firm to stiff light brown CLAY	ark grey banding.		11					3
					<u> </u>	3.10	78.73	CORNBRASH FORMATION] Firm to very stiff dark grey CLAY wi	h rare fracturing 22 M		2.60 3.60	110	0	0		
					<u> </u>			FOREST MARBLE FORMATION]	-		/					
					<b> </b> _		]/	between 2.70 and 2.90m bgl B Firm to stiff dark grey CLAY.	and of weak mudston	е.	1					
					F			FOREST MARBLE FORMATION]								
					E											
3.60 - 4.60	C 6		60m N=24 (10,15/8,6,4,6) Recovery=80%			3.60	78.23	Grey slightly clayey slightly sandy fi	ne to coarse angular	o sub-angular	+		-			
					•			weak mudstone GRAVEL.								
						3.78	_	FOREST MARBLE FORMATION] Firm to very stiff dark grey slightly a	gravelly CLAY. Gravel is	fine angular	1					
					* * * * *	3.95		nudstone. [FOREST MARBLE FORMATION]								
	I					] —]			es onto next page		1	I	I			Ľ.º́⊢.́⊔ ₄.
Notes:								Hole Diameter	Casing	Hammer Info	mation			9	Scale:	1:20
			with a CAT scanner by a C dug to a depth of 0.6 m be						Depth Diam (m) (mm)	Energy Ratio	Serial N	lo.			ed By:	IKL
3. Borehole	was termir	ated at the	aug to a depth of 5.00 m b at 4.4 m bgl during drillir	gl.	Dase UI	ine pit	was one so	1.50 128	1.60 138	64%	ar257	0			ed By:	
5. After com	pletion the	borehole v	at 4.4 m bgi during driiir was installed with a monit t. ES = Environmental sam	oring sta		cample	B = Bull	1.60 113		Install Respons	1			-	ed By: ion ID:	
0. 3FT = Stat	nuaru Peñe	adun les	c. Eo – Environmental Sañ	יט =	DISLUIDEC	sample	. о = duik s	ampre.		Ref         From (m)           Pipe1         1.00	) To (		╞			ference
										1.00	5.0		1	С	G/3	9017

Project T								Status:		Locatio	n ID							
Cli			d Partnership Ltd ant Used		Cro	undwat	tor	DRAFT		BHO	)7					C	G	
From (m)	To (m)	Type	Plant Used	Strike		me (min)		Location Type: Rotary core	ed				Card	d Geo	otecl	hnics Li	mited	
0.00 0.60 0.60 1.60	0.60 1.60 5.00 5.22	IP WLS RC RC	Hand Dug Comacchio 305 Tracked Drilling Rig Comacchio 305	4.4 4.6		20	- 2.05	Coords: 454836.030E/22 Ordnance Survey Great Britain National Grid	n [	Level: Depth:	81.830m <b>5.00 m</b>			lalmi Wo	ing B oolsa Goda	usines usines ack Way Iming, rrey,	s Centr	
								Orientation: 0°	Incl	ination:	90°					1XW I-uk.co	m	
								Date Start: 29/10/202	21 Da	ate End:	29/10/2021				-	2 of 2		
	Sa	amples & Te	ests	Water Level	Legend /Cover	Strata Depth	Level (m)	Strat	a Description				tary C	Coring	g	Fract (mm)		Depth (m)
Sample Depth (m)	Type/ Ref		Tests/Results	(m)	700001	(m)						Core Run	TCR (%)	SCR (%)	RQD (%)	min l avg max	Dackini	(11)
						4.27		Stiff to very stiff dark grey slightly coarse. Gravel is fine angular muo [FOREST MARBLE FORMATION]		ly gravelly	CLAY. Sand is	3.60 4.40	100	16	16	• • • • • • •		
							_ !	Medium strong to strong light green MUDSTONE.	ey thinly bed	ded fine gra	ained	3.60 4.60	80			• •		
4.60 - 5.00	C7	SPT(C) 4.6	i0m N=47 (3,7/10,8,13,16)			4.40		FOREST MARBLE FORMATION] Stiff to very stiff grey CLAY. [FOREST MARBLE FORMATION]								• • • •		
			Recovery=100%			4.76		Strong greenish grey weathered I FOREST MARBLE FORMATION]	MUDSTONE.			4.40 5.00 4.60 5.00	82 100		40	• • •		
						5.00	76.83	· · ·								•		
		SPT(C) 5.00	im 50 (25 for 145mm/50 for 77mm)			5.00	-	EOH at 5.00m -	- Achieved targ	et depth							<u>+    *</u>	5 —
																		-
							-											
							-											6 —
							-											
							-											-
							-											
							-											7 —
							-											
																		-
							-											
																		8
Notes:								Hole Diameter	Ca	ising	Hammer In	formation			S	Scale: 1	:20	
1. Borehole l			with a CAT scanner by a C					cing. Depth Dian	n Depth	Diam (mm)	Energy Ratio	Serial N	0.			ed By:	IKI	L
3. Borehole	was termir	nated at the	dug to a depth of 0.6 m bg target depth of 5.00 m bg at 4.4 m bgl during drillin	gl.	ie pase 0	i the pit (	was CAI SCi	5.00 116		(1111)	64%	ar257	0			ed By:		
5. After com	pletion the	borehole v	was installed with a monit t. ES = Environmental sam	oring sta		d samplo	B = Rulko	ample			Install Respo					ed By: on ID:		
o. Jri = Stal	naara Pefi	auon ies		рю. D =	Distul De	a sampie	u – duik S	umpre.			Ref From (	, ,		-		iL Refe	rence	2

