

# Bankwood Way, Birstall

## Combined Phase 1 & Phase 2 Ground Investigation Report

Curtins Ref: 076893-CUR-00-XX-RP-GE-002-V01

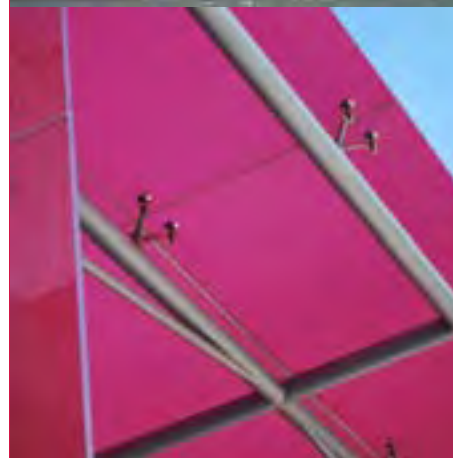
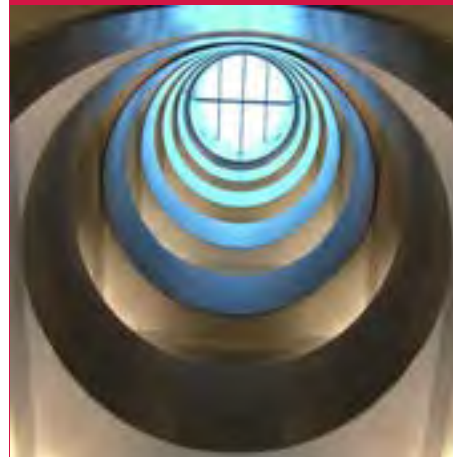
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Issue Date: 12 May 2021

Client Name: Lidl GB Limited

Client Address: Iport Unit 4, Ontario Drive, Doncaster, South Yorkshire, DN11 0BF

Site Address: Land off Bankwood Way, Birstall, Leeds, WF17 9TB



| Rev | Description                      | Issued by | Checked | Date             |
|-----|----------------------------------|-----------|---------|------------------|
| V01 | Issue for information            | AD        | ML      | 12 May 2021      |
| V02 | Revised following client comment | ML        | ML      | 18 December 2020 |
| V03 | Amended Site Layout              | ML        | ML      | 12 May 2021      |

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## Executive Summary

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appointment</b>                   | <p>In August 2020, Curtins were instructed by Lidl GB Limited to undertake a Combined Phase 1 Preliminary Site Assessment (PSA) and Phase 2 Ground Investigation Report (GIR) at a site off Bankwood Way, Birstall, WF17 9TB. The site is centred at National Grid Reference (NGR) 423694, 427432.</p> <p>The report has been produced in support of the proposed design and build of two retail units and associated car parking.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Current Site Status</b>           | <p>The site is situated within the wider Birstall Retail Park off Junction 27 of the M62. The site comprises vacant land covered by a number of large piles of demolition crush following the demolition of six former office buildings post 2018. Temporary metal fencing surrounds the perimeter of the site, and an earth bund comprised of demolition crush runs adjacent to the northern boundary inhibiting vehicle access. An electrical substation operated by a third party is present centrally within the west. A culverted watercourse (at an approximate depth of 8mbgl) is present running parallel to the eastern boundary.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Summary of Phase 1</b>            | <p>The earliest available (1850s) indicate the site as agricultural fields and woodland. Coal Authority Abandonment Plans indicate historical coal workings in the northeast of the site, extending offsite to the northeast until the 1911. A 'highwall' is shown running north to south in the centre of the site on historical mapping dated 1983-4. This feature had extended to the northeast area of the site by 1956. A historical landfill is indicated to have been present across the majority of the site and extending offsite to the southeast in 1970. Operations are considered to have continued until c.1986 when the 'highwalls' are no longer shown, suggesting a conclusion to infilling operations. In 1992, eight commercial office buildings are present across the site. These remained onsite until 2018 before being demolished.</p> <p>Offsite, extensive coal and mineral mining had occurred within close proximity to the site and within the surrounding area from the 1870s onwards. Historical mapping dated 1956 shows the wider collieries to be disused. A number of additional landfills are shown within close proximity to the site. Construction of Birstall Retail Park is first shown on the 1990 mapping.</p> <p>Made ground is anticipated given the site history and previous site investigations. Superficial deposits are indicated to be absent. Bedrock deposits are indicated to comprise Pennine Lower Coal Measures in the central and southern areas, and the Emley Rock is indicated in the western and northern areas. Both are designated as Secondary A aquifers. The Flockton Thin Coal seam outcrops at the site. The Top Fenton (also known as the First and Second Brown Metal) coal seam is indicated to be present at a depth of 30mbgl beneath the site. Coal Authority records indicate a mine adit in the northeast corner of the site.</p> <p>A previous site investigation completed by Delta-Simons in 2018 recorded highly variable thicknesses of made ground underlain by sandstone, siltstone, mudstone and coal of the Pennine Lower Coal Measures. Possible voids or collapsed mine workings were encountered at shallow depths in exploratory holes progressed in the west and northeast of the site, identified by a loss of flush and / or poor or no recovery. Ground gas monitoring indicates the Site can be classified as gas Characteristic Situation 2 (CS2) based on monitoring wells installed within the PLCMs and reworked natural infilled within the landfill. However, limited ground gas monitoring was undertaken within the landfill waste.</p> <p>Structural surveys of two former office buildings located in the south of the site indicate external and internal structural defects associated with the settlement of landfill materials.</p> <p>Primary potential risks to be investigated during the intrusive investigation, as well as establishing ground conditions and geotechnical risks, included; potential for land gas and risks to human health and controlled waters from made ground soils and associated with the historical landfill.</p> |
| <b>Fieldworks Undertaken</b>         | <p>Site investigation works were undertaken between the 1<sup>st</sup> and 10<sup>th</sup> September 2020 and comprised twelve rotary boreholes, three cable percussive boreholes and nine machine excavate trial trenches.</p> <p>Ground gas and groundwater monitoring standpipes were installed within all three cable percussive boreholes and one rotary borehole. Monitoring wells were installed within the footprint of the historical landfill; of which three monitoring wells were installed within the landfill waste materials. Selected soil samples were subjected to laboratory analysis and three return gas and groundwater monitoring visits have been undertaken.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Encountered Ground Conditions</b> | <p>The surface cover largely comprised demolition fill associated with the demolition of the former commercial office buildings onsite. This was generally underlain by a subbase and geotextile membrane.</p> <p>The underlying made ground was encountered in all exploratory hole locations and was found to highly variable in composition and thickness across the site. Outside the footprint of the historical landfill, made ground was encountered to an average depth of 1.75mbgl. Made ground typically comprised reworked natural clay. Within the footprint of the historical landfill, typical landfill waste materials (i.e. refuse) was encountered in the southern areas of the site to a maximum depth of 12.5mbgl. Made ground comprising reworked natural clay was encountered in the remaining areas of the historical landfill to a maximum depth of 14.0mbgl. The thickness of this stratum varied spatially, with deeper deposits in the east of the site before shallowing rapidly in the northeast of the site. Similarly, these deposits became thinner in the west and north, albeit more gradual than in the northeast.</p> <p>Weathered and solid bedrock was encountered at shallow depths (&lt;2mbgl) outside the footprint of the historic landfill and at a depth of 14.5mbgl within the footprint of the historic landfill. Solid geology predominantly comprised extremely weak to medium strong (becoming slightly stronger with depth) thinly laminated orangish brown mottled grey mudstone and siltstone, with minor/occasional bands of medium strong to strong grey fine-grained sandstone up to a depth of 30mbgl.</p> <p>Coal attributed to the Flockton Thin coal seam was encountered between depths of 2.8mbgl and 8.4mbgl across the northeastern, northwestern and western areas of the site. No other coal seams were encountered within 30mbgl. Potential collapsed mine workings and voids (suggestive of bell pits) were encountered in the western areas of the site.</p> <p>A consistent groundwater body cannot be determined this is likely owing to the highly variable fill and the coal mine legacy features outside of the filled area. It is likely that perched groundwater is prevalent across the site.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Combined Phase 1 &amp; Phase 2 Ground Investigation Report

|                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                           | Strong putrid/organic odours associated with the black sludge matrix to the landfill waste materials was noted. Bubbling was noted within the perched waters during the drilling of BH202.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Environmental Laboratory Testing and Ground Gas Monitoring Results</b> | <p>The environmental chemistry soil results have been compared with the General Assessment Criteria for soils with respect to human health against 'Commercial' thresholds with a SOM of 6% for Made Ground soils. With respect to the proposed end-use of the site, no exceedances were reported above the Generic Assessment Criteria thresholds within the nine samples of made ground scheduled. No Asbestos Containing Materials (ACMs) or asbestos fibres were identified.</p> <p>With respect to the results of three monitoring visits, maximum methane concentrations were recorded between 29.6%v/v and 78.6v/v, and maximum carbon dioxide concentrations were recorded between 6.7% v/v and 21.4% v/v. Maximum steady state flow rates were recorded 5.2 l/hr. Maximum elevated gas concentrations and flow rates were recorded within monitoring wells installed within the landfill waste materials. Bubbling was noted within BH202 during the second round of monitoring.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Ground Contamination and Ground Gas Assessment</b>                     | <p>A <b>Low</b> risk rating is identified to end-users at this stage from direct contact and/or ingestion of contaminants within shallow site soils, this is owing in part to the presence of existing demolition rubble and the proposed site development forming a suitable cap.</p> <p>A <b>Low</b> risk rating is identified to construction workers and adjacent residents from shallow site soils accounting for the use of appropriate PPE and construction management/environmental controls.</p> <p>A <b>Low</b> risk rating is identified at this stage to the nearest surface water feature and groundwater receptors.</p> <p>Spot monitoring has identified elevated methane and carbon dioxide. Curtins assessment of the ground model and calculated hazardous gas flow rate indicates a high risk to the proposed development commensurate with Characteristic Situation of 4 (CS4).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Geotechnical Assessment</b>                                            | <p>The presence of deep backfill material, landfill waste and mining legacy features are key constraints to the proposed development.</p> <p>The landfill waste and reworked clay are not suitable for traditional shallow foundations. A piled foundation solution is recommended for the buildings and service yard area.</p> <p>Mine legacy features comprising potential worked seam and bell pits will require treatment prior to development. Following any treatment works the gas risk should be re-assessed potentially with supplementary monitoring.</p> <p>The potential for ongoing creep/consolidation settlement in areas of deeper fill (&gt;5m) may give rise to unacceptable and differential settlement in external areas. This is of most risk in the east and south east of the site.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Recommendations</b>                                                    | <p>It is recommended that proposed civil and structural design is progressed in collaboration with a geotechnical engineer. It is likely that further intrusive investigation will be required to validate design as a part of a Geotechnical Design Report.</p> <p>The ongoing design should consider the following:</p> <ul style="list-style-type: none"> <li>The proposed foundation solution should take into account the presence of landfill material and the mine working legacy features in the west and north. Any suggested solution should consider the potential for ongoing settlement of the fill the nature and quality of mine stabilisation works and the potential for altering the ground gas regime. Given the nature of the landfill material any foundation solution relying on geotechnical performance of this material should not be considered viable. A piled solution is recommended at this stage for the proposed buildings and the service yard area.</li> <li>A strategy for road and pavement design in external areas should be developed taking account of the potential for ongoing settlement, predominantly in the south and east of the site.</li> <li>The drainage and utility/ strategy should consider the potential for settlement.</li> <li>No formal remediation is required based on levels of contaminants recorded in recovered samples. If the proposed scheme design changes from that in Appendix A then further assessment may be required.</li> <li>Gas protection should be incorporated in proposed buildings inline with the requirements of a CS4.</li> </ul> |

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## 1.0 Introduction

### 1.1 Project Background

In August 2020, Curtins were instructed by Lidl GB Limited to undertake a Combined Phase 1 Preliminary Site Assessment (PSA) and Phase 2 Ground Investigation Report (GIR) at a site off Bankwood Way, Birstall, WF17 9TB. The site is centred at National Grid Reference (NGR) 423694, 427432.

The report has been produced in support of the proposed design and build of two retail units and associated car parking.

The proposed redevelopment plans are enclosed within *Appendix A*.

### 1.2 Scope of Services

The Phase 1 PSA is intended to provide an overview of the geo-environmental setting of the site, develop both a working conceptual and ground model for the site as well as present an initial assessment of geo-environmental risks that could be presented to the development, including its intended site users and the wider environment.

A Phase 2 GIR has subsequently been undertaken to address the findings of the Phase 1 PSA.

Specifically, the Phase 2 investigation and report are intended to determine:

- If there is a risk of the proposed end-user being adversely impacted upon by potential contamination in shallow site soils that may be present on the site due to its known current, recent and historical use;
- If there is a risk of groundwater and/or surface water being adversely impacted upon by potential contamination that may be present on the site due to its known current, recent and historical use;
- If there is a risk to the end-user from landfill and/or soil gases including methane, carbon dioxide, carbon monoxide and hydrogen sulphide;
- Likelihood of the proposed works being adversely impacted by potential geo-hazards across the site;
- Recommendations for the design of foundations and building ground floor slabs; and
- Recommendations for the specification of sub-structure concrete and water supply pipes.

The report also includes a Coal Mining Risk Assessment (CMRA).

Consideration of detailed flood risk, ecology and archaeological issues are outside of the scope of this report.



## 2.0 Phase 1 Preliminary Site Assessment

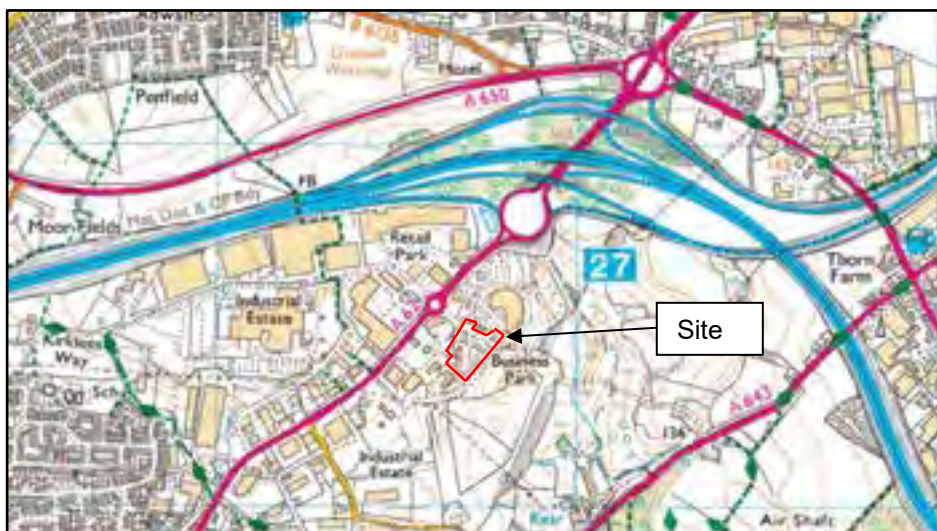
### 2.1 Current Setting

Site use, location and description are shown below in *Table 2.1* and *Figure 2.1*.

**Table 2.1 – Site Details**

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Site Address</b>                     | Land off Bankwood Way, Birstall, Leeds, WF17 9TB.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>NGR</b>                              | 423694, 427432                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Area of Site</b>                     | 1.51 hectares                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Current Site Use and Description</b> | <p>The site is located approximately 500 m southwest of Junction 27 of the M62 motorway. The site forms part of the wider commercial retail park commonly referred to as Birstall Retail Park.</p> <p>The site comprises vacant land covered by demolition crush following the demolition of six former office buildings post 2018. A number of large piles of demolition crush originating from the aforementioned demolition also remain across the site. Temporary metal fencing surrounds the perimeter of the site, and an earth bund comprised of demolition crush runs adjacent to the northern boundary which inhibits vehicle access. An electrical substation operated by a third party is present centrally within the west.</p> <p>A culverted watercourse (at an approximate depth of 8mbgl) is present running parallel to the eastern boundary.</p> <p>The elevation falls gently from 151.9mAOD in the north to 149.1mAOD in the south of the site. The area in the northwest of the site is raised approximately 1m above the remainder of the site.</p> <p>The site is access via an access road which runs south from Bankwood Way, orientated east to west to the north of the site.</p> <p>The surrounding land use is predominantly commercial or retail/leisure, with office buildings bordering to the north and south.</p> |





**Figure 2.1 – Site Location Plan.** Note that the Ordnance Survey map shows the site prior to demolition.  
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## 2.2 Surrounding Area Details

The following information was established through undertaking an environmental database search (Envirocheck Report (Ref.1) presented in *Appendix B*). These land uses are summarised in *Table 2.2*.

**Table 2.2 – Surrounding Area**

|                         |          |                                                                                                                                                                                                                            |
|-------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Surrounding Area</b> | <b>N</b> | Commercial office building with Birstall Retail Park comprising retail buildings and restaurants beyond. The nearest premises comprise Showcase Cinema 15m to the northeast and McDonalds restaurant 30m to the northwest. |
|                         | <b>E</b> | Bankwood Way with an empty car park and vacant undeveloped land beyond.                                                                                                                                                    |
|                         | <b>S</b> | Commercial office buildings with a fitness club and agricultural land beyond. An industrial estate is located further beyond.                                                                                              |
|                         | <b>W</b> | Woodhead Road with Birstall Retail Park beyond.                                                                                                                                                                            |

## 2.3 Previous Site Use

A review of the available historical mapping and other information for the site, as presented within the Envirocheck Report (Ref. 1), has been undertaken and is presented in *Table 2.3* below.

**Table 2.3 – Previous Site and Surrounding Area Uses and Potential Sources of Contamination.** On site uses are indicated in **bold**.

| <b>Date</b>                  | <b>Description</b>                                                                                                                                                                                                                                                                                                                   | <b>Potential Sources of Contamination</b>                                                                                                                                                                                                                                                                                                    |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1852 - 54</b><br>1:10,560 | <p><b>The site forms part of wider agricultural fields. Bank Wood woodland encroaches within the northeast corner of the site.</b></p> <p>The wider area is largely agricultural with a railway orientated north to south approximately 60m to the west and a number of coal pits and sandstone quarries (&gt;50m away). Gelderd</p> | <ul style="list-style-type: none"> <li><b>Limited potential for contamination.</b></li> <li>Although the shafts are indicated &gt;50m away from the site, the uncontrolled deposition of unknown soils, coal tailings and materials adjacent to the shafts may have resulted in materials being deposited adjacent to the site. A</li> </ul> |

| Date                                                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Potential Sources of Contamination                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                              | Road is shown roughly in its current configuration to the north.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | potential ground gas source and a risk to groundwater.                                                                                                                                                                                                                                                                                                                |
| <b>1877</b><br>Coal Authority Consultants Coal Mining Report | <b>The Coal Authority Consultants Coal Mining Report (Ref. 6) states that the Flockton Thin and Top Fenton coal seams underlying the site were last worked in 1877 and 1911 respectively.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>• Deposition of made ground (notably soils, coal tailings and materials) of unknown composition associated with mining operations. A potential ground and/or mine gas source and a risk to groundwater.</li> </ul>                                                                                                             |
| <b>1893-94</b><br>1:2,500                                    | <p>A 'highwall' is shown running north to south in the centre of the site which indicates either an opencast mine or quarry in the southeastern part of the site. The feature extends offsite to the southeast and is labelled as land parcel 1185.</p> <p>Construction of Howden Clough Colliery 150m southwest. The majority of coal pits and shafts are either no longer shown or denoted as 'Old' by this time. An 'Old Coal Pit' is labelled until circa 1922.</p>                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>• As per 1877.</li> <li>• As per 1852-54.</li> </ul>                                                                                                                                                                                                                                                                           |
| <b>1907</b><br>1:2,500                                       | A further railway line orientated north northeast to south southeast is present 150m to the east.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>• Limited potential for contamination.</li> </ul>                                                                                                                                                                                                                                                                              |
| <b>1956</b><br>1:2,500                                       | <p><b>Further evidence of potential mining is indicated, with the presence of 'highwall' orientated east southeast/west northwest in the north of the site. 'Issues' are also shown associated with the 'highwall' which suggest drainage/ interception of groundwater from the feature.</b></p> <p>Howden Clough Colliery is shown as disused at this time.</p>                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>• As per 1877.</li> </ul>                                                                                                                                                                                                                                                                                                      |
| <b>1968-76</b><br>1:2,500                                    | <p>Raw Royd Works and a depot are shown within 100m of the site, to the northwest and southwest respectively. The railway line located to the west is shown to be dismantled by this time.</p> <p>Refuse or slag heaps are indicated 20m to the southeast.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• Uncontrolled deposition of made ground of unknown composition associated with the deposition of refuse or slag heaps. A potential ground gas source and a risk to groundwater.</li> </ul>                                                                                                                                    |
| <b>1970</b>                                                  | <p><b>The Envirocheck Report (Ref. 1) indicates a historical landfill, namely Nab Lane Refuse Disposal Tip, extending across the southern, northeastern and eastern portions of the site. The landfill is detailed to have accepted inert, industrial, commercial and household waste, and liquid sludge, with operations commencing in November 1970. The date of last input is not indicated.</b></p> <p>Given the location and date of deposition, it is presumed that the refuse or slag heaps indicated 20m to the southeast pertains to infilling operations associated with Nab Lane Refuse Disposal Tip. Earthworks associated with the dismantling of the railway to the west are shown until circa 1987.</p> | <ul style="list-style-type: none"> <li>• Controlled deposition of landfill waste onsite and adjacent to the site. A potential ground gas source and a risk to groundwater.</li> <li>• Uncontrolled deposition of made ground (notably ash, slag and clinker) of unknown composition associated with the reprofiling/earthworks of the former railway line.</li> </ul> |
| <b>1985</b><br>1:2,500                                       | A tank is shown approximately 10m to the north on the opposite side of Bankwood Way.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• The contents of the tank are unknown and therefore there is potential for the</li> </ul>                                                                                                                                                                                                                                     |

| Date                       | Description                                                                                                                                                             | Potential Sources of Contamination                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            |                                                                                                                                                                         | release and/or spillages of hydrocarbons. It is noted however that the tank is located downgradient of the site.                                                                                                                                                                                                                                                                                                                                                                   |
| <b>1986</b><br>1:10,000    | <b>The 'highwalls' in the centre and northern parts of the site are no longer indicated which suggests a conclusion to infilling operations.</b>                        | <ul style="list-style-type: none"> <li>• As per 1970.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>1989</b>                | Howden Clough Landfill Site is indicated 53m to the east of the site. The site accepted household, commercial and industrial waste from May 1989 until an unknown date. | <ul style="list-style-type: none"> <li>• Controlled deposition of landfill waste adjacent to the site. A potential ground gas source and a risk to groundwater.</li> </ul>                                                                                                                                                                                                                                                                                                         |
| <b>1990</b><br>1:2,500     | Part of the wider Birstall Retail Park had been constructed to the north of the site by this time, with further expansion of the retail park hereon.                    | <ul style="list-style-type: none"> <li>• Uncontrolled deposition of made ground of unknown composition associated with the construction of Birstall Retail Park.</li> </ul>                                                                                                                                                                                                                                                                                                        |
| <b>1992</b><br>1:1,250     | <b>By this time, eight commercial office buildings are present onsite, which forms the majority of the Centre 27 Business Park.</b>                                     | <ul style="list-style-type: none"> <li>• <b>Uncontrolled deposition of made ground of unknown composition associated with the construction of Centre 27 Business Park.</b></li> </ul>                                                                                                                                                                                                                                                                                              |
| <b>Post 2018 – Present</b> | <b>All properties on site had been demolished, with demolition rubble stored onsite in the form of large piles. The site remains vacant at the time of writing.</b>     | <ul style="list-style-type: none"> <li>• <b>Uncontrolled deposition of made ground of unknown composition associated with the demolition of commercial office buildings onsite. Although unlikely, given the age of the demolished buildings, it is possible that Asbestos Containing Materials (ACMs) may have been used as a building material and may be present with demolition materials. The risk posed by ACMs therefore cannot be discounted at this stage.</b></li> </ul> |

## 2.4 Geology and Hydrogeology

### 2.4.1 Geology and Hydrogeology

A study of the Envirocheck report (Ref. 1), the British Geological Survey's (BGS) Geology of Britain Viewer (Ref. 2), BGS 1:50,000 (Ref. 3) and BGS 1:10,000 (Ref. 4) mapping records indicates the following geological and hydrogeological succession underlying the site:

**Table 2.4.1 – Geological/Hydrogeological Succession**

| Made Ground                                                                                                                          | Associated Hydrogeological Classification |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Made ground                                                                                                                          | N/A                                       |
| Superficial Geology                                                                                                                  | Associated Hydrogeological Classification |
| None identified.                                                                                                                     | N/A                                       |
| Bedrock Geology                                                                                                                      | Associated Hydrogeological Classification |
| Pennine lower Coal Measures (PLCM) <sup>1</sup> in the central and southern areas. The Flockton Thin Coal seam outcrops at the site. | Secondary A Aquifers <sup>3</sup> .       |

|                                                            |  |
|------------------------------------------------------------|--|
| Emley Rock <sup>2</sup> in the western and northern areas. |  |
|------------------------------------------------------------|--|

**Notes:**

1. Interbedded grey mudstone, siltstone and pale grey sandstone, commonly with mudstones containing marine fossils in the lower part, and more numerous and thicker coal seams in the upper part.
2. A fine-grained flaggy sandstone with mudstone partings.
3. These are permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

There is one BGS borehole record (SE22NW744) located onsite, which recorded a sequence of boulder clay to 1.25mbgl underlain by interbedded sandstones, siltstone and mudstones attributed to the PLCM to 29.65mbgl, where the borehole terminated. The record details potential coal (denoted '? Coal') from 27.15mbgl to 27.5mbgl, which is not interpreted to be the Brown Metal coal seam.

It should be noted that this investigation was completed prior to landfill infilling operations or subsequent developments and demolition, and therefore the depth to the coal seams may not be accurate when compared to the current levels.

A further BGS borehole record (SE22NW745) was drilled on the northern boundary as part of the aforementioned investigation. Boulder clay was encountered to 1.45mbgl, which was underlain by interbedded sandstones and shales to 5.7mbgl. Broken ground described as finely banded sandstone and black shale was encountered between 5.7mbgl and 6.4mbgl, which was underlain by collapsed ground (presumed old workings) comprising fragments of coal and shale was encountered between 6.4mbgl and 7.55mbgl.

A total of six faults are indicated within 1km of the site. The nearest is located approximately 100m west, orientated northeast to southwest. The site is located on the downthrow side of the fault.

The site is not located within a source protection zone (SPZ). There are no groundwater abstractions within 1km of the site.

## 2.4.2 Mining and Quarrying

The site is located within a Coal Mining Development High Risk Area according to the Coal Authority Interactive Mapping (Ref. 5). As such a Coal Authority Consultants Coal Mining Report (Ref. 6) has also been obtained from the Coal Authority. The report is presented in *Appendix B* and is summarised in *Table 2.4.2*. A separate Coal Mining Risk Assessment Report has also been prepared by Delta-Simons in August 2017 (Ref. 7) and is summarised in *Section 3.0*.

**Table 2.4.2 – Summary of the Coal Authority Consultants Coal Mining Report (reference 51002302567002).**

| Detailed findings of Coal Authority Report   | Does it affect the site                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Past or present underground mining           | Yes – probable unrecorded shallow workings. The Flockton Thin and Top Fenton (also referred to as High Fenton or the First and Second Brown Metal coal seam) coal seams underlying the site were last worked in 1877 and 1911 respectively. The Flockton Thin coal seam (0.91m thick) is indicated to be present at a depth of 10mbgl and the Top Fenton (0.6m thick) is shown at a depth of 30mbgl. Both seams are indicated to dip eastwards at 2.1°.                                                                                                                      |
| Future underground coal mining               | The property is not in an area where the Coal Authority has plan to grant a licence to remove coal using underground methods, nor has a licence been granted to remove or otherwise work coal using underground methods. The property is not in an area likely to be affected from any planned future underground coal mining.                                                                                                                                                                                                                                               |
| Mine entries within 20m of the site boundary | Yes. An adit is present in the northeastern corner of the site at NGR 423770 427440.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Coal Mining Subsidence                       | Coal authority is unaware of any damage to property within 50m of the site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Mine Gas                                     | No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Past, present or future opencast coal mining | <p>Not within the boundary of an opencast site. There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary. The property is located within 500 metres of two areas; 100m to the southeast and 120m to the northwest which are affected by unrecorded opencast mining. Both areas are relatively large in area.</p> <p>A review of the Envirocheck (Ref. 1) suggests that the opencast mine located to the south is attributed to the Howden Clough Coal Pit and the other is attributed to the Horse Riggs Coal Pit.</p> |

There are 12 no. BGS recorded mineral sites within 500m of the site; of which the majority relate to underground coal mining. The nearest relates to the Paradise Coal Pit located 72m to the north. Two entries however pertain to opencast coal mining which are discussed in *Table 2.4.2*. It should be noted that a further two entries relate to the opencast mining of the Emley Rock sandstone at Horse Riggs 110m and 164m to the north. All 15 no. entries have since ceased operations.

### 2.4.3 Other Ground Stability Issues

The Envirocheck report (Ref. 1) confirms that there is a very low to no hazard from the following ground stability hazards on the site; compressible, collapsible, dissolution, landslide, running sand, and shrinking or swelling clay.



Further ground instability issues particularly resulting from ground movement are discussed further in *Sections 3.2 and 3.3*.

## **2.5 Land Gases**

### **2.5.1 Landfill and Infilled Land**

The Envirocheck Repot (Ref. 1) indicates a historical landfill, namely Nab Lane Refuse Disposal Tip, extending across the southern, northeastern and eastern portions of the site. The landfill was authorised to accept inert, industrial, commercial and household waste, and liquid sludge, with operations commencing in November 1970. The last input date is not indicated. A further entry pertaining to the site lists the site as a registered landfill which was operational from March 1982. It is not known when operations ceased.

Ground gas monitoring has been previously completed by Delta-Simons in Jul 2018 (Ref. 8). This information is presented in *Section 3.0* and further assessed in *Section 9.0*.

A further two historical landfill sites are recorded within 250m of the site. Howden Clough Landfill Site is indicated 53m to the east of the site. The site was authorised to accept household, commercial and industrial waste from May 1989 until an unknown date. The site is also listed as a registered landfill which details the site as 'dormant' in March 1996. A refuse tip situated 82m to the southeast is shown on historical mapping dated 1972. No records pertaining to this site are recorded.

There are nine listed entries of potentially infilled land within 250m of the site. All of which pertain to the infilling of unknown filled ground (non-water) (pit, quarry etc.). The largest and most pertinent relates to the infilling of Howden Clough Colliery 154m to the southwest.

### **2.5.2 Mine Gases**

The Flockton Thin Coal is shown to outcrop at the site. The Coal Mining Consultants Report has no record of a mine gas emission requiring action associated with the property. However, given the presence of shallow coal underlying the site, the risk posed by mine gas emissions cannot be discounted at this stage. As such, the risk posed by mine gases is assessed further in *Section 9.0*.

### **2.5.3 Radon**

The BGS (Ref. 1) and Public Health England Radon Mapping (Ref. 9) confirm that the site is situated in an area where <1% of homes are above the radon action level. On this basis radon protection measures are not considered necessary in the construction of retail premises.

Where the new development incorporates a basement the advice of a specialist radon assessor must be obtained.

## **2.6 Hydrology**

The nearest recorded surface water feature is Howden Clough Beck located approximately 190m to the east of the site. A culverted watercourse (at an approximate depth of 8mbgl) is present running parallel to the eastern boundary.

There are 15 no. Pollution Incidents listed within 500m of the site. The closest pertains to a Category 3 – minor incident following the release of chemicals – detergents/surfactants into Mouth/Scotia Beck located 129m to the west in January 1994.

There are no surface water abstractions within 500m of the site.

There are four active discharge consents recorded within 500m of the site. The nearest, located 200m to the north, relates to the discharge of trade discharges – site drainage (contaminated surface water, not waste sites) into Howden Clough Beck. The licence is held by Trustees Hercules Unit Trust & Britel Fund Ltd and was issued in March 1993.

## **2.7 Unexploded Ordnance (UXO) Risk Assessment**

A review of the Zetica Online UXO Mapping (Ref. 10) indicates that the site is situated within a low risk area. Low-risk regions are those with a bombing density of <10 bombs per 1000 acres.

The historical mapping does not indicate any ruins, or buildings that appear to be demolished following WWII, on or surrounding the site. No evidence exists that suggests that the site received direct strikes from ordnance. Furthermore, there were no significant military or industrial targets on or offsite. It is further noted that the site has undergone multiple stages of redevelopment since WWII, which increases the likelihood of encountering UXO already and therefore reduces the likelihood of UXO being present onsite.

Based on the forgoing commentary, the likelihood of encountering UXO onsite as part of the ground investigation or development works is Low.

Notwithstanding, if unexploded ordnance is discovered, stop immediately, prevent access to the area, and inform the police. If the site boundary or location changes then the UXO risk should be reassessed.



### 3.0 Existing Reports

The proposed development site has been subject of, in part or fully, several site assessments and ground investigations.

As part of this assessment Curtins have been provided (or sourced from publicly available sources) the following reports:

- Phase I Environmental Site Assessment, Delta-Simons, November 2014 (Ref. 11).
- Coal Mining Risk Assessment, Delta-Simons, August 2017 (Ref. 7)
- Phase II Geo-Environmental Assessment, July 2018 (Ref. 8)

The reports listed above summarise or make references to several other investigations, which were not available to Curtins for detailed review and are listed below, in chronological order:

- Ground Investigation – Exploratory Hole Records, Associated British Consultants, 1989.
- Structural Survey & Phase I Desk Study, Waterman Partnership Engineering Group, 2001.
- Phase I Environmental Study, WSP, June 2004.
- Letter Report, Peter Associates Consulting Structural and Civil Engineers, August 2014.

The following sections present a summary of the pertinent findings of the reports directly reviewed or those referenced in reviewed reports.

#### 3.1 Associated British Consultants, 1989

A number of boreholes were progressed on or within close proximity to the site. The following pertinent information obtained from exploratory hole records is as follows:

- Borehole BL/1/89, located approximately 30m to the east of the site, encountered landfill material from 1.1mbgl to 11.4mbgl;
- Borehole BL/2/89, located approximately 20 m to the southeast of the site, recorded landfill waste from 0.7mbgl to > 15.8mbgl. The base of the material was unproven;
- Borehole B2, located onsite in the northernmost corner of the site, encountered coal between 10.7mbgl and 10.9 mbgl; and
- Borehole B3, located approximately 5m to the southwest of the site, encountered coal between 5.9 mbgl and 6.6 mbgl.

Refer to *Figure 3* enclosed within the Delta-Simons 2018 Phase II Geo-Environmental Report for precise locations of the aforementioned boreholes. The investigation was completed prior to the development of the site and the wider Birstall Retail Park, and therefore recorded depths may vary when compared to current levels.

### **3.2 Waterman Partnership Engineering Group, 2001**

A structural survey was undertaken of the buildings recently cleared from the site. The survey was conducted by Waterman Partnership Engineering Group and reported up to 100mm of settlement in the paving and drainage external to Units 6 and 7, formerly situated in the south and east of the site respectively (within the footprint of the proposed Lidl). No settlement or movement was recorded on the units themselves and the report concluded that they appeared to be supported on stable foundations. However, external areas including pavements, grilles and rainwater pipes had been disturbed by relative ground movement attributed to consolidation of the underlying landfill in the c. 10 years since construction of the buildings.

### **3.3 Peter Associates Consulting Structural and Civil Engineers, 2014**

A letter report detailing visual inspections undertaken by Peter Associates between 2001 and 2013 records structural defects to Units 6 and 7 from ground movement. Structural defects were first recorded in both units in 2001, with significant defects noted in Unit 7 and only minor defects in Unit 6 during the subsequent inspection in 2005. During the final inspection in 2013, it was concluded that Unit 6 showed no significant deterioration since the 2005 inspection. Further movement was recorded in Unit 7 but was estimated to be becoming 'less aggressive'. The report concluded that whilst continued subsidence damage was noted at both units, the superstructure was deemed to not be under any threat from structural instability or loss of structural integrity.

### **3.4 Delta-Simons, Phase I Environmental Site Assessment, 2014**

The Delta-Simons Phase I Environmental Site Assessment considered the risk posed by former coal mining legacy at the site as a moderate risk to the proposed development at the time. An assessment of historical ground gas monitoring data indicated a low risk to human health from the landfill gases; however, the data was considered to be limited.

Contrary to this assessment, the report references a WSP report (ref. 70004819) which details gas monitoring results from two boreholes advanced within the adjacent landfill, which is interpreted to be the offsite portion of the landfill located onsite. Gas monitoring results recorded elevated concentrations of methane at 69.7%v/v and flow rates of 8.1 litres/hour (l/hr). However, two additional boreholes located onsite (positions not stated) recorded comparatively lower concentrations, with the maximum methane concentrations of 0.1%v/v and maximum carbon dioxide concentrations of 2%v/v. Flow rates were also comparatively negligible, with a maximum of 0.2 litres/hour.

### **3.5 Delta Simons, Coal Mining Risk Assessment, 2017**

The CMRA completed by Delta-Simons indicates that the Flockton Thin coal seam is present outcropping in the centre of the site, trending northeast. The BGS borehole record on the northern boundary encountered broken ground between 5.7mbgl and 6.4mbgl underlain by possible coal workings from 6.4mbgl to 7.55mbgl.

Historical coal mining records indicated potential workings of the First and Second Brown Metal coal seams at an approximate depth of 27mbgl. The report concluded that based on the recorded thicknesses and depths, the Flockton and First and Second Metal Coal seams, if worked, pose a risk to future developments from ground movement and/or collapse.

Abandonment plans contained within Delta-Simons' CMRA indicate the Flockton Thin coal seam being worked offsite, to the south, but there is potential for older, unrecorded workings closer to, or under the site. It should be noted that the accuracy of the abandonment plans is not always reliable. Additionally, as recording abandonment plans only became a legal requirement from 1872, there is potential for historical unrecorded mining prior to this date.

Further abandonment plans for the First and Second Brown Metal coal seams indicate that the seam was worked in the north of the site, and an adit is shown in the northeastern corner of the site, extending offsite to the northeast.

### **3.6 Delta-Simons, Phase II Geo-Environmental Assessment, 2018**

Delta-Simons completed an intrusive ground investigation in 2018 which comprised the following:

- 14 no. machine excavated trial pits (TP102 to TP114 and TP116) to a maximum depth of 5.1mbgl;
- 11 no. window sample holes to a maximum depth of 6.45mbgl; and
- nine rotary boreholes (RT101 to RT109) to a maximum depth of 41.0mbgl.

The ground model recorded highly variable thicknesses of made ground, ranging from 0.8m to 11.8m thick. Landfill materials were encountered within nine exploratory hole locations within the southern and eastern areas of the site. The composition of the landfill material was spatially variable, with landfill waste (i.e. textiles, plastics, car tyres, wood and refuse etc.) encountered in the southwest of the site and reworked natural material encountered in the remaining, eastern exploratory hole locations. In RT104, reworked clay was recorded to a depth of 8.7mbgl and was underlain by deep landfill waste to a depth 9.5mbgl. The base of the borehole was not proven.

The landfill materials generally became deeper towards the eastern boundary before shallowing rapidly towards the northeast corner. This abrupt shallowing is consistent with historical mapping (dated from 1955 to 1987) which shows an embankment or 'highwall' in the northeast corner of the site.

Contrary to the landfill boundary plans enclosed within the Delta-Simons Phase I Environmental Site Assessment (Ref. 11), Delta-Simons identified the landfill boundary to extend further to the northwest and not as far to the northeast.

Coal measuring 0.1m in thickness was also encountered at a depth of 5.8m within completely weathered bedrock in DS112. Possible voids or collapsed workings were encountered at shallow depths in exploratory holes RT101 (3.8mbgl to 5.7mbgl), RT107 (3.2mbgl to 4.6mbgl) and RT108 (2.2mbgl to 5.0mbgl), in the west and north-east of the Site. These features were identified by a loss of flush and / or poor or no recovery. These features were considered to be associated with historical workings of the Flockton Thin coal seam. Delta-Simons recommended further assessment of these features followed by remedial actions (i.e. grouting or earthworks) prior to development.

Intact coal was identified within the PLCM bedrock in RT105, RT106, RT107, RT108 and RT109 at depths ranging from 37.1mbgl to 38.5mbgl, with a thickness ranging between 0.2 and 0.3 m. Given the depth and thickness of the coal seam, Delta-Simons interpreted this coal seam to be the Third Brown Metal coal seam, which was not considered to pose a risk to future developments based on CIRIA's SP32 (Ref. 12) 10:1 criterion (i.e. 10m of competent overburden to 1m coal seam or void thickness). Thus no remedial actions/treatment (i.e. grouting) was recommended.

Rotary probe holes (RT101 to RT103) advanced to identify the adit in the northeast corner did not conclusively identify the feature.

Groundwater strikes recorded during intrusive works were recorded between 1.7mbgl (DS104) and 3.4mbgl (DS107). Groundwater were recorded within boreholes located within the footprint of the historic landfill and were therefore believed to be perched. Groundwater was also recorded between 2.3mbgl and 5.5 mbgl during third-party excavation works running concurrent to the site investigation. The locations of these groundwater strikes are not recorded.

Delta-Simons identified elevated concentrations of Polycyclic Aromatic Hydrocarbons (PAHs) compounds in excess of commercial/industrial Generic Assessment Criteria (GAC) in one sample recovered from the landfill material. As such, Delta-Simons recommended the installation of a clean capping layer.