CG/39017

1.00

5.00

Pipe1

Project Ti Cli	ent: Elli	ott Wood	Partnership Ltd					Status:		Location ID BH08					С	G	L
From (m) 0.00 1.20 1.60	Metho To (m) 1.20 1.60 3.21	od and Pla Type IP WLS RC	Ant Used Plant Used Hand Tools Comacchio 305 Comacchio 305	Strike		ndwa		Coords: 455034.000E/22 Ordnance Survey Great Brita National Grid Orientation: 0°	1569.560N			Car	d Geo dalmi Wo	otec ing E oolsa Goda Su	hnics	Limite ss Cen ay,	d,
											┶		ww	w.cg	gl-uk.c		
	5;	amples & Tes	ts	Water	Legend	Strata	Level	Date Start: 19/10/20	21 Date	End: 20/10/2021	Bc	ntary (	Sł Coring		t 1 of Fract	1 Inst/	Dept
Sample Depth (m)	Type/ Ref	-	Fests/Results	Level (m)		Depth (m)	(m)		·		Core	-	SCR	-	(mm) min avg		ll (m)
0.30 0.40 - 0.60	ES 1 B 1					0.20		Grass over soft dark brown sligh Sand is fine to medium. [TOPSOIL] Dark brown clayey slightly cobbl GRAVEL. Cobble of sub-angular [WEATHERED CORNBRASH FORM	y fine to coarse s rey limestone.		_				max		
0.70 - 0.90 0.90 - 1.10	B 2 B 3					0.70		Dark brown slightly clayey fine t limestone GRAVEL. [WEATHERED CORNBRASH FORI Light brown mottled orange san	1ATION]								
1.20 - 1.60	D1	SPT(S) 1.20	0m N=43 (8,9/4,7,12,20)			1.20 1.25	80.07 - 80.02	Light brown motified orange san angular limestone GRAVEL. Sanc [WEATHERED CORNBRASH FOR] Soft brown gravelly slightly claye sub-angular limestone.	is medium to co IATION]	arse.							1-
1.70	C1					1.35 1.55 1.60	79.72 79.67	[WEATHERED CORNBRASH FORI Light brown and grey sandy fine limestone GRAVEL. Sand is coars [WEATHERED CORNBRASH FORI Very stiff light brown slightly gra angular limestone. [WEATHERED CORNBRASH FORI Light brown sandy slightly clayer GRAVEL. Sand is coarse. [WEATHERED CORNBRASH FORI Grey fine to coarse sub-angular [WEATHERED CORNBRASH FORI	to medium sub- e. 1ATION] velly CLAY. Grave 1ATION] fine to medium 1ATION] imestone GRAVE	l is fine to medium sub- sub-angular to angular	1.20	100	0	0			2-
2.40	C 2					2.25	78.92	Stiff light brown gravelly CLAY. G angular limestone. ([CORNBRASH FORMATION] Stiff dark grey CLAY. [FOREST MARBLE FORMATION] between 2.55 and 2.70m bg			1.60 3.00	93	0	0			
3.00 3.00 - 3.10	C 2 D 2	SPT(S) 3.10r	n 50 (25 for 70mm/50 for 40mm)			3.10	78.17	EOH at 3.10m	- Achieved target d	epth	_						3.
2. Prior to dr 3. Borehole v 4. Groundwa 5. After com	illing, a ha was termir iter was no pletion the	nd pit was d nated at the f ot encounter e borehole w	vith a CAT scanner by a ( ug to a depth of 1.2 m b targer depth of 3.00 m b ed during drilling. as installed with a moni ES = Environmental sar	gl ogl. toring sta	ndpipe.		-	(m) (m) 1.60 12 3.10 11	m Depth n) (m) 8 <b>1.60</b>	3 Hammer Info Diam (mm) Energy Ratio (mm) 64% Install Respon Ref From (m Pipe1 1.00	Serial N ar257 se Zones	10. '0 s (m)	C Ap	Logg Check oprov Sect CC			

	N 4 . '				C	- 4 -		DRAFT			BHC	19						G	
rom (m) 0.00 1.20 2.70	Metho To (m) 1.20 2.70 3.16	d and Pla Type IP WLS RC	nt Used Plant Used Hand Tools Comacchio 305 Comacchio 305	Strike (	Groundw m) Time (mi		Coords:	tion:	DE/22162	Final	Level: Depth: nation: te End:	81.410m <b>3.00 m</b> 90° 19/10/2021	- - - -		dalm W (	ing E ools Goda Su GU7 /w.cg	Busine ack Wa alming rrey, 7 1XW gl-uk.c	, om	'
				Water	Legend Strata	a Level	Dates	lan: 19/		escription	të End:	19/10/2021	-				t 1 of Fract	1 Inst/	De
Sample	Sa Type/	mples & Test	s ests/Results	Level (m)	/Cover Depti (m)	n (m)			Strata D	escription			KO Core	TCR (%)	SCR	RQD	(mm) min avg	Backfill	
0.40 0.40 - 0.60	ES 1 B 1					81.01	Grass over so throughout. limestone. [TOPSOIL] Light brown Gravel is fine [WEATHEREE	Gravel is fine lightly clayey to coarse sub	to mediur sandy GR p-angular	AVEL. San to sub-rou	ular to sub	rounded	_				max		
.00 - 1.20	B 2 B 3			-	0.70	80.71	Soft brown g is fine to coa [WEATHERED	se sub-angul	ar to sub-	rounded li		to coarse. Gravel							
		SPT(S) 1.2	0m N=17 (1,2/3,2,5,7)			80.06	Soft brown n coarse. Graw (WEATHEREE Firm light bro coarse sub-a [WEATHEREE Stiff light bro Gravel is fine [WEATHEREE	I is fine to co CORNBRASH wn sandy gra gular limesto CORNBRASH wn to grey sa to medium s	arse sub-a I FORMAT avelly CLAY one. I FORMAT ndy slight ub-angula	ION] (. Sand is c ION] ly gravelly r limeston	estone. Darse. Gra		1.20 2.00	100	0	0			
		SPT(S) 2.0	0m N=15 (8,8/2,3,2,8)		2.15 	79.26	[FOREST MA	tone. FORMATION relly CLAY - re vel is fine to n RBLE FORMAT relly CLAY. Gra RBLE FORMAT	I] ecovered a medium su rION] avel is fine rION] ?) light gr hered wit open.	s a gravel ub-angular to mediur	(fine to mo limeston) m sub-ang	edium, sub- a. Jular limestone.	2.00	100	22	0			
		SPT(S) 3.00n	n 50 (5,18/50 for 10mm)		3.00	78.41	2.79m b horizont 2.87m b horizont 2.94m b	Il Fracture - n Il, rough, ope Il Fracture - s Il, rough, ope Il Fracture - s contal, undulo	noderately n. lightly we n. lightly we ating, part	athered w athered, s	ith orange ight orang	staining,							
										-							C - 1	1.20	
tes:	ocation wa	s scanned w	ith a CAT scanner by a C		er prior to dril	ling comm	encing	Hole D Depth	iameter Diam	Depth	Diam	Hammer Info Energy Ratio	rmation Serial N		╞		Scale: ged By:		BD
rior to dri orehole w	lling, a hai vas termin	ated at the ta	g to a depth of 1.2 m b arger depth of 3.00 m b ed during drilling.					(m) 2.60 2.70	(mm) 128 113	(m) 2.60	(mm) 168	0%	ar257	0			ked By: ved By:		

I Approved By: Install Response Zones Section ID: Ref From (m) To (m) CGL Reference 1.00 3.00 Pipe1 CG/39017