Ground gases were monitored using continuous monitoring instruments for a period of approximately two weeks in DS102 and DS104 to DS112 respectively. No spot monitoring or groundwater level monitoring is reported. The maximum concentrations of methane and carbon dioxide were recorded at 2.02%v/v in DS106 and 6.3%v/v in DS111, respectively. The maximum peak flow was recorded at 0.25 litres/hour in DS112. Based on these findings, the site was classified as Characteristic Situation (CS) 2, requiring the installation of ground gas protection measures in the proposed buildings. The maximum elevated concentrations of methane and carbon dioxide are attributed to monitoring wells installed within the PLCMs.

With the exception of DS104, all monitoring wells installed within the footprint of the landfill were screened within the made ground and/or reworked natural clay strata which has a comparatively lower putrescible content and thus a lower potential for generating ground gases (when compared to the landfill waste materials). DS104 screened within the landfill waste materials recorded maximum elevated concentrations of methane and carbon dioxide at 0.11% v/v and 2.13% v/v respectively; however, the response zone was installed across multiple stratum.

Therefore a limited dataset exists for monitoring wells installed within the landfill materials. Given that these materials are considered to have a greater putrescible content and based on the grossly elevated concentrations of methane and flow rate (reported in *Section 3.4*) believed to be recorded from the same landfill (albeit located offsite), further assessment is therefore necessary. As such, the aforementioned ground gas classification (CS2) is considered to be the risk posed by mine gases only and not that of the landfill materials.

Based on the subsidence related issues identified by assessments detailed in *Sections 3.2* and *3.3*, ground improvement such as deep soil mixing was recommended to enable the use of a piled foundation solution. Delta-Simons recommended a piled solution comprising traditional bored, driven or continuous flight auger piles to competent geology due to the poor ground conditions.

## 4.0 Preliminary Conceptual Site Model & Qualitative Risk Assessment

The preliminary conceptual site model (PCSM) and Qualitative Risk Assessment (QRA) are presented in the table presented in this section.

The PCSM details the source-pathway-receptor linkages or potential pollutant linkages (PPL) that have been identified for the site. The QRA details the associated level of risk relating to these potential pollutant linkages.

The PCSM and QRA concern risk to human health and water environment with additional, more specific risk assessment protocols contained within the main body of this reporting, as detailed in *Section 4.1* below.

The QRA follows the framework outlined within CIRIA C552 (Ref. 13) which is summarised within *Appendix H*.

The 'risk rating' within the QRA refers to the risk that the source, pathway, receptor linkage or PPL is complete. Unless specifically stated it does not necessarily refer to an immediate risk and is intended to be used as a tool to assess the necessity for further assessment/investigation.

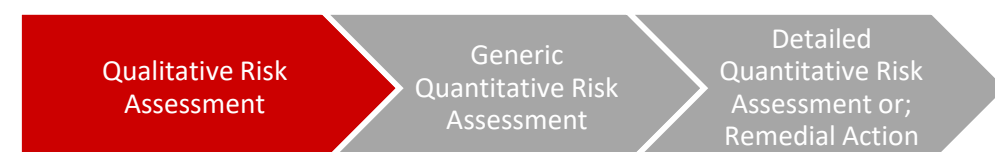
### 4.1 Additional Risk Assessments

The following risk assessments, listed below, are not included within the main CSM and QRA as they are not of relevance to this site. They have already been considered as listed below;

- The risk presented by Mining (specifically mine ground gases) is discussed and assessed in *Section 3.6*;
- The risk presented by Radon is discussed and assessed in *Section 2.5.3*; and
- The risk presented by Unexploded Ordnance is discussed and assessed in *Section 2.7*.

Under current health and safety legislation, employers are required to carry out their own appropriate risk assessments and mitigation to protect themselves and their employees, other human receptors and the environment from potential contamination. Such risks must be adequately mitigated by law, specifically the Construction Design Management (CDM) Regulations (2015) (Ref. 14) which require that potential risks to human health and the environment from construction activities are appropriately identified and all necessary steps taken to eliminate / manage that risk. It has been assumed that any future construction works on site will be undertaken in compliance with these requirements and therefore construction workers involved in the building works at the site.





- The table below represents the first stage in the land quality risk assessment process: The Qualitative Risk Assessment.
- For a development site to be deemed 'suitable for use', the level of risk needs to be brought down to acceptable levels, i.e. low to very low risk. The purpose of each stage of risk assessment is ultimately to establish, if there is a requirement for additional levels of assessment to be made to have sufficient confidence to support a risk characterisation or management decision, e.g. remedial action.
- In the absence of specific site data, a Generic Quantitative Risk Assessment is invariably recommended.

| Conceptual Site Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                         |                                                                             | Qualitative Risk Assessment                                               |                                                                                                                                                                                                                                                                                                                       |                     | Recommended Actions                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Source                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Pathway(s)                                                                                                                              | Receptor(s)                                                                 | Consequence                                                               | Likelihood of Occurrence                                                                                                                                                                                                                                                                                              | Risk Rating         |                                                                                                                                             |
| <b>On-site sources of potential contamination:</b> <ul style="list-style-type: none"> <li>• <b>Made ground</b> of unknown composition from demolition rubble associated with former commercial buildings.</li> <li>• <b>Landfill materials</b> comprising industrial, commercial and household waste, and liquid sludge. Locally elevated concentrations of PAH compounds identified in one sample of landfill material recovered during the Delta-Simons 2018 site investigation.</li> <li>• Other potential contaminants may include, but are not limited to, asbestos, heavy metals and a range of organic and inorganic contaminants.</li> </ul> | <b>Direct contact with contaminated soils and shallow/ surface groundwater</b><br><br><b>Ingestion, inhalation of soil derived dust</b> | <b>Site End Users</b><br>(Commercial)                                       | <b>Medium</b><br><br>Chronic health risk.                                 | <b>Low</b><br><br>Considering the limited number of elevated concentrations of contaminants encountered during the previous Delta-Simons 2018 site investigation. Elevated concentrations of PAH compounds were identified in one sample recovered from the landfill material.                                        | <b>Moderate/Low</b> | Ground Investigation and Contamination Testing<br>Generic Quantitative Risk Assessment.                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                         | <b>Construction and maintenance workers</b>                                 | <b>Medium</b><br><br>Chronic health risk.                                 | <b>Very low</b><br><br>Standard Health & Safety precautions likely to be adopted by construction workers which will reduce likelihood of contact with contaminated soils.                                                                                                                                             | <b>Low</b>          | Construction Workers should be provided with appropriate PPE during all groundwork activities.<br><br>Generic Quantitative Risk Assessment. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Direct contact, ingestion, inhalation within windblown dust</b>                                                                      | <b>Adjacent Commercial Building Users</b>                                   | <b>Medium</b><br><br>Chronic health risk.                                 | <b>Low</b><br><br>Taking into account the close proximity of the commercial buildings to the north and south.                                                                                                                                                                                                         | <b>Moderate/Low</b> | Ground Investigation with Contamination Testing and Generic Quantitative Risk Assessment.                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Horizontal and vertical migration of contaminants</b>                                                                                | <b>Controlled Waters</b><br>Surface Water<br>Howden Clough Beck (190m east) | <b>Mild</b><br><br>Pollution of non-sensitive waters.                     | <b>Low</b><br><br>Given the distance from the site to Howden Clough Beck.                                                                                                                                                                                                                                             | <b>Low</b>          | Ground Investigation with Contamination Testing and Generic Quantitative Risk Assessment to assess the risk.                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                         | <b>Controlled Waters</b><br>Groundwater<br>Bedrock - Secondary A Aquifer    | <b>Medium</b><br><br>Site is not located within a Source Protection Zone. | <b>Low</b><br><br>Based on limited elevated concentrations of contaminants, namely PAH compounds, identified during the previous Delta-Simons 2018 site investigation. The underlying bedrock predominantly comprises mudstone which limits vertical migration of contaminants.                                       | <b>Moderate/Low</b> | Ground Investigation with Contamination Testing and Generic Quantitative Risk Assessment to assess the risk.                                |
| <b>Production of ground generating gases</b> from landfill materials containing organic/putrescible content located onsite and extending offsite. Infilling is considered to have occurred between the 1970s and 1980s.                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Horizontal and vertical migration of ground gas.</b>                                                                                 | <b>Site End Users</b><br>(Commercial)                                       | <b>Medium</b><br><br>Chronic health risk.                                 | <b>Likely</b><br><br>Based on the available ground gas monitoring results. Slightly elevated concentrations of carbon dioxide >5% were recorded in DS111 and DS112 installed within the underlying PLCMs. The maximum concentration of methane was recorded at 2.02% in DS106 also partly installed within the PLCMs. | <b>Moderate</b>     | Ground Investigation with ground gas monitoring to assess the risk.                                                                         |



| Conceptual Site Model |            |             | Qualitative Risk Assessment |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             | Recommended Actions |
|-----------------------|------------|-------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------|
| Source                | Pathway(s) | Receptor(s) | Consequence                 | Likelihood of Occurrence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Risk Rating |                     |
|                       |            |             |                             | <p>A review of the exploratory hole records suggests the landfill material has high putrescible content and is therefore considered to be a source of ground gas generation. The previous assessment of ground gases attributed to the former landfill (notably targeting landfill waste materials) by Delta-Simons in 2018 was limited.</p> <p>Ground gas monitoring undertaken by WSP within boreholes presumably located within the offsite portion of the historic landfill to the southeast recorded maximum elevated concentrations of methane at 69.7%v/v and flow rates of 8.1 litres/hour (l/hr).</p> |             |                     |

## 5.0 Phase 2 Investigation Scope of Works

Site investigation works were undertaken on the 1<sup>st</sup> and 10<sup>th</sup> September 2020.

The scope of the ground investigation was designed in general accordance with current UK guidance including the Environment Agency's Land Contamination Risk Management (Ref. 15), British Standard (BS) 10175 (Ref. 16), BS5930:2010 (Ref. 17), and BSEN1997: Part 2:2007 Eurocode 7 (Ref. 18). A summary of the scope and rationale are summarised in *Table 5.0*.

The main aim of the works were to validate the findings of the recent investigation and target potential data gaps.

**Table 5.0 – Scope and Rationale of Fieldwork**

| Exploratory Hole Type                    | Exploratory Hole Ref.                                                                 | Exploratory Hole Depth (mbgl)                               | Rationale                                                                                                                                                                                                                                                                                                              |
|------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Rotary Open-holed Boreholes</b>       | RH201<br>RH202<br>RH203                                                               | 7.0<br>7.0<br>8.0                                           | Investigate the adit located in the northeastern corner of the site.                                                                                                                                                                                                                                                   |
|                                          | RH204<br>RH205<br>RH206<br>RH207                                                      | 30.0<br>8.0<br>30.0<br>8.0                                  | Assess potential historical shallow workings and shallow coal seams; namely, the Flockton Thin coal seam which outcrops onsite. RH204 and RH206 were progressed to a depth of 30mbgl to confirm the presence and conditions of the First and Second Brown Metal seams at an anticipated depth of approximately 27mbgl. |
|                                          | RH208<br>RH209<br>RH210                                                               | 9.0<br>9.0<br>9.0                                           | Delineate the depth and extent of landfill materials.                                                                                                                                                                                                                                                                  |
| <b>Rotary Open-holed/Cored Boreholes</b> | RH211<br>RH212                                                                        | 22.5<br>10.5                                                | Further confirm the depth of landfill materials. Collect rock core data (top 10m of bedrock) to inform the pile design. Install gas and ground monitoring wells within the landfill materials.                                                                                                                         |
| <b>Cable Percussive Boreholes</b>        | BH201<br>BH202<br>BH203                                                               | 15.45<br>10.45<br>8.5                                       | Further confirm the depth of landfill materials. Obtain in-situ geotechnical test data to inform potential foundation solutions. Collect soil samples for chemical and geotechnical analysis. Install gas and ground monitoring wells within the landfill materials.                                                   |
| <b>Trial Trenches</b>                    | TT201e &<br>TT201w<br>TT201A<br>TT202<br>TT203<br>TT204A<br>TT204B<br>TT204C<br>TT205 | 5.2<br>5.0<br>4.3<br>5.0<br>2.6<br>3.8<br>3.5<br>3.2<br>3.5 | Investigate the conjectured 'highwall' of the landfill and potential historical mine workings. Collect soil samples for chemical and geotechnical analysis.                                                                                                                                                            |

Curtins drawing ref. 076893-CUR-00-XX-DR-GE-001-V01 records the locations of the intrusive investigation, a copy of which is included within *Appendix A*.

## 5.1 Soil Logging and Sampling

Exploratory hole arisings were logged onsite by a qualified Engineer and in accordance with the requirements of BS5930 (Ref. 17), including recording observed visual and olfactory indications of contamination. Exploratory hole logs are provided in *Appendix C*.

A utility and topographical survey drawing no. 105879 was made available for the site. A copy of which is available within *Appendix A*. Site levels at exploratory hole locations have been estimated where possible based on this survey drawing.

## 5.2 Monitoring Well Installations

Ground gas and groundwater monitoring installations (50 mm diameter) were installed all three cable percussive boreholes (BH201, BH202 and BH203) and rotary open-holed/cored borehole (RH211). A bentonite seal was placed above and below the screened section of the borehole to minimise potential for downward migration of contaminants and the creation of a preferential migratory pathway. A gravel surround was installed in the annulus between the sides of the borehole and the slotted sections of pipe.

The monitoring wells were primarily designed to assess the potential for landfill ground gas and were therefore the screened section focussed on made ground (landfill materials waste).

A summary of the response zones is presented in *Table 5.2* on the following page.

**Table 5.2 – Monitoring Well Response Zones**

| Borehole Ref. | Response Zone(s) (m bgl) | Strata Description(s)                             |
|---------------|--------------------------|---------------------------------------------------|
| BH201         | 2.0 – 14.0               | Landfill waste materials.                         |
| BH202         | 1.0 – 9.50               | Landfill waste materials.                         |
| BH203         | 2.0 – 7.50               | Landfill waste materials.                         |
| RH211         | 1.5 – 12.0               | Reworked natural clay / landfill waste materials. |

Copies of borehole logs can be referred to in *Appendix C* of this report.

## 6.0 Laboratory Analysis

Representative soil samples were selected for laboratory chemical analysis, based on field observations and to provide a characterisation of the Made Ground and natural strata encountered. Selected soil and groundwater samples were placed in laboratory provided containers and stored in cool boxes prior to being transported to the nominated laboratory under the laboratory's chain of custody documentation. The laboratory selected by Curtins for chemical and geotechnical analysis was i2 Analytical Laboratories (UKAS and MCERTS accredited).

Specific sources of contamination including, and notably, the historical landfill located onsite was targeted. With regard to site wide made ground attributed to the demolition of former commercial office buildings, soil samples were recovered across all exploratory hole locations in a non-targeted, systematic array to give adequate and representative coverage of the site accounting for the historical site use, proposed end-use and the immediate environmental setting.

### 6.1 Soil Analysis

The contaminants of concern potentially present on the site was considered to include, amongst others; organic matter, landfill waste/refuse, organics, hydrocarbons (e.g. fuel/oils), heavy metals and asbestos the extent of which is captured by the broad environmental testing suite listed in *Table 6.1*.

**Table 6.1 – Environmental Chemistry Analysis Suite: Soils**

| Suite Ref.                                                                                            | Analyte                                                              | LOD               |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------|
| <b>Soils Suite B</b>                                                                                  | Asbestos Screen, pH and Soil Organic Matter (SOM)                    | -                 |
|                                                                                                       | Arsenic, Chromium, Chromium VI, Copper, Lead, Selenium, Zinc, Nickel | 1 to 1.2 mg/kg    |
|                                                                                                       | Boron (water soluble)                                                | 0.2 mg/kg         |
|                                                                                                       | Cadmium                                                              | 0.2 mg/kg         |
|                                                                                                       | Mercury                                                              | 0.3 mg/kg         |
|                                                                                                       | Cyanide (total)                                                      | 1 mg/kg           |
|                                                                                                       | Sulphate as SO <sub>4</sub> (water soluble)                          | 1.25 mg/l         |
|                                                                                                       | Total Phenols (screen)                                               | 1 mg/kg           |
|                                                                                                       | Speciated PAHs (USEPA 16)                                            | 0.05 to 0.1 mg/kg |
|                                                                                                       | TPH CWG (Aro/Alk Split) including BTEX and MTBE                      | 0.1 to 10 mg/kg   |
| <b>In addition to the analytes listed above, the following analytes are included in Soil Suite A:</b> |                                                                      |                   |
| <b>Soil Suite A</b>                                                                                   | Ammoniacal Nitrogen (NH <sub>3</sub> & NH <sub>4</sub> )             | 0.5 mg/kg         |
|                                                                                                       | Cyanide (free)                                                       | 1 mg/kg           |
|                                                                                                       | SVOCs                                                                | 0.05 to 0.3 mg/kg |
|                                                                                                       | VOCs                                                                 | 1 mg/kg           |

Three samples of landfill waste materials were obtained from BH202 and BH203 and tested for Soil Suite A. An additional six soil samples of site wide made ground and reworked natural clay were recovered and tested for Soil Suite B.

Copies of the environmental chemistry testing certificates are presented in *Appendix D*.

## 6.2 Geotechnical Analysis

Soil samples for testing were prepared in accordance with BS1377: Part 1:2016 (Ref. 19) and representative sub-samples were taken for testing. The geotechnical tests carried out are listed in *Table 6.2*.

**Table 6.2 – Geotechnical Analysis: Soils**

| Test Type                                         | Quantity |
|---------------------------------------------------|----------|
| Moisture Content                                  | 11       |
| Atterberg Limit (4 point)                         | 8        |
| Particle Size Distributions (Wet Sieve)           | 3        |
| Optimal Moisture Content (4.5kg Vibrating Hammer) | 3        |
| BRE Suite D                                       | 6        |
| Point Load Strength Index Tests                   | 13       |

The results of the geotechnical testing are summarised in *Section 11.0*. Copies of the geotechnical testing certificates are presented in *Appendix E*.

## 7.0 Encountered Ground Conditions & Ground Model

### 7.1 General

A summary of the ground conditions encountered during the site investigation works is presented below, with detailed information presented in the exploratory hole logs included in *Appendix C* and a summary of each strata presented in subsequent sections.

**Table 7.1** – Summary of Ground Conditions Encountered

| Stratum                                                                      | Depth to top of strata (mbgl) | Thickness (m) |       | Description                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------|-------------------------------|---------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                              |                               | Min           | Max   |                                                                                                                                                                                                                             |
| <b>MADE GROUND - DEMOLITION FILL</b>                                         | 0.00                          | 0.05          | 1.0   | Grey and brown slightly clayey slightly sandy angular to subangular fine to coarse gravel of concrete, brick and sandstone.                                                                                                 |
| <b>MADE GROUND - SUBBASE</b>                                                 | 0.00                          | 0.1           | 2.0   | Creamish brown slightly sandy very gravelly clay. Gravel is angular to subangular fine to coarse of limestone.                                                                                                              |
| <b>MADE GROUND – REWORKED NATURAL CLAY</b>                                   | 0.0 – 9.7                     | 0.3           | 12.0  | Firm to stiff dark greyish brown slightly sandy slightly sandy slightly gravelly clay. Gravel is angular to subrounded fine to coarse of mudstone with rare fragments of coal, brick, sandstone, timber and plastic bags.   |
| <b>MADE GROUND – LANDFILL WASTE MATERIALS</b>                                | 0.5 – 7.2                     | 1.0           | 7.7   | Landfill waste within a black clayey matrix. Waste comprises plastic bags, carpet, rubber, timber, plastic, metal, metal wire, and brick, sandstone and concrete cobbles.                                                   |
| <b>WEATHERED PENNINE LOWER COAL MEASURES</b>                                 | 1.5 – 14.0                    | 0.5           | 1.0   | Firm to stiff brown mottled orange and grey slightly gravelly clay. Gravel is angular to subangular fine to coarse of mudstone.                                                                                             |
| <b>PENNINE LOWER COAL MEASURES*</b>                                          | 0.4 – 14.5                    | 0.45*         | 29.6* | Predominantly extremely weak to strong becoming stronger with depth thinly laminated orangish brown mottled grey mudstone and siltstone with minor/occasional bands of medium strong to strong grey fine-grained sandstone. |
| <b>PENNINE LOWER COAL MEASURES – COAL (INFERRED FLOCKTON THIN COAL SEAM)</b> | 2.8 – 8.4                     | 0.2           | 0.6   | Black intact coal.                                                                                                                                                                                                          |

\* Thickness not proven.

### 7.2 Made Ground

The interpreted extent of the historical landfill (shown as the conjectured ‘highwall’) is presented on Curtins drawing ref. 076893-CUR-00-XX-DR-GE-001-V01, a copy of which is included within *Appendix A*.

Made ground was encountered in all exploratory hole locations and was found to highly variable in composition and thickness across the site. Outside the footprint of the historical landfill (RH201 to



RH207, TT201e, TT201A and TT204C) made ground was encountered to an average depth of 1.75mbgl. Made ground typically comprised cohesive made ground described as reworked natural (cohesive made ground) recovered as slightly sandy gravelly clay. Gravel constituents included brick, mudstone, sandstone and concrete.

Made ground was not encountered beneath the demolition fill (as discussed in *Section 7.2.1*) in exploratory holes RH205, RH206 and RH207.

Within the footprint of the historical landfill, typical landfill waste materials (i.e. refuse) was encountered in the southern areas of the site whilst made ground comprising reworked natural clay was encountered in the remaining areas of the landfill. The nature of made ground encountered and typical geological succession within the footprint of the historical landfill is further detailed below:

#### **7.2.1 Surface Cover**

The majority of the site was covered by demolition fill comprising clayey slightly sandy gravel of concrete, brick and sandstone measuring on average 0.45m thick. The surface cover was encountered in nearly all exploratory hole locations and is attributed to the demolition of commercial office buildings formerly located onsite.

#### **7.2.2 Subbase**

The demolition fill was underlain by a subbase encountered in all exploratory hole locations progressed within the footprint of the historical landfill. The subbase was described as a creamish brown slightly sandy very gravelly clay. Gravel is angular to subangular fine to coarse of limestone. This stratum was recorded to be on average 0.7m thick and was generally underlain by a white geotextile membrane.

With the exception of RH205, all exploratory holes (RH201, RH202, RH203, RH204, RH206, RH207, TT201A and TT204C) progressed outside the footprint of the historical landfill did not encounter a subbase.

#### **7.2.3 Reworked Natural Clay – Cohesive Made Ground**

Made ground comprising reworked natural clay was encountered in BH201, BH203, RH206, RH208 to RH212, TT201w, TT202 to TT205 to a maximum depth of 14mbgl (BH201).

The reworked natural clay was described as firm to stiff dark greyish brown slightly sandy slightly sandy slightly gravelly clay. Gravel constituents were angular to subrounded fine to coarse of mudstone with rare fragments of coal, brick, sandstone, timber and plastic bags.

The thickness of this stratum varied spatially, with deeper deposits in the east of the site (14.0mbgl in BH201) before shallowing rapidly in the northeast corner of the site. Similarly,

these deposits became thinner in the west and north, albeit more gradual than in the northeast. The reworked natural clay was largely absent in the exploratory hole locations completed in the south.

#### 7.2.4 Landfill Waste Material

Landfill waste materials was encountered in BH202, BH203, RH211 TT202 and TT203 to a maximum depth of 12.5 mbgl. The thickest extents of these materials were generally confined to south of the site and predominantly comprised plastic bags, carpet, rubber and tyres, timber, metal, metal wire, plastic, brick, and cobbles of sandstone.

Deep lying landfill waste material was also encountered underlying the reworked natural clay in RH211 from 7.2mbgl to 12.5mbgl.

#### 7.2.5 Summary of Geotechnical Results

A summary of the geotechnical test results recorded within the made ground are presented in *Table 7.2.5*. Full details of the geotechnical results recorded are presented on the exploratory hole logs in *Appendix C* and test result certificates in *Appendix E*.

**Table 7.2.5 – Summary of Geotechnical Test Results – Made Ground**

| Parameter                                               | No. of tests | Minimum | Maximum | Average |
|---------------------------------------------------------|--------------|---------|---------|---------|
| pH                                                      | 6            | 6.5     | 9.1     | 8.15    |
| Water Soluble Sulphate (mg/l)                           | 6            | 30.9    | 1020    | 303.9   |
| SPT 'N' Value <sup>(1)</sup> – reworked natural strata  | 12           | 7       | 40      | 23      |
| SPT 'N' Value <sup>(1)</sup> – landfill waste materials | 12           | 11      | 34      | 16.4    |
| Moisture Content (%)                                    | 7            | 13      | 45      | 22.1    |
| Liquid Limit (%)                                        | 7            | 35      | 77      | 46      |
| Plastic Limit (%)                                       | 7            | 19      | 52      | 27.1    |
| Plasticity Index (%)                                    | 7            | 16      | 25      | 18.9    |
| Modified Plasticity Index <sup>(2)</sup> (%)            | 7            | 48      | 94      | 83      |
| Optimum Moisture Content (%)                            | 3            | 12      | 13      | 12.3    |
| PSD (%)                                                 | 2            | 4.9     | 18.4    | -       |
| Cobbles                                                 |              | 57      | 77.4    |         |
| Gravel                                                  |              | 7.2     | 18.3    |         |
| Sand                                                    |              | 6.2     | 10.5    |         |
| Silt/Clay                                               |              |         |         |         |

(1) Only includes SPTs in which full penetration was achieved.

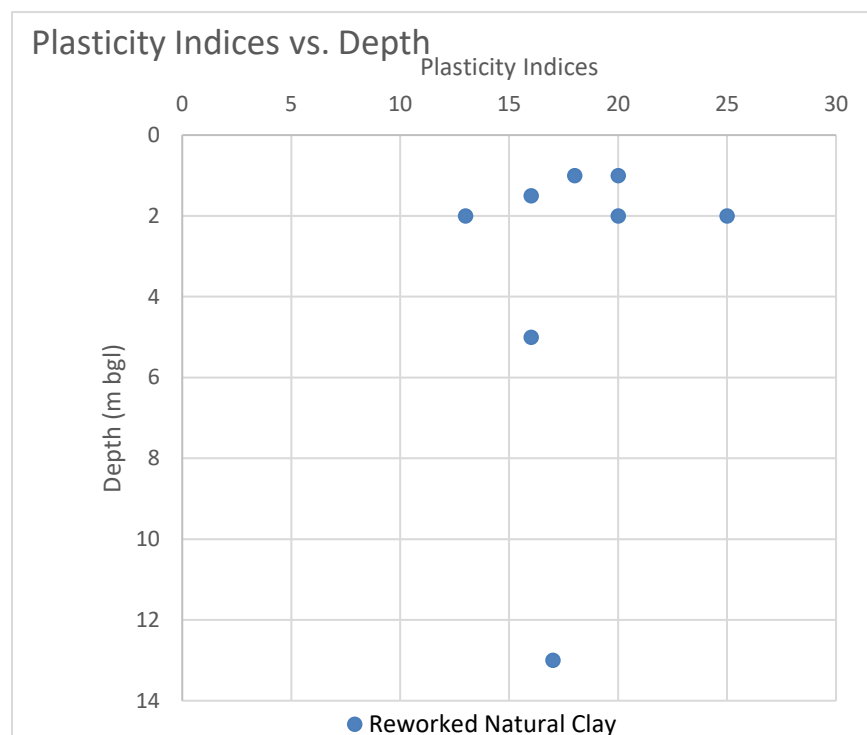
(2) Modified plasticity index is the plasticity of components <425 µm.

Based on the typically heterogenous nature of made ground, parametric analysis is not generally undertaken. However, based on the ground conditions encountered during the previous site investigation by Delta-Simons in 2018 and those detailed in this report, the reworked natural clays across the majority of the site were identified as relatively vertically and spatially uniform (with regards to composition and strength). Given this, a preliminary parametric analysis has been completed below.

It must be noted however that given the localised nature of the exploratory hole locations (i.e. providing information at that exact position), this cannot be considered to be representative of site-wide made ground (reworked natural clays). Therefore interpretation of the reworked natural clays characteristics cannot be considered to be representative of the site-wide ground characterises. The variability of this material, the potential presence of voids, landfill waste beneath and relict structures cannot be discounted. This variability is exemplified by the presence of deep lying landfill waste materials at 7.2mbgl beneath the reworked natural clay in RH211.

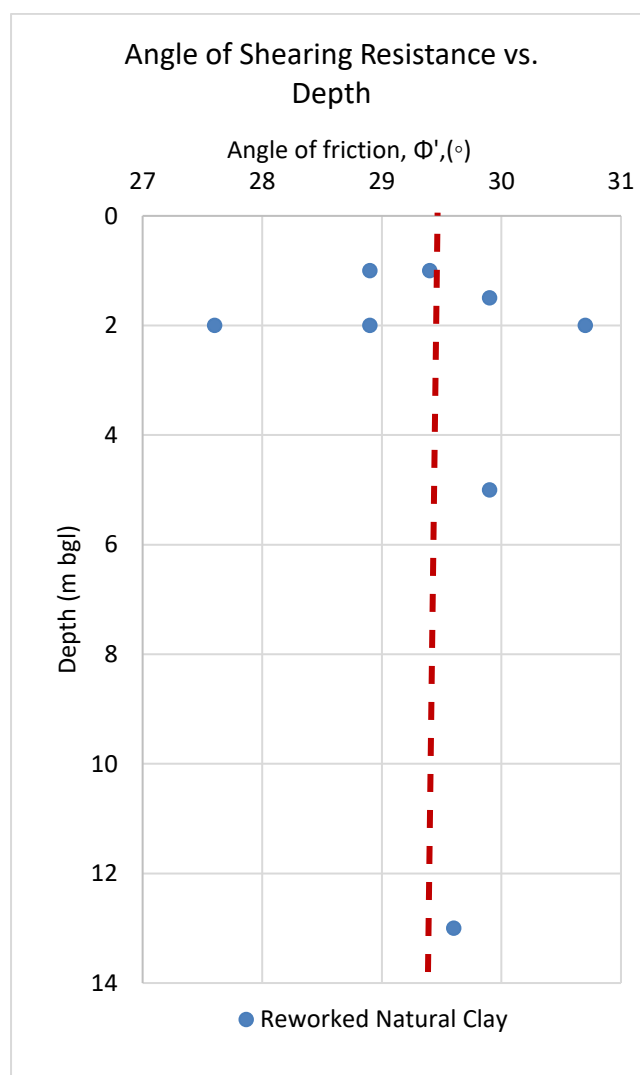
The Atterberg test results are recorded from seven samples recovered from the reworked natural clay fill and typically indicate a variable plasticity, as generally anticipated within made ground deposits. The results predominantly indicate medium plasticity clay soils, with medium and very high plasticity silts. The results are presented in *Figure 7.2.5a*.

**Figure 7.2.5a – Plasticity Indices vs. Depth – Reworked Natural Clay**



The Angle of Shearing Resistance,  $\phi'$ , for the cohesive reworked natural clay has been derived from the correlation with Plasticity Indices. A peak angle of drained shearing resistance of  $29.5^\circ$  is recommended based on this correlation taking into consideration the guidance from Gibson (1953) (Ref. 31). The results are presented in Figure 7.2.5b.

**Figure 7.2.5b – Plasticity Indices vs. Depth – Reworked Natural Clay**



The variability identified in SPT 'N' results reflects the heterogeneous nature of the landfill waste materials. A total of twelve SPT 'N' results were recorded within the reworked natural clay in BH201. These results together with 28 no. SPT 'N' values recorded within site-wide reworked natural clays during the Delta-Simons 2018 site investigation are presented below.

A moderately conservative Undrained Shear Strength,  $C_u$ , of cohesive soils can be estimated from the correlation between Plasticity Indices (PI) and SPT 'N' values (Ref. 32) using Equation 1:

$$C_u = f_1 \times \text{SPT } N \quad \text{Equation 1}$$

Where:

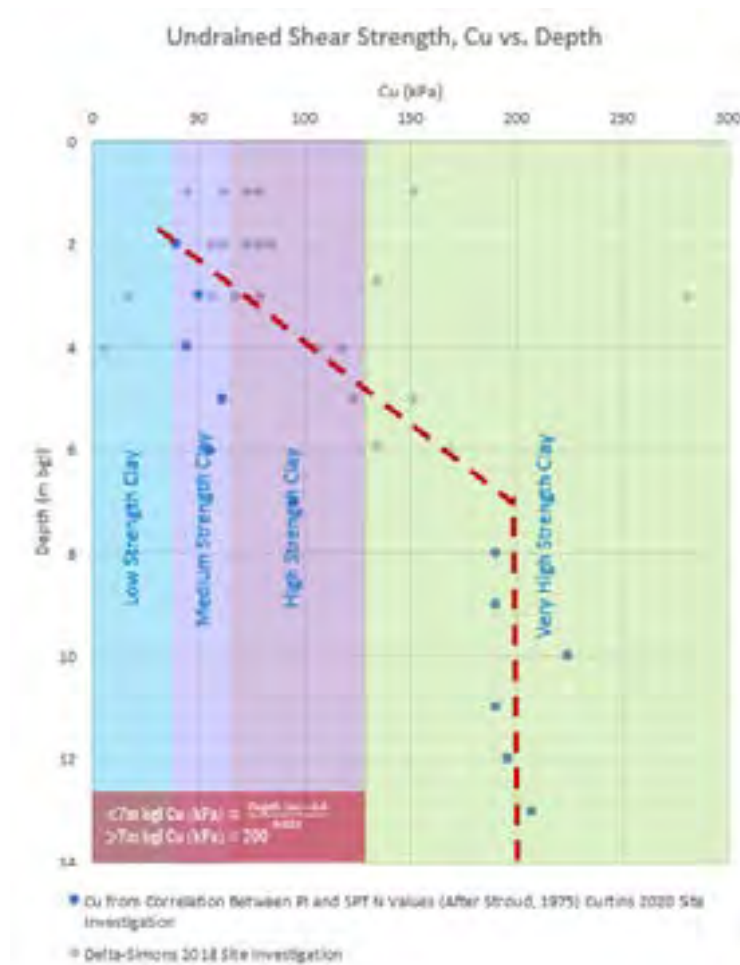
$C_u$  is the Undrained Shear Strength

$f_1$  is the Stroud Factor determined from Figure 1.5 (Ref. 32)

SPT  $N$  is Characteristic Standard Penetration Test Result

Using a maximum  $f_1$  factor of 5.6 for an average plasticity index of 18%,  $C_u$  values ranging between 5.6 and 280 kPa were determined. The results indicate an increase with depth, Figure 7.2.5c.

**Figure 7.2.5c – Undrained Shear Strength ( $C_u$ ) vs. Depth – Reworked Natural Clay**



A moderately conservative Coefficient of Consolidation,  $M_v$ , of the cohesive soils can be estimated from the correlation between Plasticity Indices (PI) and SPT N values (Ref. 32) described by Equation 2:

$$M_v = 1 / (f_2 \times \text{SPT } N) \quad \text{Equation 2}$$

Where:

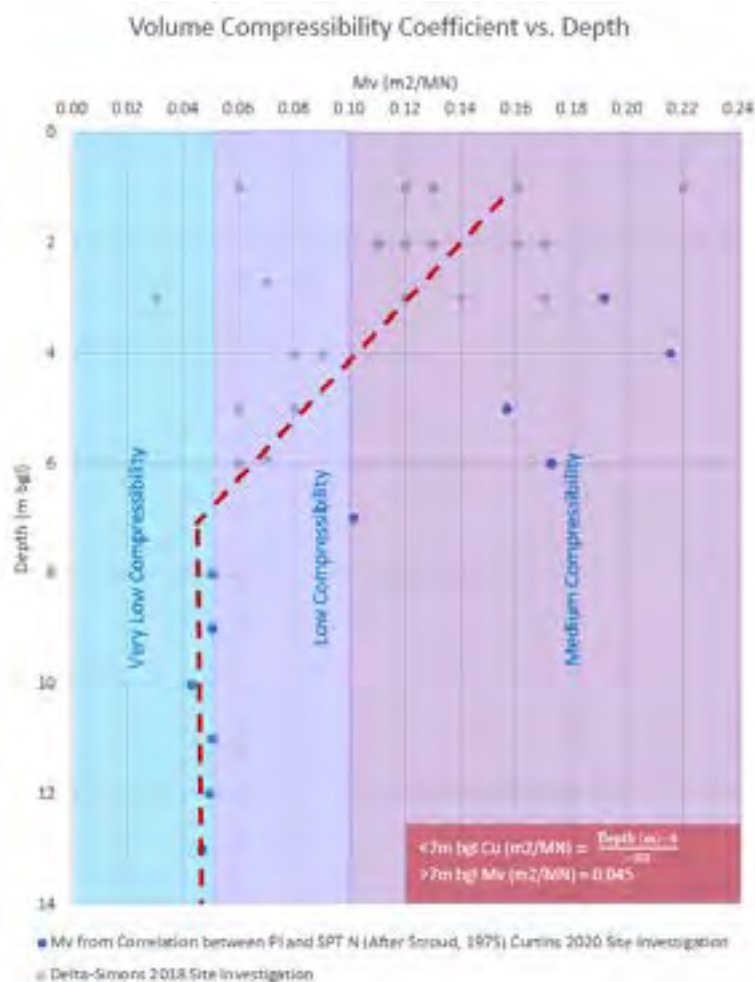
$M_v$  is the coefficient of consolidation

$f_2$  is the Stroud Factor determined from Figure 1.5 (Ref. 32)

SPT N is Characteristic Standard Penetration Test Result

Using an  $f_2$  factor of 0.58 for an average plasticity index of 18%,  $M_v$  values typically range between 0.03 and 1.72 m<sup>2</sup>/MN. The results indicate medium compressibility becoming low compressibility clays with depth, Figure 7.25d.

**Figure 7.25d – Volume Compressibility Coefficient vs. Depth – Reworked Natural Clay**



### 7.3 Bedrock

Weathered bedrock typically comprising firm to stiff brown mottled orange and grey slightly gravelly clay was encountered in BH201, BH203, RH205, TT202 and TT203 at a variety of depths ranging from 1.5mbgl (TT203) to 14.0mbgl (BH201). Gravel constituents comprised angular to subangular fine to coarse of mudstone. The average thickness of this stratum was recorded at 1m thick.

The underlying solid bedrock was encountered in BH201, BH203, RH201 to RH212, TP201A and TT204A to TT205 at depths ranging from 0.4mbgl (RH205) to 14.5mbgl (BH201). The range in depths to solid bedrock is attributed to the previous land uses and the apparent 'highwall'. The depth to solid bedrock was typically shallower (i.e. <2mbgl) in exploratory holes positioned outside the footprint of the historic landfill whereas solid bedrock was encountered at depth within the footprint of the historic landfill.

Solid geology, owing to the PLCM formation, predominantly comprised extremely weak to medium strong (becoming slightly stronger with depth) thinly laminated orangish brown mottled grey mudstone and siltstone, with minor/occasional bands of medium strong to strong grey fine-grained sandstone. These strata were encountered to a depth of 30mbgl (RH204 and RH206). The base was not proven during this investigation.

In the northeast corner, solid geology comprised a thin (0.5m thick) band of orangish brown fine-grained sandstone from a typical depth of 2mbgl, underlain by a weak greyish brown thinly laminated mudstone with thin bands of fine-grained sandstone to a maximum depth of 8mbgl (RH203).

#### 7.3.1 Summary of Geotechnical Results

A summary of the geotechnical test results recorded within the solid geology are presented in *Table 7.3.1*. Full details of the geotechnical results recorded are presented on the exploratory hole logs in *Appendix C* and test result certificates in *Appendix E*.

**Table 7.3.1 – Summary of Geotechnical Test Results – Solid Geology**

| Parameter                                    | No. of tests | Minimum | Maximum | Average |
|----------------------------------------------|--------------|---------|---------|---------|
| Moisture Content (%)                         | 1            |         | 15      |         |
| Liquid Limit (%)                             | 1            |         | 43      |         |
| Plastic Limit (%)                            | 1            |         | 30      |         |
| Plasticity Index (%)                         | 1            |         | 13      |         |
| Modified Plasticity Index (%) <sup>(1)</sup> | 1            |         | 66      |         |
| SPT 'N' Value <sup>(2)</sup>                 | 4            |         | 23      |         |
| PSD (%)                                      | 1            |         | 11.6    |         |
| Cobbles                                      |              |         | 77.0    |         |
|                                              |              |         | 8.2     |         |



| Parameter                                     | No. of tests | Minimum | Maximum | Average |
|-----------------------------------------------|--------------|---------|---------|---------|
| Gravel<br>Sand<br>Silt/Clay                   |              | 3.2     |         |         |
| Point Load Strength Index ( $Is_{50}$ ) (MPa) | 13           | 0.03    | 0.45    | 0.20    |

(1) Modified plasticity index is the plasticity of components <425 $\mu$ m.

(2) Only includes SPTs in which full penetration was achieved.