Number         Number of Pairs (Perc)         Number of Pairs (Perc)         Number of Pairs (Perc)         Construction (Pairs (Perc))         Construction (Pairs		ient: Elli		artnership Ltd					Status:			Locatio BH1						C	G	
Compton & Lock         United Trans         User of Compton         State Decempton         Hear Community           Location         Trans         Location         Location         State Decempton         Location         Location <tdlocation< td=""></tdlocation<>	0.00 1.20 1.30	To (m) 1.20 1.30 2.30	Type IP WLS RC	Plant Used Hand Tools Comacchio 305 Comacchio 305	Strike				Location Type: Rota Coords: 455233.900 Ordnance Survey Grea National Grid Orientation:	DE/22166 Britain O°	Final	Level: Depth: nation:	81.080m <b>3.00 m</b> 90°		Car	d Ge dalm W (	otec ing E ools Goda Su GU7 /w.cg	chnics L Busines ack Wa alming, Irrey, 7 1XW gl-uk.co	imited, s Centro y, om	
Dame         Insol         Insol         Core         <		Sa	amples & Tests		Water			Level						Ro	otary			Fract (mm)	Inst/	Dept
ULD 1-30         12         Suff brown to light brown gravely (LAC Gravel is fine to coarse sub- angular limestone. [WATHERD CONNERASH FORMATION]         Image: Connect Sub- angular limestone. [WATHERD CONNERASH FORMATION]           30: 4.30         87           30: 5.30         7.30           30: 5.30         7.30			Tes	ts/Results		/Cover				/ with roc	otlets throu	ghout.						min avg max	Backfill	(m)
0.00: 1.09       9.3       0.1       3PT(0 1.20% 00 1.20% 0r 1.20% 0r 1.20% 0r 1.00%       1.00       0.00       1.00       0.00       1.00       1.00       0.00       1.00       0.00       1.00       0.00 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>0.30</td> <td>-</td> <td>angular limestone.</td> <td></td> <td></td> <td>is fine to</td> <td>coarse sub-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>					-		0.30	-	angular limestone.			is fine to	coarse sub-							
0.80-1.10       0.1       97(9) 120m St (1209 for 185mm)          Light brown sandy clawy (DAWEL: Grawel is fine to accure sub-angular imestore. Stat 6 fine to accure sub-angular INVEATHERED CONNERASH FORMATION)           Light brown sandy slightly gravely CLM. Sand is fine to medium. Gravel is fine to accure sub-angular INVEATHERED CONNERASH FORMATION           Light brown medium grained Light bro	0.70 - 0.90	В 2			-			-										4		
LAP-1-26       U.1       9*(b) Lobit 30L0295 0F (50MM)       Firm light brown sandy slightly gravelly CLX, sand is fine to medium. Gravels firm to coarse ub-aquily limestone. (WEATHERED CORNBRASH FORMATION)       1.00       65       0       0         9*(c) 2.30= 50 05 Ker 75me/50 fer 12.30m       2.40       72.09       Strong (?) thinly bedded light grey and light brown medium grained UMESTIME. Fractures are closely spaced, slightly weathered and arrange stained, horizontal, irregular, rough to industrian, group to open to open.       2.30       65       0       0         9*(c) 2.30= 50 05 Ker 75me/50 fer 12.30m       9       9       100	0.90 - 1.10	В 3			-		0.90	-	imestone. Sand is fine to r	nedium.		e to coars	e sub-angular							1
Strong (?) think bedded light grey and light brown medium grained         UMESTORE. Fractures are closely spaced, slightly weathered and orange stained, horizontal, irregular, rough to undulating, partly open to open.         2.13m hgl Fracture - slightly weathered, slight orange staining, horizontal, rough, open.         2.23m hgl Fracture - slightly weathered, slight orange staining, horizontal, rough, open.         2.33m hgl Fracture - slightly weathered, slight orange staining, horizontal, rough, open.         2.33m hgl Fracture - slightly weathered, slight orange staining, horizontal, rough, open.         2.33m hgl Fracture - slightly weathered, no staining, horizontal, undulating, open.         2.33m hgl Fracture - slightly weathered, no staining, horizontal, undulating, open.         2.35m hgl Fracture - slightly weathered, orange staining, horizontal, undulating, open.         2.45m hgl Fracture - slightly weathered, no staining, horizontal, undulating, open.         2.55m hgl Fracture - slightly weathered, no staining, horizontal, undulating, open.         2.55m hgl Fracture - slightly weathered, no staining, horizontal, undulating, open.         2.70m hgl Fracture - slightly weathered, no staining, horizontal, undulating, open.         2.70m hgl Fracture - slightly weathered, no staining, horizontal, undulating, open.         2.70m hgl Fracture - slightly weathered, no staining, horizontal, undulating, open.         2.70m hgl Fracture - slightly weathered, no staining, horizontal, rough, open.         2.70m hgl Fracture - slightly weathered, no staining, horizont	1.20 - 1.50	D1	SPT(S) 1.20m 5	50 (1,2/50 for 165mm)			1.20	-	Gravel is fine to coarse sub	-angular	limestone.	and is fine	to medium.		86	0	0			
2.1 Bm bij Fracture - siighty weathered, no staining, horizontal, rough, open.         2.2 Jam bij Fracture - siighty weathered, slight orange staining, horizontal, rough, open.         2.3 m bij Fracture - siighty weathered, slight orange staining, horizontal, rough, open.         2.3 m bij Fracture - siighty weathered, slight orange staining, horizontal, rough, open.         2.3 m bij Fracture - siighty weathered, slight orange staining, horizontal, rough, open.         2.3 m bij Fracture - siighty weathered, no staining, horizontal, undulating, open.         2.4 Sim bij Fracture - slighty weathered, orange staining, horizontal, undulating, open.         2.5 Sm bij Fracture - slighty weathered, orange staining, horizontal, undulating, open.         2.5 Sm bij Fracture - slighty weathered, orange staining, horizontal, undulating, open.         2.5 Sm bij Fracture - slighty weathered, no staining, horizontal, undulating, rough, open.         2.7 m bij Fracture - slighty weathered, no staining, horizontal, undulating, rough, open.         2.7 m bij Fracture - slighty weathered, no staining, horizontal, undulating, rough, open.         2.7 m bij Fracture - slighty weathered, no staining, horizontal, undulating, rough, open.         2.7 m bij Fracture - slighty weathered, no staining, horizontal, undulating, rough, open.         2.7 m bij Fracture - slighty weathered, no staining, horizontal, undulating, rough, open.         2.7 m bij Fracture - slighty weathered, no staining, horizontal, undulating, rough, open.         2.8 mbij freature - slighty weathered, no staining, hor					- - - - - - - - - - - - - - - - - - -		2.10		IMESTONE. Fractures are tained, horizontal, irregul CORNBRASH FORMATION	closely sp ar, rough ]	aced, slight to undulation	tly weath ng, partly	ered and orange open to open.							2 -
Notes:       Hole Diameter       Casing       Harmer Information       Sci         Notes:       Hole Diameter       Casing       Harmer Information       Sci         Notes:       Hole Diameter       Casing       Harmer Information       Sci         L. Borehole location was scanned with a CAT scanner by a CGL Engineer prior to drilling commencing       Depth       Diam       Depth       Diam       Energy Ratio       Serial No.       Logged					- - - - - - - - - - - - - - - - - - -		3.00		rough, open. 2.23m bgl Fracture - s horizontal, rough, ope 2.29m bgl Fracture - n staining, horizontal to 2.33m bgl Fracture - n infilling the fracture, h 2.45m bgl Fracture - s undulating, open.	lightly we n. noderatel sub-horiz noderatel oriztonal, lightly we	athered, sli y weathere ontal, roug y weathere open. athered, no	ight oran <u>o</u> d, slight o h, open. d, grey sa o staining,	ge staining, orange ndy clay . horizontal,		100	86	14	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		3 -
1. Borehole location was scanned with a CAT scanner by a CGL Engineer prior to drilling commencing Depth Diam Energy Ratio Serial No. Logged									2.63m bgl Fracture - s horizontal, undulating 2.70m bgl Fracture - s rough, open.	ightly we , rough, o lightly we	pen. athered, no	o staining,	-							-
2 Prior to drilling a band nit was due to a denth of 1.2 m hel (m) (m) (mm) (m) (mm)								-			-	-						Scale:		4
B. Borehole was terminated at the targer depth of 3.00 m bgl.       1.30       128       1.30       168       0%       ar2570       Checked         B. Groundwater was not encountered during drilling.       2.30       116       168       0%       ar2570       Approved         S. After completion the borehole was installed with a monitoring standpipe.       2.30       116       168       0%       ar2570       Approved         S. SPT = Standard Penetration Test. ES = Environmental sample. D = Disturbed sample. B = Bulk sample.       B = Bulk sample.       B = Bulk sample.       Ref       From (m)       To (m)       Sector	2. Prior to dri 3. Borehole v 4. Groundwa 5. After comp	rilling, a ha was termir ater was no pletion the	nd pit was dug nated at the tar ot encountered e borehole was	to a depth of 1.2 m by ger depth of 3.00 m b during drilling. installed with a monit	gl gl. :oring star	ndpipe.			(m) 1.30 2.30	(mm) 128	(m)	(mm)	0% Install Respor	ar257	70 s		Check	ked By: ved By:	KBE	)