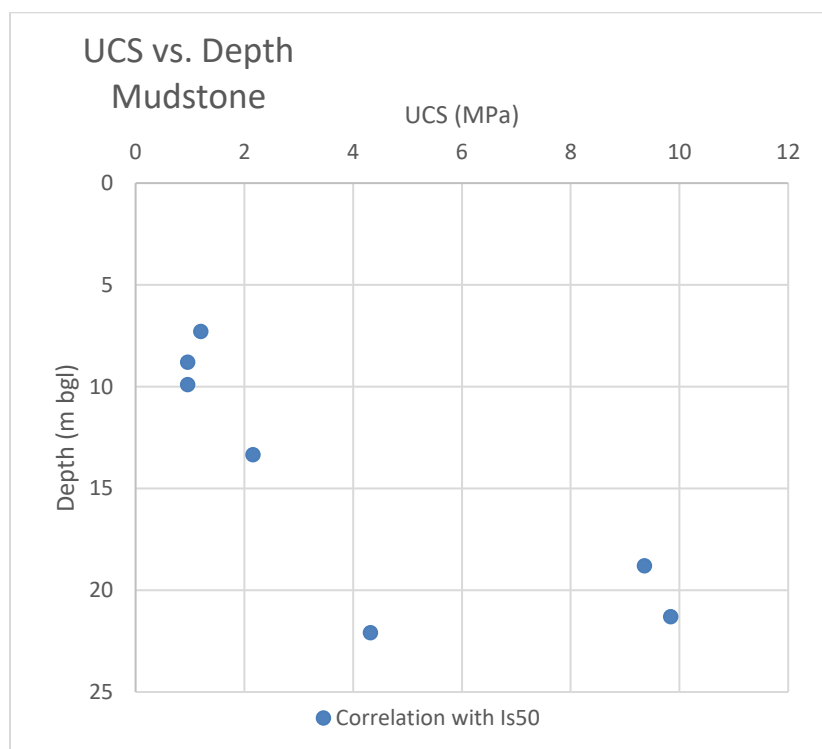
Full penetration was achieved in one SPT test at 8mbgl within weathered mudstone in BH203. The remaining three SPT tests all refused, recording 'N' values >50.

Two samples of sandstone recovered from RH211 (13.75mbgl) and TT204B (1.0mbg) reported Point Load strength index's ( $Is_{50}$ ) of 0.07 MPa and 0.37 MPa respectively.

Geotechnical testing of the one weathered bedrock indicates very high plasticity and of Low Volume Change Potential.

### 7.3.2 Mudstone – Unconfined Compressive Strength (USC)

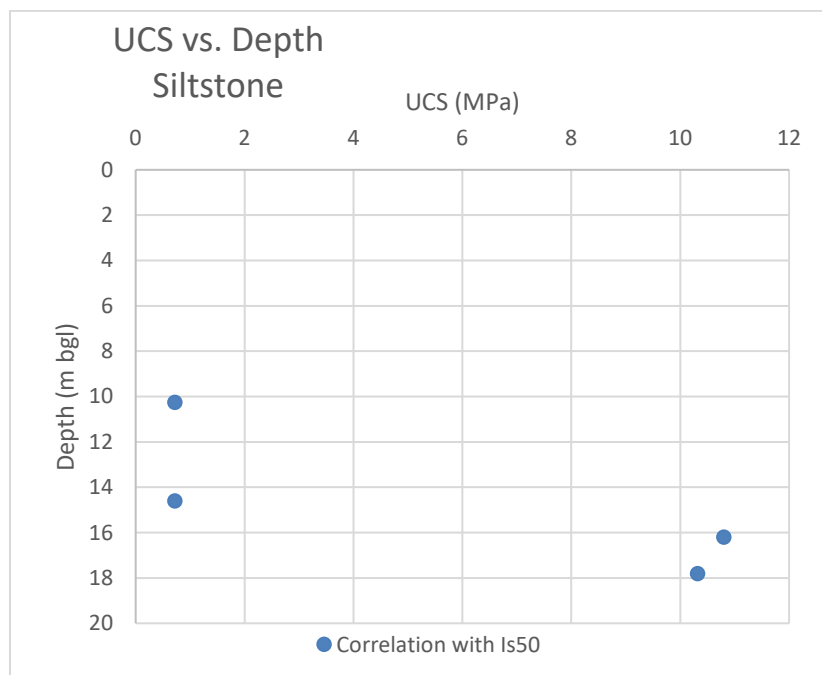
UCSs were determined from the Point Load test results from a total of 7 samples of mudstone recovered from RH211 and RH212. A factor of 24 has been used to correlate the  $Is_{50}$  determined from the Point Load tests to the UCS, *Figure 7.3.2*.



**Figure 7.3.2 – UCS vs. Depth – Mudstone**

### 7.3.3 Siltstone – Unconfined Compressive Strength

UCSs were determined from the Point Load test results from a total of four samples of siltstone recovered from RH211 and RH212. A factor of 24 has been used to correlate the  $Is_{50}$  determined from the Point Load tests to the UCS, *Figure 7.3.3*.



**Figure 7.3.3 – UCS vs. Depth – Siltstone**

## 7.4 Discussion

Given the extensive previous land use changes onsite, a large majority of the ground was disturbed. The extent of the historic landfill was largely identified by abrupt changes from landfill materials to the bedrock. It also correlates generally with the occurrence of the subbase and geotextile membrane, which was presumably placed as a capping layer above the landfill materials.

The extent of the landfill varies from that shown on the landfill boundary plans shown on the Envirocheck Report present in *Appendix B*. The landfill material (comprising both landfill waste materials and reworked natural clays) encountered indicates that the extent of the landfill extends further to the northwest but not extending as far to the northeast. The extent in the northeast is more consistent with historical mapping (dated between 1955 and 1987) which shows an embankment or 'highwall' in the northeast of the site.

The extent of the historic landfill identified is largely consistent with that identified in the Delta-Simons site investigation in 2018. With regard to the historic landfill, ground conditions were also similar in composition and extents (i.e. landfill waste materials confined to the southern areas of the site, whilst

reworked natural clays were present in the central and northern areas). The Curtins 2020 site investigation however identified greater depths of landfill waste materials and reworked natural clays in the southern and central areas respectively. In areas, these variations are partly owing to the build-up of the existing levels following the recent demolition.

Other disparities with the findings of the Delta-Simons site investigation in 2018 include a greater vertical extent of reworked natural clay in the northern area of the site. This stratum was encountered up to a depth of 3.4mbgl in TP205, positioned within close proximity to RT109 completed by Delta-Simons in 2018 which identified fill to only 0.15mbgl.

## 7.5 Coal, Historical Mine Workings, Mine Adit and Voids

Coal was encountered within the Pennine Lower Coal Measures bedrock during the investigation in RH201, RH206, RH208, TT201A and TT204C, as detailed in *Table 7.5a*.

**Table 7.5a** – Summary of Coal Encountered within the Pennine Lower Coal Measures

| Exploratory Hole Location | Depth to top of stratum (mbgl) | Thickness (m) | Coal Description                                    |
|---------------------------|--------------------------------|---------------|-----------------------------------------------------|
| RH201                     | 4.7                            | 0.2           | Recovered as drilling fines within the water flush. |
| RH206                     | 6.2                            | 0.6           | Recovered as drilling fines within the water flush. |
| RH208                     | 8.4                            | 0.2           | Recovered as drilling fines within the water flush. |
| TT201A                    | 3.4                            | 0.6           | Intact.                                             |
| TT204C                    | 2.8                            | 0.4*          | Intact – trial pit terminated within the coal.      |

\* Thickness not proven.

Two rotary open-holed boreholes (RH204 and RH206) were advanced to a maximum depth of 30mbgl to confirm the presence and conditions or absence of the First and Second Brown Metal coal seams at an anticipated depth of 27mbgl. Both boreholes did not identify any evidence of coal seams or historical mine workings to 30mbgl. This evidence includes the presence of coal drilling returns, loss of flush or soft/broken ground.

Evidence of potential historical mine workings, voids and mine adit were encountered within RH202, RH203, RH204, RH205, RH207, TT201e and TT204B, as detailed in *Table 7.5b*.

**Table 7.5b – Evidence of Potential Historical Mine Workings, Voids and Mine Adit**

| Exploratory Hole Location | Depth to top of stratum (mbgl) | Void or Workings Thickness (m) | Evidence of Historical Mine Workings and Voids                                                                                                  |
|---------------------------|--------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| RH202                     | 4.6                            | *                              | Complete (100%) loss of flush and no drilling returns yet hard competent ground to 7.0mbgl - potential broken ground suggestive of a coal seam. |
| RH204                     | 2.1                            | 2.4                            | Complete (100%) loss of flush and no drilling returns - potential broken ground suggestive of historical mine workings.                         |
|                           | 2.4                            | 2.9                            | Stiff dark brown clay with frequent fragments of coal – potential coal tailings/backfill suggestive of historical mine workings.                |
|                           | 2.9                            | 3.5                            | Complete (100%) loss of flush and no drilling returns - potential void suggestive of historical mine workings.                                  |
| RH205                     | 1.8                            | 3.5                            | Partial (60%) loss of flush – potential broken ground.                                                                                          |
|                           | 3.5                            | 4.5                            | Complete (100%) loss of flush and no drilling returns – potential void/soft ground suggestive of historical mine workings.                      |
|                           | 4.5                            | *                              | Complete (100%) loss of flush and no drilling returns yet hard competent ground to 8.0mbgl.                                                     |
| RH207                     | 3.0                            | *                              | Complete (100%) loss of flush and no drilling returns yet hard competent ground to 8.0mbgl - potential broken ground suggestive of a coal seam. |
| TT201e                    | 2.5                            | 5.0                            | Loose black angular gravel of coal (non-intact) – potential fill / coal mine tailings.                                                          |
| TT204B                    | 1.5                            | >3.0*                          | Large void encountered in the northern face of the trench – see <i>Figure 7.5.1</i> .                                                           |

\* Thickness not proven.

### 7.5.1 Discussion

The shallow coal encountered across the site is considered to be attributed to the Flockton Thin coal seam based on thickness and depths. It should be noted that recent changes to site levels resulting from demolition works may result in increased depth ranges when compared to previous site investigations. Given the thicknesses and depths of the Flockton Thin coal seam, this coal seam is considered to pose a risk to future developments based on CIRIA's SP32 10:1 criterion (Ref. 12), which considers the potential collapse of historical mine workings propagating to the surface.

Exploratory holes (RH201 to RH203, TT201A and TT201e) completed in the northeast corner of the site did not identify any evidence of collapsed mine workings. The loss of flush identified at 4.6mbgl in RH202 is at a similar depth to the coal seam identified in RH201 and therefore is considered to be broken ground attributed to the coal seam. Similarly, the thickness of loose coal tailings identified in TT201e, together with the identification of overlying reworked natural clay strata suggests disturbed ground and/or fill arisings rather than potential mine workings.

Intact coal (0.6m thick) was encountered within the PLCM in TT201A at 3.4mbgl which provides further evidence to suggest the lack of collapsed mine workings. The collapsed workings (described as loose fill) identified in the rotary probe borehole (RT101) completed by Delta-Simons in 2018 are confined to the extreme northeast boundary, trending offsite to the northeast. It should be noted the location of exploratory hole locations were restricted by the presence of the deep culverted watercourse (approximately 8mbgl) which runs parallel with the eastern boundary. Therefore, if present further to the east, the construction of the culvert may have disturbed the mine adit.

Rotary open-holed borehole RH204 drilled in the southwest of the site encountered a sequence of broken ground, potential backfilled arisings and soft ground and/or a void from 2.1mbgl to 3.5mbgl. This also coincided with a partial loss of flush followed by a complete loss of flush. These ground conditions are similar to those encountered in RT107 completed by Delta-Simons in 2018, which identified a loss of flush and no recovery which was deemed to be a potential void.

TT204B completed approximately 15m to the northeast of RH204 encountered a large void between 1.5mbgl and >3.0mbgl in the northern face of the pit. The base of the void was not proven due to collapse and rapid water ingress. The void is illustrated in *Figure 7.5.1*.

**Figure 7.5.1 – Void Identified in TT204B (1.5mbgl and 3.0mbgl).**



The nature, size and structure (i.e. overlying sandstone strata provides support as a roof) suggests potential bell pitting coal mining techniques within the west of the site. The depth at

which the void was encountered is also similar to the depths recorded for the coal in TT204C (2.8mbgl to >3.2mbgl), located approximately 5m to the west.

The evidence of potential mine workings identified between 1.8mbgl and 4.5mbgl in RH205 affirms the findings encountered within RT108 completed by Delta-Simons in 2018. Similar mining techniques (i.e. bell pitting) identified in TT204B might have been employed in this area.

The previous site investigation completed by Delta-Simons in 2018 encountered coal considered to be associated with the aforementioned coal seams at depths ranging from 37.1mbgl and 38.5mbgl. Given that these coal seams were not identified up to 30mbgl, together with an anticipated thickness (0.58m thick) and depths identified during the Delta-Simons site investigation, these coal seams are not considered to pose a risk to future developments.

Rotary open-holed boreholes (RH201 to RH203) were progressed within close proximity of the anticipated location of the mine adit located in the northeast corner of the site. The boreholes did not encounter any evidence suggestive of a mine adit. It should be noted that the location of the mine adit detailed within the Coal Authority Consultants Coal Mining Report (Ref. 6) is located within the footprint of the historic landfill. The exact (albeit approximate) location of the mine adit was investigated previously by Delta-Simons, whom identified >10m of reworked natural clay fill in this locality.

## 7.6 Obstructions/Constraints

Subsurface obstructions identified during the site investigation works are outlined in *Table 7.6*.

**Table 7.6 – Obstructions Noted During Site Investigation**

| Exploratory Hole Location | Depth (mbgl) | Obstruction Description                                                                                     |
|---------------------------|--------------|-------------------------------------------------------------------------------------------------------------|
| RH209                     | 0.0 – 3.2    | Concrete and rebar considered to be former pile foundations for the demolished commercial office buildings. |
| RH212                     | 2.2 – 2.7    | Concrete and rebar considered to be former pile foundations for the demolished commercial office buildings. |
| TT201e                    | 3.0 – 5.0    | 3 no. concrete piles with metal rebar were encountered in the southern face of the pit.                     |

Slow drilling progress was also recorded at various depths in BH202 and BH203 due to presence of rubber and tyres which inhibited drilling.

## 7.7 Observed Potential Contamination

Strong putrid/organic odours associated with the landfill waste materials were noted within exploratory hole locations BH202, BH203, RH211 TT202 and TT203. A black sludge forming the matrix to this material was also present.

Bubbling/effervescing was noted within the perched waters during the drilling of BH202. Methane concentrations recorded by the gas monitor placed directly within the borehole recorded levels greater than limits of detection. Further details are provided in *Section 9.0* of this report.

## 7.8 Groundwater

A summary of groundwater and perched water levels recorded during the site investigation are presented in *Table 7.8a*.

**Table 7.8a – Groundwater and Perched Water Noted During Site Investigation**

| Exploratory Hole Location | Water Strikes       |                                                 |
|---------------------------|---------------------|-------------------------------------------------|
|                           | Strike Depth (mbgl) | Strata                                          |
| TT202                     | 4.5                 | Landfill waste                                  |
| TT203                     | 2.5                 | Mudstone – water ingress from landfill material |
| TT204A                    | 3.4                 | Reworked natural clay                           |
| TT204B                    | 3.0 rising to 2.5   | Mudstone                                        |
| BH202                     | 6.0 rising to 5.3   | Landfill waste                                  |
| BH203                     | 5.5 rising to 3.5   | Landfill waste                                  |

Groundwater strikes in the landfill waste are considered to represent perched water.

Three rounds of groundwater monitoring have been undertaken between 22<sup>nd</sup> September and 16<sup>th</sup> October 2020, the results of which are presented in *Table 7.8b*. Full details of the water levels recorded during the monitoring visits are presented in *Appendix F*.

**Table 7.8b – Groundwater Monitoring Results**

| Borehole Ref. | Installation Strata                               | 22/09/2020   | 08/10/2020   | 16/10/2020   |
|---------------|---------------------------------------------------|--------------|--------------|--------------|
|               |                                                   | Depth (mbgl) | Depth (mbgl) | Depth (mbgl) |
| BH201         | Landfill waste materials.                         | 11.48        | 12.7         | 12.15        |
| BH202         | Landfill waste materials.                         | -            | 4.44         | 5.65         |
| BH203         | Landfill waste materials.                         | -            | 3.37         | 3.19         |
| RH211         | Reworked natural clay / landfill waste materials. | -            | 7.15         | 6.94         |

- not recorded due to fault with the interface probe

A consistent groundwater body cannot be determined this is likely owing to the highly variable fill and the coal mine legacy features outside of the filled area. It is likely that perched groundwater is prevalent across the site.



## 7.9 Aggressive Ground Conditions

The classification of the site in terms of concrete in aggressive ground is based on the guidance provided in Table C2 of the Building Research Establishment (BRE) Special Digest 1, third edition of 2005 (Ref. 20). *Table 7.9* details the classification.

**Table 7.9 – Aggressive Chemical Environment for Concrete (ACEC) Site Classification**

| Stratum                                                     | Design Sulphate Class | ACEC Class <sup>(1)</sup> |
|-------------------------------------------------------------|-----------------------|---------------------------|
| Curtins Made Ground (reworked natural and landfill samples) | DS-1                  | AC-1s                     |
| Delta-Simons samples                                        | DS-2                  | AC-2s                     |

(1) ACEC assessment was based on the *static* groundwater condition in a *brownfield* scheme area

The Delta-Simons report concluded a DS-2, AC-2 assessment. Given the variability in the landfill material is considered prudent to adopt a more conservative design class.

## 8.0 Ground and Groundwater Contamination Assessment

This section of the report includes the assessment of the potential contamination, solid, liquid and gas, identified on the subject site which may present a risk to the proposed end-users, associated utilities and the wider environment.

In guidance published by the Environment Agency, the risk to human health or Water Environment is determined through an assessment of pollutant linkages between a source of contamination (within the ground or groundwater either on or off site) and a sensitive receptor such as end-users of the site, building materials, edible plants grown in gardens or groundwater abstracted for drinking. This is termed a source-pathway-receptor relationship. The same model is applied to the assessment of risk arising from ground gases as detailed within BS8576:2013 (Ref. 21).

These models have a common approach, which is one of a tiered assessment. At each stage of the assessment further detail can be applied to the conceptual site model to provide a detailed interpretation on a site by site basis. As part of the planning process this approach is adopted to establish either if the site is 'suitable for use' or whether additional work or else remedial work is required for the site to be deemed so.

The sub-sections hereafter therefore incorporate the first tier (Tier 1) of this approach otherwise referred to as the Generic Quantitative Risk Assessment (GQRA). The GQRA builds on the qualitative risk assessment presented in *Section 4.0* in conjunction with observations made during the ground investigation and is based solely on the results of the chemical and other testing data obtained as part of Curtins ground investigation. The GQRA is used to build/refine the Conceptual Site Model (CSM) for the site as detailed and presented in *Section 9.0* of this report.

The following sections present more detail on the risk assessment methodology rationale for the main receptors.

### 8.1 Human Health GQRA

Detailed guidance on human health risk assessment is available within several documents, published by both the Environment Agency and Defra. Guidance includes Contaminated Land Exposure Assessment (CLEA) v1.071 model (Ref. 22), Report SC050021/SR2: Human Health Toxicological Assessment of Contaminants in Soil (Ref. 23) and Report SC059921/SR3: Updated Technical Background to the CLEA Model (Ref. 24).

A generic quantitative risk assessment (GQRA) has been carried out for the Potential Contaminant Linkages (PCLs) investigated by screening of soil contamination data against relevant Generic Assessment Criteria (GAC) where available, including:

- i) **Soil Guideline Values (SGVs):** These have been published by the Environment Agency and are trigger values for screening out low risk areas of land contamination. SGV's give an indication of representative average concentrations of chemicals in soil, below which long-term

health risks are likely to be minimal. SGVs have been published for several contaminants including arsenic, cadmium, mercury, nickel, selenium, BTEX, phenols and dioxins, furans and dioxin-like PCB substances for land uses including residential, allotments and commercial. The SGVs have been developed for a sandy loam soil with 6% soil organic matter (SOM) content;

- ii) **Supplementary Screening Values (SSVs):** In addition to the SGVs developed by the EA, other third-party organisations have derived SSVs for a wider range of contaminants and land uses using the CLEA Model. Curtins have adopted these numbers where applicable, including those developed by Atkins AtriskSoil™, the LQM/CIEH Suitable for Use Levels (S4UL) and EIC/AGS/CL:AIRE published thresholds;
- iii) **Category 4 Screening Levels (C4SLs):** In March 2014 Defra published C4SLs for arsenic, benzene, benzo(a)pyrene, cadmium, hexavalent chromium and lead. These values were derived to support the revised Part 2A Statutory Guidance issued in 2012 (Ref. 25) in which four categories of contaminated land are included, ranging from Category 1 (significant/high risk) to Category 4 (low risk). C4SLs are not representative of significant possibility of significant harm (SPoSH) and are low risk levels which, and therefore where the C4SLs are not exceeded, land can be demonstrated to be in Category 4 and cannot be determined as contaminated land.

#### 8.1.1 Adopted Soil Human Health GACs Screening Methodology

It is anticipated that the end-use of the site be most analogous with a *Commercial* end-use scenario and so assessment has been undertaken against the following GACs, in order of preference:

1. Environment Agency Soil Guideline Values,
2. CL:AIRE, AGS, EIC. Soil Generic Assessment Criteria for Human Health Risk Assessments,
3. LQM/CIEH 2015 S4ULs for Human Health Risk Assessment, and
4. DEFRA Category 4 Screening Levels.

The soil organic matter (SOM) content has an influence on the volatilisation of organic contaminants (i.e. the higher the SOM, the lower the volatilisation rate and therefore inhalation exposure risk). Soil organic matter (SOM) values for the site soils (predominantly consisting of reworked natural clays) ranged from 0.5% to 9.9%. The highest reported SOM values were recorded in samples recovered from the landfill waste materials.

With consideration for a calculated geometric average, Made Ground features determine an SOM of 3.62%. As such, a comparison against *Commercial* end-use General Assessment Criteria SOM of 6.0% has been adopted for both the made ground. The adopted GAC's are listed in *Appendix G*.

### **8.1.2 Generic Assessment Criteria Screening of Soil Laboratory Results**

The results of the environmental testing can be referred to in *Appendix D*.

With respect to the proposed end-use of the site, no exceedances were reported above the GAC thresholds within the nine samples of made ground recovered and scheduled.

All nine samples of made ground (including representative samples of the surface demolition) were scheduled for asbestos identification. No suspected Asbestos Containing Materials (ACMs) were identified in the exploratory hole logs nor were any asbestos fibres identified in all nine samples scheduled.

## **8.2 Materials Management**

### **8.2.1 Re-use of Site Soils**

Based on the geochemical testing results presented as part of this investigation it is considered that there is no specific requirement to remove soils from site because of them presenting an unacceptable risk to human health or the environment.

The re-use of site-won soils may therefore be undertaken if the following principles are met:

- i) the geotechnical suitability of the material needs to be confirmed;
- ii) the re-use of the material needs to be covered as part of the planning approval, e.g. site levels maintained within agreed limits;
- iii) the volume of the material being re-used needs to be confirmed and traceable; and
- iv) regulatory approval from the relevant authorities has been sought.

These principles are outlined within the CL;AIRE Definition of Waste Code of Practice (v2) (Ref. 26) and if and where the re-use of site-won soils is proposed as part of the development works it is recommended that a Materials Management Plan is produced in line with the Definition of Waste Code of Practice to detail and document the process.

## 9.0 Ground Gas Assessment

The assessment of risk presented by ground gases is assessed with reference to guidance published by CIRIA (Assessing Risks Posed by Hazardous Ground Gases to Buildings, C665 (Ref. 27), BSI Publication (Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings BS8485:2015 (Ref.28) and other broadly accepted references such as the Ground Gas Handbook 2009 (Ref. 29).

The gas risk assessment adopts a tiered approach. In the first instance this involves a re-evaluation of the Conceptual Site Model described within *Section 3.0* and thereafter validating this conceptual model with the ground gas data, the semi-quantitative risk assessment.

### 9.1 Conceptual Site Model

The Conceptual Site Model presented within the Phase 1 Preliminary Site Assessment in *Section 4.0* identified significant potential ground gas sources associated with landfill waste materials attributed to the historic landfill located onsite and extending offsite to the southeast. Infilling operations are thought to have been undertaken between the 1970s and 1980s.

Ground gas monitoring undertaken during the previous site investigation by Delta-Simons in 2018 reported slightly elevated concentrations of carbon dioxide >5% were recorded in DS111 and DS112 installed within the underlying PLCMs. The maximum concentration of methane was recorded at 2.02% in DS106 also partly installed within the PLCMs. The maximum elevated concentrations of methane and carbon dioxide are attributed to monitoring wells installed within the PLCMs.

Monitoring wells installed within the reworked natural clays at DS102, DS106 and DS107 recorded maximum carbon dioxide concentrations ranging from 3.24%v/v to 4.41%v/v.

Ground gas monitoring undertaken by WSP, and reported in the Delta-Simons Phase I Environmental Site Assessment, reported recorded maximum elevated concentrations of methane at 69.7%v/v and flow rates of 8.1 l/hr within boreholes considered to be located within the offsite portion of the historic landfill to the southeast.

As detailed in *Section 3.6*, the existing ground gas monitoring records were primarily taken from exploratory hole locations installed within the PLCMs and reworked natural clay (made ground). Only one borehole (DS104) was installed, albeit partially, within the landfill waste materials (as identified during the previous site investigation by Delta-Simons) which are considered to possess the greatest putrescible content and ground gas generation. Based on the limited ground gas monitoring records from the landfill waste materials, the Preliminary Conceptual Site Model in *Section 3.0* identified a **Moderate Risk**.

The Curtins 2020 ground investigation revealed a ground model generally consistent with Delta-Simons' 2018 site investigation and therefore the preliminary site model. A significant thickness of landfill waste materials was identified within the southern part of the site, whilst made ground (principally reworked natural clays) were encountered across the majority of the site. Anthropogenic materials including timber and plastic bags were identified within the reworked natural clays.

During intrusive works, the landfill waste materials were recovered in a black sludge matrix which exhibited a strong putrid/organic odour.

As detailed in *Section 9.2*, bubbling/effervescing was noted within the perched waters during the drilling of BH202. Methane concentrations recorded by the gas monitor placed directly within the borehole recorded levels greater than limits of detection. Further bubbling/effervescing was also noted during subsequent monitoring rounds within BH202.

## 9.2 Ground Gas Monitoring Results

To characterise the site's ground gas regime and validate the qualitative assessment of ground gas risk standpipe installations were incorporated within four borehole locations as detailed in *Section 5.2*.

Three gas monitoring visits were undertaken between 22<sup>nd</sup> September and 16<sup>th</sup> October 2020, with barometric pressure recorded between 983 and 1008mb. The results log sheets are contained within *Appendix F* and summarised in *Table 9.1*:

**Table 9.1 – Summary of Ground Gas Monitoring Results**

| Borehole Ref. | Maximum CH <sub>4</sub> Concentration (%) | Maximum CO <sub>2</sub> Concentration (%) | Minimum Steady O <sub>2</sub> Concentration (%) | Maximum gas flow (l/hr) |              |
|---------------|-------------------------------------------|-------------------------------------------|-------------------------------------------------|-------------------------|--------------|
|               |                                           |                                           |                                                 | Peak                    | Steady State |
| BH201         | 29.6                                      | 6.7                                       | 5.4                                             | 0.0                     | 0.0          |
| BH202         | 78.8                                      | 21.4                                      | 0.1                                             | -0.4                    | -0.2         |
| BH203         | 67.9                                      | 17.5                                      | 0.1                                             | 0.0                     | 0.0          |
| RH211         | 78.6                                      | 17.3                                      | 0.0                                             | 5.2                     | 5.2          |

Maximum methane concentrations of between 29.6%<sub>v/v</sub> and 78.6%<sub>v/v</sub> were recorded across the four boreholes installed within the footprint of the historic landfill. The greatest concentrations were recorded in the three boreholes (BH202, BH203 and RH211) installed within the landfill waste materials.

Maximum carbon dioxide concentrations of between 6.7%<sub>v/v</sub> and 21.4%<sub>v/v</sub> were recorded. Similar to methane concentrations, the greatest concentrations were recorded within the three boreholes installed within the landfill waste materials.

Barometric pressures <1000mb were recorded on the first and second, with falling barometric state recorded on the second visit. A rising barometric state was recorded on the third visit.

The greatest recorded, positive, peak flow rate was recorded in RH211 on the second visit, recording a peak and steady flow rates of 5.2 l/hr. The steady state flow rate was recorded for a period of 5 minutes. The differential pressure was recorded at 26 mbar and 38 mbar during the second and third rounds of monitoring in this monitoring well. It should be noted that groundwater levels were not recorded above the response zone which can give rise to increase in pressure within the pipework, which when released, and subsequent equalised, when the gas tap is opened, can result in high or increased peak flow rates followed by considerably lower steady flow rates. This was not observed in any monitoring wells during the ground gas monitoring programme. A negative peak flow rate of -0.4l/hr, reducing to a steady rate of -0.2l/hr was also recorded in BH202 during the second round of gas monitoring.

Groundwater levels were recorded to be slightly variable across the ground gas programme.

Maximum concentrations of hydrogen sulphide (H<sub>2</sub>S) and carbon monoxide (CO) were recorded at 2ppm and 15ppm respectively, during the second round of gas monitoring. These concentrations were generally consistent across all four borehole locations.

Bubbling/effervescing was noted within the perched waters during the drilling of BH202. Methane concentrations recorded by the gas monitor placed directly within the borehole recorded levels greater than limits of detection during drilling. Bubbling/effervescing was further reported during the second round of gas monitoring.

The This phenomenon, together with the negative flow rate are suggestive of gas generation.

### **9.3 Ground Gas Assessment**

When plotted on ternary plots within Ground Gas Information Sheet (Ref. 30), the 'worst-case' gas concentrations recorded in the three monitoring wells installed within the landfill waste materials are typical of anticipated gas concentrations in landfills. The elevated concentrations of methane identified are comparable to those recorded by WSP in monitoring wells installed in the presumed offsite portion of the historic landfill.

The presence of putrescible material and the steady rates of flow, along with evidence of pockets of gas encountered during the drilling confirm that gas generation is more than likely occurring. The variable nature of the fill may give rise to periodic or fluctuating flows which was observed in the monitoring to date.

Proposed development plans indicate the construction of commercial retail units, and as such an assessment in accordance with CIRIA C665 (Ref. 28), has been undertaken. This approach considers the maximum flow rates and gas concentrations recorded, adopting the 'worst-case' Gas Screening Value (GSV).



Based on the ground gas monitoring results the maximum methane and carbon dioxide GSVs were calculated at 4.087 and 0.9 respectively. The maximum calculated GSVs are indicative of a CS4 classification. Based on the GSVs and other lines of evidence pertaining to gas generation from the landfill waste materials, it would be prudent to allow for CS4 gas protection measures to be zoned across the extent of the landfill underlain by landfill waste materials (i.e. refuse). Therefore based on the proposed development, both retail units will require CS4 gas protection measures.

Ground gas monitoring completed by Delta-Simons in 2018 recommended a site-wide CS2 classification based on maximum concentrations of methane and carbon dioxide of 2.02%v/v and 6.3%v/v respectively. The monitored wells were located outside of the landfill and suggest that zoning of the site may be a possibility. The maximum peak concentrations of carbon dioxide reported in excess in BH201 during all three monitoring rounds were comparable with the Delta-Simons data. However, maximum peak methane concentrations recorded between 20% v/v and 30% v/v, in excess of Delta-Simons data.

Although the Delta-Simons data suggests a relatively low gas risk, Curtins consider the risk to the proposed development to be greater than previous monitoring suggests. This is owing to the concentrations of methane and carbon dioxide recorded and the variability of the backfill material. In addition to this the presence of broken and voided bedrock adjacent and in close proximity to the landfill material may provide potential viable pathways for gas migration. Given the proximity of the proposed buildings either on or close to the landfill material and the potential for migration to occur it is not considered prudent to zone the site and therefore the proposed buildings.

In summary, it is Curtins assessment that the gas risk at the site warrants the adoption of protection measures equivalent to a CS4 gas risk for both of the proposed buildings.

The potential risks from ground gases to the excavations are to be dealt with by the Contractor, in accordance with the Confined Space Regulations, during construction. Appropriate ground gas monitoring and safety measures should be in place during the works, as the potential presence of ground gases could pose a risk in any confined spaces of deep excavations.

## 10.0 Revised Conceptual Site Model

The Preliminary Conceptual Site Model (PCSM) presented in *Section 4.0* of this report has been revised following the GQRA in *Section 8.0 and 9.0* above. The Revised Conceptual Site Model (CSM) is summarised in the table overleaf.

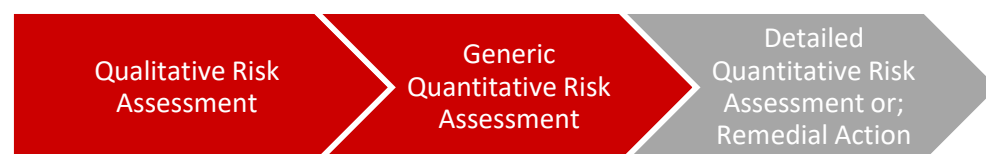
The CSM details the source-pathway-receptor linkages or potential pollutant linkages (PPL) that have been identified as relevant for the site. The GQRA details the associated level of risk relating to these potential pollutant linkages.

The CSM follows the framework outlined within CIRIA C552 (Ref. 13) which is summarised within *Appendix H*.

The 'risk rating' within the CSM refers to the risk that the source, pathway, receptor linkage or PPL is complete. Unless specifically stated it does not necessarily refer to an immediate risk and is intended to be used as a tool to assess the necessity for further assessment/investigation.

Risks presented by Unexploded Ordnance is discussed and assessed in *Section 2.7*.

Under current health and safety legislation, employers are required to carry out their own appropriate risk assessments and mitigation to protect themselves and their employees, other human receptors and the environment from potential contamination. Such risks must be adequately mitigated by law, specifically the Construction Design Management (CDM) Regulations, 2015 (Ref. 14) which require that potential risks to human health and the environment from construction activities are appropriately identified and all necessary steps taken to eliminate / manage that risk. It has been assumed that any future construction works onsite will be undertaken in compliance with these requirements. Reference should be given to the environmental testing results discussed within *Section 6.0* and presented within *Appendix D*.



- The table below represents the Second stage in the land quality risk assessment process; the Revised Conceptual Site Model following the Quantitative Risk Assessment.
- For a development site to be deemed 'suitable for use' the level of risk needs to be brought down to acceptable levels, i.e. low to very low risk. The purpose of each stage of risk assessment is ultimately to establish if there is a requirement for additional levels of assessment to be made to have sufficient confidence to support a risk characterisation or management decision, e.g. remedial action.
- In the absence of specific site data, a Generic Quantitative Risk Assessment is invariably recommended.

| Conceptual Site Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                         |                                                                                 | Qualitative Risk Assessment                           |                                                                                                                                                                                                                                                                                                                                     |                 | Recommended Actions                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Source                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Pathway(s)                                                                                                                              | Receptor(s)                                                                     | Consequence                                           | Likelihood of Occurrence                                                                                                                                                                                                                                                                                                            | Risk Rating     |                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>On-site sources of potential contamination:</b> <ul style="list-style-type: none"> <li>• <b>Made ground</b> demolition rubble associated with former commercial buildings. No further contaminants were reported in excess of the assessment criteria protective of a commercial end use during the Curtins 2020 site investigation.</li> <li>• <b>Landfill materials</b> comprising industrial, commercial and household waste, and liquid sludge. Locally elevated concentrations of PAH compounds identified in one sample of landfill material recovered during the Delta-Simons 2018 site investigation. No further contaminants were reported in excess of the assessment criteria protective of a commercial end use during the Curtins 2020 site investigation.</li> </ul> | <b>Direct contact with contaminated soils and shallow/ surface groundwater</b><br><br><b>Ingestion, inhalation of soil derived dust</b> | <b>Site End Users</b><br><br>(Commercial)                                       | <b>Medium</b><br><br>Chronic health risk.             | <b>Very Low</b><br><br>Considering the limited number of elevated concentrations of PAH compounds identified in one sample recovered from the landfill material and given the presence of a capping layer.<br><br>No ACMs or asbestos fibres were identified within any samples including demolition fill materials at the surface. | <b>Low</b>      | No further actions required as capping layer (in the form of a subbase and geotextile membrane typically measuring >0.3m thick) has been adopted currently across the site. The proposed development comprises building cover and hardstanding across the entire site, which in essence replaces the capping layer.<br><br>If the proposed development were to alter then further assessment would be required. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                         | <b>Construction and maintenance workers</b>                                     | <b>Medium</b><br><br>Chronic health risk.             | <b>Very Low</b><br><br>Standard Health & Safety precautions likely to be adopted by construction workers which will reduce likelihood of contact with contaminated soils.                                                                                                                                                           | <b>Low</b>      | Construction Workers should be provided with appropriate PPE during all groundwork activities.                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Direct contact, ingestion, inhalation within windblown dust</b>                                                                      | <b>Adjacent Commercial Building Users</b>                                       | <b>Medium</b><br><br>Chronic health risk.             | <b>Very Low</b><br><br>Considering the limited number of contaminants and the presence of a capping layer.                                                                                                                                                                                                                          | <b>Low</b>      | No further actions required as capping layer (in the form of a subbase and geotextile membrane typically measuring >0.3m thick) has been adopted currently across the site. The proposed development comprises building cover and hardstanding across the entire site, which in essence replaces the capping layer.<br><br>If the proposed development were to alter then further assessment would be required. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Horizontal and vertical migration of contaminants</b>                                                                                | <b>Controlled Waters</b><br><br>Surface Water<br>Howden Clough Beck (190m east) | <b>Mild</b><br><br>Pollution of non-sensitive waters. | <b>Very Low</b><br><br>Given the distance from the site to Boggart Hole Brook.                                                                                                                                                                                                                                                      | <b>Very Low</b> | No further actions required.                                                                                                                                                                                                                                                                                                                                                                                    |

| Conceptual Site Model                                                                                                                                                                                                   |                                                         |                                                                          | Qualitative Risk Assessment                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             | Recommended Actions                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Source                                                                                                                                                                                                                  | Pathway(s)                                              | Receptor(s)                                                              | Consequence                                                           | Likelihood of Occurrence                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Risk Rating |                                                                                                                                                   |
|                                                                                                                                                                                                                         |                                                         | <b>Controlled Waters</b><br>Groundwater<br>Bedrock - Secondary A Aquifer | <b>Medium</b><br>Site is not located within a Source Protection Zone. | <b>Very Low</b><br>Based on limited elevated concentrations of contaminants, namely PAH compounds, identified during the previous Delta-Simons 2018 site investigation. No further contaminants were identified during the Curtins 2020 site investigation. The underlying bedrock predominantly comprises mudstone which limits vertical migration of contaminants.                                                                                                                           | <b>Low</b>  | No further actions required.                                                                                                                      |
| <b>Production of ground generating gases</b> from landfill materials containing organic/putrescible content located onsite and extending offsite. Infilling is considered to have occurred between the 1970s and 1980s. | <b>Horizontal and vertical migration of ground gas.</b> | <b>Site End Users</b><br>(Commercial)                                    | <b>Medium</b><br>Chronic health risk.                                 | <b>High</b><br>Maximum peak concentrations of methane and carbon dioxide were recorded at 78.8% and 21.4% respectively within monitoring wells installed within the landfill waste materials, indicating CS4. These concentrations were typical within all three monitoring wells installed within the landfill waste materials (minus the elevated flow rates).<br>Evidence of gas generation (flow rates and bubbling) was further identified within the monitoring well installed in BH202. | <b>High</b> | In view of the calculated GSVs and appraisal of the ground model at the site it assessed that protection measures of CS4 are adopted on the site. |

## 10.1 Summary of Pollutant Linkages

A **High** risk rating is identified to proposed commercial end-users from ground gases associated with historic landfill located onsite and offsite, migrating into buildings and subsequent inhalation. The area of landfill waste materials beneath the area in the south of the site represents a significant source of ground gas with high methane and carbon dioxide concentrations. In addition to the elevated gas concentrations recorded and variability of the backfill material, broken and voided bedrock was identified adjacent and in close proximity to the landfill which may provide potential viable pathways for gas migration. Given the proximity of the proposed buildings either on or close to the landfill material and the potential for migration to occur it is considered prudent to adopt gas protection measures equivalent to a CS4 characterisation situation.

No elevated concentrations of contaminants were reported in excess of the assessment criteria protective of a commercial end use; however, elevated concentrations of PAH compounds were identified within one sample recovered from landfill waste materials during the Delta-Simons 2018 site investigation. As the exceedance was localised to the landfill waste materials, a **Low** risk rating has been identified to site end-users (commercial), construction workers and adjacent workers from made ground associated with the historic landfill. The assessment is based on the proposed development comprising building cover and hardstanding cover breaking the source-pathway-receptor linkage to end users (i.e. replacing the capping layer). If the proposed development were to alter then further assessment would be required.

The risk to the sensitive Secondary A Aquifer, which underlies the site from leachable contamination in site soils through vertical and horizontal migration through the superficial deposits is assessed as **Low** due to bedrock underlying the site predominantly comprising low permeable mudstone. The mudstone will act as an impermeable barrier, inhibiting the downward migration of slightly elevated concentrations of PAH compounds identified within one sample of landfill waste materials recovered during the Delta-Simons 2018 investigation.

## 11.0 Engineering Assessment and Recommendations

### 11.1 Introduction

This section will assess the relevant geotechnical issues for a proposed commercial development. The engineering assessment considers foundation design, bearing capacity, excavations, ground floor slabs and concrete design for the site. Structural details and loadings have not yet been provided. It should be noted that detail may change in the development of designs beyond the issue of this Phase 2 Report and the Construction Designer should satisfy themselves regarding the adequacy of their design and proposed approach to construction by reference to the on-going project design proposals, the site investigation information and their own examination of the site.