CG/39017

Project Ti Cli	ient: Elli	ott Woo	d Partnership Ltd						Status: RAFT			Locatio BH1							С	G	Ĺ
From (m)	Metho To (m)	d and P	lant Used Plant Used	Strike		indwa ne (min		To Location T	ype: Rota	ry cored											_
0.00 0.00	1.20 0.80	IP IP	Hand Dug Hand Dug	Strike	e (m) Tin	ne (min	i) Kose	Coords: 4	54862.39	DE/22140	)1.940N	Level:	81.310m		4		dalm	ing		Limite ss Cer ay,	
0.80 1.20	3.00 3.00	RC RC	Tracked Drilling Rig Tracked Drilling Rig					Ordnance S National Gr		t Britain	Final	Depth:	3.00 r	n					alming Irrey,	5,	
1.20 2.00	2.00 3.45	WLS RC	Comacchio 305 Comacchio 305					Orientatio	on:	0°	Incli	nation:	90°				14/14	GU	7 1XW gl-uk.o		
								Date Sta	rt: 01/	11/2021	Da	te End:	01/11/2	021					t 1 of		
	Sa	amples & Te	ests	Water Level		Strata Depth		1		Strata De	escription					tary (	-	-	Fract (mm)	Inst, Backf	
Sample Depth (m)	Type/ Ref		Tests/Results	(m)	,	(m)	(,								Core Run	TCR (%)	SCR (%)	RQD (%)	min avg max		
						0.20	81.11	Grass over soft throughout. Gra [TOPSOIL]						ne.							
0.20 - 0.40 0.20 - 0.40	B 1 ES 1					0.20	-	between 0. Soft brown slig and subangular [WEATHERED C	ntly silty gr fine to coa	avelly CLA Irse limest	Y with rare one.		Gravel is an	ngular							
0.60 - 0.80	B 2				×	0.70	00.61													••	
0.70 - 0.90 0.70 - 0.90	B 2 ES 2				* <u>*</u> 	0.70	80.61	Firm light yellow Gravel is angula [WEATHERED C between 0.	ir and suba ORNBRASH	ngular fine I FORMAT	e rarely coa ION]	arse limes		λY.						•	*
1.10 - 1.20	В 3				<u>×</u> _×			between 1.	10 and 1 4	0m hal Ah	undant an	aular and	sub-anaula	ar							1-
1.20 - 1.65	D 1	SPT(S)	1.20m N=6 (2,2/1,1,2,2)		×			coarse lime		-	undunt un	guiur unu	sub unguit	-							
															0.80 2.00	100					•
1.60 - 1.80	ES 2																				
						1.80	79.51								1.20 2.30	86	0	0			
					× × × < × × × × × ×	2.00	79.31	Soft pale yellow fine and mediu [WEATHERED C	m weak lin	estone.		is angular	and subang	gular							•
2.00 - 3.00	C 3	SPT(S) 2.00	0m 50 (25 for 120mm/50 for 55mm) Recovery=80%			-		Medium strong [CORNBRASH F			n fossilifer	ous LIMES	STONE.								2-
						2.20	79.11	Extremely weal [FOREST MARB			NE.										
								between 2. limestone.	40 and 2.5	5m bgl Me	edium stro	ng grey fo	ossilierous		2.00	80					•
															3.00 2.30 3.00	100	86	14			
							_														•
		SPT(C) 3.	.00m N=32 (1,2/2,12,8,10)			3.00	78.31		FOH at	3 00m - Ac	hieved targe	t denth									* * 3 -
									LOTT	5.00m Ac	ineved targe	e deptir									
							-														
							-														
									1		1		1								4 -
Notes: 1. Borehole l	location wa	as scanned	with a CAT scanner by a G	EL Engir	neer prior	to drilli	ng comm	encing2. Prior to	Hole D Depth	iameter Diam	Cas Depth	bing Diam	Hamm Energy Rat	er Informa tio Se	ition	0.	$\vdash$		Scale: ged By:		KBD
drilling, a hai Groundwate	nd pit was r was not e	dug to a de encountere	epth of 1.2 m bgl 3. Boreh ed during drilling. 5. After o	ole was completi	terminate on the bo	d at the rehole	e targer d was insta	epth of 3.00 m bgl.4 led with a		(mm) 128	(m) 1.60	(mm) 138	64%		257				ked By:		
monitoring s Bulk sample.		5. SPT = Sta	andard Penetration Test. E	S = Envii	ronmental	l sample	e. D = Dist	urbed sample. B =	3.00	116			Install F	Response z	ones		A		ved By: tion ID:		
														rom (m)	To (		⊢			feren	ce
													Pipe1	1.00	3.0	JÜ				901	