### 11.2 Summary of Ground Conditions

The majority of the site is covered by a historic, infilled landfill. Within the footprint of the historic landfill, ground conditions generally comprised a sequence of demolition fill underlain by a subbase. This was underlain by reworked natural cohesive clay and further by mudstone and siltstone with minor bands of sandstone attributed to the PLCMs. Landfill waste materials were encountered beneath the subbase in the southern portion of the site, and at depth beneath the reworked natural clay towards the centre of the site. Outside the footprint of the historic landfill, bedrock (including shallow coal) was generally encountered at shallow depth. Potential voids and collapsed mine workings were also observed at shallow depths across the site.

Perched water levels within the landfill waste materials were highly variable, with levels fluctuating rapidly over relatively short temporal scales. Perched water levels were generally greater than 3mbgl.

### 11.3 Foundation Design

It is understood that the proposed development is to consist of two single storey commercial properties. Loadings are currently unknown, however given the proposed development are not considered to be excessive.

The proposed foundations solution is dictated by the observed ground conditions.

The made ground is not considered a suitable founding stratum due to its inherent variability in composition and consistency, therefore foundations. Given the overall depth of made ground within the landfilled area a piled foundation solution is recommended. The pile design should be undertaken by a suitably qualified piling contractor however potential for settlement around the piles, predominantly in the landfill waste and the potential for ongoing creep/consolidation within the reworked material.

The presence of putrescible material is likely to give rise to ongoing and variable settlement and decomposition within this material which would negatively affect the performance of any ground improved solution. Any ground improvement solution that relies on any level of geotechnical performance within the landfill material should be treated with caution owing to the current variability and the potential for variable degradation over the design life of the structure. Further to this the presence of material which is actively gassing should be considered with some ground improvement techniques likely to increase this risk. The design of any ground improvement should be undertaken by a specialist designer with consideration of the risks inherent with the material identified as part of this ground investigation. Further Ground Investigation will be required to inform a proposed ground improved solution.

Outside of the fill area the presence of mine legacy features including large voids and bands of broken ground will likely negate the adoption of shallow foundations. Large voids filled with grout will unlikely be suitable as a founding stratum with piled solution transferring loads into competent rock below the zone of workings are likely to be required. An alternative solution maybe to bulk excavate the areas outside of the landfill to allow back filling of voids with engineered fill which, if placed to a suitable performance specification may be suitable for the adoption of shallow foundations.

#### **11.4 Ground Floor Slabs**

Based on observation onsite together with the results of laboratory tests it is recommended that, ground floor slabs should be suspended.

#### **11.5 Road and Pavement Design**

Based on the current layout it is identified that the majority of car parking and external hard standing is with tin the landfilled areas.

The potential for the backfill material to continue to settle is considered high, especially in the landfill waste. This is evidenced by historical reports noting in excess of 100mm of movement.

Although the settlement potential of the reworked clay will reduce over time differential settlement will be observed in this material owing to the varying thickness of the fill. Of note is the highwall on the east of the site where the access road enters the site and depth of made ground increases rapidly from c.2m to c.12m. It is also noted that the thickness of landfill waste within the backfill changes over a short distance and has been found to be underneath the reworked materials in the centre of the site.

In the northern car park areas the potential for unacceptable settlement is considered lower as total fill depths are typically <5m with the greatest areas of risk considered to the the eastern car park and along the access road. Consideration could be given to ground improvement in these areas however the limitations in landfill waste noted in *Section 11.3* would still be a consideration. A piled external area



may be a requirement to prevent ongoing settlement and potential future maintenance of the car park. Any such design would need to account for the potential for differential settlement where piled and non-piled external areas interface. Without mitigation it is considered likely that external areas, especially to the east of the site will be prone to ongoing and potentially unacceptable movement requiring ongoing repair/maintenance.

The proposed service yard in the south west corner overlies a significant thickness of landfill waste. Due to the sensitivities in service yard areas and the critical tie in with loading areas in buildings it is recommended that this area is piled.

### **11.6 Utilities**

Similar to the consideration for external areas and pavement design proposed utilities placed within deep fill should consider the potential for ongoing and differential settlement.

### **11.7 Chemical Attack on Buried Concrete**

See *Section 7.9*.

### **11.8 Excavation and Support**

Given the mining legacy features encountered and the variable fill material it is recommended that all excavations should be considered unstable.

Any excavations progressed on the site should be undertaken in accordance with CIRIA (2001) Trenching Practice, 2nd Edition (report no. 97) (Ref. 33), taking into account the ground conditions encountered on site.

Perched water is likely to be encountered in shallow excavations.

## 12.0 Conclusions & Recommendations

### 12.1 Conclusions and Recommendations

A revised tabulated revised Conceptual Site Model has been derived following the findings on the Generic Quantitative Risk Assessment risk assessment and is presented in *Section 9.0*.

#### 12.1.1 Ground Contamination

Environmental testing indicates that there is low risk to future site users and controlled water receptors from levels of contaminants in the soils encountered as part of the ground investigation.

Assuming that the site is predominantly hardstanding no further mitigation measures are considered to be required. Should development proposals change this assessment may need to be revisited.

The prevailing risk to the proposed development is from ground gas generating from the landfill waste. It is recommended that gas protection measures in accordance with Characteristic Situation 4 should be adopted. The design of the gas protection should be in accordance with BR8485:2015 (Annex 2019).

It is recommended that construction workers are provided with appropriate PPE and sanitary facilities with reference to the environmental testing results presented herein.

#### 12.1.2 Geotechnical Assessment

The presence of deep backfill material, landfill waste and mining legacy features are key constraints to the proposed development.

The landfill waste and reworked clay are not suitable for traditional shallow foundations. This is due to the depth and variability of the material and the potential for ongoing settlement.

A piled foundation solution is recommended for the buildings and service yard area.

If a ground improved solution is being considered this should be undertaken by specialist designer with due consideration of the risks identified on the site. Further Ground investigation Should be undertaken.

Mine legacy features comprising potential worked seam and bell pits will require treatment prior to development. The advice of a specialist contractor should be sought however consideration should be given to bulk excavation and filling of bell pit features in association with drilling and grouting of worked seams. Following any treatment works the gas risk should be re-assessed potentially with supplementary monitoring.

The potential for ongoing creep/consolidation settlement in areas of deeper fill (>5m) should be considered with regard to external areas and pavement design. In addition, consideration for potential ground movement around proposed utilities will be required.

It is recommended that proposed civil and structural design is progressed in collaboration with a geotechnical engineer. It is likely that further intrusive investigation will be required to validate design as a part of a Geotechnical Design Report.

## 13.0 References

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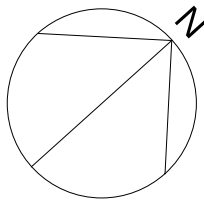
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## Appendix A Drawings

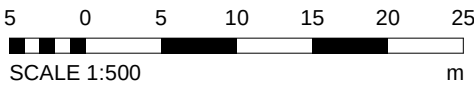
- Site Development Plans, drawing ref. 7200-35-8010; 7200-35-8011 and 7200-35-8012
- Centara Topographical & Utility Survey, Drawing No. 105879
- Curtins, Exploratory Hole Location Plan, drawing ref. 076893-CUR-00-XX-DR-GE-001-V01 (dated September 2020).





Do not scale this drawing.  
Architects are to be notified of any discrepancies.  
Contractors must check all dimensions on site.  
This drawing is subject to copyright laws and is for use on this project only.  
This drawing is to be used solely for the information as titled only.  
For other information refer to the latest revision of any cross referenced drawings.  
To be read in conjunction with relevant design standards/protocols

This is a colour drawing. In order to ensure any subsequent reproduction is viewed correctly it should be printed in full colour.



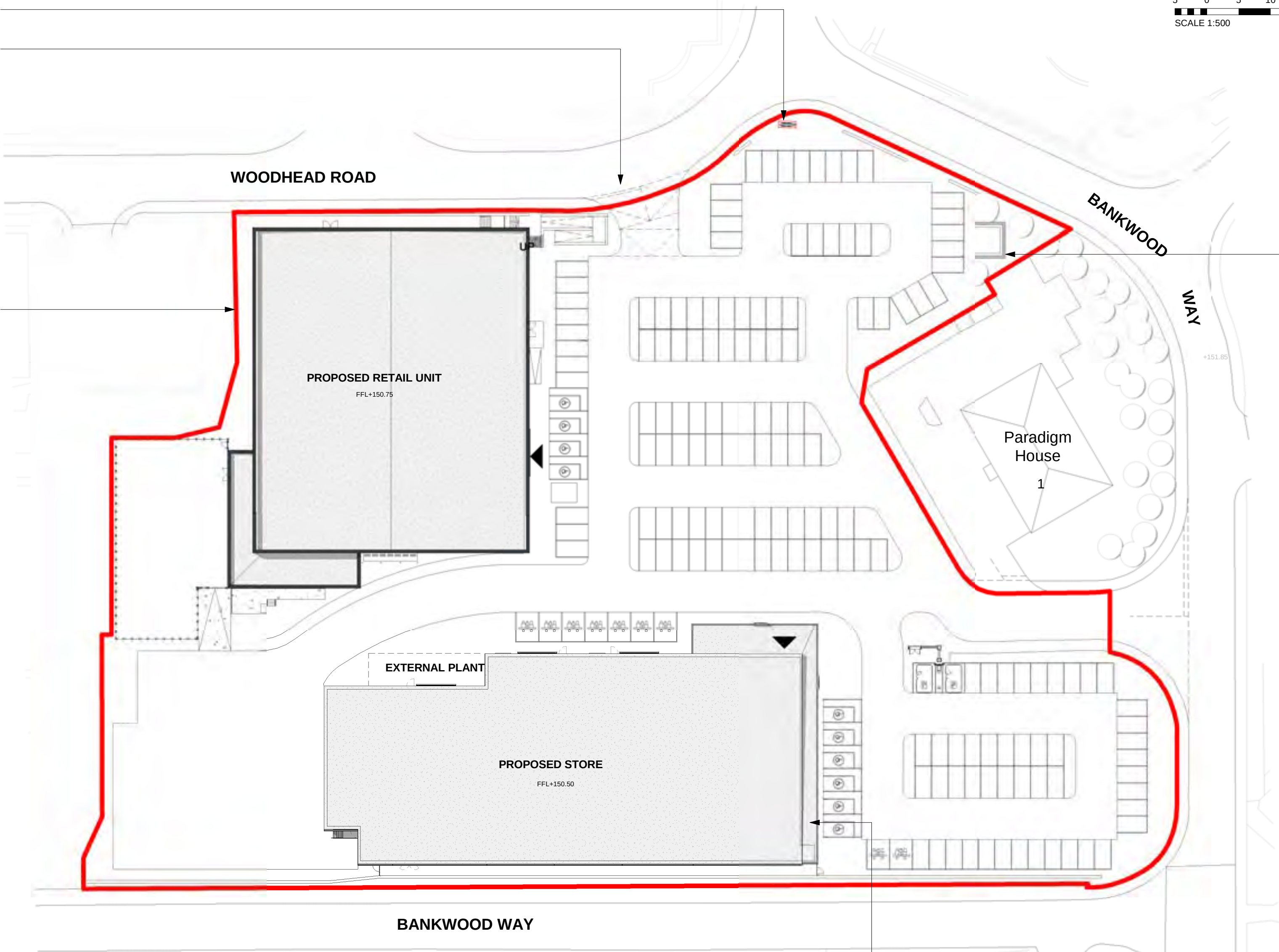
| SITE AREA EXTG |                                 |       |          |
|----------------|---------------------------------|-------|----------|
|                | OVERALL SITE BOUNDARY (ASSUMED) | ACRES | HECTARES |
|                |                                 | 3.78  | 1.53     |

PROPOSED LIDL SIGNAGE

PROPOSED ACCESS TO LIDL & LPA APPROVAL, AND FURTHER REVIEW BY HIGHWAY ENGINEERS

ASSUMED OVERALL SITE BOUNDARY (SUBJECT TO TITLE REVIEW)

PROPOSED SUBSTATION LOCATION WITH LOCAL RETAINING PARKING SPACE HATCHED OUT FOR MAINTENANCE AND SERVICING WHEN REQUIRED



PROPOSED CYCLE PARKING PROVISION  
SUBJECT TO LPA INPUT/APPROVAL

|     |                      |          |     |     |
|-----|----------------------|----------|-----|-----|
| P2  | DRAFT PLANNING ISSUE | 16.04.21 | MN  | JM  |
| P1  | DRAFT PLANNING ISSUE | 18.12.20 | GL  | JM  |
| Rev | Description          | Date     | Drm | Ckd |

Status

PLANNING

**SMR**  
SMALLEY MARSEY RISPIN  
**ARCHITECTS**  
Floor 2 The Exchange Station Parade Harrogate HG1 1TS  
01423 707 757 admin@smrarchitects.co.uk

Project

LIDL BIRSTALL, BANKWOOD WAY

Client



Drawing Title

PROPOSED SITE PLAN

| Proj Ref     | Origin | Zone  | Level   | Type  | Role | Num    | Status | Rev  |
|--------------|--------|-------|---------|-------|------|--------|--------|------|
| - - - 7404   | - SMR  | - 00  | - ZZ    | - DR  | - A  | - 2003 | - S3   | - P2 |
| SMR Job Ref  |        | Sheet | Scale   | Drawn |      |        |        |      |
| 7404-00-2003 |        | A2    | 1 : 500 | MN    |      |        |        |      |









**Key:**

-  RH201 Rotary Probe Boreholes
-  BH201 Cable Percussive Boreholes
-  RH211 Rotary Probe Boreholes with Cored Follow On
-  TT201 Trial Trench
-  Conjectured Highwall Location

**Notes:**  
 Drawing not to scale.  
 All locations are approximate only.

| GENERAL NOTES: |              |       |     |  |
|----------------|--------------|-------|-----|--|
| Rev:           | Description: | Date: | By: |  |
| ---            |              |       |     |  |



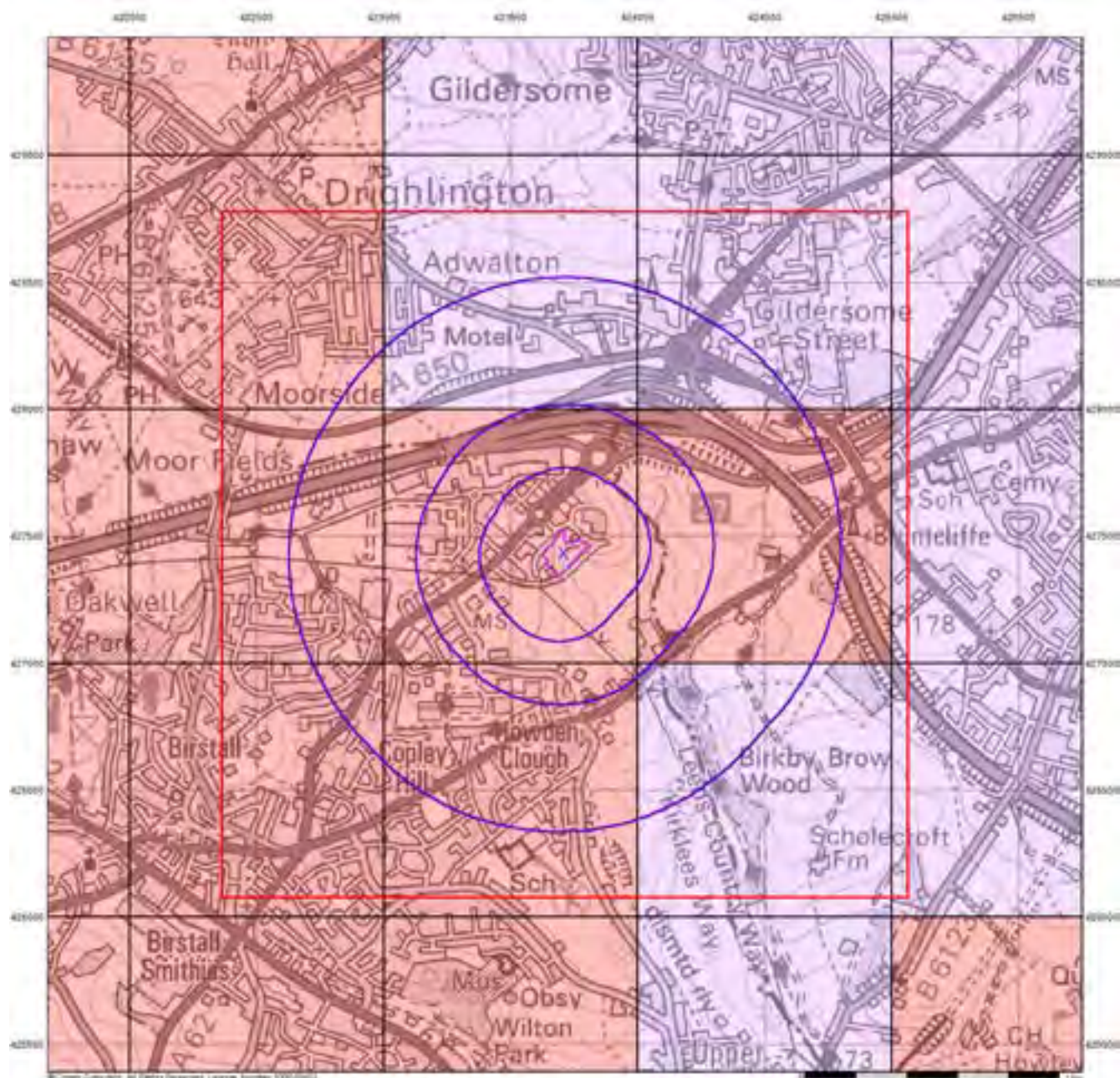
Ground Floor  
 Rose Wharf  
 78-80 East Street  
 Leeds  
 LS9 8EE  
 t: 0113 274 8509  
 e: leeds@curtins.com  
 w: www.curtins.com

Civil & Structural • Transport Planning • Environmental • Infrastructure • Sustainability • Conservation & Heritage • Principal Designer  
 Birmingham • Bristol • Cambridge • Cardiff • Glasgow • Gillingham • Glasgow • Harrogate • Leeds • Liverpool • London • Manchester • Nottingham  
 Oxford • Plymouth • Southampton • Stoke-on-Trent • Swansea • Telford • Warrington • Wolverhampton

|                                                                              |  |                  |                |
|------------------------------------------------------------------------------|--|------------------|----------------|
| Project:<br>Bankwood Way, Birstall                                           |  | Status:<br>DRAFT |                |
| Drawing Title:<br>As-built Exploratory Hole<br>Location Plan                 |  | Drawn By: AD     | Checked By: ML |
|                                                                              |  | Designed By: AD  | Date: 15/09/20 |
|                                                                              |  | Scale: NTS       |                |
| Project No: Originator: Zone: Level: Type: Discipline: Category/Number: Rev: |  |                  |                |
| 076893-CUR-00-XX-DR-GE-001-V02                                               |  |                  |                |

## Appendix B     Supporting Information

- Envirocheck Report
- Coal Authority Consultants Coal Mining Report



## Groundwater Vulnerability

### General

Boundary Line
 Search Buffers
 Existing Bottoms Profile

### Agency and Hydrological

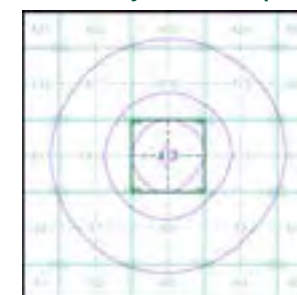
#### Bedrock Aquifers

High Vulnerability, Principal Aquifer  
 High Vulnerability, Secondary Aquifer  
 Medium Vulnerability, Principal Aquifer  
 Medium Vulnerability, Secondary Aquifer  
 Low Vulnerability, Principal Aquifer  
 Low Vulnerability, Secondary Aquifer  
 Unproductive Aquifer  
 Soluble Rock

#### Superficial Aquifers

High Vulnerability, Principal Aquifer  
 High Vulnerability, Secondary Aquifer  
 Medium Vulnerability, Principal Aquifer  
 Medium Vulnerability, Secondary Aquifer  
 Low Vulnerability, Principal Aquifer  
 Low Vulnerability, Secondary Aquifer

### Site Sensitivity Context Map - Slice A

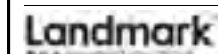


### Order Details

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 National Grid Reference: 423710, 427430  
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 Search Buffer (m): 1000

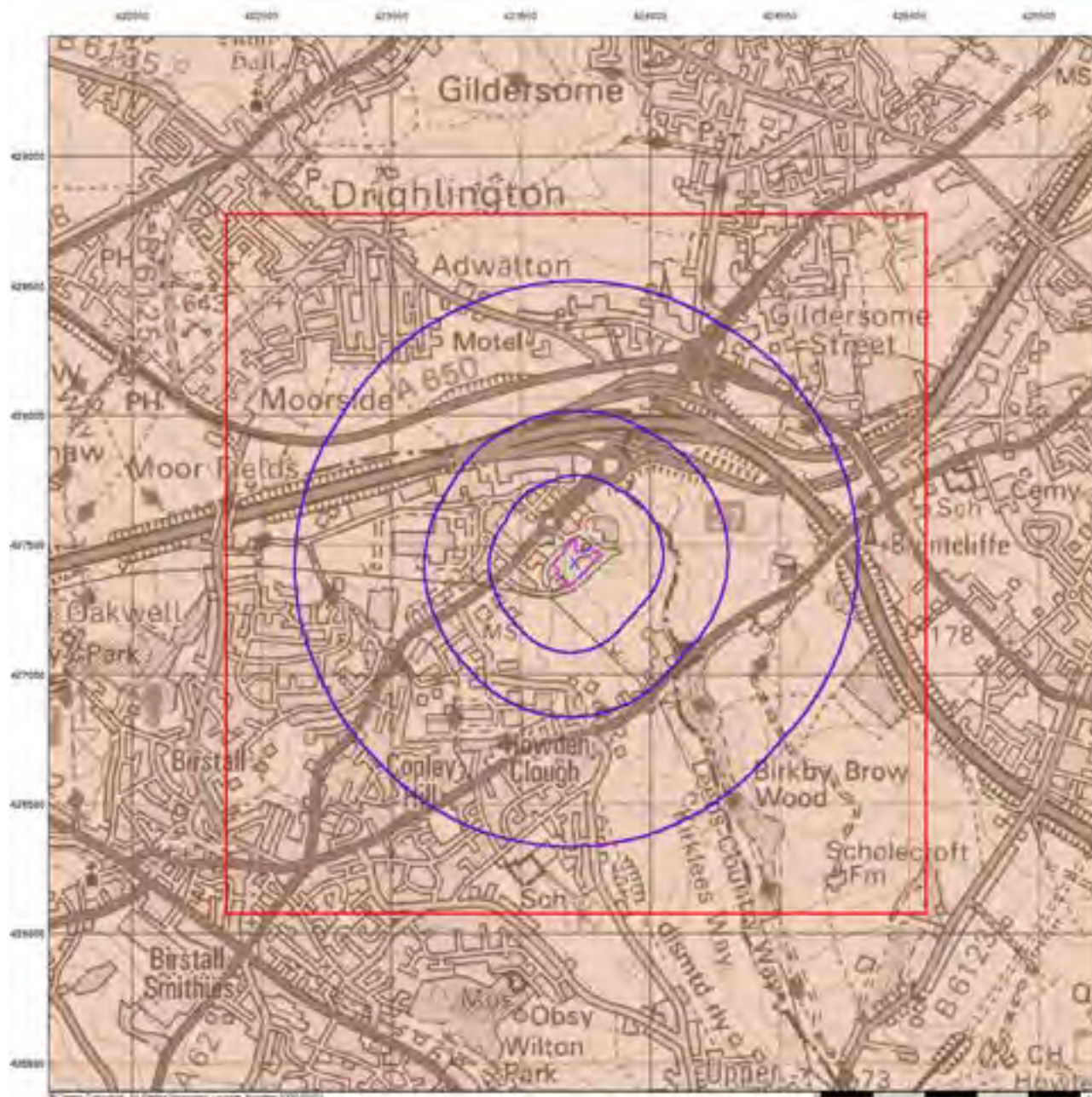
### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk





## Bedrock Aquifer Designation

### General

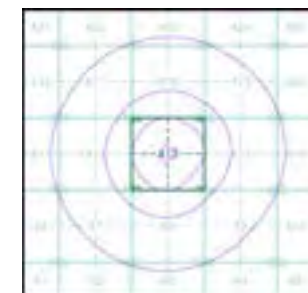
- Specified Site
- Specified Buffer(s)
- Flowing Artesian Front
- Site
- Map ID

### Agency and Hydrological

#### Geological Classes

- Emersion Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landfill)

### Site Sensitivity Context Map - Slice A

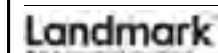


### Order Details

Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

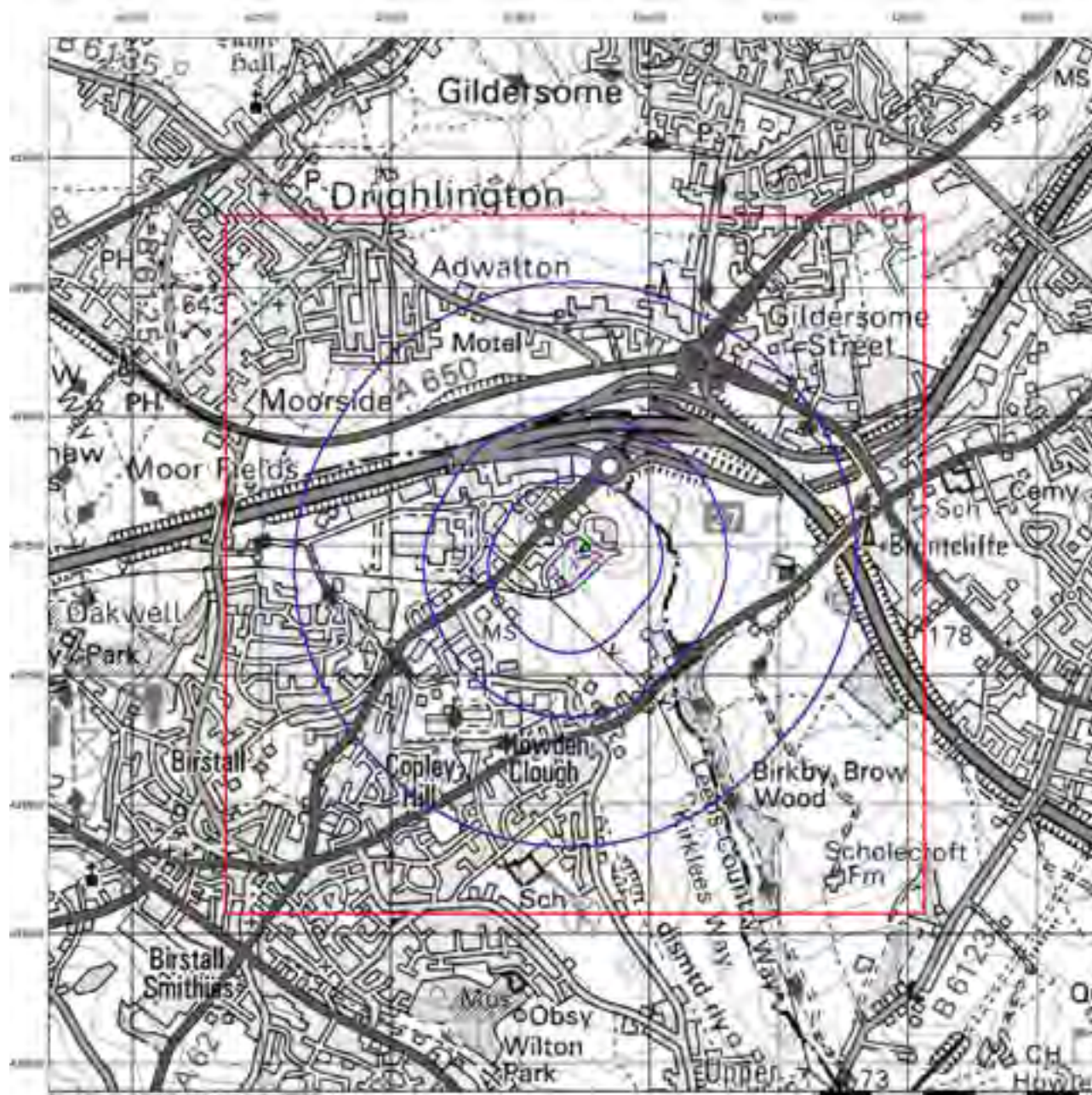
### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk





## Superficial Aquifer Designation

### General

Specified Site Specified Buffer X Flowing Waterfront

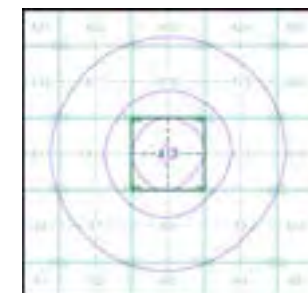
Site

Search Buffer

### Geological Classes

- Emmott Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landfill)

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

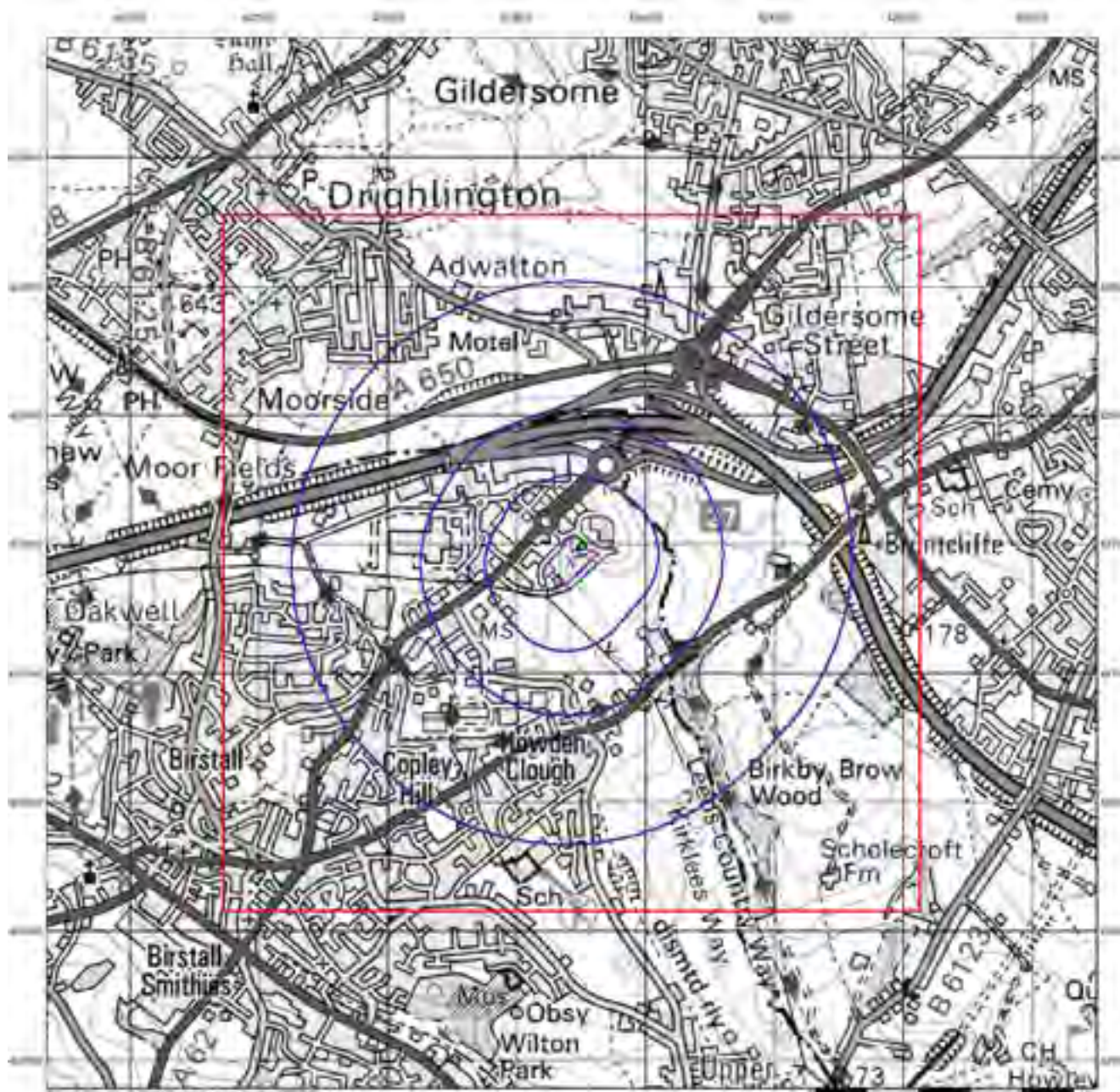
### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
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## Source Protection Zones

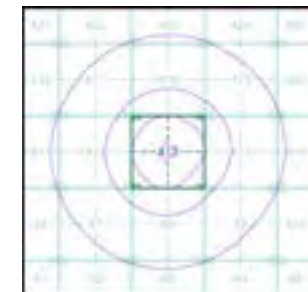
### General

- Boundary Line
- Site
- (Shaded Buffer) 1
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- (Shaded Buffer) 100

### Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1a)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2a)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3a)
- Special interest (Zone 4)

## Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

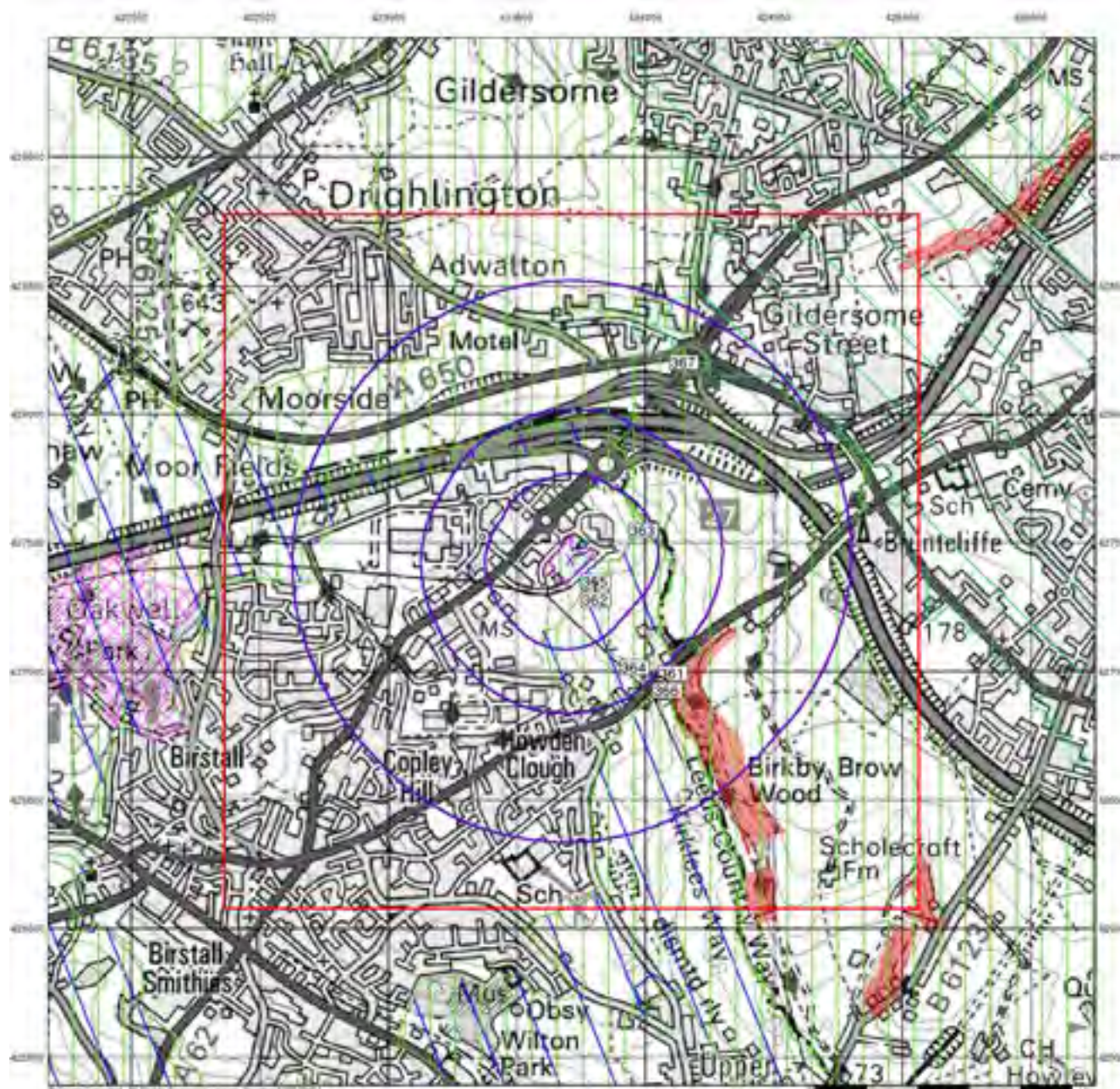
### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB

**Landmark**  
 A Landmark Information Group Service

Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: [www.envirocheck.co.uk](http://www.envirocheck.co.uk)





## Sensitive Land Uses

### General

- Sensitive Site
- Site
- Sensitive Buffer
- Sensitive Reference Point
- Map ID

### Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- National Sensitive Area
- National Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Site

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

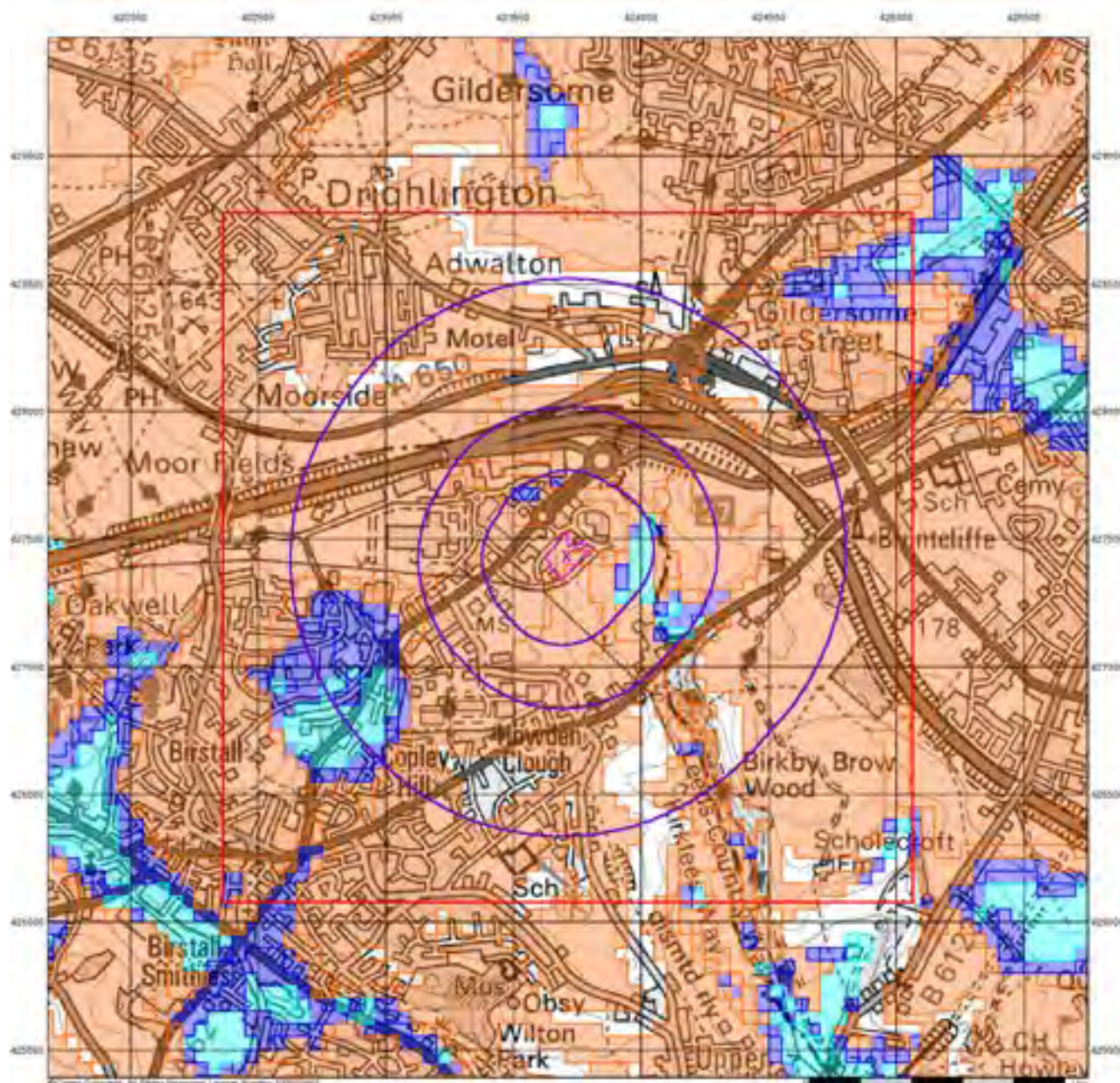
### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB

**Landmark**  
 Environmental & Planning Consultants

Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk





## BGS Flood GFS Data

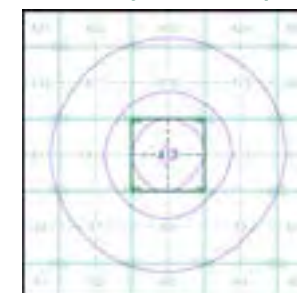
### General

- Identified Site
- Identified Buffer
- Swamp Potential Point
- Site

### Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

## Site Sensitivity Context Map - Slice A

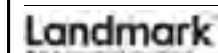


## Order Details

Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

## Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk

## Envirocheck<sup>®</sup> Report:

### Datasheet

#### Order Details:

**Order Number:**

259373929\_1\_1

**Customer Reference:**

076893 - Bankwood Way, Birstall

**National Grid Reference:**

423710, 427430

**Slice:**

A

**Site Area (Ha):**

1.51

**Search Buffer (m):**

1000

#### Site Details:

Bankwood Way

Birstall

Batley

West Yorkshire

WF17 9TB

#### Client Details:

Mr A Drew

Curtins Consulting Ltd

Rose Wharf

78-80 East Street

Leeds

West Yorkshire

LS9 8EE

| Report Section        | Page Number |
|-----------------------|-------------|
| Summary               | -           |
| Agency & Hydrological | 1           |
| Waste                 | 19          |
| Hazardous Substances  | 37          |
| Geological            | 39          |
| Industrial Land Use   | 50          |
| Sensitive Land Use    | 73          |
| Data Currency         | 74          |
| Data Suppliers        | 79          |
| Useful Contacts       | 80          |

## Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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## Report Version v53.0



| Data Type                                                     | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|---------------------------------------------------------------|-------------|---------|-----------|-------------|-----------------------------|
| <b>Agency &amp; Hydrological</b>                              |             |         |           |             |                             |
| BGS Groundwater Flooding Susceptibility                       | pg 1        | Yes     | Yes       | Yes         | n/a                         |
| Contaminated Land Register Entries and Notices                |             |         |           |             |                             |
| Discharge Consents                                            | pg 2        |         | 1         | 3           | 1                           |
| Prosecutions Relating to Controlled Waters                    |             |         | n/a       | n/a         | n/a                         |
| Enforcement and Prohibition Notices                           | pg 3        |         |           |             | 1                           |
| Integrated Pollution Controls                                 | pg 4        |         |           | 2           | 2                           |
| Integrated Pollution Prevention And Control                   | pg 4        |         |           | 4           | 1                           |
| Local Authority Integrated Pollution Prevention And Control   |             |         |           |             |                             |
| Local Authority Pollution Prevention and Controls             | pg 5        |         | 3         | 4           | 4                           |
| Local Authority Pollution Prevention and Control Enforcements |             |         |           |             |                             |
| Nearest Surface Water Feature                                 | pg 7        |         | Yes       |             |                             |
| Pollution Incidents to Controlled Waters                      | pg 7        |         | 3         | 17          | 10                          |
| Prosecutions Relating to Authorised Processes                 |             |         |           |             |                             |
| Registered Radioactive Substances                             |             |         |           |             |                             |
| River Quality                                                 |             |         |           |             |                             |
| River Quality Biology Sampling Points                         |             |         |           |             |                             |
| River Quality Chemistry Sampling Points                       |             |         |           |             |                             |
| Substantiated Pollution Incident Register                     | pg 12       |         | 2         |             | 2                           |
| Water Abstractions                                            | pg 13       |         |           |             | (*5)                        |
| Water Industry Act Referrals                                  |             |         |           |             |                             |
| Groundwater Vulnerability Map                                 | pg 14       | Yes     | n/a       | n/a         | n/a                         |
| Groundwater Vulnerability - Soluble Rock Risk                 |             |         | n/a       | n/a         | n/a                         |
| Groundwater Vulnerability - Local Information                 |             |         | n/a       | n/a         | n/a                         |
| Bedrock Aquifer Designations                                  | pg 14       | Yes     | n/a       | n/a         | n/a                         |
| Superficial Aquifer Designations                              |             |         | n/a       | n/a         | n/a                         |
| Source Protection Zones                                       |             |         |           |             |                             |
| Extreme Flooding from Rivers or Sea without Defences          |             |         |           | n/a         | n/a                         |
| Flooding from Rivers or Sea without Defences                  |             |         |           | n/a         | n/a                         |
| Areas Benefiting from Flood Defences                          |             |         |           | n/a         | n/a                         |
| Flood Water Storage Areas                                     |             |         |           | n/a         | n/a                         |
| Flood Defences                                                |             |         |           | n/a         | n/a                         |
| OS Water Network Lines                                        | pg 14       |         | 7         | 8           | 23                          |



| Data Type                                                           | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|---------------------------------------------------------------------|-------------|---------|-----------|-------------|-----------------------------|
| <b>Waste</b>                                                        |             |         |           |             |                             |
| BGS Recorded Landfill Sites                                         | pg 19       |         | 1         |             | 1                           |
| Historical Landfill Sites                                           | pg 19       | 1       |           | 3           | 7                           |
| Integrated Pollution Control Registered Waste Sites                 |             |         |           |             |                             |
| Licensed Waste Management Facilities (Landfill Boundaries)          | pg 21       |         | 1         |             |                             |
| Licensed Waste Management Facilities (Locations)                    | pg 21       |         | 2         | 2           | 6                           |
| Local Authority Landfill Coverage                                   |             | 1       | n/a       | n/a         | n/a                         |
| Local Authority Recorded Landfill Sites                             | pg 24       |         | 1         | 1           | 3                           |
| Potentially Infilled Land (Non-Water)                               | pg 24       |         | 10        | 7           | 19                          |
| Potentially Infilled Land (Water)                                   | pg 26       |         | 4         | 3           | 22                          |
| Registered Landfill Sites                                           | pg 28       | 1       | 1         | 4           | 8                           |
| Registered Waste Transfer Sites                                     | pg 34       |         | 1         | 2           | 1                           |
| Registered Waste Treatment or Disposal Sites                        | pg 35       |         | 1         | 1           | 1                           |
| <b>Hazardous Substances</b>                                         |             |         |           |             |                             |
| Control of Major Accident Hazards Sites (COMAH)                     | pg 37       |         |           | 1           |                             |
| Explosive Sites                                                     |             |         |           |             |                             |
| Notification of Installations Handling Hazardous Substances (NIHHS) |             |         |           |             |                             |
| Planning Hazardous Substance Consents                               | pg 37       |         |           | 8           |                             |
| Planning Hazardous Substance Enforcements                           |             |         |           |             |                             |

| Data Type                                                         | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|-------------------------------------------------------------------|-------------|---------|-----------|-------------|-----------------------------|
| <b>Geological</b>                                                 |             |         |           |             |                             |
| BGS 1:625,000 Solid Geology                                       | pg 39       | Yes     | n/a       | n/a         | n/a                         |
| BGS Estimated Soil Chemistry                                      | pg 39       | Yes     | Yes       | Yes         | Yes                         |
| BGS Recorded Mineral Sites                                        | pg 43       |         | 6         | 6           | 17                          |
| BGS Urban Soil Chemistry                                          |             |         |           |             |                             |
| BGS Urban Soil Chemistry Averages                                 |             |         |           |             |                             |
| CBSCB Compensation District                                       |             |         | n/a       | n/a         | n/a                         |
| Coal Mining Affected Areas                                        | pg 48       | Yes     | n/a       | n/a         | n/a                         |
| Mining Instability                                                | pg 48       | Yes     | n/a       | n/a         | n/a                         |
| Man-Made Mining Cavities                                          | pg 48       |         |           | 1           |                             |
| Natural Cavities                                                  |             |         |           |             |                             |
| Non Coal Mining Areas of Great Britain                            |             |         |           | n/a         | n/a                         |
| Potential for Collapsible Ground Stability Hazards                | pg 48       | Yes     |           | n/a         | n/a                         |
| Potential for Compressible Ground Stability Hazards               | pg 48       | Yes     | Yes       | n/a         | n/a                         |
| Potential for Ground Dissolution Stability Hazards                |             |         |           | n/a         | n/a                         |
| Potential for Landslide Ground Stability Hazards                  | pg 48       | Yes     | Yes       | n/a         | n/a                         |
| Potential for Running Sand Ground Stability Hazards               | pg 49       | Yes     |           | n/a         | n/a                         |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards | pg 49       | Yes     | Yes       | n/a         | n/a                         |
| Radon Potential - Radon Affected Areas                            |             |         | n/a       | n/a         | n/a                         |
| Radon Potential - Radon Protection Measures                       |             |         | n/a       | n/a         | n/a                         |
| <b>Industrial Land Use</b>                                        |             |         |           |             |                             |
| Contemporary Trade Directory Entries                              | pg 50       | 5       | 22        | 39          | 87                          |
| Fuel Station Entries                                              | pg 63       |         | 1         |             | 1                           |
| Points of Interest - Commercial Services                          | pg 64       | 1       | 4         | 10          | 38                          |
| Points of Interest - Education and Health                         |             |         |           |             |                             |
| Points of Interest - Manufacturing and Production                 | pg 68       | 1       | 3         | 11          | 22                          |
| Points of Interest - Public Infrastructure                        | pg 71       |         | 2         | 5           | 7                           |
| Points of Interest - Recreational and Environmental               | pg 72       |         |           |             | 2                           |
| Gas Pipelines                                                     |             |         |           |             |                             |
| Underground Electrical Cables                                     |             |         |           |             |                             |

| Data Type                            | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m<br>(*up to 2000m) |
|--------------------------------------|-------------|---------|-----------|-------------|--------------------------------|
| <b>Sensitive Land Use</b>            |             |         |           |             |                                |
| Ancient Woodland                     | pg 73       |         |           |             | 1                              |
| Areas of Adopted Green Belt          | pg 73       |         | 2         |             | 1                              |
| Areas of Unadopted Green Belt        | pg 73       |         | 1         |             | 1                              |
| Areas of Outstanding Natural Beauty  |             |         |           |             |                                |
| Environmentally Sensitive Areas      |             |         |           |             |                                |
| Forest Parks                         |             |         |           |             |                                |
| Local Nature Reserves                |             |         |           |             |                                |
| Marine Nature Reserves               |             |         |           |             |                                |
| National Nature Reserves             |             |         |           |             |                                |
| National Parks                       |             |         |           |             |                                |
| Nitrate Sensitive Areas              |             |         |           |             |                                |
| Nitrate Vulnerable Zones             | pg 73       |         |           |             | 1                              |
| Ramsar Sites                         |             |         |           |             |                                |
| Sites of Special Scientific Interest |             |         |           |             |                                |
| Special Areas of Conservation        |             |         |           |             |                                |
| Special Protection Areas             |             |         |           |             |                                |
| World Heritage Sites                 |             |         |           |             |                                |

| Map ID | Details                                                                                                                                     | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A13NW (W)                              | 0                            | 1       | 423700<br>427432 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A13SW (S)                              | 0                            | 1       | 423709<br>427400 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A13NE (E)                              | 53                           | 1       | 423850<br>427432 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A13NW (NW)                             | 89                           | 1       | 423600<br>427550 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A13NE (E)                              | 103                          | 1       | 423900<br>427432 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13SE (E)                              | 118                          | 1       | 423900<br>427400 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A13NE (N)                              | 135                          | 1       | 423750<br>427650 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface                     | A13NE (E)                              | 152                          | 1       | 423950<br>427432 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13NE (E)                              | 157                          | 1       | 423950<br>427500 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13NW (NW)                             | 166                          | 1       | 423600<br>427650 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13NW (N)                              | 181                          | 1       | 423700<br>427700 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface                     | A13SE (SE)                             | 182                          | 1       | 423900<br>427300 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A13SE (SE)                             | 216                          | 1       | 423900<br>427250 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A13NE (NE)                             | 226                          | 1       | 423850<br>427700 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A14NW (E)                              | 252                          | 1       | 424050<br>427432 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A14NW (E)                              | 255                          | 1       | 424050<br>427500 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A14NW (E)                              | 267                          | 1       | 424050<br>427550 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A14NW (NE)                             | 287                          | 1       | 424050<br>427600 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A18SW (N)                              | 288                          | 1       | 423650<br>427800 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A14SW (E)                              | 298                          | 1       | 424050<br>427300 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                        | A18SW (N)                              | 304                          | 1       | 423600<br>427800 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR           |
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|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A14SW (E)                              | 322                          | 1       | 424100 427350 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A14SW (SE)                             | 327                          | 1       | 424050 427250 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A14SW (E)                              | 342                          | 1       | 424100 427300 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A14SW (SE)                             | 360                          | 1       | 424050 427200 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A14SW (SE)                             | 367                          | 1       | 424100 427250 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A12NE (NW)                             | 380                          | 1       | 423350 427700 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A14SW (E)                              | 387                          | 1       | 424150 427300 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A14SW (SE)                             | 394                          | 1       | 424050 427150 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A14SW (SE)                             | 397                          | 1       | 424100 427200 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A14SW (SE)                             | 431                          | 1       | 424100 427150 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A12SE (W)                              | 433                          | 1       | 423200 427350 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A18SE (N)                              | 469                          | 1       | 423900 427950 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A14SW (SE)                             | 478                          | 1       | 424200 427200 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A12SE (W)                              | 492                          | 1       | 423150 427300 |
|        | <b>BGS Groundwater Flooding Susceptibility</b><br>Flooding Type: Limited Potential for Groundwater Flooding to Occur                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A9NW (SE)                              | 498                          | 1       | 424100 427050 |
| 1      | <b>Discharge Consents</b><br>Operator: Trustees Hercules Unit Trust & Britel Fund Ltd<br>Property Type: REAL ESTATE ACTIVITIES/BUYING/SELLING/RENTING<br>Location: Gelderd Road, Birstall, Bradford, West Yorkshire<br>Authority: Environment Agency, North East Region<br>Catchment Area: Calder<br>Reference: Wra6867<br>Permit Version: 1<br>Effective Date: 17th March 1993<br>Issued Date: 17th March 1993<br>Revocation Date: Not Supplied<br>Discharge Type: Trade Discharges - Site Drainage (Contaminated Surface Water, Not Waste Sites)<br>Discharge Environment: Freshwater Stream/River<br>Receiving Water: Howden Clough Beck<br><b>Status: New Consent, by Application (Water Resources Act 1991, Section 88)</b><br>Positional Accuracy: Located by supplier to within 100m | A13NE (N)                              | 200                          | 2       | 423800 427700 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 2      | <b>Discharge Consents</b><br>Operator: Mr Stephen Tuthill<br>Property Type: Business Services<br>Location: Proposed Development, Gelderd Road, BIRSTALL, West Yorkshire<br>Authority: Environment Agency, North East Region<br>Catchment Area: Aire<br>Reference: C4970<br>Permit Version: Not Supplied<br>Effective Date: Not Supplied<br>Issued Date: 15th February 1988<br>Revocation Date: Not Supplied<br>Discharge Type: Trade Effluent Discharge-Site Drainage<br>Discharge: Freshwater Stream/River<br>Environment:<br>Receiving Water: Howden Clough Beck<br><b>Status: Not Supplied</b><br>Positional Accuracy: Located by supplier to within 100m                                                                                                                                      | A13NE (NE)                             | 263                          | 2       | 423850<br>427745 |
| 3      | <b>Discharge Consents</b><br>Operator: Landfill Site Opencast Coal Site Drainage<br>Property Type: Not Given<br>Location: Location Description Not Available<br>Authority: Environment Agency, North East Region<br>Catchment Area: Not Given<br>Reference: 44290705<br>Permit Version: Not Supplied<br>Effective Date: Not Supplied<br>Issued Date: Not Supplied<br>Revocation Date: Not Supplied<br>Discharge Type: Trade Effluent<br>Discharge: Freshwater Stream/River<br>Environment:<br>Receiving Water: Not Supplied<br><b>Status: Not Supplied</b><br>Positional Accuracy: Located by supplier to within 100m                                                                                                                                                                             | A14SW (E)                              | 308                          | 2       | 424100<br>427400 |
| 4      | <b>Discharge Consents</b><br>Operator: Hargreaves Clearwaste Ltd.<br>Property Type: WASTE COLLECTION/TREATMENT/DISPOSAL/MATERIALS RECOVERY<br>Location: Hargreaves Clearwaste Limited; Howd, En Clough Landfill Site, Howden, Clough Road, Morley, Leeds.<br>Authority: Environment Agency, North East Region<br>Catchment Area: Calder<br>Reference: C3971<br>Permit Version: 1<br>Effective Date: 7th August 1985<br>Issued Date: 7th August 1985<br>Revocation Date: 16th August 1993<br>Discharge Type: Trade Discharge - Process Water<br>Discharge: Freshwater Stream/River<br>Environment:<br>Receiving Water: Howden Clough Beck<br><b>Status: Post National Rivers Authority Legislation where issue date &gt; 31/08/1989</b><br>Positional Accuracy: Located by supplier to within 100m | A14SW (E)                              | 407                          | 2       | 424200<br>427400 |
| 5      | <b>Discharge Consents</b><br>Operator: Woodnab Chemicals Co Ltd,<br>Property Type: MAKING OF CHEMICALS + CHEMICAL PRODUCTS<br>Location: Woodnab (Chemicals) Co Ltd, Chemica, L Works, Pheasant Drive, Birstal, L (Cooling Water)<br>Authority: Environment Agency, North East Region<br>Catchment Area: Calder<br>Reference: C3948<br>Permit Version: 1<br>Effective Date: 5th July 1985<br>Issued Date: 5th July 1985<br>Revocation Date: 19th November 1990<br>Discharge Type: Trade Discharge - Process Water<br>Discharge: Freshwater Stream/River<br>Environment:<br>Receiving Water: Howden Clough Beck<br><b>Status: Post National Rivers Authority Legislation where issue date &gt; 31/08/1989</b><br>Positional Accuracy: Located by supplier to within 100m                            | A9NW (SE)                              | 600                          | 2       | 424100<br>426900 |
| 6      | <b>Enforcement and Prohibition Notices</b><br>Location: Pennine View Trading Estate, Birstall, BATLEY, West Yorkshire, WF17 9NF<br>Permit Reference: NOT GIVEN<br>Enforcement Date: 18th December 1998<br>Details: EA News Release 18/12/1998, An open bag of asbestos dust was discovered.<br>Positional Accuracy: Manually positioned within the geographical locality                                                                                                                                                                                                                                                                                                                                                                                                                          | A12SE (SW)                             | 523                          | 2       | 423205<br>427100 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 7      | <b>Integrated Pollution Controls</b><br>Name: Tennants<br>Location: Gelderd Road, Birstall, BATLEY, West Yorkshire, WF17 9LS<br>Authority: Environment Agency, North East Region<br>Permit Reference: AL5178<br>Dated: 24th December 1993<br>Process Type: Application since found to be exempt from IPC<br>Description: 4.3 A (F) Acid processes within the Chemical Industry<br><b>Status: Application since found to be exempt from IPC</b><br>Positional Accuracy: Unknown                                                                                                                                                                                                                                                                                                                          | A12SE (SW)                             | 392                          | 2       | 423300<br>427195 |
| 8      | <b>Integrated Pollution Controls</b><br>Name: Tmd Friction Uk Ltd<br>Location: Pennine View, Birstall, BATLEY, West Yorkshire, WF17 9NF<br>Authority: Environment Agency, North East Region<br>Permit Reference: AI0136<br>Dated: 17th August 1993<br>Process Type: IPC application for process that was regulated by HMIP for air releases under previous legislation<br>Description: 3.2 A (A) processes involving Asbestos within the Mineral Industry<br><b>Status: Authorisation superseded by a substantial or non substantial variation</b><br>Positional Accuracy: Manually positioned to the road within the address or location                                                                                                                                                               | A12SE (SW)                             | 440                          | 2       | 423274<br>427145 |
| 9      | <b>Integrated Pollution Controls</b><br>Name: Tmd Friction Uk Ltd<br>Location: Pennine View, BATLEY, West Yorkshire, WF17 9NF<br>Authority: Environment Agency, North East Region<br>Permit Reference: BD3574<br>Dated: 24th November 1998<br>Process Type: IPC minor (non-substantial) variation to previous variation<br>Description: 3.2 A (A) processes involving Asbestos within the Mineral Industry<br><b>Status: Authorisation revoked</b><br>Positional Accuracy: Manually positioned to the road within the address or location                                                                                                                                                                                                                                                               | A7NE (SW)                              | 569                          | 2       | 423178<br>427058 |
| 10     | <b>Integrated Pollution Controls</b><br>Name: Tmd Friction Uk Ltd<br>Location: Pennine View, Birstall, BATLEY, West Yorkshire, WF17 9NF<br>Authority: Environment Agency, North East Region<br>Permit Reference: AU0686<br>Dated: 7th December 1995<br>Process Type: IPC minor (non-substantial) variation to previous variation<br>Description: 3.2 A (A) processes involving Asbestos within the Mineral Industry<br><b>Status: Authorisation superseded by a substantial or non substantial variation</b><br>Positional Accuracy: Manually positioned to the road within the address or location                                                                                                                                                                                                     | A7NE (SW)                              | 577                          | 2       | 423203<br>427013 |
| 11     | <b>Integrated Pollution Prevention And Control</b><br>Name: Mars Uk Ltd<br>Location: Batley Pet Foods, 1, Oakwell Way, Birstall, Batley, West Yorkshire, wf17 6lu<br>Authority: Environment Agency, North East Region<br>Permit Reference: Fp3430bj<br>Original Permit Ref: Fp3430bj<br>Effective Date: 22nd July 2005<br><b>Status: Superseded By Variation</b><br>Application Type: Application<br>App. Sub Type: New<br>Positional Accuracy: Manually positioned to the road within the address or location<br>Activity Code: 0.0 Associated Process<br>Activity Description: Associated Process<br>Primary Activity: N<br>6.8 A(1) (D) (I)<br>Activity Description: Animal Vegetable & Food; Treating Etc Animal Raw Materials (Not Milk) For Food >75T/D<br>Primary Activity: Y                    | A12SE (W)                              | 346                          | 2       | 423282<br>427387 |
| 12     | <b>Integrated Pollution Prevention And Control</b><br>Name: Mars Petcare Uk<br>Location: Mars Petcare Uk, Batley, 1, Oakwell Way, Birstall, BATLEY, West Yorkshire, WF17 9LU<br>Authority: Environment Agency, North East Region<br>Permit Reference: DP3339GW<br>Original Permit Ref: Dp3339gw<br>Effective Date: 13th January 2009<br><b>Status: Superseded By Variation</b><br>Application Type: Transfer<br>App. Sub Type: Whole limited change in management<br>Positional Accuracy: Automatically positioned to the address<br>Activity Code: 0.0 Associated Process<br>Activity Description: Associated Process<br>Primary Activity: N<br>6.8 A(1) (D) (I)<br>Activity Description: Animal Vegetable & Food; Treating Etc Animal Raw Materials (Not Milk) For Food >75T/D<br>Primary Activity: Y | A12NE (W)                              | 456                          | 2       | 423172<br>427462 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 12     | <b>Integrated Pollution Prevention And Control</b><br>Name: Mars Uk Ltd<br>Location: Masterfoods, 1, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 6LU<br>Authority: Environment Agency, North East Region<br>Permit Reference: QP3936LW<br>Original Permit Ref: Fp3430bj<br>Effective Date: 4th April 2007<br><b>Status: Superseded By Variation</b><br>Application Type: Variation<br>App. Sub Type: Simple Standard Variation<br>Positional Accuracy: Manually positioned to the address or location<br>Activity Code: 0.0 Associated Process<br>Activity Description: Associated Process<br>Primary Activity: N<br>Activity Code: 6.8 A(1) (D) (I)<br>Activity Description: Animal Vegetable & Food; Treating Etc Animal Raw Materials (Not Milk) For Food >75T/D<br>Primary Activity: Y               | A12NE (W)                              | 457                          | 2       | 423171<br>427461 |
| 13     | <b>Integrated Pollution Prevention And Control</b><br>Name: Mars Petcare Uk<br>Location: Batley Pet Foods - Epr/Dp3339gw, 1, Oakwell Way, Birstall, BATLEY, West Yorkshire, WF17 9LU<br>Authority: Environment Agency, North East Region<br>Permit Reference: FP3136CU<br>Original Permit Ref: Dp3339gw<br>Effective Date: 17th September 2012<br><b>Status: Effective</b><br>Application Type: Variation<br>App. Sub Type: Standard<br>Positional Accuracy: Located by supplier to within 100m<br>Activity Code: 0.0 Associated Process<br>Activity Description: Associated Process<br>Primary Activity: N<br>Activity Code: 6.8 A(1) (D) (I)<br>Activity Description: Animal Vegetable & Food; Treating Etc Animal Raw Materials (Not Milk) For Food >75T/D<br>Primary Activity: Y                             | A12SE (SW)                             | 480                          | 2       | 423200<br>427200 |
| 14     | <b>Integrated Pollution Prevention And Control</b><br>Name: Foxhall Environmental Services Ltd<br>Location: Foxhall Environmental Services Epr/Hp3631tp, Foxhall Farm, Owler Lane, Birstall, BATLEY, West Yorkshire, WF17 9BW<br>Authority: Environment Agency, North East Region<br>Permit Reference: XP3630VV<br>Original Permit Ref: Hp3631tp<br>Effective Date: 5th March 2014<br><b>Status: Effective</b><br>Application Type: Variation<br>App. Sub Type: Minor<br>Positional Accuracy: Located by supplier to within 10m<br>Activity Code: 5.6 A(1) a)<br>Activity Description: TEMPORARY STORAGE OF HAZ WASTE NOT UNDER S 5.2 PENDING ACTIVITIES LISTED IN S 5.1, 5.2, 5.3 AND PARAGRAPH (B) OF THIS SECTION WITH A TOTAL CAPACITY > 50 TONNES, EXCL TEMP STORAGE WHERE GENERATED<br>Primary Activity: Y | A12NW (W)                              | 886                          | 2       | 422760<br>427610 |
| 15     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Murco Petroleum Ltd<br>Location: West Yorkshire Retail Park, Holden Ing Way, Birstall, Batley, West Yorkshire, WF17 9AE<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: Epa E 114<br>Dated: Not Supplied<br>Process Type: Local Authority Air Pollution Control<br>Description: PG1/14 Petrol filling station<br><b>Status: Authorisation revoked</b><br>Positional Accuracy: Automatically positioned to the address                                                                                                                                                                                                                                                                | A13NW (NW)                             | 129                          | 3       | 423598<br>427604 |
| 15     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Anglo Petroleum Limited<br>Location: Birstall Service Station, Holden Ing Way, Birstall, Batley, WF17 9AE<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: Not Supplied<br>Dated: Not Supplied<br>Process Type: Local Authority Air Pollution Control<br>Description: PG1/14 Petrol filling station<br><b>Status: Authorised</b><br>Positional Accuracy: Automatically positioned to the address                                                                                                                                                                                                                                                                                      | A13NW (NW)                             | 129                          | 3       | 423598<br>427604 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 16     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: W I Commercial Painters<br>Location: Unit 2 Hilltop Garage, Gelderd Road, Birstall, Wf17 9lx<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: Ppc E 86<br>Dated: Not Supplied<br>Process Type: Local Authority Pollution Prevention and Control<br>Description: PG6/34 Respraying of road vehicles<br><b>Status: Permitted</b><br>Positional Accuracy: Manually positioned to the address or location                            | A13SW (SW)                             | 230                          | 3       | 423451<br>427259 |
| 17     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Astracast Plc<br>Location: P O Box 20, Spring Ram Business Park, Birstall, Wf17 9lx<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: PPC E 85<br>Dated: Not Supplied<br>Process Type: Local Authority Pollution Prevention and Control<br>Description: PG4/2 Processes for the manufacture of fibre reinforced plastics<br><b>Status: Permitted</b><br>Positional Accuracy: Manually positioned within the geographical locality | A12SE (W)                              | 290                          | 3       | 423361<br>427308 |
| 18     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Jacuzzi Uk Ltd<br>Location: Oakwell Way, Birstall, BATLEY, West Yorkshire, WF17 9LU<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: Not Given<br>Dated: Not Supplied<br>Process Type: Local Authority Air Pollution Control<br>Description: Part B process (no specific reference)<br><b>Status: Authorised</b><br>Positional Accuracy: Manually positioned within the geographical locality                                    | A12SE (W)                              | 460                          | 3       | 423167<br>427410 |
| 19     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Mastercars (Birstall) Ltd<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: PPC E 151<br>Dated: Not Supplied<br>Process Type: Local Authority Pollution Prevention and Control<br>Description: PG6/34 Respraying of road vehicles<br><b>Status: Permitted</b><br>Positional Accuracy: Manually positioned to the address or location                           | A8NE (SE)                              | 463                          | 3       | 423989<br>426984 |
| 20     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Ram Bathrooms Plc<br>Location: Po Box 24, Oakwell Way, GELDERED ROAD, Birstall, WF17 9LU<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: Not Given<br>Dated: Not Supplied<br>Process Type: Local Authority Air Pollution Control<br>Description: PG6/32 Adhesive coating<br><b>Status: Authorisation revoked</b><br>Positional Accuracy: Manually positioned to the road within the address or location                         | A12SE (W)                              | 474                          | 3       | 423166<br>427310 |
| 21     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Masterfoods (Complementary Petcare)<br>Location: Oakwell Way, Birstall, BATLEY, West Yorkshire, WF17 9<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: Epa E 38<br>Dated: Not Supplied<br>Process Type: Local Authority Air Pollution Control<br>Description: PG6/24 Pet food manufacturing<br><b>Status: Authorisation revoked</b><br>Positional Accuracy: Manually positioned to the road within the address or location      | A12SE (W)                              | 528                          | 3       | 423118<br>427284 |
| 22     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Mastercars (Birstall) Ltd<br>Location: Dark Lane, Birstall, Batley, Wf17 9lw<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: PPC E 162<br>Dated: Not Supplied<br>Process Type: Local Authority Pollution Prevention and Control<br>Description: PG6/34 Respraying of road vehicles<br><b>Status: Permitted</b><br>Positional Accuracy: Manually positioned to the road within the address or location                           | A12SW (W)                              | 757                          | 3       | 422934<br>427118 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 23     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Cis Ltd<br>Location: Owler Lane, Birstall, Batley, West Yorkshire, WF17 9BW<br>Authority: Kirklees Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: Epa E 91<br>Dated: Not Supplied<br>Process Type: Local Authority Air Pollution Control<br>Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input<br><b>Status: Authorisation revoked</b><br>Positional Accuracy: Automatically positioned to the address                                 | A12NW (W)                              | 870                          | 3       | 422766<br>427552 |
| 24     | <b>Local Authority Pollution Prevention and Controls</b><br>Name: Grahams Of Gildersome<br>Location: 23 Bradford Road, Gildersome, LEEDS, West Yorkshire, LS27 7HW<br>Authority: Leeds City Council, Neighbourhoods Department<br>Permit Reference: B0267<br>Dated: Not Supplied<br>Process Type: Local Authority Air Pollution Control<br>Description: Local Authority Air Pollution Control<br><b>Status: Authorisation revoked</b><br>Positional Accuracy: Automatically positioned to the address                                                                  | A18NE (N)                              | 875                          | 4       | 424015<br>428341 |
|        | <b>Nearest Surface Water Feature</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A13NE (E)                              | 193                          | -       | 423991<br>427454 |
| 25     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Chemicals - Detergents/Surfactant<br>Note: Not Supplied<br>Incident Date: 11th January 1994<br>Incident Reference: 149623<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                 | A13SW (W)                              | 129                          | 2       | 423500<br>427400 |
| 26     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Mouth/Gomersal Spen Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Unknown<br>Note: Not Supplied<br>Incident Date: 14th March 1991<br>Incident Reference: 120570<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 2 - Significant Incident<br>Positional Accuracy: Located by supplier to within 100m                                                 | A13SW (SW)                             | 166                          | 2       | 423500<br>427300 |
| 27     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Nab Lane<br>Authority: Environment Agency, North East Region<br>Pollutant: Construction Materials<br>Note: Not Supplied<br>Incident Date: 26th April 1989<br>Incident Reference: 8969<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                                                         | A13SE (SE)                             | 249                          | 2       | 423900<br>427200 |
| 27     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Nab Lane Industrial Estate, Gelderd Road<br>Authority: Environment Agency, North East Region<br>Pollutant: Miscellaneous - Vehicle Washings And De Waxing<br>Note: Not Supplied<br>Incident Date: 29th March 1989<br>Incident Reference: 8766<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m | A13SE (SE)                             | 252                          | 2       | 423900<br>427195 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 28     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Unknown<br>Note: Not Supplied<br>Incident Date: 18th December 1991<br>Incident Reference: 129280<br>Catchment Area: Not Given<br>Receiving Water: Groundwater<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                                      | A13SW (SW)                             | 306                          | 2       | 423400<br>427200 |
| 29     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Road<br>Location: Batley Beck<br>Authority: Environment Agency, North East Region<br>Pollutant: Unknown<br>Note: Fish Killed: No Information<br>Incident Date: 24th March 1995<br>Incident Reference: SL950403<br>Catchment Area: Calder Tributaries<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                                        | A13NE (NE)                             | 308                          | 2       | 424000<br>427700 |
| 30     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Scotia Beck/Source Batley Beck Afu<br>Authority: Environment Agency, North East Region<br>Pollutant: Industrial Effluent<br>Note: Not Supplied<br>Incident Date: 21st August 1991<br>Incident Reference: 125443<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 2 - Significant Incident<br>Positional Accuracy: Located by supplier to within 100m         | A13SE (SE)                             | 317                          | 2       | 423900<br>427100 |
| 30     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Contaminated Groundwater<br>Note: Not Supplied<br>Incident Date: 1st February 1991<br>Incident Reference: 119289<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 1 - Major Incident<br>Positional Accuracy: Located by supplier to within 100m          | A13SE (SE)                             | 321                          | 2       | 423900<br>427095 |
| 31     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Other General Premises<br>Location: Scotia Beck/Source Batley Beck Afu<br>Authority: Environment Agency, North East Region<br>Pollutant: Sewage - Septic Tank Effluent<br>Note: Not Supplied<br>Incident Date: 27th January 1994<br>Incident Reference: 149756<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m | A13SE (SE)                             | 390                          | 2       | 424000<br>427100 |
| 31     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Water Company Sewage: Foul Sewer<br>Location: Mouth/Todmorden Calder Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Mud/Clay/Soil<br>Note: Not Supplied<br>Incident Date: 14th November 1990<br>Incident Reference: 116871<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m              | A13SE (SE)                             | 393                          | 2       | 424000<br>427095 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 32     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Miscellaneous Premises: Unknown<br>Location: Gelderd Road<br>Authority: Environment Agency, North East Region<br>Pollutant: Unknown<br>Note: Not Supplied<br>Incident Date: 11th January 1989<br>Incident Reference: 8441<br>Catchment Area: Not Given<br>Receiving Water: Not Given<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                                                                                              | A12SE (SW)                             | 390                          | 2       | 423300<br>427200 |
| 32     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Miscellaneous Premises: Unknown<br>Location: Gelderd Road<br>Authority: Environment Agency, North East Region<br>Pollutant: Unknown<br>Note: Not Supplied<br>Incident Date: 18th January 1989<br>Incident Reference: 8447<br>Catchment Area: Not Given<br>Receiving Water: Not Given<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                                                                                              | A12SE (SW)                             | 392                          | 2       | 423300<br>427195 |
| 33     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Road<br>Location: Pizza Hut, Gelderd Road, BIRSTALL<br>Authority: Environment Agency, North East Region<br>Pollutant: Oils - Diesel (Including Agricultural)<br>Note: Watercourse :Batley Beck; From Lady Ann Beck To River Calder<br>Incident Date: Not Supplied<br>Incident Reference: SL980408<br>Catchment Area: Calder Tributaries<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Unknown<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m | A14SW (SE)                             | 397                          | 2       | 424100<br>427200 |
| 34     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Other General Premises<br>Location: Oulton Beck<br>Authority: Environment Agency, North East Region<br>Pollutant: Oils - Diesel (Including Agricultural)<br>Note: Fish Killed: No Information; Oulton Beck<br>Incident Date: 24th February 1995<br>Incident Reference: SL950291<br>Catchment Area: Calder Tributaries<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                 | A14SW (E)                              | 433                          | 2       | 424200<br>427300 |
| 35     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Gelderd Road<br>Authority: Environment Agency, North East Region<br>Pollutant: Oils - Gas Oil<br>Note: Not Supplied<br>Incident Date: 20th February 1989<br>Incident Reference: 8609<br>Catchment Area: Not Given<br>Receiving Water: Not Given<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                                                                                                  | A12SE (W)                              | 444                          | 2       | 423200<br>427300 |
| 36     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Miscellaneous Premises: Unknown<br>Location: Gelderd Road<br>Authority: Environment Agency, North East Region<br>Pollutant: Unknown<br>Note: Not Supplied<br>Incident Date: 12th January 1989<br>Incident Reference: 8459<br>Catchment Area: Not Given<br>Receiving Water: Not Given<br>Cause of Incident: Not Given<br>Incident Severity: Category 2 - Significant Incident<br>Positional Accuracy: Located by supplier to within 100m                                                                                        | A12SE (SW)                             | 446                          | 2       | 423300<br>427100 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 37     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Mud/Clay/Soil<br>Note: Not Supplied<br>Incident Date: 16th October 1990<br>Incident Reference: 115841<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 1 - Major Incident<br>Positional Accuracy: Located by supplier to within 100m  | A8NE (S)                               | 451                          | 2       | 423800<br>426900 |
| 38     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Scotchman Lane<br>Authority: Environment Agency, North East Region<br>Pollutant: Chemicals - Unknown<br>Note: Not Supplied<br>Incident Date: 25th May 1989<br>Incident Reference: 9188<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 2 - Significant Incident<br>Positional Accuracy: Located by supplier to within 100m               | A14SW (SE)                             | 465                          | 2       | 424100<br>427100 |
| 38     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Clough House Howden Clough<br>Authority: Environment Agency, North East Region<br>Pollutant: Mud/Clay/Soil<br>Note: Not Supplied<br>Incident Date: 27th April 1989<br>Incident Reference: 8986<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m             | A14SW (SE)                             | 468                          | 2       | 424100<br>427095 |
| 39     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Highway/Car Park<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Mud/Clay/Soil<br>Note: Not Supplied<br>Incident Date: 11th February 1991<br>Incident Reference: 119512<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m    | A12SE (SW)                             | 480                          | 2       | 423200<br>427200 |
| 40     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Miscellaneous Premises: Unknown<br>Location: Gelderd Road<br>Authority: Environment Agency, North East Region<br>Pollutant: Unknown<br>Note: Not Supplied<br>Incident Date: 12th January 1989<br>Incident Reference: 8458<br>Catchment Area: Not Given<br>Receiving Water: Not Given<br>Cause of Incident: Not Given<br>Incident Severity: Category 2 - Significant Incident<br>Positional Accuracy: Located by supplier to within 100m                           | A12SE (SW)                             | 527                          | 2       | 423200<br>427100 |
| 40     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Clough House Howden Clough<br>Authority: Environment Agency, North East Region<br>Pollutant: Industrial Effluent<br>Note: Not Supplied<br>Incident Date: 25th September 1990<br>Incident Reference: 115276<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m | A12SE (SW)                             | 530                          | 2       | 423200<br>427095 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 41     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Highway/Car Park<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Oils - Diesel (Including Agricultural)<br>Note: Not Supplied<br>Incident Date: 1st November 1993<br>Incident Reference: 148545<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m   | A12SE (W)                              | 541                          | 2       | 423100<br>427300 |
| 42     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial Premises<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Industrial Effluent<br>Note: Not Supplied<br>Incident Date: 15th October 1990<br>Incident Reference: 115831<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 1 - Major Incident<br>Positional Accuracy: Located by supplier to within 100m                   | A8NE (S)                               | 548                          | 2       | 423800<br>426800 |
| 43     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Water Company Sewage: Foul Sewer<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Chemicals - Unknown<br>Note: Not Supplied<br>Incident Date: 2nd July 1989<br>Incident Reference: 101073<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 2 - Significant Incident<br>Positional Accuracy: Located by supplier to within 100m    | A7NE (SW)                              | 585                          | 2       | 423300<br>426900 |
| 44     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Miscellaneous Premises: Unknown<br>Location: Nab Lane Industrial Estate, Gelderd Road<br>Authority: Environment Agency, North East Region<br>Pollutant: Unknown<br>Note: Not Supplied<br>Incident Date: 20th January 1989<br>Incident Reference: 8482<br>Catchment Area: Not Given<br>Receiving Water: Not Given<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                            | A12SE (SW)                             | 613                          | 2       | 423100<br>427100 |
| 45     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Construction/Demolition<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Surface Water<br>Note: Not Supplied<br>Incident Date: 3rd July 1991<br>Incident Reference: 123938<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m                         | A17SE (NW)                             | 619                          | 2       | 423200<br>427900 |
| 46     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Landfill/Waste Disposal Site<br>Location: Mouth/Scotia Beck Batley Beck Afl<br>Authority: Environment Agency, North East Region<br>Pollutant: Miscellaneous - Tip Leachate<br>Note: Not Supplied<br>Incident Date: 30th January 1991<br>Incident Reference: 119216<br>Catchment Area: Not Given<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 1 - Major Incident<br>Positional Accuracy: Located by supplier to within 100m | A9NW (SE)                              | 676                          | 2       | 424100<br>426800 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 46     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Water Company Sewage: Foul Sewer<br>Location: HOWDEN CLOUGH<br>Authority: Environment Agency, North East Region<br>Pollutant: Sewage - Wrong Connection<br>Note: Batley Beck; No Fish Killed<br>Incident Date: 25th September 1998<br>Incident Reference: SL980873<br>Catchment Area: Calder Tributaries<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m            | A9NW (SE)                              | 680                          | 2       | 424100<br>426795 |
| 47     | <b>Pollution Incidents to Controlled Waters</b><br>Property Type: Industrial: Other<br>Location: Off Bradford Road, GILDERSOME<br>Authority: Environment Agency, North East Region<br>Pollutant: Oils - Diesel (Including Agricultural)<br>Note: Fish Killed: No Information<br>Incident Date: 24th February 1997<br>Incident Reference: SL970300<br>Catchment Area: Aire Tributaries<br>Receiving Water: Freshwater Stream/River<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m | A19NW (NE)                             | 871                          | 2       | 424100<br>428300 |
| 48     | <b>Substantiated Pollution Incident Register</b><br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Incident Date: 30th June 2010<br>Incident Reference: 796057<br>Water Impact: Category 2 - Significant Incident<br>Air Impact: Category 3 - Minor Incident<br>Land Impact: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 10m<br>Pollutant: Sewage Materials: Grey Water                                                                                                                                            | A13NE (NE)                             | 204                          | 2       | 423953<br>427598 |
| 48     | <b>Substantiated Pollution Incident Register</b><br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Incident Date: 25th April 2013<br>Incident Reference: 1106239<br>Water Impact: Category 2 - Significant Incident<br>Air Impact: Category 3 - Minor Incident<br>Land Impact: Category 4 - No Impact<br>Positional Accuracy: Located by supplier to within 10m<br>Pollutant: Crude Sewage<br>Pollutant: Other Sewage                                                                                                                                    | A13NE (NE)                             | 224                          | 2       | 423969<br>427611 |
| 49     | <b>Substantiated Pollution Incident Register</b><br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Incident Date: 3rd May 2002<br>Incident Reference: 76299<br>Water Impact: Category 2 - Significant Incident<br>Air Impact: Category 4 - No Impact<br>Land Impact: Category 4 - No Impact<br>Positional Accuracy: Located by supplier to within 10m<br>Pollutant: Organic Chemicals/Products: Surfactants And Detergents                                                                                                                               | A9NW (SE)                              | 573                          | 2       | 424095<br>426933 |
| 50     | <b>Substantiated Pollution Incident Register</b><br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Incident Date: 19th November 2007<br>Incident Reference: 545916<br>Water Impact: Category 2 - Significant Incident<br>Air Impact: Category 4 - No Impact<br>Land Impact: Category 4 - No Impact<br>Positional Accuracy: Located by supplier to within 10m<br>Pollutant: Other Pollutant                                                                                                                                                               | A7NE (SW)                              | 664                          | 2       | 423190<br>426899 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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|        | <b>Water Abstractions</b><br>Operator: Kirklees Metropolitan Council<br>Licence Number: 2/27/13/153<br>Permit Version: 100<br>Location: Nova Beck<br>Authority: Environment Agency, North East Region<br>Abstraction: Holiday Sites, Camp Sites & Tourist Attractions: Make-Up or Top Up Water<br>Abstraction Type: Water may be abstracted from a single point<br>Source: Surface<br>Daily Rate (m3): 36<br>Yearly Rate (m3): 9500<br>Details: Oakwell Hall, Country Park, Birstall, Near Batley<br>Authorised Start: 01 January<br>Authorised End: 31 December<br>Permit Start Date: 26th April 1982<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m                                          | (W)                                    | 1659                         | 2       | 421980<br>427220 |
|        | <b>Water Abstractions</b><br>Operator: Mark Darnborough & Son (Drighlington) Ltd<br>Licence Number: 2/27/17/080<br>Permit Version: Not Supplied<br>Location: Drighlington<br>Authority: Environment Agency, North East Region<br>Abstraction: General Industrial<br>Abstraction Type: Not Supplied<br>Source: Surface<br>Daily Rate (m3): 18<br>Yearly Rate (m3): 4546<br>Details: Licence Lapsed<br>Authorised Start: Not Supplied<br>Authorised End: Not Supplied<br>Permit Start Date: Not Supplied<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m                                                                                                                                          | (N)                                    | 1808                         | 2       | 423400<br>429300 |
|        | <b>Water Abstractions</b><br>Operator: J & D Brook Ltd<br>Licence Number: 2/27/17/016<br>Permit Version: Not Supplied<br>Location: Location Description Not Available<br>Authority: Environment Agency, North East Region<br>Abstraction: General Industrial<br>Abstraction Type: Not Supplied<br>Source: Surface<br>Daily Rate (m3): 332<br>Yearly Rate (m3): 59098<br>Details: Licence Revoked<br>Authorised Start: Not Supplied<br>Authorised End: Not Supplied<br>Permit Start Date: Not Supplied<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m                                                                                                                                           | (E)                                    | 1947                         | 2       | 425600<br>428200 |
|        | <b>Water Abstractions</b><br>Operator: Moss Metal Finishing Limited<br>Licence Number: 2/27/13/027<br>Permit Version: 101<br>Location: Well - Coal Measures - Birstall<br>Authority: Environment Agency, North East Region<br>Abstraction: Metal: General Use Relating To Secondary Category (Medium Loss)<br>Abstraction Type: Water may be abstracted from a single point<br>Source: Groundwater<br>Daily Rate (m3): Not Supplied<br>Yearly Rate (m3): Not Supplied<br>Details: Providence Mill, Smithies Moor Lane, Birstall, Nr. Leeds<br>Authorised Start: 01 January<br>Authorised End: 31 December<br>Permit Start Date: 18th April 2002<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | (SW)                                   | 1966                         | 2       | 422600<br>425700 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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|        | <b>Water Abstractions</b><br>Operator: Roundhay Metal Finishers (Leeds) Ltd<br>Licence Number: 2/27/13/027<br>Permit Version: 100<br>Location: Well - Coal Measures - Birstall<br>Authority: Environment Agency, North East Region<br>Abstraction: Metal: General Use Relating To Secondary Category (Medium Loss)<br>Abstraction Type: Water may be abstracted from a single point<br>Source: Groundwater<br>Daily Rate (m3): 123<br>Yearly Rate (m3): 36823<br>Details: Providence Mill, Smithies Moor Lane, Birstall, Nr. Leeds<br>Authorised Start: 01 January<br>Authorised End: 31 December<br>Permit Start Date: 14th December 1965<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 10m | (SW)                                   | 1966                         | 2       | 422600<br>425700 |
|        | <b>Groundwater Vulnerability Map</b><br>Combined Classification: Secondary Bedrock Aquifer - High Vulnerability<br>Combined Vulnerability: High<br>Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer<br>Pollutant Speed: High<br>Bedrock Flow: Well Connected Fractures<br>Dilution: 300-550 mm/year<br>Baseflow Index: >70%<br>Superficial Patchiness: <90%<br>Superficial Thickness: <3m<br>Superficial Recharge: No Data                                                                                                                                                                                                                                                                                        | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
|        | <b>Groundwater Vulnerability - Soluble Rock Risk</b><br>None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                        |                              |         |                  |
|        | <b>Bedrock Aquifer Designations</b><br>Aquifer Designation: Secondary Aquifer - A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
|        | <b>Superficial Aquifer Designations</b><br>No Data Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                        |                              |         |                  |
|        | <b>Extreme Flooding from Rivers or Sea without Defences</b><br>None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                        |                              |         |                  |
|        | <b>Flooding from Rivers or Sea without Defences</b><br>None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                        |                              |         |                  |
|        | <b>Areas Benefiting from Flood Defences</b><br>None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                        |                              |         |                  |
|        | <b>Flood Water Storage Areas</b><br>None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                        |                              |         |                  |
|        | <b>Flood Defences</b><br>None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                        |                              |         |                  |
| 51     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 438.4<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | A13NE (E)                              | 193                          | 6       | 423991<br>427454 |
| 52     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 15.3<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A13NE (NE)                             | 210                          | 6       | 423956<br>427604 |

| Map ID | Details                                                                                                                                                                                                                                         | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 53     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 42.6<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1 | A13NE (NE)                             | 219                          | 6       | 423989<br>427571 |
| 54     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 17.8<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1 | A13NE (NE)                             | 219                          | 6       | 423989<br>427571 |
| 55     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 28.2<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1 | A13NE (NE)                             | 221                          | 6       | 423982<br>427587 |
| 56     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 27.9<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1       | A13NE (NE)                             | 221                          | 6       | 423982<br>427587 |
| 57     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 66.4<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1 | A13NE (NE)                             | 225                          | 6       | 423969<br>427612 |
| 58     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 50.4<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1       | A13SE (SE)                             | 274                          | 6       | 423871<br>427132 |
| 59     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 70.0<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1       | A13SE (SE)                             | 277                          | 6       | 423874<br>427131 |
| 60     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 59.0<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1       | A13SE (S)                              | 289                          | 6       | 423845<br>427094 |
| 61     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 322.5<br>Watercourse Level: Not Supplied<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1           | A8NE (S)                               | 311                          | 6       | 423807<br>427049 |

| Map ID | Details                                                                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 62     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 112.5<br>Watercourse Level: Not Supplied<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1            | A13SE (SE)                             | 324                          | 6       | 423942<br>427133 |
| 63     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 83.6<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1  | A14SW (SE)                             | 404                          | 6       | 424054<br>427140 |
| 64     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 250.4<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1       | A9NW (SE)                              | 473                          | 6       | 424073<br>427058 |
| 65     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 137.5<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1 | A9NW (SE)                              | 473                          | 6       | 424073<br>427058 |
| 66     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 39.5<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1        | A8NW (S)                               | 509                          | 6       | 423557<br>426845 |
| 67     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 36.6<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1        | A8NW (S)                               | 537                          | 6       | 423522<br>426826 |
| 68     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 418.1<br>Watercourse Level: Not Supplied<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1            | A14SW (SE)                             | 562                          | 6       | 424293<br>427187 |
| 69     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 30.7<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1  | A9NW (SE)                              | 586                          | 6       | 424104<br>426924 |
| 70     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 44.7<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1  | A9NW (SE)                              | 592                          | 6       | 424089<br>426900 |

| Map ID | Details                                                                                                                                                                                                                                         | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 71     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 86.3<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1 | A9NW (SE)                              | 628                          | 6       | 424107<br>426869 |
| 72     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 32.3<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1       | A14NE (E)                              | 661                          | 6       | 424451<br>427563 |
| 73     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 33.1<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1       | A12SW (SW)                             | 669                          | 6       | 423028<br>427120 |
| 74     | <b>OS Water Network Lines</b><br>Watercourse Form: Lake<br>Watercourse Length: 5.1<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1                | A14NE (E)                              | 674                          | 6       | 424458<br>427593 |
| 75     | <b>OS Water Network Lines</b><br>Watercourse Form: Lake<br>Watercourse Length: 14.2<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1               | A14NE (E)                              | 674                          | 6       | 424458<br>427593 |
| 76     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 41.6<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1       | A14NE (E)                              | 682                          | 6       | 424465<br>427606 |
| 77     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 29.4<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1       | A9NW (SE)                              | 699                          | 6       | 424152<br>426813 |
| 78     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 47.4<br>Watercourse Level: Underground<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1             | A9NW (SE)                              | 699                          | 6       | 424152<br>426813 |
| 79     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 93.8<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1 | A9NW (SE)                              | 700                          | 6       | 424131<br>426794 |



| Map ID | Details                                                                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 80     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 18.4<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1        | A9NW (SE)                              | 707                          | 6       | 424197<br>426844 |
| 81     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 42.5<br>Watercourse Level: Not Supplied<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1             | A9NW (SE)                              | 778                          | 6       | 424219<br>426768 |
| 82     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 93.2<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1        | A9NW (SE)                              | 778                          | 6       | 424219<br>426768 |
| 83     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 36.9<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1  | A9SW (SE)                              | 782                          | 6       | 424190<br>426737 |
| 84     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 181.3<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1 | A9SW (SE)                              | 816                          | 6       | 424207<br>426706 |
| 85     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 58.4<br>Watercourse Level: Not Supplied<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1             | A9SW (SE)                              | 816                          | 6       | 424207<br>426706 |
| 86     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 61.4<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Aire and Calder<br>Primacy: 1        | A9SW (SE)                              | 834                          | 6       | 424260<br>426730 |
| 87     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 11.1<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1  | A9SW (SE)                              | 966                          | 6       | 424245<br>426547 |
| 88     | <b>OS Water Network Lines</b><br>Watercourse Form: Inland river<br>Watercourse Length: 49.0<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Howden Clough Beck<br>Catchment Name: Aire and Calder<br>Primacy: 1  | A9SW (SE)                              | 977                          | 6       | 424251<br>426538 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 89     | <b>BGS Recorded Landfill Sites</b><br>Site Name: Nab Lane<br>Location: BIRSTALL, Yorks<br>Authority: British Geological Survey, National Geoscience Information Service<br>Ground Water: Potential threat to ground water<br>Surface Water: Information not available<br>Geology: N/A<br>Positional Accuracy: Positioned by the supplier<br>Boundary Accuracy: Moderate                                                                                                                                                                                                             | A13SW (SW)                             | 89                           | -       | 423637<br>427263 |
| 90     | <b>BGS Recorded Landfill Sites</b><br>Site Name: Nab Lane<br>Location: BIRSTALL, Yorks<br>Authority: British Geological Survey, National Geoscience Information Service<br>Ground Water: Potential threat to ground water<br>Surface Water: Information not available<br>Geology: N/A<br>Positional Accuracy: Positioned by the supplier<br>Boundary Accuracy: Derived                                                                                                                                                                                                              | A7NE (SW)                              | 710                          | -       | 423059<br>426982 |
| 91     | <b>Historical Landfill Sites</b><br>Licence Holder: Not Supplied<br>Location: Howden Clough, Kirkless, Yorkshire<br>Name: Nab Lane Refuse Disposal Tip<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD31617<br>First Input Date: 9th November 1970<br>Last Input Date: Not Supplied<br>Specified Waste: Deposited Waste included Inert, Industrial, Commercial and Household<br>Type: Waste, and Liquid Sludge<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: Not Supplied<br>BGS Ref: 1459<br>Other Ref: Not Supplied | A13NE (E)                              | 0                            | 2       | 423716<br>427431 |
| 92     | <b>Historical Landfill Sites</b><br>Licence Holder: Mr Stanley Briggs<br>Location: Moat Hill Farm, Howden Clough, Birstall, Batley<br>Name: Railway Cutting<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD04161<br>First Input Date: 31st December 1978<br>Last Input Date: 31st December 1988<br>Specified Waste: Deposited Waste included Inert, Industrial and Commercial Waste<br>Type:<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: 4700/0777<br>BGS Ref: Not Supplied<br>Other Ref: 4700/0159                 | A8NW (S)                               | 410                          | 2       | 423637<br>426930 |
| 93     | <b>Historical Landfill Sites</b><br>Licence Holder: Clugston Reclamation Limited<br>Location: Drighlington<br>Name: Land Adjacent to Rushforth Quarry and Owlett Hall<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD03800<br>First Input Date: 31st December 1968<br>Last Input Date: 31st December 1992<br>Specified Waste: Deposited Waste included Inert, Industrial and Commercial Waste<br>Type:<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: 4700/0049<br>BGS Ref: Not Supplied<br>Other Ref: 4700/0718, 142  | A18SW (N)                              | 496                          | 2       | 423492<br>427963 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 94     | <b>Historical Landfill Sites</b><br>Licence Holder: ORA Hyman<br>Location: Wakefield Road, Drighlington<br>Name: Rear Of 132 Wakefield Road<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD03671<br>First Input Date: Not Supplied<br>Last Input Date: Not Supplied<br>Specified Waste: Deposited Waste included Inert and Commercial Waste<br>Type:<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: Not Supplied<br>BGS Ref: Not Supplied<br>Other Ref: 886, 4700/0886                                                                                      | A18SW (N)                              | 496                          | 2       | 423492<br>427963 |
| 95     | <b>Historical Landfill Sites</b><br>Licence Holder: London and Scandinavian Metallurgical Company Limited<br>Location: Wakefield Road, Drighlington<br>Name: Rear Of 132 Wakefield Road<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD03672<br>First Input Date: Not Supplied<br>Last Input Date: 31st December 1989<br>Specified Waste: Deposited Waste included Inert, Industrial, Commercial, Household and<br>Type: Special Waste<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: Not Supplied<br>BGS Ref: Not Supplied<br>Other Ref: 4700/0142, 831001 | A18SW (N)                              | 526                          | 2       | 423512<br>428004 |
| 96     | <b>Historical Landfill Sites</b><br>Licence Holder: Hargreaves Clearwaste Services Limited<br>Location: Howden Clough, Morley, Leeds<br>Name: Thorne Farm<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD03677<br>First Input Date: 31st December 1977<br>Last Input Date: 31st December 1985<br>Specified Waste: Deposited Waste included Inert, Industrial, Commercial and Special Waste<br>Type:<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: 4700/0013<br>BGS Ref: Not Supplied<br>Other Ref: 716, 4700/0033                                          | A14NE (E)                              | 599                          | 2       | 424397<br>427470 |
| 97     | <b>Historical Landfill Sites</b><br>Licence Holder: Naylor Myers Limited<br>Location: Wakefield Road, Drighlington<br>Name: Rushforth Works<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD03674<br>First Input Date: 8th July 1981<br>Last Input Date: 10th January 1990<br>Specified Waste: Deposited Waste included Inert and Industrial Waste<br>Type:<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: 4700/0051<br>BGS Ref: Not Supplied<br>Other Ref: 4700/0147, 1556                                                                                  | A18NW (N)                              | 660                          | 2       | 423613<br>428172 |
| 98     | <b>Historical Landfill Sites</b><br>Licence Holder: Clugston Reclamation Limited<br>Location: Wakefield Road, Drighlington<br>Name: Rushforth Quarry / Rear Of 132 Wakefield Road<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD03673<br>First Input Date: 1st January 1968<br>Last Input Date: Not Supplied<br>Specified Waste: Deposited Waste included Inert Waste<br>Type:<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: Not Supplied<br>BGS Ref: Not Supplied<br>Other Ref: 4700/0069                                                                | A18NW (N)                              | 667                          | 2       | 423535<br>428161 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR           |
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| 99     | <b>Historical Landfill Sites</b><br>Licence Holder: Clugston Reclamation Limited<br>Location: Rear of 132 Wakefield Road, Drighlington<br>Name: Rushforth Works<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD03676<br>First Input Date: 30th June 1988<br>Last Input Date: 31st December 1989<br>Specified Waste: Deposited Waste included Inert and Commercial Waste<br>Type:<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: 4700/0242<br>BGS Ref: Not Supplied<br>Other Ref: 4700/0668                                                                                                                                    | A17NE (NW)                             | 724                          | 2       | 423294 428117 |
| 100    | <b>Historical Landfill Sites</b><br>Licence Holder: Sharkey Brothers Limited<br>Location: Land at the Rear of 132 Wakefield Road, Drighlington<br>Name: Rushforth Works<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD03675<br>First Input Date: 23rd August 1985<br>Last Input Date: 13th February 1986<br>Specified Waste: Deposited Waste included Inert and Commercial Waste<br>Type:<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: 4700/0188<br>BGS Ref: Not Supplied<br>Other Ref: 4700/0498                                                                                                                          | A17NE (NW)                             | 728                          | 2       | 423296 428123 |
| 101    | <b>Historical Landfill Sites</b><br>Licence Holder: Not Supplied<br>Location: Off Gelderd Road, Copley Hill<br>Name: Nab Lane<br>Operator Location: Dudley Road, Kingswinford<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD32535<br>First Input Date: 31st December 1971<br>Last Input Date: Not Supplied<br>Specified Waste: Deposited Waste included Industrial Waste<br>Type:<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: Not Supplied<br>BGS Ref: 1458<br>Other Ref: Not Supplied                                                                                                                                                                       | A7NE (SW)                              | 737                          | 2       | 423047 426952 |
| 102    | <b>Licensed Waste Management Facilities (Landfill Boundaries)</b><br>Name: Howden Clough Landfill Site<br>Licence Number: 65118<br>Location: Howden Clough Landfill Site, Howden Clough Road, Morley, West Yorkshire<br>Licence Holder: Biffa Waste Services Ltd<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Household, Commercial And Industrial Waste Landfills<br>Max Input Rate: Not Supplied<br><b>Licence Status:</b> Closure<br>Issued: 31st May 1989<br>Positional Accuracy: Positioned by the supplier<br>Boundary Accuracy: As Supplied                                                                                               | A13NE (E)                              | 53                           | 2       | 423849 427445 |
| 103    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 61065<br>Location: Land/premises At, Nab Lane, Birstall, Batley, West Yorkshire, WF17 0HU<br>Operator Name: Suez Recycling And Recovery Kirklees Ltd<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Household Waste Amenity Sites<br><b>Licence Status:</b> Modified<br>Issued: 1st April 1996<br>Last Modified: 30th June 2016<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | A13SW (S)                              | 38                           | 2       | 423700 427300 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 104    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 61038<br>Location: Howden Clough Colliery, Birstall, Batley, West Yorkshire, WF17 9LX<br>Operator Name: Hicks Haulage<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Metal Recycling Sites (Mixed)<br><b>Licence Status: Expired</b><br>Issued: 4th January 1994<br>Last Modified: Not Supplied<br>Expires: 1st January 1999<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m                                 | A13SW (W)                              | 129                          | 2       | 423500<br>427400 |
| 105    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 61047<br>Location: 30 Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LT<br>Operator Name: R Spivey & Son Ltd<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Material Recycling Treatment Facilities<br><b>Licence Status: Modified</b><br>Issued: 30th January 1995<br>Last Modified: 29th February 2016<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 10m                    | A7NE (SW)                              | 468                          | 2       | 423373<br>426991 |
| 106    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 61009<br>Location: Land/premises At Hill Top Garage, Gelderd Road, Birstall, West Yorkshire<br>Operator Name: R Gentry<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Household, Commercial And Industrial Transfer Stations<br><b>Licence Status: Expired</b><br>Issued: 10th July 1991<br>Last Modified: Not Supplied<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m             | A12SE (SW)                             | 480                          | 2       | 423200<br>427200 |
| 107    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 65118<br>Location: Howden Clough Landfill Site, Howden Clough Road, Morley, West Yorkshire<br>Operator Name: Biffa Waste Services Ltd<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Household, Commercial And Industrial Waste Landfills<br><b>Licence Status: Closed</b><br>Issued: 31st May 1989<br>Last Modified: 23rd May 2002<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | A14SE (E)                              | 623                          | 2       | 424400<br>427300 |
| 108    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 100351<br>Location: Unit 13, Nab Lane, Birstall, Batley, West Yorkshire, WF17 9NG<br>Operator Name: X P O Bulk U K Limited<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Physico-chemical Treatment Facilities<br><b>Licence Status: Transferred</b><br>Issued: 27th August 2008<br>Last Modified: Not Supplied<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 10m                     | A7NE (SW)                              | 664                          | 2       | 423189<br>426899 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 109    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 65055<br>Location: Units 7 & 8 Norquest Ind Est, Pennine View, Birstall, Batley, West Yorkshire, WF17 9NE<br>Operator Name: R Spivey & Son Limited<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Physical Treatment Facilities<br><b>Licence Status: Modified</b><br>Issued: 24th December 1999<br>Last Modified: 12th November 2019<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | A7NE (SW)                              | 726                          | 2       | 423200<br>426800 |
| 110    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 61446<br>Location: 11 Bradford Road, Gildersome, Leeds, West Yorkshire, LS27 7HW<br>Operator Name: J W Crowther & Son Limited<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Transfer Stations Taking Non-biodegradable Wastes<br><b>Licence Status: Issued</b><br>Issued: 14th October 1993<br>Last Modified: Not Supplied<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 10m            | A19NW (N)                              | 867                          | 2       | 424070<br>428310 |
| 111    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 400623<br>Location: Foxhall Farm, Owler Lane, Birstall, West Yorkshire, WF17 9BW<br>Operator Name: Foxhall Clinical Services Limited<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Clinical Waste Transfer Station<br><b>Licence Status: Transferred</b><br>Issued: 8th November 2013<br>Last Modified: Not Supplied<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 10m                  | A12NW (W)                              | 872                          | 2       | 422778<br>427625 |
| 111    | <b>Licensed Waste Management Facilities (Locations)</b><br>Licence Number: 100522<br>Location: Foxhall Farm, Owler Lane, Birstall, West Yorkshire, WF17 9BW<br>Operator Name: Foxhall Environmental Services Ltd<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, Yorkshire Area<br>Site Category: Asbestos Waste Transfer Station<br><b>Licence Status: Modified</b><br>Issued: 17th September 2008<br>Last Modified: 5th March 2014<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: Not Supplied<br>IPPC Reference: FP3297LP<br>Positional Accuracy: Located by supplier to within 10m                    | A12NW (W)                              | 880                          | 2       | 422766<br>427610 |
|        | <b>Local Authority Landfill Coverage</b><br>Name: Kirklees Metropolitan Borough Council<br>- Has not been able to supply Landfill data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                        | 0                            | 7       | 423709<br>427432 |
|        | <b>Local Authority Landfill Coverage</b><br>Name: Leeds City Council<br>- Has supplied landfill data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                        | 213                          | 8       | 423992<br>427550 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                            | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 112    | <b>Local Authority Recorded Landfill Sites</b><br>Location: Geldered Road, Gildersome<br>Reference: MO/3593<br>Authority: Leeds City Council, Planning and Development<br><b>Last Reported Status:</b> Unknown<br>Types of Waste: Inert<br>Date of Closure: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m<br>Boundary Quality: Not Applicable            | A13NE (NE)                             | 249                          | 8       | 423900<br>427700 |
| 113    | <b>Local Authority Recorded Landfill Sites</b><br>Location: Off Geldered Road, Gildersome<br>Reference: MO/1740<br>Authority: Leeds City Council, Planning and Development<br><b>Last Reported Status:</b> Unknown<br>Types of Waste: Not Supplied<br>Date of Closure: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m<br>Boundary Quality: Not Applicable | A18SW (N)                              | 304                          | 8       | 423600<br>427800 |
| 114    | <b>Local Authority Recorded Landfill Sites</b><br>Location: Owlet Hall Farm, Gildersome<br>Reference: 75/23/00399<br>Authority: Leeds City Council, Planning and Development<br><b>Last Reported Status:</b> Unknown<br>Types of Waste: Inert<br>Date of Closure: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m<br>Boundary Quality: Not Applicable      | A18SW (N)                              | 609                          | 8       | 423527<br>428098 |
| 115    | <b>Local Authority Recorded Landfill Sites</b><br>Location: Wyre Hall Quarry<br>Reference: MO/4394<br>Authority: Leeds City Council, Planning and Development<br><b>Last Reported Status:</b> Unknown<br>Types of Waste: Asbestos Dust<br>Date of Closure: Not Supplied<br>Positional Accuracy: Positioned by the supplier<br>Boundary Quality: Moderate                           | A18NW (N)                              | 664                          | 8       | 423669<br>428181 |
| 116    | <b>Local Authority Recorded Landfill Sites</b><br>Location: Rushforths Quarry, Drighlington<br>Reference: MO/3566<br>Authority: Leeds City Council, Planning and Development<br><b>Last Reported Status:</b> Unknown<br>Types of Waste: Not Supplied<br>Date of Closure: Not Supplied<br>Positional Accuracy: Positioned by the supplier<br>Boundary Quality: Moderate             | A18NW (N)                              | 700                          | 8       | 423498<br>428185 |
| 117    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: NW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                                                                                                                                                                                                                                           | A13NW (NW)                             | 84                           | -       | 423573<br>427490 |
| 118    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: N<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                                                                                                                                                                                                                                            | A13NW (N)                              | 110                          | -       | 423643<br>427608 |
| 119    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: SW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                                                                                                                                                                                                                                           | A13SW (SW)                             | 122                          | -       | 423575<br>427282 |
| 120    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: SW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                                                                                                                                                                                                                                           | A13SW (SW)                             | 154                          | -       | 423575<br>427234 |
| 121    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: N<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                                                                                                                                                                                                                                            | A13NW (N)                              | 170                          | -       | 423704<br>427689 |

| Map ID | Details                                                                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 122    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: N<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NE (N)                              | 185                          | -       | 423750<br>427701 |
| 123    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: W<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13SW (W)                              | 215                          | -       | 423418<br>427373 |
| 124    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: W<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NW (W)                              | 222                          | -       | 423406<br>427451 |
| 125    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: NE<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A13NE (NE)                             | 230                          | -       | 423845<br>427709 |
| 126    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: N<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NE (N)                              | 248                          | -       | 423757<br>427764 |
| 127    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: SW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A13SW (SW)                             | 323                          | -       | 423462<br>427107 |
| 128    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: S<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NW (S)                               | 385                          | -       | 423690<br>426952 |
| 129    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: S<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NE (S)                               | 393                          | -       | 423816<br>426965 |
| 130    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: S<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NW (S)                               | 415                          | -       | 423527<br>426955 |
| 131    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: SW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A8NW (SW)                              | 440                          | -       | 423436<br>426976 |
| 132    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: E<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A14NW (E)                              | 463                          | -       | 424261<br>427466 |
| 133    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: S<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NE (S)                               | 477                          | -       | 423920<br>426920 |
| 134    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: SE<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A8NE (SE)                              | 511                          | -       | 423984<br>426920 |
| 135    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: NW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A17SE (NW)                             | 568                          | -       | 423364<br>427977 |
| 136    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: N<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A18SE (N)                              | 583                          | -       | 423939<br>428057 |
| 137    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: W<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A12SE (W)                              | 598                          | -       | 423039<br>427315 |

| Map ID | Details                                                                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 138    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: E<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A14SW (E)                              | 646                          | -       | 424370<br>427159 |
| 139    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: N<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A18NW (N)                              | 661                          | -       | 423610<br>428172 |
| 140    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: N<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A18NW (N)                              | 679                          | -       | 423699<br>428198 |
| 141    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: N<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A18NE (N)                              | 679                          | -       | 423998<br>428137 |
| 142    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: NE<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A19SW (NE)                             | 732                          | -       | 424370<br>427922 |
| 143    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: SE<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A9NW (SE)                              | 767                          | -       | 424225<br>426788 |
| 144    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: SW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A7NW (SW)                              | 777                          | -       | 423006<br>426940 |
| 145    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: S<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8SE (S)                               | 798                          | -       | 423748<br>426541 |
| 146    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: SW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A7NW (SW)                              | 823                          | -       | 422893<br>427044 |
| 147    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: E<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A14SE (E)                              | 900                          | -       | 424675<br>427256 |
| 148    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: NW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A17NW (NW)                             | 911                          | -       | 423036<br>428151 |
| 149    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: NE<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A19NW (NE)                             | 927                          | -       | 424183<br>428320 |
| 150    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: E<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A15NW (E)                              | 957                          | -       | 424755<br>427476 |
| 151    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: N<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A23SE (N)                              | 960                          | -       | 423847<br>428470 |
| 152    | <b>Potentially Infilled Land (Non-Water)</b><br>Bearing Ref: NW<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995 | A17NE (NW)                             | 962                          | -       | 423083<br>428260 |
| 153    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894   | A13SE (SE)                             | 141                          | -       | 423853<br>427310 |
| 154    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955   | A13NW (W)                              | 175                          | -       | 423461<br>427484 |