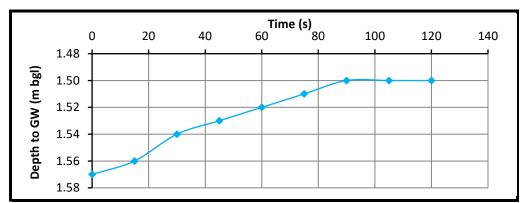
Project Ti Cli			lf Club d Partnership Ltd						Status: DRAFT			Locatic BH1					С	C	
			ant Used			ndwa	-												
From (m) 0.00 0.80	To (m) 0.80 3.00	Type IP WLS	Plant Used Hand Dug Comacchio 305	Strike	(m) Tin	ne (min	i) Rose 1	-	Type: Rota 154955.450		51.910N	Level:	80.590m		Goda	Iming	chnics Busine	ss Cen	
0.80	3.00	RC	Tracked Drilling Rig					Ordnance National G	Survey Great rid	Britain	Final	Depth:	3.00 m			God	sack W Ialming urrey,		
								Orientati		0°	Incli	nation:	90°	1		GU	7 1XW		
								Date St	art: 01/1	1/2021	Da	te End:	01/11/2021				gl-uk.c		
	Sa	i mples & Te	sts	Water Level	Legend /Cover	Strata Depth				Strata De	escription			Ro	tary Co	ring	Fract (mm)	Inst/ Backfi	
Sample Depth (m)	Type/ Ref		Tests/Results	(m)	/Cover	(m)								Core Run	TCR S (%) (1	CR RQE %) (%)	min avg max		ll (m)
							80.39	Grass over sof Gravel is angu [TOPSOIL]					oderate rootlets. e.						
0.20 - 0.40 0.20 - 0.40	B 1 ES 1					0.20		Soft brown slig and subangula [WEATHERED	r fine to coa	rse limest	one.	rootlets.	Gravel is angular	-					
0.60 - 0.80	В 2				×		-												
		SPT(C) O	.80m N=12 (6,2/1,3,3,5)			0.80	79.79	with rare remi limestone. [CORNBRASH between ( between )	nant rootlets FORMATION 0.80 and 0.90	. Gravel is ] )m bgl Lin )m bgl Ab	subangul	ar fine to o	tly gravelly CLAY coarse sub-angular				_		1-
1.60 - 1.80	ES 2							2	1					0.80	100				
		SPT(C) 2	.00m N=26 (2,4/4,6,7,9)			2.00		Very stiff grey abundant muc [FOREST MAR	Istone lithor	elics.	rely orang	ish brown	CLAY with						2 -
							-							2.00 3.00	100				
		SPT(C) 3.0	00m N=45 (2,3/7,7,16,15)			3.00	77.59		EOH at	3.00m - Ac	hieved targe	et depth					-		3-
																			4 -
Notes:									Hole Di	ameter	(°	sing	Hammer Inform	nation	-		Scale:	1.20	4 -
L. Borehole l			with a CAT scanner by a G		eer prior	to drilli	ng comme	ncing	Depth	Diam	Depth	Diam		nation Serial N	0.	Log	scale:		BD
8. Borehole v	was termir	nated at the	dug to a depth of 1.2 m by targer depth of 3.00 m b red during drilling						(m) 2.00	(mm) 128	(m)	(mm)	64%	ar257(	b		ked By:		
5. After com	pletion the	e borehole v	red during drilling. vas installed with a monit t. ES = Environmental sam			camp	e B - Pull	sample	3.00	113			Install Response	1			ved By:		
9. SPT = Star	iuara Pene	errarion les	L. ES = ENVIRONMENTAL SAM	ipie. D =	DISCULDEC	i sampl	е. a = Bulk	sampre.					Ref         From (m)           Pipe1         1.00	To ( 3.0			GL Re		ce
															-		CG/3	9017	7

#### **Rising Head Test - BH04**



Bicester Golf Club CG/39017 07/02/2022

Time (mins)	Time(s)	Depth (m)	H (m)	H/Ho
0.00	0.00	1.57	2.41	-
0.25	15.00	1.56	2.42	0.432691921
0.50	30.00	1.54	2.44	0.44092242
0.75	45.00	1.53	2.45	0.445012405
1.00	60.00	1.52	2.46	0.449085731
1.25	75.00	1.51	2.47	0.453142531
1.50	90.00	1.5	2.48	0.457182941
1.75	105.00	1.5	2.48	0.457182941
2.00	120.00	1.5	2.48	0.457182941



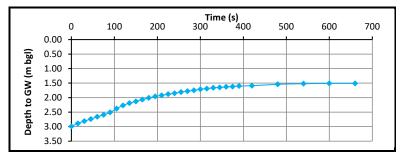
General Approach (A	fter Horvslev 1951)
Initial GW depth	1.39 mbgl
Well depth	3.98 mbgl
Well pipe diameter	63 mm
F	0.374996243 intake Factor - Fig 6 BS5930:1999
D	0.063 m - Diameter of standpipe
H1	1.56 m
H2	1.5 m
t1	15 s
t2	120.00 s
A	0.003117245 m2
ŀ	$x = \frac{A}{F(t_2 - t_1)} \ln \frac{H_1}{H_2}$
k =	<u>3.10506E-06</u> m/s