| Map ID | Details                                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 155    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A13NE (N)                              | 221                          | -       | 423798<br>427726 |
| 156    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1908 | A13SE (SE)                             | 224                          | -       | 423922<br>427262 |
| 157    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1908 | A13SE (SE)                             | 308                          | -       | 423959<br>427178 |
| 158    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A18SE (N)                              | 323                          | -       | 423795<br>427832 |
| 159    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A8NE (SE)                              | 493                          | -       | 424018<br>426970 |
| 160    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A18SW (N)                              | 510                          | -       | 423523<br>427992 |
| 161    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A8NW (S)                               | 540                          | -       | 423613<br>426802 |
| 162    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A8SW (S)                               | 603                          | -       | 423570<br>426746 |
| 163    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A12NE (W)                              | 612                          | -       | 423073<br>427685 |
| 164    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A12SW (W)                              | 615                          | -       | 423033<br>427260 |
| 165    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A8SW (S)                               | 666                          | -       | 423575<br>426681 |
| 166    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A7SE (SW)                              | 786                          | -       | 423236<br>426694 |
| 167    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A9NW (SE)                              | 850                          | -       | 424320<br>426767 |
| 168    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A19NW (NE)                             | 867                          | -       | 424286<br>428186 |
| 169    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A19NW (NE)                             | 878                          | -       | 424364<br>428140 |
| 170    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A18NE (N)                              | 879                          | -       | 423735<br>428398 |
| 171    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A19NE (NE)                             | 897                          | -       | 424414<br>428119 |
| 172    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1854 | A19NW (NE)                             | 900                          | -       | 424144<br>428310 |
| 173    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A18NE (N)                              | 901                          | -       | 423730<br>428420 |
| 174    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A7NW (SW)                              | 903                          | -       | 422886<br>426893 |
| 175    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A17NE (N)                              | 938                          | -       | 423326<br>428372 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 176    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1854                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A19SE (NE)                             | 940                          | -       | 424513<br>428076 |
| 177    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A19NW (NE)                             | 951                          | -       | 424263<br>428301 |
| 178    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A19SE (NE)                             | 972                          | -       | 424691<br>427845 |
| 179    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A7SE (SW)                              | 980                          | -       | 423162<br>426510 |
| 180    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1854                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A19SE (NE)                             | 985                          | -       | 424673<br>427915 |
| 181    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A7SE (S)                               | 986                          | -       | 423332<br>426418 |
| 182    | <b>Registered Landfill Sites</b><br>Licence Holder: West Yorks Waste Management<br>Licence Reference: WY 100<br>Site Location: Nab Lane Ext.Site, Howden Clough, Birstall, Batley, West Yorkshire<br>Licence Easting: Not Supplied<br>Licence Northing: Not Supplied<br>Operator Location: 54 Bradford Road, BRIGHOUSE, West Yorkshire, HD6 1RY<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Undefined<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 24th March 1982<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Positioned by the supplier<br>Boundary Accuracy: Moderate<br>Authorised Waste: House, Com + Ind.Waste<br>Prohibited Waste: Poisonous, Noxious, Polluting Wastes<br>Special Wastes                                                                            | A13NW (S)                              | 0                            | 2       | 423709<br>427432 |
| 183    | <b>Registered Landfill Sites</b><br>Licence Holder: West Yorks Waste Management<br>Licence Reference: WY 11<br>Site Location: Nab Lane, Howden Clough, Birstall, Batley, West Yorkshire<br>Licence Easting: 423700<br>Licence Northing: 427100<br>Operator Location: 54 Bradford Road, BRIGHOUSE, West Yorkshire, HD6 1RY<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Undefined<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: Not Supplied<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: House, Com + Ind.Waste<br>Environment Agency Notifiable Wastes<br>must give specific<br>authorisation for this<br>waste to be<br>acceptedWaste<br>requires prior<br>approval | A13SW (S)                              | 237                          | 2       | 423700<br>427100 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 184    | <p><b>Registered Landfill Sites</b></p> <p>Licence Holder: Biffa Waste Services Ltd<br/> Licence Reference: 716<br/> Site Location: Howden Clough (Phase 6), Howden Clough Road, Morley, LEEDS, West Yorkshire, LS27 0LS<br/> Licence Easting: 424200<br/> Licence Northing: 427400<br/> Operator Location: As Site Address<br/> Authority: Environment Agency - North East Region, Ridings Area<br/> Site Category: Landfill - with treatment<br/> Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year)<br/> Waste Source: No known restriction on source of waste<br/> Restrictions:<br/> Status: Site dormant<br/> Dated: 1st March 1996<br/> Preceded By: 716<br/> Licence:<br/> Superseded By: Not Given<br/> Licence:<br/> Positional Accuracy: Manually positioned to the address or location<br/> Boundary Accuracy: Not Applicable<br/> Authorised Waste<br/> Com. &amp; Ind. Waste<br/> Max.Waste Permitted By Licence<br/> Sludges As Described Above<br/> Uncontam. Constr'N/Demol Waste<br/> Uncontam. Earth/Excav'N Waste<br/> Wy/I From Inorg.Waste Thermal Procs<br/> Wy/N Cont.Pack'/Wiping/Filter/Prot.Clo<br/> Wy/P Contam.Excav/Constr/Demol.Waste<br/> Wy/S Waste From Tr'T Fac/W.Water Tr'T<br/> Aliphatic Hydrocarbons &gt; 1%W/W<br/> Borates<br/> Chem'Y Unstable/Pot'Ly Explosive Waste<br/> Chlorates Etc, Persulphates, Permang'S<br/> Chromates<br/> Clinical Wastes<br/> Difficult Waste N.O.S.<br/> Free Liquids<br/> Free/Simple Ionic Cyanides &gt;0.3%W/W<br/> Hypochlorites And Chlorites<br/> Inorganic Peroxides<br/> List I Substances In Eec Dir. 80/68<br/> Nitrites<br/> Organotin Cpds<br/> Pcbs/Analogues &gt; 50 Mg/Kg<br/> Pesticide/Herbicide/Fungicide &gt; 0.2w/W<br/> Spec.Waste (Epa'90:S62/1996 Regs)N.O.S<br/> Spont.Reacting With Air,Water,Waste<br/> Strong Oxidising Agents<br/> Undrained Fridges/Freezers<br/> Unreacted Styrene/Acrylonitrile/Isocya<br/> W. Arsen'/Selen'/Antimony/Cpds &gt;5%W/W<br/> W. Likely To Pollute Environment N.O.S<br/> W. With Pot'L Harm Human Health N.O.S<br/> Waste Burns Unsupported At 40 C<br/> Waste Giving Rise To Free Halogens<br/> Waste N.O.S.<br/> Waste With Cadmium/Cpds &gt;0.33%W/W<br/> Waste With Inorg.Mercury/Cpds &gt;1%W/W<br/> Waste With Lead/Cpds &gt;5%W/W<br/> Waste With Org.Mercury/Cpds &gt;0.01w/W<br/> Waste With Ph &lt; 4<br/> Waste With Ph &gt; 12<br/> Waste With Wt Loss &gt; 85% On Drying</p> <p><b>Prohibited Waste</b></p> | A14SW (E)                              | 407                          | 2       | 424200<br>427400 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 184    | <b>Registered Landfill Sites</b><br>Licence Holder: Biffa Waste Services Ltd<br>Licence Reference: 716<br>Site Location: Howden Clough (Phase 6), Howden Clough Road, Morley, LEEDS, West Yorkshire, LS27 0LS<br>Licence Easting: 424200<br>Licence Northing: 427400<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill - with treatment<br>Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Record supersededSuperseded<br>Dated: 1st October 1995<br>Preceded By: 716<br>Licence:<br>Superseded By: 716<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Gen. H'Hold, Com & Ind.Waste<br>Max.Onsite Treatment Of Landfill Gas<br>Max.Waste Permitted By Licence<br>Uncontam. Constr'N/Demol. Waste<br>Uncontam. Earth & Excav'N Waste<br>Prohibited Waste: Batteries<br>Chemical Manuf.Process Wastes<br>Clinical Wastes<br>Contaminated Land<br>Contaminated Packaging<br>Difficult Wastes (As In Wmp.26) Incl.<br>Drums/Containers<br>Greases/Lubricants<br>Malodorous Waste<br>Non-Solid Wastes<br>Special Wastes<br>Tannery & Fellmongers Waste<br>Timber Treatment Waste | A14SW (E)                              | 407                          | 2       | 424200<br>427400 |
| 184    | <b>Registered Landfill Sites</b><br>Licence Holder: Biffa Waste Services Ltd<br>Licence Reference: 716<br>Site Location: Howden Clough (Phase 6), Howden Clough Road, Morley, LEEDS, West Yorkshire, LS27 0LS<br>Licence Easting: 424200<br>Licence Northing: 427400<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Undefined<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Record supersededSuperseded<br>Dated: 1st May 1989<br>Preceded By: Not Given<br>Licence:<br>Superseded By: 716<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: House, Com + Ind.Waste<br>Prohibited Waste: Drums (Unless By P.A.)<br>Environment Agency Liable To Cause Environmental Hazards<br>must give specific authorisation for this waste to be acceptedWaste requires prior approval<br>Poisonous, Noxious, Polluting Wastes<br>Sludge Wastes<br>Special Wastes                                                                                                                                                                                                                                                                                | A14SW (E)                              | 407                          | 2       | 424200<br>427400 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 184    | <b>Registered Landfill Sites</b><br>Licence Holder: Hargreaves Clearwaste Ltd<br>Licence Reference: 88 (33)<br>Site Location: Howden Clough, Howden Clough Road, Morley, Leeds, West Yorkshire<br>Licence Easting: 424200<br>Licence Northing: 427400<br>Operator Location: 10 Queen Street, Woodlesford, LEEDS, West Yorkshire, LS26 8AL<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Undefined<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 14th January 1981<br>Preceded By: 33<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: House, Com + Ind.Waste<br>Prohibited Waste: Liable To Cause Enviromental Hazards<br>Poisonous, Noxious, Polluting Wastes                                                                                                                                                                                                                                                             | A14SW (E)                              | 407                          | 2       | 424200<br>427400 |
| 185    | <b>Registered Landfill Sites</b><br>Licence Holder: Clugston Reclamation Ltd<br>Licence Reference: 142<br>Site Location: Owlett Hall Farm, Wakefield Road, Drighlington, Bradford, West Yorkshire<br>Licence Easting: Not Supplied<br>Licence Northing: Not Supplied<br>Operator Location: St Vincent House, Normanby Road, SCUNTHORPE, Lincolnshire, DN15 8QT<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Very Small (Less than 10,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 11th May 1979<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Positioned by the supplier<br>Boundary Accuracy: Moderate<br>Authorised Waste: Com. + Ind. Waste<br>Mineral Waters<br>Prohibited Waste: Liable To Cause Enviromental Hazards<br>Poisonous, Noxious, Polluting Wastes                                                                                                                                                                                                              | A18SW (N)                              | 510                          | 2       | 423513<br>427987 |
| 186    | <b>Registered Landfill Sites</b><br>Licence Holder: Clugston Reclamation Ltd<br>Licence Reference: 886<br>Site Location: Adj Rushforth Quarry And, Owlett Hall Landfill, Drighlington, Bradford, West Yorkshire<br>Licence Easting: 423400<br>Licence Northing: 427950<br>Operator Location: St Vincent House, Normanby Road, SCUNTHORPE, Lincolnshire, DN15 8QT<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 1st May 1991<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Brick,Stone,Slate,Concrete,Breeze Bl'K<br>Build'G Sand,Gravel,Tile,Ceramic,Slate<br>Excavation Waste<br>Ind.Waste Excav. From L/Fill Lic.142<br>Total Max.Waste Permitted By Licence<br>Prohibited Waste: Liable To Cause Environmental Hazards<br>Poisonous, Noxious, Polluting Wastes | A18SW (NW)                             | 526                          | 2       | 423400<br>427950 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 187    | <b>Registered Landfill Sites</b><br>Licence Holder: S Briggs<br>Licence Reference: 159<br>Site Location: Moat Hill Farm, Howden Clough, Birstall, Batley, West Yorkshire<br>Licence Easting: 423500<br>Licence Northing: 426800<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill - Railway cutting<br>Max Input Rate: Undefined<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 1st May 1981<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Com. + Ind. Non-Haz, Non-Biodegrad. Construction And Demolition Wastes<br>Prohibited Waste: Biodegradable/Putrescible Waste<br>Combustible/Potentially Combustible<br>Poisonous, Noxious, Polluting Wastes                | A8NW (S)                               | 569                          | 2       | 423500<br>426800 |
| 188    | <b>Registered Landfill Sites</b><br>Licence Holder: Clugston Roadstone Ltd<br>Licence Reference: 69<br>Site Location: Rushforth Quarry, Wakefield Road, Drighlington, Bradford, West Yorkshire<br>Licence Easting: Not Supplied<br>Licence Northing: Not Supplied<br>Operator Location: St Vincent House, Normanby Road, SCUNTHORPE, Lincolnshire, DN15 8QT<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Very Small (Less than 10,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 11th March 1981<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Positioned by the supplier<br>Boundary Accuracy: Moderate<br>Authorised Waste: Com. + Ind. Waste<br>Mineral Water<br>Prohibited Waste: Liable To Cause Enviromental Hazards<br>Poisonous, Noxious, Polluting Wastes     | A18NW (N)                              | 685                          | 2       | 423504<br>428171 |
| 189    | <b>Registered Landfill Sites</b><br>Licence Holder: Naylor-Myers Ltd<br>Licence Reference: 147<br>Site Location: Rushforth Works, Wakefield Road, Drighlington, Bradford, West Yorkshire<br>Licence Easting: 423600<br>Licence Northing: 428250<br>Operator Location: 5 Barr Street, Leeds Road, HUDDERSFIELD, West Yorkshire, HD2 1YD<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Undefined<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 1st December 1980<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Construction And Demolition Wastes<br>Ind. Non-Haz. Inert, Non-Flammable<br>Prohibited Waste: Biodegradable/Putrescible Waste<br>Poisonous, Noxious, Polluting Wastes | A18NW (N)                              | 740                          | 2       | 423600<br>428250 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 190    | <b>Registered Landfill Sites</b><br>Licence Holder: Hargreaves Clearwaste Ltd<br>Licence Reference: 33<br>Site Location: Thorne Farm, Howden Clough, Morley, Leeds, West Yorkshire<br>Licence Easting: 424550<br>Licence Northing: 427500<br>Operator Location: 10 Queen Street, Woodlesford, LEEDS, West Yorkshire, LS26 8AL<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Record supersededSuperseded<br>Dated: 8th November 1977<br>Preceded By: Not Given<br>Licence:<br>Superseded By: 88 (33)<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Commercial Waste<br>Construction And Demolition Wastes<br>Ind. Non-Haz. Inert, Non-Putresc.<br>Prohibited Waste: Biodegradable/Putrescible Waste<br>Notifiable Wastes<br>Environment Agency Asbestos<br>must give specific<br>authorisation for this<br>waste to be<br>acceptedWaste<br>requires prior<br>approval<br><br>Difficult Wastes | A14NE (E)                              | 753                          | 2       | 424550<br>427500 |
| 191    | <b>Registered Landfill Sites</b><br>Licence Holder: Sharkey Bros Ltd<br>Licence Reference: 498<br>Site Location: Land Behind 132 Wakefield Road, Drighlington, Bradford, West Yorkshire<br>Licence Easting: 423200<br>Licence Northing: 428150<br>Operator Location: 132 Wakefeld Road, Drighlington, LEEDS, West Yorkshire, BD11 1DR<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Undefined<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 1st July 1985<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Construction And Demolition Wastes<br>Excavated Natural Materials \$<br>Prohibited Waste: Liable To Cause Enviromental Hazards<br>Poisonous, Noxious, Polluting Wastes                                                                                                                                                                                          | A17NE (NW)                             | 804                          | 2       | 423200<br>428150 |
| 191    | <b>Registered Landfill Sites</b><br>Licence Holder: Clugston Reclamation Ltd<br>Licence Reference: 668<br>Site Location: Rear Of 132 Wakefield Road, Drighlington, Bradford, West Yorkshire<br>Licence Easting: 423200<br>Licence Northing: 428200<br>Operator Location: St Vincent House, Normanby Road, SCUNTHORPE, Lincolnshire, DN15 8QT<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Landfill<br>Max Input Rate: Undefined<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 1st June 1988<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Excavation Waste<br>Solid, Inert Constr'N/Demol. Waste<br>Prohibited Waste: Liable To Cause Environmental Hazards<br>Poisonous, Noxious, Polluting Wastes<br>Putrescible Waste                                                                                                                                                                           | A17NE (NW)                             | 845                          | 2       | 423200<br>428200 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 192    | <b>Registered Waste Transfer Sites</b><br>Licence Holder: R Gentry t/a M G Skip Hire<br>Licence Reference: 845<br>Site Location: Hill Top Garage, Gelderd Road, Birstall, BATLEY, West Yorkshire, WF17 9LX<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Transfer<br>Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Licence Status: Operational as far as is knownOperational<br>Dated: 1st July 1991<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the road within the address or location<br>Boundary Quality: Not Supplied<br>Authorised Waste:<br>Bulky Household Waste<br>General Household Refuse<br>Max.Storage In Licence<br>Max.Waste Permitted By Licence<br>Non-Haz. Com./Ind. Waste<br>Plant/Garden Waste<br>Scrap Metal<br>Uncontam. Constr'N/Demol. Waste<br>Uncontam. Earth & Excavation Waste<br>Prohibited Waste: Special Wastes (As In '96 Regs)<br>Waste N.O.S.                                                                                                                                                                                                                                                                                                                                              | A13SW (W)                              | 245                          | 2       | 423400<br>427330 |
| 193    | <b>Registered Waste Transfer Sites</b><br>Licence Holder: Kirklees Waste Services Ltd<br>Licence Reference: 1627<br>Site Location: Nab Lane H.W.Site, Birstall, Batley, West Yorkshire<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Civic Amenity<br>Max Input Rate: Very Small (Less than 10,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Licence Status: Operational as far as is knownOperational<br>Dated: 1st March 1996<br>Preceded By: WY 100<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Quality: Not Supplied<br>Authorised Waste:<br>Breeze Blocks, Building Sand, Gravel,<br>Tiles, Other Ceramic Matls, Slate<br>Animal, Food And Kitchen Wastes<br>Ash From Solid Fuel Central Heating<br>Domestic Appliances<br>Dusty Wastes From D.I.Y<br>Empty Paint & Solvent Drums<br>Garden Waste<br>General Household Refuse<br>Household Waste Which May Include<br>Max.Storage In Licence<br>Max.Waste Permitted By Licence<br>Other Scrap Metal<br>Parts From Private Vehicles<br>Uncontam. Earth/Excav'N Waste<br>Uncontam.Brick,Stone,Solid Concrete,<br>Waste Oil From Private Vehicles<br>Difficult Wastes (As In Wmp.26)<br>Spec.Waste (Epa'90:S62/1996 Regs)<br>Waste Likely To Pollute Environment<br>Waste N.O.S.<br>Prohibited Waste: Waste With Pot'L Harm Human Health | A8NW (S)                               | 389                          | 2       | 423650<br>426950 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 193    | <b>Registered Waste Transfer Sites</b><br>Licence Holder: West Yorks Waste Management<br>Licence Reference: WY 100<br>Site Location: Nab Lane C.A.Site, Howden Clough, Birstall, Batley, West Yorkshire<br>Operator Location: 54 Bradford Road, BRIGHOUSE, West Yorkshire, HD6 1RY<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Civic Amenity<br>Max Input Rate: Undefined<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Licence Status: Record supersededSuperseded<br>Dated: 1st March 1982<br>Preceded By: Not Given<br>Licence:<br>Superseded By: 1627<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Quality: Not Supplied<br>Authorised Waste: Civic Amenity/Refuse Amenity Waste<br>Licence Details Not To Hand                                                                                                                                                                                                                                                                                                                            | A8NW (S)                               | 389                          | 2       | 423650<br>426950 |
| 194    | <b>Registered Waste Transfer Sites</b><br>Licence Holder: J W Crowther & Son Ltd<br>Licence Reference: 1306<br>Site Location: 11 Bradford Road, Gildersome, LEEDS, West Yorkshire, LS27 7HW<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Transfer<br>Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Licence Status: Operational as far as is knownOperational<br>Dated: 1st October 1993<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Quality: Not Supplied<br>Authorised Waste: Ash<br>Breeze Blocks,Build'G Sand,Gravel,Tile<br>Max.Storage In Licence<br>Max.Waste Permitted By Licence<br>Oth.Ceram.Mat'L,Slate,Road Scalp. Etc<br>Uncontam. Bricks,Stone,Solid Concrete&<br>Uncontam. Earth, Excavation Waste,Soil<br>Prohibited Waste: Liable To Cause Environmental Hazards<br>Poisonous, Noxious, Polluting Wastes<br>Waste N.O.S. | A19NW (N)                              | 872                          | 2       | 424060<br>428320 |
| 195    | <b>Registered Waste Treatment or Disposal Sites</b><br>Licence Holder: Hicks Haulage Ltd<br>Licence Reference: 1182<br>Site Location: Howden Clough Colliery, Birstall, Batley, West Yorkshire<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Scrapyard<br>Max Input Rate: Very Small (Less than 10,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 4th January 1994<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the road within the address or location<br>Boundary Quality: Not Supplied<br>Authorised Waste: Batteries<br>Max.Storage In Licence<br>Max.Waste Permitted By Licence<br>Scrap Cars<br>Tyres<br>Waste Oil<br>Prohibited Waste: Poisonous, Noxious And Polluting N.O.S<br>Waste N.O.S.                                                                                                                                                      | A13SW (SW)                             | 166                          | 2       | 423500<br>427300 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 196    | <b>Registered Waste Treatment or Disposal Sites</b><br>Licence Holder: R Spivey & Son Ltd<br>Licence Reference: 1434<br>Site Location: 30 Pheasant Drive, Nab Lane Industrial Estate, Birstall, Batley, West Yorkshire<br>Operator Location: 54 Upper Station Road, BATLEY, West Yorkshire, WF17 5TA<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Recycling Drums<br>Max Input Rate: Very Small (Less than 10,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Licence Status: Operational as far as is knownOperational<br>Dated: 1st January 1995<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Quality: Not Supplied<br>Authorised Waste: 1000 Litre Empty Plastic Drums<br>120 Litre Empty Plastic Drums<br>200 Litre Empty Plastic Drums<br>60 Litre Empty Plastic Drums<br>Max.Waste Permitted By Licence<br>Prohibited Waste: Drums With Res.Of Herbicides<br>Drums With Res.Of Pesticides<br>Drums With Res.Of Petrol.Spirit Mat'Ls<br>Drums With Res.Unsuitable To Foulsewer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A7NE (SW)                              | 471                          | 2       | 423360<br>427000 |
| 197    | <b>Registered Waste Treatment or Disposal Sites</b><br>Licence Holder: R Spivey & Son Ltd<br>Licence Reference: EAWML65055<br>Site Location: Unit 7 & 8 Norquest Industrial Estate, Pennine View, Birstall, BATLEY, West Yorkshire, WF17 9NE<br>Operator Location: 54 Upper Station Road, BATLEY, West Yorkshire, WF17 5TA<br>Authority: Environment Agency - North East Region, Ridings Area<br>Site Category: Treatment<br>Max Input Rate: Very Small (Less than 10,000 tonnes per year)<br>Waste Source: No known restriction on source of waste<br>Restrictions:<br>Licence Status: Operational as far as is knownOperational<br>Dated: 24th December 1999<br>Preceded By: Not Given<br>Licence:<br>Superseded By: Not Given<br>Licence:<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Quality: Not Supplied<br>Authorised Waste: Contaminated Plastic Drums & Ibcs<br>Ibc Cages % Fibreboard Drums<br>Special Waste (As In Epa 1990:S62 Of 1996 Regs) - Consisting Of Degradable Household/Commercial/Industrial Waste (As In Post'98 E.A.Lics And Equivalent To 22.09.00)<br>Inert Materials (As In Post'98 E.A.Lics And Equivalent To 21.00.00)<br>Material With Haz.Code H 1 - Explosive<br>Material With Haz.Code H 9 - Infectious<br>Material With Haz.Code H10 - Teratogenic<br>Material With Haz.Code H11 - Mutagenic<br>Material With Haz.Code H12 - Can Release Toxic Gases<br>Material With Haz.Code H13 - May Yield Leachates With Haz.Code Properties<br>Material With Haz.Code H14 - Ecotoxic<br>Metal Waste/Scrap Metal (As In Post'98 E.A.Lics And Equivalent To 23.00.00)<br>Other Waste/Waste Not Otherwise Specified | A7NE (SW)                              | 728                          | 2       | 423220<br>426780 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 198    | <b>Control of Major Accident Hazards Sites (COMAH)</b><br>Name: Tennants Distribution Limited<br>Location: Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LY<br>Reference: Not Supplied<br>Type: Lower Tier<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                                                                                                                                                                                                                      | A12SE (SW)                             | 350                          | 9       | 423343<br>427204 |
| 199    | <b>Planning Hazardous Substance Consents</b><br>Name: Tennants Distribution Limited<br>Location: Gelderd Road, Birstall, BATLEY, .<br>Authority: Kirklees Metropolitan Borough Council, Planning Services<br>Application Ref: 99/50/93075/Eo<br>Hazardous: Very toxic<br>Substance:<br>Maximum Quantity: 5<br>Application date: 23rd December 1999<br><b>Decision: Unknown at time of report</b><br>Positional Accuracy: Located by supplier to within 10m                                                                                                       | A13SW (SW)                             | 289                          | 7       | 423440<br>427180 |
| 199    | <b>Planning Hazardous Substance Consents</b><br>Name: Tennants Distribution Limited<br>Location: Gelderd Road, Birstall, BATLEY, .<br>Authority: Kirklees Metropolitan Borough Council, Planning Services<br>Application Ref: 99/50/93075/Eo<br>Hazardous: Toxic<br>Substance:<br>Maximum Quantity: 50<br>Application date: 23rd December 1999<br><b>Decision: Unknown at time of report</b><br>Positional Accuracy: Located by supplier to within 10m                                                                                                           | A13SW (SW)                             | 289                          | 7       | 423440<br>427180 |
| 199    | <b>Planning Hazardous Substance Consents</b><br>Name: Tennants Distribution Limited<br>Location: Gelderd Road, Birstall, BATLEY, .<br>Authority: Kirklees Metropolitan Borough Council, Planning Services<br>Application Ref: 99/50/93075/Eo<br>Hazardous: Oxidising<br>Substance:<br>Maximum Quantity: 100<br>Application date: 23rd December 1999<br><b>Decision: Unknown at time of report</b><br>Positional Accuracy: Located by supplier to within 10m                                                                                                      | A13SW (SW)                             | 289                          | 7       | 423440<br>427180 |
| 199    | <b>Planning Hazardous Substance Consents</b><br>Name: Tennants Distribution Limited<br>Location: Gelderd Road, Birstall, BATLEY, .<br>Authority: Kirklees Metropolitan Borough Council, Planning Services<br>Application Ref: 99/50/93075/Eo<br>Hazardous: Flammable (flammable liquids with flash point >=21C and <=55C supporting combustion)<br>Substance:<br>Maximum Quantity: 120<br>Application date: 23rd December 1999<br><b>Decision: Unknown at time of report</b><br>Positional Accuracy: Located by supplier to within 10m                           | A13SW (SW)                             | 289                          | 7       | 423440<br>427180 |
| 199    | <b>Planning Hazardous Substance Consents</b><br>Name: Tennants Distribution Limited<br>Location: Gelderd Road, Birstall, BATLEY, .<br>Authority: Kirklees Metropolitan Borough Council, Planning Services<br>Application Ref: 99/50/93075/Eo<br>Hazardous: Highly flammable (highly flammable liquids which have a flash point <21C and which are not extremely flammable)<br>Substance:<br>Maximum Quantity: 50<br>Application date: 23rd December 1999<br><b>Decision: Unknown at time of report</b><br>Positional Accuracy: Located by supplier to within 10m | A13SW (SW)                             | 289                          | 7       | 423440<br>427180 |
| 199    | <b>Planning Hazardous Substance Consents</b><br>Name: Tennants Distribution Limited<br>Location: Gelderd Road, Birstall, BATLEY, .<br>Authority: Kirklees Metropolitan Borough Council, Planning Services<br>Application Ref: 99/50/93075/Eo<br>Hazardous: Unknown at time of report<br>Substance:<br>Maximum Quantity: 5<br>Application date: 23rd December 1999<br><b>Decision: Unknown at time of report</b><br>Positional Accuracy: Located by supplier to within 10m                                                                                        | A13SW (SW)                             | 289                          | 7       | 423440<br>427180 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 199    | <b>Planning Hazardous Substance Consents</b><br>Name: Tennants Distribution Limited<br>Location: Gelderd Road, Birstall, BATLEY, .<br>Authority: Kirklees Metropolitan Borough Council, Planning Services<br>Application Ref: 99/50/93075/Eo<br>Hazardous Substance: Dangerous for the environment (very toxic to aquatic organisms)<br>Maximum Quantity: 30<br>Application date: 23rd December 1999<br><b>Decision: Unknown at time of reportUnknown</b><br>Positional Accuracy: Located by supplier to within 10m | A13SW (SW)                             | 289                          | 7       | 423440<br>427180 |
| 199    | <b>Planning Hazardous Substance Consents</b><br>Name: Tennants Distribution Limited<br>Location: Gelderd Road, Birstall, BATLEY, .<br>Authority: Kirklees Metropolitan Borough Council, Planning Services<br>Application Ref: 99/50/93075/Eo<br>Hazardous Substance: Combination of Dangerous Substances<br>Maximum Quantity: 2<br>Application date: 23rd December 1999<br><b>Decision: Unknown at time of reportUnknown</b><br>Positional Accuracy: Located by supplier to within 10m                              | A13SW (SW)                             | 289                          | 7       | 423440<br>427180 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                           | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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|        | <b>BGS 1:625,000 Solid Geology</b><br>Description: Pennine Lower Coal Measures Formation And South Wales Lower Coal Measures Formation (Undifferentiated)                                                                                                                                                                                                         | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 15 - 25 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration:  | A13NW (W)                              | 0                            | 1       | 423692<br>427434 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 35 - 45 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 30 - 45 mg/kg<br>Concentration: | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 35 - 45 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 30 - 45 mg/kg<br>Concentration: | A13NW (NW)                             | 119                          | 1       | 423566<br>427558 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 25 - 35 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 30 - 45 mg/kg<br>Concentration: | A13NE (E)                              | 202                          | 1       | 424000<br>427432 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 15 - 25 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration: | A13NE (NE)                             | 270                          | 1       | 424000<br>427646 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 25 - 35 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration:  | A8NE (S)                               | 341                          | 1       | 423736<br>426999 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                           | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 25 - 35 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration:  | A8NE (S)                               | 356                          | 1       | 423793<br>426996 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 35 - 45 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 30 - 45 mg/kg<br>Concentration: | A18SE (N)                              | 467                          | 1       | 423898<br>427949 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 15 - 25 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration: | A18SW (N)                              | 481                          | 1       | 423709<br>428000 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 35 - 45 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 30 - 45 mg/kg<br>Concentration: | A18SW (NW)                             | 490                          | 1       | 423433<br>427927 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 35 - 45 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration: | A18SW (N)                              | 498                          | 1       | 423699<br>428017 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 25 - 35 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 30 - 45 mg/kg<br>Concentration: | A18SE (NE)                             | 528                          | 1       | 424000<br>427963 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                           | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 15 - 25 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration:  | A9NW (SE)                              | 560                          | 1       | 424204<br>427072 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 15 - 25 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration:  | A8NE (SE)                              | 565                          | 1       | 423957<br>426840 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 25 - 35 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration:  | A8SW (S)                               | 593                          | 1       | 423629<br>426747 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 35 - 45 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 30 - 45 mg/kg<br>Concentration: | A7NE (SW)                              | 625                          | 1       | 423101<br>427074 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 35 - 45 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration: | A12NW (W)                              | 626                          | 1       | 423000<br>427432 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 35 - 45 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 15 - 30 mg/kg<br>Concentration: | A12SW (W)                              | 646                          | 1       | 423000<br>427265 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                            | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic 15 - 25 mg/kg<br>Concentration:<br>Cadmium <1.8 mg/kg<br>Concentration:<br>Chromium 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel 15 - 30 mg/kg<br>Concentration:       | A18NW (N)                              | 719                          | 1       | 423628<br>428233 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic 25 - 35 mg/kg<br>Concentration:<br>Cadmium <1.8 mg/kg<br>Concentration:<br>Chromium 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel 15 - 30 mg/kg<br>Concentration:       | A7NW (SW)                              | 727                          | 1       | 423026<br>427000 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic 35 - 45 mg/kg<br>Concentration:<br>Cadmium <1.8 mg/kg<br>Concentration:<br>Chromium 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel 15 - 30 mg/kg<br>Concentration: | A7NW (SW)                              | 749                          | 1       | 423000<br>427000 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic 25 - 35 mg/kg<br>Concentration:<br>Cadmium <1.8 mg/kg<br>Concentration:<br>Chromium 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel 30 - 45 mg/kg<br>Concentration:  | A7NW (SW)                              | 763                          | 1       | 423000<br>426975 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic 25 - 35 mg/kg<br>Concentration:<br>Cadmium <1.8 mg/kg<br>Concentration:<br>Chromium 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel 30 - 45 mg/kg<br>Concentration:      | A9NE (SE)                              | 816                          | 1       | 424398<br>426904 |
|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic 25 - 35 mg/kg<br>Concentration:<br>Cadmium <1.8 mg/kg<br>Concentration:<br>Chromium 60 - 90 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel 15 - 30 mg/kg<br>Concentration:       | A7SW (SW)                              | 980                          | 1       | 423000<br>426640 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR           |
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|        | <b>BGS Estimated Soil Chemistry</b><br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Rural Soil<br>Arsenic: 25 - 35 mg/kg<br>Concentration:<br>Cadmium: <1.8 mg/kg<br>Concentration:<br>Chromium: 90 - 120 mg/kg<br>Concentration:<br>Lead Concentration: <100 mg/kg<br>Nickel: 30 - 45 mg/kg<br>Concentration:                                                                                                                                        | A3NW (S)                               | 984                          | 1       | 423702 426353 |
| 200    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Paradise Coal Pit<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72471<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m         | A13NW (NW)                             | 72                           | 1       | 423585 427486 |
| 201    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Horse Riggs<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72470<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Emley Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                                     | A13NW (N)                              | 110                          | 1       | 423654 427613 |
| 202    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Birstall Fields Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72474<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A13SW (SW)                             | 153                          | 1       | 423583 427226 |
| 203    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Horse Riggs<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72469<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Emley Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                                     | A13NW (N)                              | 164                          | 1       | 423702 427683 |
| 204    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Horse Riggs Coal Pit<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72468<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m      | A13NE (N)                              | 183                          | 1       | 423763 427696 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 205    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Paradise Coal Pit<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72472<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m   | A13NW (W)                              | 213                          | 1       | 423414<br>427445 |
| 206    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Owlet Hall Colliery<br>Location: Morley, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72483<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m        | A18SE (N)                              | 280                          | 1       | 423737<br>427798 |
| 207    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Moat Hill Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72475<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A13SW (SW)                             | 311                          | 1       | 423472<br>427114 |
| 208    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Howden Clough<br>Location: Birstall, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73788<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m              | A12SE (W)                              | 324                          | 1       | 423316<br>427333 |
| 209    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Moat Hill Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72478<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A8NW (S)                               | 391                          | 1       | 423699<br>426946 |
| 210    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Moat Hill Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72477<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A8NW (S)                               | 414                          | 1       | 423535<br>426952 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 211    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Moat Hill Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72476<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m    | A8NW (SW)                              | 440                          | 1       | 423445<br>426971 |
| 212    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Howden Clough South Occs<br>Location: Morley, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 2666<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Cobex Ltd.<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Lower Coal Measures Formation<br>Commodity: Coal - Opencast<br>Positional Accuracy: Located by supplier to within 100m | A14NW (E)                              | 504                          | 1       | 424300<br>427500 |
| 213    | <b>BGS Recorded Mineral Sites</b><br>Site Name: The Pheasant Inn<br>Location: Birstall, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73720<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m              | A12SE (W)                              | 587                          | 1       | 423050<br>427312 |
| 214    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Owlet Hall<br>Location: Gildersome, Bradford, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 13379<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Middle Coal Measures Formation<br>Commodity: Fireclay<br>Positional Accuracy: Located by supplier to within 10m        | A18SE (N)                              | 640                          | 1       | 423985<br>428100 |
| 215    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Prospect Terrace<br>Location: Birkenshaw, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73783<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m             | A17SE (NW)                             | 646                          | 1       | 423230<br>427970 |
| 215    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Prospect Terrace<br>Location: Birkenshaw, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73782<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m             | A17SE (NW)                             | 679                          | 1       | 423191<br>427978 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 216    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Holden Clough Mill<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 74103<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Thornhill Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                            | A14SE (SE)                             | 667                          | 1       | 424389<br>427150 |
| 217    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Grey Stone Fields<br>Location: Gildersome Street, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73843<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m          | A18NW (N)                              | 685                          | 1       | 423624<br>428198 |
| 218    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Prospect Terrace<br>Location: Birkenshaw, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73781<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m                  | A17SE (NW)                             | 717                          | 1       | 423194<br>428034 |
| 219    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Wyre Hall<br>Location: Gildersome, Bradford, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 13378<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Middle Coal Measures Formation<br>Commodity: Common Clay and Shale<br>Positional Accuracy: Located by supplier to within 10m | A18NE (N)                              | 731                          | 1       | 423720<br>428250 |
| 220    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Wyre Hall<br>Location: Gildersome, Bradford, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 13377<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Middle Coal Measures Formation<br>Commodity: Common Clay and Shale<br>Positional Accuracy: Located by supplier to within 10m | A18NW (N)                              | 760                          | 1       | 423475<br>428240 |
| 221    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Holden Clough<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 74107<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Thornhill Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                                | A8SE (S)                               | 791                          | 1       | 423774<br>426550 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 222    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Rakes House<br>Location: Birstall, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 71977<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Birstall Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                        | A7NW (SW)                              | 818                          | 1       | 422902<br>427038 |
| 223    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Grey Stone<br>Location: Gildersome Street, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73844<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A19NW (NE)                             | 928                          | 1       | 424197<br>428312 |
| 224    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Grey Stone<br>Location: Gildersome Street, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73842<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A23SE (N)                              | 955                          | 1       | 423854<br>428464 |
| 225    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Penfield<br>Location: Penfield, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 74097<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m            | A17NE (NW)                             | 956                          | 1       | 423084<br>428253 |
| 226    | <b>BGS Recorded Mineral Sites</b><br>Site Name: The Shoulder Of Mutton<br>Location: Bruntcliffe, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 74102<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Thornhill Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m          | A15NW (E)                              | 966                          | 1       | 424764<br>427462 |
| 227    | <b>BGS Recorded Mineral Sites</b><br>Site Name: Prospect Terrace<br>Location: Birkenshaw, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73855<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m  | A9SW (SE)                              | 991                          | 1       | 424335<br>426586 |



| Map ID | Details                                                                                                                                                                                                                                                                                              | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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|        | <b>BGS Measured Urban Soil Chemistry</b><br>No data available                                                                                                                                                                                                                                        |                                        |                              |         |                  |
|        | <b>BGS Urban Soil Chemistry Averages</b><br>No data available                                                                                                                                                                                                                                        |                                        |                              |         |                  |
|        | <b>Coal Mining Affected Areas</b><br>Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.                             | A13NW (S)                              | 0                            | 10      | 423709<br>427432 |
|        | <b>Mining Instability</b><br>Mining Evidence: Inconclusive Coal Mining<br>Source: Ove Arup & Partners<br>Boundary Quality: As Supplied                                                                                                                                                               | A13NW (S)                              | 0                            | -       | 423709<br>427432 |
|        | <b>Man-Made Mining Cavities</b><br>Easting: 423800<br>Northing: 427900<br>Distance: 390<br>Quadrant Reference: A18<br>Quadrant Reference: SE<br>Bearing Ref: N<br>Cavity Type: Not supplied<br>Commodity: Fireclay<br>Solid Geology Detail: No Details<br>Superficial Geology: No Details<br>Detail: | A18SE (N)                              | 390                          | 11      | 423800<br>427900 |
|        | <b>Non Coal Mining Areas of Great Britain</b><br>No Hazard                                                                                                                                                                                                                                           |                                        |                              |         |                  |
|        | <b>Potential for Collapsible Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                                | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>Potential for Compressible Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                               | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>Potential for Compressible Ground Stability Hazards</b><br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                              | A13NW (NW)                             | 78                           | 1       | 423609<br>427548 |
|        | <b>Potential for Compressible Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                               | A13NW (NW)                             | 161                          | 1       | 423590<br>427638 |
|        | <b>Potential for Ground Dissolution Stability Hazards</b><br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                               | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                                  | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                                       | A13NE (NE)                             | 146                          | 1       | 423925<br>427536 |
|        | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                                  | A13NE (NE)                             | 168                          | 1       | 423913<br>427591 |
|        | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                                  | A13NE (NE)                             | 213                          | 1       | 423982<br>427570 |
|        | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                                  | A13NE (NE)                             | 219                          | 1       | 423889<br>427672 |
|        | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                                  | A13SE (SE)                             | 219                          | 1       | 423932<br>427280 |
|        | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                                       | A13SE (SE)                             | 220                          | 1       | 423933<br>427280 |
|        | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                                                  | A13NE (NE)                             | 245                          | 1       | 423959<br>427654 |

| Map ID | Details                                                                                                                                                                                                                                                                   | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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|        | <b>Potential for Running Sand Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                    | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>Potential for Running Sand Ground Stability Hazards</b><br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service                                                                                                   | A13NW (NW)                             | 78                           | 1       | 423609<br>427548 |
|        | <b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                                                                                      | A13NW (NW)                             | 0                            | 1       | 423706<br>427434 |
|        | <b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b><br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service                                                                                     | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                                                                                      | A13NW (NW)                             | 119                          | 1       | 423566<br>427558 |
|        | <b>Radon Potential - Radon Affected Areas</b><br>Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level).<br>Source: British Geological Survey, National Geoscience Information Service | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>Radon Potential - Radon Protection Measures</b><br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service                     | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                    | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 228    | <b>Contemporary Trade Directory Entries</b><br>Name: Fleetcraft Ltd<br>Location: Unit 8, Centre 27 Business Park, Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB<br>Classification: Commercial Vehicle Servicing, Repairs, Parts & Accessories<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address        | A13NE (E)                              | 0                            | -       | 423728<br>427440 |
| 229    | <b>Contemporary Trade Directory Entries</b><br>Name: Ncs Group<br>Location: Adtech House Unit 6, Centre 27 Business Park, Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                  | A13SW (SW)                             | 0                            | -       | 423682<br>427369 |
| 229    | <b>Contemporary Trade Directory Entries</b><br>Name: Go Digital Prints<br>Location: Unit 6, Adtech House, Centre 27 Business Park, Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                         | A13SW (SW)                             | 0                            | -       | 423682<br>427369 |
| 230    | <b>Contemporary Trade Directory Entries</b><br>Name: Konica Business Machines<br>Location: Unit 4, Allied House, Centre 27 Business Park, Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB<br>Classification: Copying & Duplicating Machines & Supplies<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address | A13SW (W)                              | 0                            | -       | 423661<br>427420 |
| 231    | <b>Contemporary Trade Directory Entries</b><br>Name: Kerry Foods<br>Location: Unit 2, Centre 27 Business Park, Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB<br>Classification: Food Products - Manufacturers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                        | A13NW (NW)                             | 0                            | -       | 423686<br>427470 |
| 232    | <b>Contemporary Trade Directory Entries</b><br>Name: Schneider Electric Buildings Uk<br>Location: Centre 27 Business Park, Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB<br>Classification: Temperature Monitoring Systems Manufacturers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address             | A13NW (N)                              | 42                           | -       | 423698<br>427557 |
| 233    | <b>Contemporary Trade Directory Entries</b><br>Name: Allied Textile Companies Ltd<br>Location: Unit 3, Allied House, Centre 27 Business Park, Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB<br>Classification: Textile Manufacturing<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                 | A13NE (NE)                             | 78                           | -       | 423821<br>427548 |
| 234    | <b>Contemporary Trade Directory Entries</b><br>Name: Wyko<br>Location: Oakwell Industrial Park, Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LR<br>Classification: Distribution Services<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the road within the address or location                                        | A13NW (N)                              | 99                           | -       | 423644<br>427596 |
| 234    | <b>Contemporary Trade Directory Entries</b><br>Name: Merco Service Station<br>Location: West Yorkshire Retail Park, Holden Ing Way, Birstall, Batley, West Yorkshire, WF17 9AE<br>Classification: Petrol Filling Stations<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                       | A13NW (NW)                             | 129                          | -       | 423598<br>427604 |
| 235    | <b>Contemporary Trade Directory Entries</b><br>Name: Sofology<br>Location: Birstall Retail Park Leeds Yorkshire, Birstall, Batley, West Yorkshire, WF17 9AD<br>Classification: Furniture Manufacturers - Home & Office<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned within the geographical locality                             | A13NW (NW)                             | 171                          | -       | 423522<br>427579 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                            | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR           |
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| 236    | <b>Contemporary Trade Directory Entries</b><br>Name: Currys Pc World<br>Location: Unit A-b, West Yorkshire Retail Park, Holden ING Way, Birstall, BATLEY, West Yorkshire, WF17 9AE<br>Classification: Electrical Goods Sales, Manufacturers & Wholesalers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address | A13NW (W)                              | 191                          | -       | 423454 427505 |
| 236    | <b>Contemporary Trade Directory Entries</b><br>Name: Currys<br>Location: A-B, Unit, West Yorkshire Retail Park, Holden Ing Way, Birstall, Batley, West Yorkshire, WF17 9AE<br>Classification: Electrical Goods Sales, Manufacturers & Wholesalers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address       | A13NW (W)                              | 191                          | -       | 423454 427505 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: Showcase Pallets Uk1 Ltd<br>Location: Gelderd Road, Birstall, Batley, WF17 9LX<br>Classification: Pallets, Crates & Packing Cases<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                                    | A13SW (SW)                             | 205                          | -       | 423470 427275 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: Watson Trailers<br>Location: Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Commercial Vehicle Bodybuilders & Repairers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                               | A13SW (SW)                             | 216                          | -       | 423462 427268 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: Foxpress<br>Location: Gelderd Rd, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Commercial Vehicle Servicing, Repairs, Parts & Accessories<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned within the geographical locality                            | A13SW (SW)                             | 248                          | -       | 423417 427281 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: M G Traction<br>Location: Hill Top Garage, 77a Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Road Haulage Services<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                     | A13SW (SW)                             | 248                          | -       | 423417 427281 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: M H S Hartleys Ltd<br>Location: Hilltop Garage, Gelderd Road, Birstall, BATLEY, West Yorkshire, WF17 9LX<br>Classification: Distribution Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                  | A13SW (SW)                             | 248                          | -       | 423417 427281 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: F B S Plant & Recovery<br>Location: Hill Top Garage, Gelderd Rd, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Commercial Vehicle Breakdown & Recovery Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                    | A13SW (SW)                             | 248                          | -       | 423417 427281 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: B & M Fabrications<br>Location: Hilltop Garage, Gelderd Road, Birstall, BATLEY, West Yorkshire, WF17 9LX<br>Classification: Engineers - General<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                    | A13SW (SW)                             | 248                          | -       | 423417 427281 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: Brian Fredericks<br>Location: Hill Top Garage, Gelderd Rd, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Road Haulage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                     | A13SW (SW)                             | 248                          | -       | 423417 427281 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: Brian Fredericks (Transport) Ltd<br>Location: Hill Top Garage, Gelderd Rd, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Road Haulage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                     | A13SW (SW)                             | 248                          | -       | 423417 427281 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: Leemings Road Haulage<br>Location: Hilltop Garage, Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Road Haulage Services<br><b>Status:</b> Inactive<br>Positional Accuracy: Manually positioned to the address or location                                                      | A13SW (SW)                             | 248                          | -       | 423417<br>427281 |
| 237    | <b>Contemporary Trade Directory Entries</b><br>Name: Des Hartley & Sons Ltd<br>Location: Unit 4 Hilltop Garage, Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Road Haulage Services<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                                       | A13SW (SW)                             | 248                          | -       | 423417<br>427281 |
| 238    | <b>Contemporary Trade Directory Entries</b><br>Name: P R G Powerhouse<br>Location: West Yorkshire Retail Pk, Holden Ing Way, Birstall, Batley, West Yorkshire, WF17 9AD<br>Classification: Electrical Goods Sales, Manufacturers & Wholesalers<br><b>Status:</b> Inactive<br>Positional Accuracy: Manually positioned to the road within the address or location | A13NW (NW)                             | 206                          | -       | 423520<br>427638 |
| 238    | <b>Contemporary Trade Directory Entries</b><br>Name: Comet<br>Location: West Yorkshire Retail Park, Holden Ing Way, Birstall, Batley, West Yorkshire, WF17 9AE<br>Classification: Electrical Goods Sales, Manufacturers & Wholesalers<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                 | A13NW (NW)                             | 212                          | -       | 423550<br>427673 |
| 239    | <b>Contemporary Trade Directory Entries</b><br>Name: S C S<br>Location: West Yorkshire Retail Park, Holden ING Way, Birstall, Batley, WF17 9AD<br>Classification: Furniture Manufacturers - Home & Office<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                                             | A13NW (NW)                             | 221                          | -       | 423490<br>427624 |
| 240    | <b>Contemporary Trade Directory Entries</b><br>Name: Screwfix<br>Location: Screwfix, Gelderd Road, Batley, WF17 9LX<br>Classification: Builders' Merchants<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                                                                                              | A13SW (W)                              | 239                          | -       | 423392<br>427378 |
| 241    | <b>Contemporary Trade Directory Entries</b><br>Name: Gelderd Road Auto Centre<br>Location: 79 Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Mot Testing Centres<br><b>Status:</b> Active<br>Positional Accuracy: Manually positioned to the address or location                                                                    | A13SW (SW)                             | 253                          | -       | 423406<br>427295 |
| 241    | <b>Contemporary Trade Directory Entries</b><br>Name: Alpha Scaffolding & Plant Hire Ltd<br>Location: Hilltop Garage, Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Scaffolding & Work Platforms<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                         | A13SW (SW)                             | 253                          | -       | 423406<br>427295 |
| 242    | <b>Contemporary Trade Directory Entries</b><br>Name: Morrells Wood Finishes<br>Location: Unit 1, Oakwell Court, Oakwell Way, Birstall, Batley, WF17 9LU<br>Classification: Coating Specialists<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                                                          | A12NE (W)                              | 275                          | -       | 423352<br>427445 |
| 242    | <b>Contemporary Trade Directory Entries</b><br>Name: P M G Print Management<br>Location: Unit 4 Oakwell Park, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Printers<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                                                       | A12SE (W)                              | 290                          | -       | 423337<br>427402 |
| 243    | <b>Contemporary Trade Directory Entries</b><br>Name: Comet Group Plc<br>Location: Spring Rams Retail Park, Holden ING Way, Birstall, Batley, West Yorkshire, WF17 9DT<br>Classification: Electrical Goods Sales, Manufacturers & Wholesalers<br><b>Status:</b> Inactive<br>Positional Accuracy: Manually positioned to the road within the address or location   | A13NW (NW)                             | 275                          | -       | 423448<br>427658 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 244    | <b>Contemporary Trade Directory Entries</b><br>Name: Morrells Woodfinishers<br>Location: Unit 1, Oakwell Court, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: French Polishing<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                           | A12SE (W)                              | 282                          | -       | 423347<br>427394 |
| 244    | <b>Contemporary Trade Directory Entries</b><br>Name: Pumps & Gear Boxes Ltd<br>Location: Unit 4, Oakwell Court, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Gearboxes<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                    | A12SE (W)                              | 282                          | -       | 423347<br>427394 |
| 244    | <b>Contemporary Trade Directory Entries</b><br>Name: The Factory Blind Shop<br>Location: Unit 1, Oakwell Court, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Blinds, Awnings & Canopies<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                 | A12SE (W)                              | 282                          | -       | 423347<br>427394 |
| 244    | <b>Contemporary Trade Directory Entries</b><br>Name: N J Products<br>Location: Unit 5, Oakwell Court, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Manufacturers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                        | A12SE (W)                              | 282                          | -       | 423347<br>427394 |
| 244    | <b>Contemporary Trade Directory Entries</b><br>Name: Highway Recovery M62 Ltd<br>Location: Gelderd Rd, Birstall, Batley, West Yorkshire, WF17 9LX<br>Classification: Car Breakdown & Recovery Services<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the road within the address or location         | A12SE (W)                              | 285                          | -       | 423366<br>427310 |
| 244    | <b>Contemporary Trade Directory Entries</b><br>Name: Hss Lift & Shift<br>Location: Unit 3, Triangle Business Park, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Lifting Equipment<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                       | A12SE (W)                              | 291                          | -       | 423345<br>427352 |
| 244    | <b>Contemporary Trade Directory Entries</b><br>Name: Direct Air Cargo<br>Location: Unit 3, Triangle Business Park, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Road Haulage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                   | A12SE (W)                              | 291                          | -       | 423345<br>427352 |
| 245    | <b>Contemporary Trade Directory Entries</b><br>Name: Tennants Distribution Ltd<br>Location: Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LY<br>Classification: Chemicals - Distributors & Wholesalers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                          | A12SE (SW)                             | 350                          | -       | 423343<br>427204 |
| 246    | <b>Contemporary Trade Directory Entries</b><br>Name: Fiber Options (Europe) Ltd<br>Location: Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Fibre Optics<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the road within the address or location                           | A12SE (W)                              | 369                          | -       | 423262<br>427367 |
| 246    | <b>Contemporary Trade Directory Entries</b><br>Name: Future Forwarding Co Ltd<br>Location: Head Office, Oakwell Industrial Park, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Freight Forwarders<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the address or location | A12SE (W)                              | 372                          | -       | 423270<br>427319 |
| 247    | <b>Contemporary Trade Directory Entries</b><br>Name: Crossroads Truck & Bus Ltd<br>Location: Pheasant Drive, Birstall, BATLEY, West Yorkshire, WF17 9LR<br>Classification: Commercial Vehicle Dealers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                 | A8NW (SW)                              | 382                          | -       | 423456<br>427033 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                   | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR           |
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| 247    | <b>Contemporary Trade Directory Entries</b><br>Name: The Crossroads Truck & Bus Ltd<br>Location: Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LR<br>Classification: Commercial Vehicle Dealers<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                                      | A8NW (SW)                              | 382                          | -       | 423456 427033 |
| 247    | <b>Contemporary Trade Directory Entries</b><br>Name: Hartshorne Motor Services Ltd<br>Location: Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LR<br>Classification: Commercial Vehicle Dealers<br><b>Status:</b> Inactive<br>Positional Accuracy: Manually positioned within the geographical locality                                          | A8NW (SW)                              | 383                          | -       | 423456 427033 |
| 247    | <b>Contemporary Trade Directory Entries</b><br>Name: Crossroads Truck & Bus Ltd<br>Location: Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LR<br>Classification: Commercial Vehicle Dealers<br><b>Status:</b> Active<br>Positional Accuracy: Manually positioned within the geographical locality                                               | A8NW (SW)                              | 383                          | -       | 423456 427033 |
| 248    | <b>Contemporary Trade Directory Entries</b><br>Name: Leeds Fleet Services Ltd<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, West Yorkshire, WF17 0JB<br>Classification: Commercial Vehicle Servicing, Repairs, Parts & Accessories<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address | A13SE (SE)                             | 407                          | -       | 424041 427120 |
| 249    | <b>Contemporary Trade Directory Entries</b><br>Name: Ling Alliance<br>Location: Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LT<br>Classification: Road Haulage Services<br><b>Status:</b> Inactive<br>Positional Accuracy: Manually positioned to the road within the address or location                                                     | A12SE (SW)                             | 413                          | -       | 423325 427123 |
| 250    | <b>Contemporary Trade Directory Entries</b><br>Name: Evergreen Ltd<br>Location: Unit 1, Triangle Business Park, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Door Manufacturers - Industrial<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                     | A12SE (W)                              | 432                          | -       | 423215 427292 |
| 250    | <b>Contemporary Trade Directory Entries</b><br>Name: Pierlite (UK) Ltd<br>Location: Unit 1, Triangle Business Park, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Lighting Manufacturers<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                          | A12SE (W)                              | 432                          | -       | 423215 427292 |
| 250    | <b>Contemporary Trade Directory Entries</b><br>Name: Howard Tenens<br>Location: Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Road Haulage Services<br><b>Status:</b> Active<br>Positional Accuracy: Manually positioned to the road within the address or location                                                          | A12SE (W)                              | 449                          | -       | 423189 427324 |
| 251    | <b>Contemporary Trade Directory Entries</b><br>Name: D S Smith<br>Location: Pennine View, Birstall, Batley, West Yorkshire, WF17 9NF<br>Classification: Recycling Services<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                                                                       | A12SE (SW)                             | 435                          | -       | 423253 427192 |
| 252    | <b>Contemporary Trade Directory Entries</b><br>Name: R Spivey & Son Ltd<br>Location: 30, Pheasant Drive, Birstall, BATLEY, West Yorkshire, WF17 9LT<br>Classification: Drums, Kegs, Barrels & Casks<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                                              | A7NE (SW)                              | 442                          | -       | 423333 427072 |
| 253    | <b>Contemporary Trade Directory Entries</b><br>Name: Future Energy Group<br>Location: Future House, Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LT<br>Classification: Gas Companies<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                                                | A12SE (SW)                             | 447                          | -       | 423290 427112 |