#### Rising Head Test - BH07



Bicester Golf Club CG/39017 07/02/2022

Time (mins)	Time(s)	Depth (m)	H (m)	H/Ho
0.00	0.00	2.99	1.31	-
0.25	15.00	2.89	1.41	-0.751683683
0.50	30.00	2.81	1.49	-0.696497267
0.75	45.00	2.74	1.56	-0.650587566
1.00	60.00	2.66	1.64	-0.600577146
1.25	75.00	2.59	1.71	-0.558780017
1.50	90.00	2.51	1.79	-0.513057768
1.75	105.00	2.38	1.92	-0.442948201
2.00	120.00	2.27	2.03	-0.387237594
2.25	135.00	2.19	2.11	-0.34858544
2.50	150.00	2.13	2.17	-0.32054622
2.75	165.00	2.07	2.23	-0.293271802
3.00	180.00	2.01	2.29	-0.26672157
3.25	195.00	1.96	2.34	-0.245122458
3.50	210.00	1.92	2.38	-0.2281729
3.75	225.00	1.88	2.42	-0.211505847
4.00	240.00	1.85	2.45	-0.199185363
4.25	255.00	1.81	2.49	-0.182990677
4.50	270.00	1.78	2.52	-0.171014486
4.75	285.00	1.75	2.55	-0.159180028
5.00	300.00	1.71	2.59	-0.143615512
5.25	315.00	1.69	2.61	-0.135923166
5.50	330.00	1.66	2.64	-0.12449447
5.75	345.00	1.65	2.65	-0.120713747
6.00	360.00	1.63	2.67	-0.113194915
6.25	375.00	1.62	2.68	-0.109456593
6.50	390.00	1.6	2.70	-0.102021614
7.00	420.00	1.59	2.71	-0.098324753
8.00	480.00	1.54	2.76	-0.080042708
9.00	540.00	1.52	2.78	-0.07282246
10.00	600.00	1.51	2.79	-0.069231792
11.00	660.00	1.51	2.79	-0.069231792



#### General Approach (After Horvslev 1951)

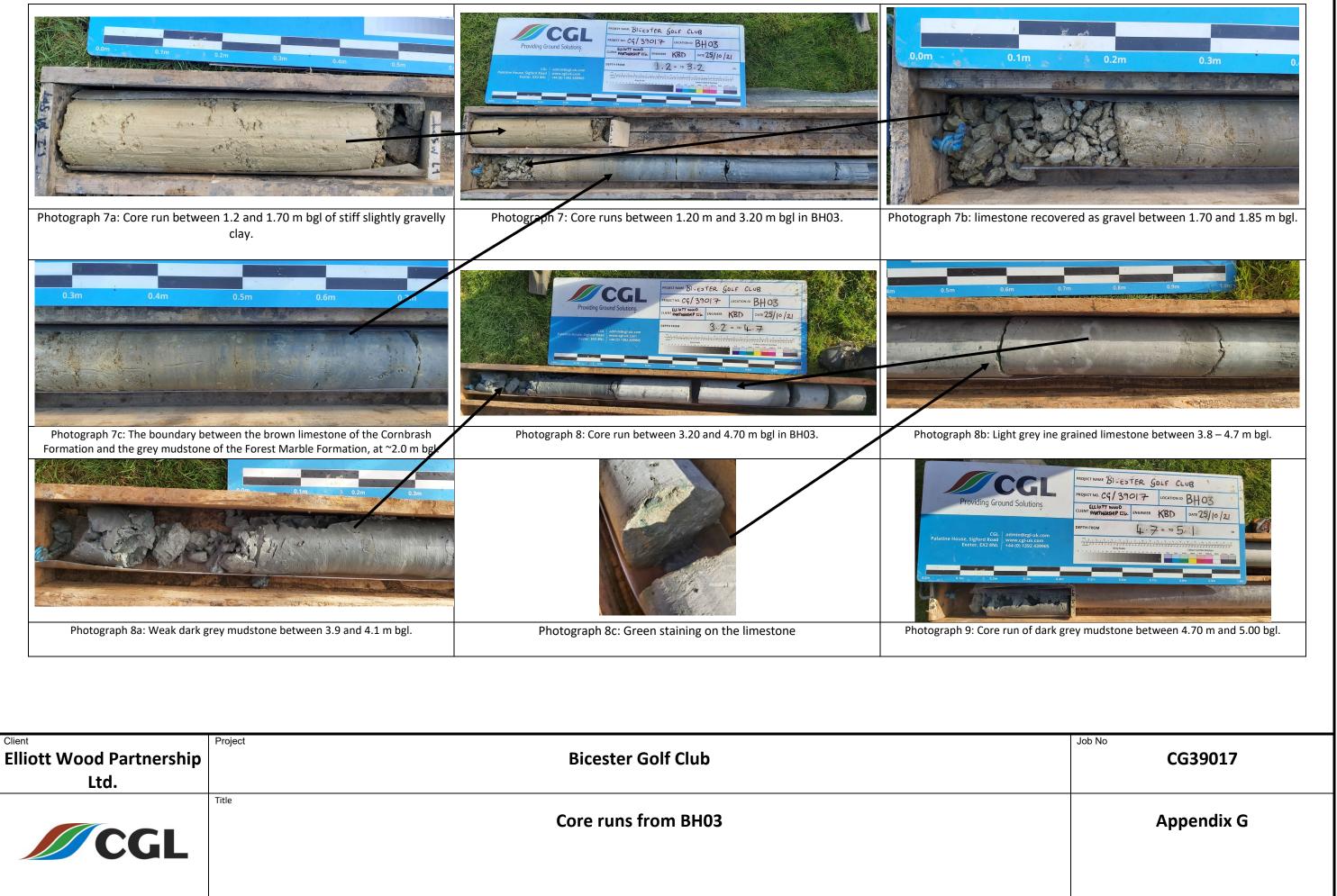
Initial GW depth Well depth Well pipe diameter	4.3	mbgl mbgl mm
wen pipe didmeter	05	
F	0.374996243	intake Factor - Fig 6 BS5930:1999
D	0.063	m - Diameter of standpipe
H1	2.89	m
H2	1.51	m
t1	15	S
t2	660.00	S
A	0.003117245	m2
k =	$k = \frac{A}{F(t_2 - t_1)} \ln \frac{B}{F}$ <u>8.36618E-06</u>	<u>d1</u> d2 m/s

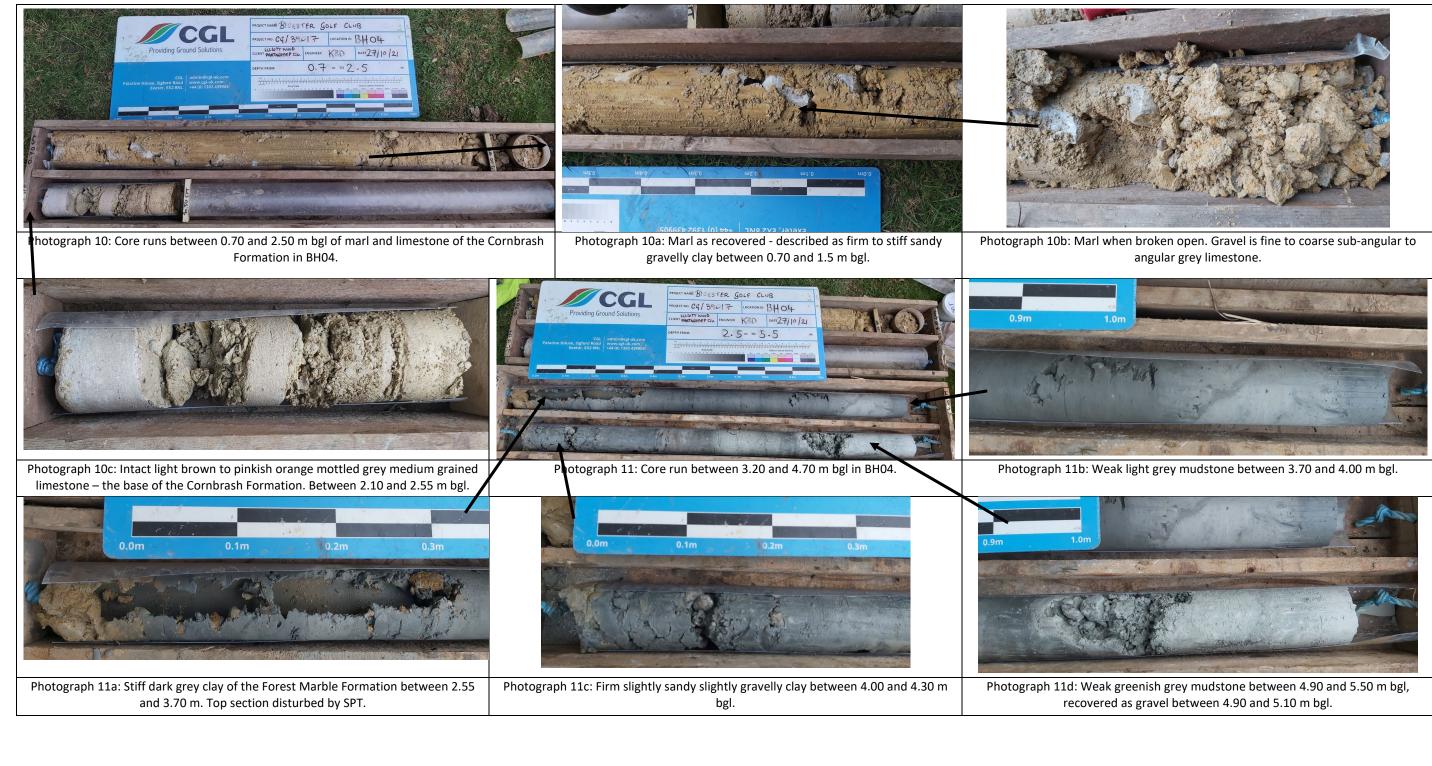
### **APPENDIX G**

Borehole Core Photographs









Client	Project	Job No
Elliott Wood Partnership	Bicester Golf Club	CG39017
Ltd.		
CGL	Title Core runs from BH04	Appendix G



OJECT NAME BIGESTER GOLF CLUB OJECT NO. CG/39017 LOCATION ID BH04 ELLIOTT WOOD ENGINEER KBD DATE 28/10/21 7.0 . 0 8.5

ROJECT NO. CG/39017 LOCATION ID BH04 ELLIOTT WOUD ENGINEER KBD DATE 28/10/21 10.0m TO 11.5

 Job No CG39017
Appendix G