| Map ID | Details                                                                                                                                                                                                                                                                                                              | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR           |
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| 253    | <b>Contemporary Trade Directory Entries</b><br>Name: Energy Asset Utility<br>Location: Future House, Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LT<br>Classification: Gas Suppliers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                            | A12SE (SW)                             | 447                          | -       | 423289 427112 |
| 253    | <b>Contemporary Trade Directory Entries</b><br>Name: Future Energy Group<br>Location: Future House, Pheasant Drive, Birstall, BATLEY, West Yorkshire, WF17 9LT<br>Classification: Gas Suppliers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                           | A12SE (SW)                             | 447                          | -       | 423290 427112 |
| 253    | <b>Contemporary Trade Directory Entries</b><br>Name: Westfield Pump & Tank<br>Location: Pennine View, Birstall, Batley, West Yorkshire, WF17 9NF<br>Classification: Pumps - Sales, Servicing & Repairs<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                    | A12SE (SW)                             | 464                          | -       | 423270 427109 |
| 253    | <b>Contemporary Trade Directory Entries</b><br>Name: Dukes Transport<br>Location: Pennine View, Birstall, Batley, West Yorkshire, WF17 9NF<br>Classification: Road Haulage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the road within the address or location                | A12SE (SW)                             | 476                          | -       | 423244 427125 |
| 254    | <b>Contemporary Trade Directory Entries</b><br>Name: Mars Care & Treats<br>Location: Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Confectionery Manufacturers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                 | A12NE (W)                              | 456                          | -       | 423172 427462 |
| 255    | <b>Contemporary Trade Directory Entries</b><br>Name: Freightlinks Uk Ltd<br>Location: Industrial Wipers Supply Co, Howden Clough Industrial Estate, Leeds Road, Batley, WF17 0JB<br>Classification: Road Haulage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address | A8NE (SE)                              | 457                          | -       | 424043 427048 |
| 256    | <b>Contemporary Trade Directory Entries</b><br>Name: Winteringham Group Ltd<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, West Yorkshire, WF17 0JB<br>Classification: Road Haulage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address | A8NE (SE)                              | 463                          | -       | 423989 426984 |
| 256    | <b>Contemporary Trade Directory Entries</b><br>Name: Style Fab<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, WF17 0JB<br>Classification: Machine Shops<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                        | A8NE (SE)                              | 479                          | -       | 423996 426969 |
| 256    | <b>Contemporary Trade Directory Entries</b><br>Name: Style Fab<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, West Yorkshire, WF17 0JB<br>Classification: Machine Shops<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                      | A8NE (SE)                              | 485                          | -       | 424034 426996 |
| 257    | <b>Contemporary Trade Directory Entries</b><br>Name: R Spivey & Sons Ltd<br>Location: Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LT<br>Classification: Drums, Kegs, Barrels & Casks<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                          | A7NE (SW)                              | 485                          | -       | 423345 426995 |
| 257    | <b>Contemporary Trade Directory Entries</b><br>Name: R Spivey & Son<br>Location: Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LT<br>Classification: Tank Cleaning & Repairing<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                  | A7NE (SW)                              | 485                          | -       | 423345 426995 |

| Map ID | Details                                                                                                                                                                                                                                                                                                             | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 257    | <b>Contemporary Trade Directory Entries</b><br>Name: Bedfords<br>Location: Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LT<br>Classification: Road Haulage Services<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                             | A7NE (SW)                              | 532                          | -       | 423318<br>426956 |
| 258    | <b>Contemporary Trade Directory Entries</b><br>Name: Batley Pet Products<br>Location: Unit 19, Norquest Industrial Park, Birstall, Batley, West Yorkshire, WF17 9NE<br>Classification: Pet Foods & Animal Feeds<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address          | A8NW (SW)                              | 492                          | -       | 423465<br>426899 |
| 259    | <b>Contemporary Trade Directory Entries</b><br>Name: Nightfreight<br>Location: Pennine View, Birstall, Batley, West Yorkshire, WF17 9NF<br>Classification: Freight Forwarders<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                            | A7NE (SW)                              | 533                          | -       | 423223<br>427058 |
| 259    | <b>Contemporary Trade Directory Entries</b><br>Name: Vehicle Lease & Servicing Ltd<br>Location: Pennine View, Birstall, Batley, WF17 9NF<br>Classification: Garage Services<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                | A7NE (SW)                              | 559                          | -       | 423227<br>427013 |
| 260    | <b>Contemporary Trade Directory Entries</b><br>Name: Plus 4 Colour Ltd<br>Location: Unit 4, Oakwell Court, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                           | A12SE (W)                              | 577                          | -       | 423087<br>427219 |
| 261    | <b>Contemporary Trade Directory Entries</b><br>Name: Well Polished<br>Location: 5, Risedale Avenue, Birstall, Batley, West Yorkshire, WF17 0NA<br>Classification: Cleaning Services - Domestic<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                           | A8NW (S)                               | 579                          | -       | 423592<br>426766 |
| 262    | <b>Contemporary Trade Directory Entries</b><br>Name: Powder Coating Finishers Ltd<br>Location: Unit 16-17 Pheasant Drive, Birstall, Batley, West Yorkshire, WF17 9LT<br>Classification: Powder Coatings<br><b>Status: Active</b><br>Positional Accuracy: Manually positioned to the address or location             | A7NE (SW)                              | 590                          | -       | 423365<br>426843 |
| 262    | <b>Contemporary Trade Directory Entries</b><br>Name: Intelligent Hardware<br>Location: Unit 13, Norquest Industrial Park, Pennine View, Batley, WF17 9NE<br>Classification: Hardware<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                     | A7NE (SW)                              | 623                          | -       | 423323<br>426833 |
| 263    | <b>Contemporary Trade Directory Entries</b><br>Name: R M Heating & Gas Services<br>Location: 225, Upper Batley Low Lane, Batley, West Yorkshire, WF17 0JF<br>Classification: Boilers - Servicing, Replacements & Repairs<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address | A8SE (S)                               | 637                          | -       | 423816<br>426713 |
| 264    | <b>Contemporary Trade Directory Entries</b><br>Name: Tibbett & Britten Group Ltd<br>Location: Unit 27, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Distribution Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                  | A12SW (W)                              | 643                          | -       | 423004<br>427263 |
| 264    | <b>Contemporary Trade Directory Entries</b><br>Name: Wallis Shipping Ltd<br>Location: Unit 27, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU<br>Classification: Freight Forwarders<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                             | A12SW (W)                              | 643                          | -       | 423004<br>427263 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                               | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 265    | <b>Contemporary Trade Directory Entries</b><br>Name: James Bedford & Co Yorkshire Ltd<br>Location: Pennine View, Birstall, Batley, WF17 9NF<br>Classification: Storage & Shelving Systems Manufacturers<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                      | A7NE (SW)                              | 652                          | -       | 423081<br>427054 |
| 266    | <b>Contemporary Trade Directory Entries</b><br>Name: Nab Lane Garage<br>Location: Nab Lane, Birstall, Batley, West Yorkshire, WF17 9NG<br>Classification: Garage Services<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                                                  | A7NE (SW)                              | 664                          | -       | 423173<br>426918 |
| 266    | <b>Contemporary Trade Directory Entries</b><br>Name: Industrial Vehicle Services<br>Location: T D G, Nab Lane, Batley, West Yorkshire, WF17 9NH<br>Classification: Fork Lift Trucks<br><b>Status:</b> Inactive<br>Positional Accuracy: Manually positioned to the road within the address or location                                 | A7NE (SW)                              | 668                          | -       | 423145<br>426940 |
| 267    | <b>Contemporary Trade Directory Entries</b><br>Name: X L Joinery<br>Location: West Yorkshire Retail Park, Holden Ing Way, Birstall, Batley, West Yorkshire, WF17 9AD<br>Classification: Door Manufacturers - Domestic<br><b>Status:</b> Active<br>Positional Accuracy: Manually positioned to the road within the address or location | A12NW (W)                              | 676                          | -       | 422967<br>427571 |
| 268    | <b>Contemporary Trade Directory Entries</b><br>Name: Roaches International Ltd<br>Location: Unit 11, Springwell, 27, Dark Lane, Birstall, Batley, West Yorkshire, WF17 9LN<br>Classification: Machinery - Industrial & Commercial<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address            | A12SW (W)                              | 699                          | -       | 422935<br>427317 |
| 269    | <b>Contemporary Trade Directory Entries</b><br>Name: X P O Logisitcs<br>Location: Nab Lane, Birstall, Batley, West Yorkshire, WF17 9NG<br>Classification: Tank Cleaning & Repairing<br><b>Status:</b> Inactive<br>Positional Accuracy: Manually positioned within the geographical locality                                           | A7NE (SW)                              | 710                          | -       | 423059<br>426981 |
| 269    | <b>Contemporary Trade Directory Entries</b><br>Name: Suez<br>Location: Nab Lane, Birstall, Batley, West Yorkshire, WF17 9NG<br>Classification: Recycling Services<br><b>Status:</b> Active<br>Positional Accuracy: Manually positioned within the geographical locality                                                               | A7NE (SW)                              | 710                          | -       | 423059<br>426981 |
| 269    | <b>Contemporary Trade Directory Entries</b><br>Name: C Harwood Vehicle Repairs & Refinishing<br>Location: C Harwood Vehicle Repairs, 1, Nab Lane, Batley, WF17 9NG<br>Classification: Car Body Repairs<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                     | A7NE (SW)                              | 721                          | -       | 423044<br>426984 |
| 269    | <b>Contemporary Trade Directory Entries</b><br>Name: Samco Yorks Ltd<br>Location: 1, Nab Lane, Birstall, Batley, West Yorkshire, WF17 9NG<br>Classification: Builders' Merchants<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                                             | A7NE (SW)                              | 729                          | -       | 423050<br>426962 |
| 270    | <b>Contemporary Trade Directory Entries</b><br>Name: Norbart Dentregler<br>Location: 13, Nab Lane, Birstall, Batley, West Yorkshire, WF17 9NG<br>Classification: Tank Cleaning & Repairing<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                                 | A7NE (SW)                              | 712                          | -       | 423121<br>426902 |
| 270    | <b>Contemporary Trade Directory Entries</b><br>Name: X P O Logistics<br>Location: 13, Nab Lane, Birstall, BATLEY, West Yorkshire, WF17 9NG<br>Classification: Tank Cleaning & Repairing<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                                      | A7NE (SW)                              | 712                          | -       | 423121<br>426902 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                         | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR           |
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| 271    | <b>Contemporary Trade Directory Entries</b><br>Name: U P V C Maintenance Supplies<br>Location: Unit 5, Springwell, 27, Dark Lane, Birstall, Batley, West Yorkshire, WF17 9LN<br>Classification: Hardware<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                             | A12SW (W)                              | 720                          | -       | 422927 427252 |
| 271    | <b>Contemporary Trade Directory Entries</b><br>Name: J C B - T C Harrison<br>Location: Unit 3, Springwell, 27, Dark Lane, Birstall, Batley, West Yorkshire, WF17 9LN<br>Classification: Plant & Machinery Manufacturers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address              | A12SW (W)                              | 729                          | -       | 422924 427230 |
| 271    | <b>Contemporary Trade Directory Entries</b><br>Name: Alfons Haar<br>Location: Unit 2, Springwell 27, Dark Lane, Birstall, Batley, WF17 9LN<br>Classification: Commercial Vehicle Component Manufacturers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                             | A12SW (W)                              | 733                          | -       | 422924 427215 |
| 271    | <b>Contemporary Trade Directory Entries</b><br>Name: Floorbrite Cleaning Contractors Ltd<br>Location: Unit 1, Springwell, 27, Dark Lane, Birstall, Batley, West Yorkshire, WF17 9LN<br>Classification: Commercial Cleaning Services<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address    | A12SW (W)                              | 738                          | -       | 422924 427197 |
| 272    | <b>Contemporary Trade Directory Entries</b><br>Name: R Spivey & Son<br>Location: Unit 8, Norquest Industrial Park, Birstall, Batley, West Yorkshire, WF17 9NE<br>Classification: Drums, Kegs, Barrels & Casks<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                        | A7NE (SW)                              | 733                          | -       | 423221 426772 |
| 273    | <b>Contemporary Trade Directory Entries</b><br>Name: Advanced Supply Chain<br>Location: Unit 1, West Yorkshire Retail Park, Holden ING Way, Birstall, Batley, WF17 9AE<br>Classification: Distribution Services<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                        | A12NW (W)                              | 750                          | -       | 422906 427634 |
| 274    | <b>Contemporary Trade Directory Entries</b><br>Name: R W Feather & Son Ltd<br>Location: Unit 2, Hornthorn House, Dark La, Birstall, Batley, West Yorkshire, WF17 9LW<br>Classification: Road Haulage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the road within the address or location | A12SW (SW)                             | 753                          | -       | 422948 427094 |
| 275    | <b>Contemporary Trade Directory Entries</b><br>Name: Nk Chemicals Europe Ltd<br>Location: Dark La, Birstall, Batley, West Yorkshire, WF17 9LW<br>Classification: Chemicals - Distributors & Wholesalers<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the road within the address or location       | A12SW (W)                              | 762                          | -       | 422914 427153 |
| 275    | <b>Contemporary Trade Directory Entries</b><br>Name: Scrap Cars Vans Caravans Buyer<br>Location: Dark Lane, Batley, West Yorkshire, wf17 9lw<br>Classification: Car Breakers & Dismantlers<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned within the geographical locality                              | A12SW (W)                              | 795                          | -       | 422880 427152 |
| 275    | <b>Contemporary Trade Directory Entries</b><br>Name: Pedigree Wholesale<br>Location: Dark Lane, Birstall, BATLEY, West Yorkshire, WF17 9LW<br>Classification: Pet Foods & Animal Feeds<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                               | A12SW (W)                              | 795                          | -       | 422880 427152 |
| 275    | <b>Contemporary Trade Directory Entries</b><br>Name: Master Cars<br>Location: Dark Lane, Birstall, Batley, WF17 9LW<br>Classification: Car Body Repairs<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                                                | A12SW (W)                              | 801                          | -       | 422880 427135 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR           |
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| 276    | <b>Contemporary Trade Directory Entries</b><br>Name: Rkr Office Services<br>Location: Unit 4, Norquest Industrial Park, Birstall, Batley, West Yorkshire, WF17 9NE<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                              | A7NE (SW)                              | 779                          | -       | 423151 426774 |
| 276    | <b>Contemporary Trade Directory Entries</b><br>Name: Dransfield Cabinets<br>Location: Unit 4, Norquest Industrial Park, Birstall, Batley, WF17 9NE<br>Classification: Cabinet Makers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                          | A7NE (SW)                              | 780                          | -       | 423150 426773 |
| 276    | <b>Contemporary Trade Directory Entries</b><br>Name: Rubberplas Ltd<br>Location: Unit 3, Norquest Industrial Park, Birstall, Batley, West Yorkshire, WF17 9NE<br>Classification: Rubber & Plastic Products - Manufacturers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                  | A7NE (SW)                              | 787                          | -       | 423139 426774 |
| 276    | <b>Contemporary Trade Directory Entries</b><br>Name: Briteair Systems Ltd<br>Location: Unit 2, Norquest Industrial Park, Birstall, Batley, West Yorkshire, WF17 9NE<br>Classification: Ventilators & Ventilation Systems<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                      | A7NE (SW)                              | 796                          | -       | 423126 426774 |
| 276    | <b>Contemporary Trade Directory Entries</b><br>Name: British & European Polymers Ltd<br>Location: Unit 1, Norquest Industrial Park, Birstall, Batley, West Yorkshire, WF17 9NE<br>Classification: Rubber & Plastic Products - Manufacturers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address | A7NE (SW)                              | 804                          | -       | 423113 426775 |
| 276    | <b>Contemporary Trade Directory Entries</b><br>Name: Precision Shaped Wires Ltd<br>Location: Unit 1, Norquest Industrial Park, Birstall, Batley, West Yorkshire, WF17 9NE<br>Classification: Wire Products - Manufacturers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                    | A7NE (SW)                              | 805                          | -       | 423113 426775 |
| 276    | <b>Contemporary Trade Directory Entries</b><br>Name: Northern Gaskets & Mouldings Ltd<br>Location: Unit 1, Norquest Industrial Park, Birstall, Batley, West Yorkshire, WF17 9NE<br>Classification: Gaskets<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                  | A7NE (SW)                              | 805                          | -       | 423113 426775 |
| 277    | <b>Contemporary Trade Directory Entries</b><br>Name: Meltog Ltd<br>Location: 1, Dark Lane, Birstall, Batley, West Yorkshire, WF17 9LW<br>Classification: Machinery - Industrial & Commercial<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                | A7NW (SW)                              | 785                          | -       | 422937 427040 |
| 277    | <b>Contemporary Trade Directory Entries</b><br>Name: Future Forwarding<br>Location: Hawthorne House, Dark Lane, Birstall, Batley, West Yorkshire, WF17 9LW<br>Classification: Freight Forwarders<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                              | A7NW (SW)                              | 785                          | -       | 422937 427040 |
| 277    | <b>Contemporary Trade Directory Entries</b><br>Name: Meltog Unipress Ltd<br>Location: 1, Dark Lane, Birstall, Batley, West Yorkshire, WF17 9LW<br>Classification: Machinery - Industrial & Commercial<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                       | A7NW (SW)                              | 785                          | -       | 422937 427040 |
| 277    | <b>Contemporary Trade Directory Entries</b><br>Name: Autobrokers Ltd<br>Location: Hawthorne House, Dark Lane, Birstall, Batley, WF17 9LW<br>Classification: Car Dealers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                                       | A7NW (SW)                              | 786                          | -       | 422937 427040 |
| 277    | <b>Contemporary Trade Directory Entries</b><br>Name: Overfinch<br>Location: Batley, WF17 9LW<br>Classification: Car Dealers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                                                                                 | A7NW (SW)                              | 786                          | -       | 422937 427040 |

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| 278    | <b>Contemporary Trade Directory Entries</b><br>Name: Industrial Supplier<br>Location: 73, Windsor Road, Batley, West Yorkshire, WF17 0JS<br>Classification: Builders' Merchants<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                 | A8SW (S)                               | 793                          | -       | 423545<br>426557 |
| 279    | <b>Contemporary Trade Directory Entries</b><br>Name: B & B Fireplaces<br>Location: 18, Bradford Road, Morley, Leeds, LS27 7HN<br>Classification: Fireplaces & Mantelpieces<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                    | A18NE (N)                              | 806                          | -       | 424007<br>428271 |
| 280    | <b>Contemporary Trade Directory Entries</b><br>Name: Biffa Waste Services Ltd<br>Location: Landfill Site, Howdenclough Rd, Morley, Leeds, LS27 0LU<br>Classification: Waste Disposal Services<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the road within the address or location          | A14SE (E)                              | 823                          | -       | 424614<br>427353 |
| 281    | <b>Contemporary Trade Directory Entries</b><br>Name: James Swain Electrical Services Ltd<br>Location: Woodgates, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1EB<br>Classification: Electrical Engineers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address       | A18NW (N)                              | 828                          | -       | 423615<br>428342 |
| 282    | <b>Contemporary Trade Directory Entries</b><br>Name: Blackgates Engineering<br>Location: 209-211, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1EB<br>Classification: Precision Engineers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                     | A18NE (N)                              | 837                          | -       | 423808<br>428351 |
| 282    | <b>Contemporary Trade Directory Entries</b><br>Name: A 1 Damp Coursing<br>Location: 10, Buttercup Way, Drighlington, Bradford, West Yorkshire, BD11 1EE<br>Classification: Damp & Dry Rot Control<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                             | A18NE (N)                              | 840                          | -       | 423771<br>428357 |
| 283    | <b>Contemporary Trade Directory Entries</b><br>Name: Tair Ltd<br>Location: 193, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1EB<br>Classification: Electronic Engineers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                      | A18NW (N)                              | 838                          | -       | 423554<br>428341 |
| 284    | <b>Contemporary Trade Directory Entries</b><br>Name: David Ward<br>Location: 26, Ashfield Road, Birstall, Batley, West Yorkshire, WF17 0EB<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                        | A7SE (SW)                              | 860                          | -       | 423091<br>426719 |
| 285    | <b>Contemporary Trade Directory Entries</b><br>Name: Spraytec Services<br>Location: Owler Lane, Birstall, Batley, West Yorkshire, WF17 9BW<br>Classification: Blast Cleaning<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                  | A12NW (W)                              | 863                          | -       | 422790<br>427635 |
| 285    | <b>Contemporary Trade Directory Entries</b><br>Name: Foxhall Environmental<br>Location: Owler Lane, Birstall, Batley, WF17 9BW<br>Classification: Waste Disposal Services<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                       | A12NW (W)                              | 900                          | -       | 422750<br>427630 |
| 286    | <b>Contemporary Trade Directory Entries</b><br>Name: Innercity Cleaning Services Ltd<br>Location: Suite 35, Turnberry Park Road, Morley, Leeds, West Yorkshire, LS27 7LE<br>Classification: Cleaning Services - Domestic<br><b>Status: Active</b><br>Positional Accuracy: Manually positioned to the address or location | A19SE (NE)                             | 865                          | -       | 424558<br>427877 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                               | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 287    | <b>Contemporary Trade Directory Entries</b><br>Name: Wood Logistics & Lifting Ltd<br>Location: Owler Lane, Birstall, Batley, West Yorkshire, WF17 9BW<br>Classification: Road Haulage Services<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                               | A12NW (W)                              | 891                          | -       | 422752<br>427600 |
| 288    | <b>Contemporary Trade Directory Entries</b><br>Name: Scobie McIntosh Ltd<br>Location: Unit 1, Oakwell Business Centre, Dark Lane, Birstall, Batley, WF17 9LW<br>Classification: Bakery Equipment Manufacturers & Suppliers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                   | A7NW (SW)                              | 893                          | -       | 422837<br>427000 |
| 289    | <b>Contemporary Trade Directory Entries</b><br>Name: Ground Force<br>Location: Alpha House, Morley, Leeds, West Yorkshire, LS27 7LE<br>Classification: Builders' Merchants<br><b>Status: Active</b><br>Positional Accuracy: Manually positioned within the geographical locality                                                      | A19SE (NE)                             | 901                          | -       | 424558<br>427949 |
| 290    | <b>Contemporary Trade Directory Entries</b><br>Name: Revolution Porsche<br>Location: 136, Leeds Road, Birstall, Batley, WF17 0HH<br>Classification: Garage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                                        | A7SE (SW)                              | 903                          | -       | 423209<br>426572 |
| 290    | <b>Contemporary Trade Directory Entries</b><br>Name: Aeromotive Sports & Performance Ltd<br>Location: Batley, WF17 0HH<br>Classification: Garage Services<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                                                                    | A7SE (SW)                              | 927                          | -       | 423201<br>426549 |
| 290    | <b>Contemporary Trade Directory Entries</b><br>Name: Carlton Porsche<br>Location: 136, Leeds Road, Birstall, Batley, West Yorkshire, WF17 0HH<br>Classification: Garage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                           | A7SE (SW)                              | 929                          | -       | 423230<br>426528 |
| 290    | <b>Contemporary Trade Directory Entries</b><br>Name: Carlton Garage<br>Location: 136, Leeds Road, Birstall, Batley, West Yorkshire, WF17 0HH<br>Classification: Classic Car Specialists<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                    | A7SE (SW)                              | 929                          | -       | 423230<br>426528 |
| 290    | <b>Contemporary Trade Directory Entries</b><br>Name: Bryan Denton Motor Engineer<br>Location: 136, Leeds Road, Birstall, Batley, West Yorkshire, WF17 0HH<br>Classification: Garage Services<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                               | A7SE (SW)                              | 939                          | -       | 423208<br>426530 |
| 291    | <b>Contemporary Trade Directory Entries</b><br>Name: Mannions Care 4 Caravans<br>Location: 23a Bradford Rd, Gildersome/Morley, Leeds, West Yorkshire, LS27 7HW<br>Classification: Caravans - Servicing & Repairs<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the address or location                    | A18NE (N)                              | 903                          | -       | 424017<br>428370 |
| 292    | <b>Contemporary Trade Directory Entries</b><br>Name: K O J Packaging Ltd<br>Location: Unit 7, Adwalton Business Park, 132, Wakefield Road, Drighlington, Bradford, BD11 1DR<br>Classification: Packaging Materials Manufacturers & Suppliers<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address | A17NE (NW)                             | 911                          | -       | 423209<br>428285 |
| 292    | <b>Contemporary Trade Directory Entries</b><br>Name: Vision Colour Print<br>Location: 132, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1DR<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                                                    | A17NE (NW)                             | 946                          | -       | 423193<br>428315 |

| Map ID | Details                                                                                                                                                                                                                                                                                                     | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR           |
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| 292    | <b>Contemporary Trade Directory Entries</b><br>Name: Proof & Print Ltd<br>Location: Adwalton Park House, 132, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1DR<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address       | A17NE (NW)                             | 946                          | -       | 423193 428315 |
| 292    | <b>Contemporary Trade Directory Entries</b><br>Name: Proof & Print Ltd<br>Location: 132, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1DR<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address                            | A17NE (NW)                             | 946                          | -       | 423193 428315 |
| 292    | <b>Contemporary Trade Directory Entries</b><br>Name: Park Spring Formes & Convertors<br>Location: 132, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1DR<br>Classification: Print Finishers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address       | A17NE (NW)                             | 946                          | -       | 423193 428315 |
| 292    | <b>Contemporary Trade Directory Entries</b><br>Name: Vision Colour Print Ltd<br>Location: Adwalton Park House, 132, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1DR<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address | A17NE (NW)                             | 946                          | -       | 423193 428315 |
| 292    | <b>Contemporary Trade Directory Entries</b><br>Name: Inovis Print Ltd<br>Location: Adwalton Park House, 132, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1DR<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the address or location | A17NE (NW)                             | 946                          | -       | 423193 428315 |
| 292    | <b>Contemporary Trade Directory Entries</b><br>Name: Proscan Services<br>Location: Adwalton Park House, 132, Wakefield Road, Drighlington, Bradford, West Yorkshire, BD11 1DR<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the address or location | A17NE (NW)                             | 946                          | -       | 423193 428315 |
| 293    | <b>Contemporary Trade Directory Entries</b><br>Name: Ultimate Business Cards<br>Location: Ashfield Rd, Birstall, Batley, West Yorkshire, WF17 0EB<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the road within the address or location             | A7SE (SW)                              | 912                          | -       | 423122 426622 |
| 294    | <b>Contemporary Trade Directory Entries</b><br>Name: Stern Electric Company Ltd<br>Location: Wakefield Road, Morley, Leeds, LS27 7HH<br>Classification: Distribution Services<br><b>Status: Active</b><br>Positional Accuracy: Automatically positioned to the address                                      | A19SE (NE)                             | 915                          | -       | 424528 428017 |
| 295    | <b>Contemporary Trade Directory Entries</b><br>Name: Springwell Microelectronics<br>Location: 197, Raikes Lane, Birstall, Batley, West Yorkshire, WF17 9QF<br>Classification: Electronic Engineers<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address               | A7NW (SW)                              | 918                          | -       | 422874 426883 |
| 295    | <b>Contemporary Trade Directory Entries</b><br>Name: J.T.S. Gas & Electrical Ltd<br>Location: 104, Raikes Lane, Birstall, Batley, West Yorkshire, WF17 9QF<br>Classification: Gas Appliances - Sales & Service<br><b>Status: Inactive</b><br>Positional Accuracy: Automatically positioned to the address   | A7NW (SW)                              | 926                          | -       | 422851 426906 |
| 296    | <b>Contemporary Trade Directory Entries</b><br>Name: Newsome Printers<br>Location: Wakefield Rd, Drighlington, Bradford, West Yorkshire, BD11 1DR<br>Classification: Printers<br><b>Status: Inactive</b><br>Positional Accuracy: Manually positioned to the road within the address or location             | A18NW (N)                              | 923                          | -       | 423376 428378 |



| Map ID | Details                                                                                                                                                                                                                                                                                                           | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 297    | <b>Contemporary Trade Directory Entries</b><br>Name: Specialist Windows<br>Location: 141, Wakefield Road, Morley, Leeds, LS27 7HH<br>Classification: PVC-U Products - Manufacturers & Suppliers<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                        | A19NW (NE)                             | 928                          | -       | 424349<br>428216 |
| 298    | <b>Contemporary Trade Directory Entries</b><br>Name: Rafferty Pest Solutions<br>Location: 4, Welbeck Road, Birstall, Batley, West Yorkshire, WF17 9QG<br>Classification: Pest & Vermin Control<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                         | A7NW (SW)                              | 943                          | -       | 422811<br>426941 |
| 299    | <b>Contemporary Trade Directory Entries</b><br>Name: Yorkshire Stoves Ltd<br>Location: Unit 1, Overland Park, Gelderd Road, Morley, Leeds, LS27 7FE<br>Classification: Woodburning Stoves<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                              | A19NW (NE)                             | 949                          | -       | 424298<br>428277 |
| 299    | <b>Contemporary Trade Directory Entries</b><br>Name: Yorkshire Stoves Ltd<br>Location: Unit 1, Overland Park, Gelderd Road, Morley, Leeds, LS27 7FE<br>Classification: Woodburning Stoves<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                | A19NW (NE)                             | 949                          | -       | 424298<br>428277 |
| 299    | <b>Contemporary Trade Directory Entries</b><br>Name: Green Oval Garage<br>Location: Unit 2, Overland Park, Gelderd Road, Morley, Leeds, LS27 7FE<br>Classification: Garage Services<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                      | A19NW (NE)                             | 967                          | -       | 424312<br>428290 |
| 299    | <b>Contemporary Trade Directory Entries</b><br>Name: My Moto<br>Location: Unit 3, Overland Park, Gelderd Road, Morley, Leeds, LS27 7FE<br>Classification: Cycle Accessories, Manufacturers & Wholesalers<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                 | A19NW (NE)                             | 974                          | -       | 424322<br>428292 |
| 299    | <b>Contemporary Trade Directory Entries</b><br>Name: The Vehicle Wrapping Centre<br>Location: Unit 5, Overland Park, Gelderd Road, Morley, Leeds, LS27 7FE<br>Classification: Car Customisation & Conversion Specialists<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address | A19NW (NE)                             | 988                          | -       | 424350<br>428290 |
| 300    | <b>Contemporary Trade Directory Entries</b><br>Name: The Rescue Service<br>Location: 4, Turnberry Park Road, Morley, Leeds, LS27 7LE<br>Classification: Car Body Repairs<br><b>Status:</b> Inactive<br>Positional Accuracy: Automatically positioned to the address                                               | A19SE (NE)                             | 951                          | -       | 424591<br>427989 |
| 301    | <b>Contemporary Trade Directory Entries</b><br>Name: Bathtec<br>Location: 87, Briarmains Road, Birstall, Batley, West Yorkshire, WF17 9QT<br>Classification: Bath Resurfacing<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                            | A7NW (SW)                              | 952                          | -       | 422767<br>427012 |
| 302    | <b>Contemporary Trade Directory Entries</b><br>Name: Bamford Motors<br>Location: 2, Wakefield Road, Morley, Leeds, LS27 7HJ<br>Classification: Garage Services<br><b>Status:</b> Active<br>Positional Accuracy: Automatically positioned to the address                                                           | A19SE (NE)                             | 972                          | -       | 424672<br>427889 |
| 303    | <b>Fuel Station Entries</b><br>Name: Birstall Service Station<br>Location: Holdening Way M62, Birstall Spring Ram Business Park, Batley, West Yorkshire, WF17 9AD<br>Brand: Obsolete<br>Premises Type: Not Applicable<br><b>Status:</b> Obsolete<br>Positional Accuracy: Automatically positioned to the address  | A13NW (NW)                             | 128                          | -       | 423598<br>427604 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                 | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 304    | <b>Fuel Station Entries</b><br>Name: Plantation Services<br>Location: 121, Wakefield Road , Guildersome , Leeds, West Yorkshire, LS27 7HH<br>Brand: Bp<br>Premises Type: Service Area<br><b>Status: Open</b><br>Positional Accuracy: Manually positioned to the road within the address or location                     | A19NW (NE)                             | 877                          | -       | 424387<br>428117 |
| 305    | <b>Points of Interest - Commercial Services</b><br>Name: Groupe Samat Ltd<br>Location: Unit 5 Centre 27 Business Park, Bankwood Way, Birstall, Batley, WF17 9TB<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location          | A13SW (SW)                             | 0                            | 12      | 423660<br>427390 |
| 306    | <b>Points of Interest - Commercial Services</b><br>Name: M G Traction<br>Location: Hill Top Garage, 77a Gelderd Road, Birstall, Batley, WF17 9LX<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                         | A13SW (SW)                             | 248                          | 12      | 423417<br>427281 |
| 306    | <b>Points of Interest - Commercial Services</b><br>Name: Des Hartley & Sons Ltd<br>Location: Unit 4 Hilltop Garage, Gelderd Road, Birstall, Batley, WF17 9LX<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location             | A13SW (SW)                             | 248                          | 12      | 423417<br>427281 |
| 306    | <b>Points of Interest - Commercial Services</b><br>Name: M H S Ltd<br>Location: Hilltop Garage, Gelderd Road, Birstall, Batley, WF17 9LX<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                 | A13SW (SW)                             | 248                          | 12      | 423417<br>427281 |
| 306    | <b>Points of Interest - Commercial Services</b><br>Name: Leemings Road Haulage<br>Location: Hilltop Garage, Gelderd Road, Birstall, Batley, West Yorkshire, WF17 9LX<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location     | A13SW (SW)                             | 248                          | 12      | 423417<br>427281 |
| 306    | <b>Points of Interest - Commercial Services</b><br>Name: Gelderd Road Auto Centre<br>Location: 79 Gelderd Road, Birstall, Batley, WF17 9LX<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                             | A13SW (SW)                             | 253                          | 12      | 423406<br>427295 |
| 306    | <b>Points of Interest - Commercial Services</b><br>Name: East Coast Distribution Ltd<br>Location: Hilltop Garage, Gelderd Road, Birstall, Batley, WF17 9LX<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location               | A13SW (SW)                             | 253                          | 12      | 423406<br>427295 |
| 307    | <b>Points of Interest - Commercial Services</b><br>Name: Schenker GB Logistics<br>Location: Unit 3 Triangle Retail Park, Oakwell Way, Birstall, Batley, WF17 9LU<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location         | A12SE (W)                              | 291                          | 12      | 423345<br>427352 |
| 307    | <b>Points of Interest - Commercial Services</b><br>Name: Bax Global Ltd<br>Location: Unit 3 Triangle Retail Park, Oakwell Way, Birstall, Batley, WF17 9LU<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                | A12SE (W)                              | 291                          | 12      | 423345<br>427352 |
| 308    | <b>Points of Interest - Commercial Services</b><br>Name: Leeds Fleet Services Ltd<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, WF17 0JB<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location | A13SE (SE)                             | 407                          | 12      | 424040<br>427120 |
| 309    | <b>Points of Interest - Commercial Services</b><br>Name: D S Smith<br>Location: Pennine View, Birstall, Batley, WF17 9NF<br>Category: Recycling Services<br>Class Code: Recycling, Reclamation and Disposal<br>Positional Accuracy: Positioned to address or location                                                   | A12SE (SW)                             | 435                          | 12      | 423253<br>427192 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                 | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 309    | <b>Points of Interest - Commercial Services</b><br>Name: D S Smith<br>Location: Pennine View, Birstall, Batley, WF17 9NF<br>Category: Recycling Services<br>Class Code: Recycling, Reclamation and Disposal<br>Positional Accuracy: Positioned to address or location                                                   | A12SE (SW)                             | 436                          | 12      | 423252<br>427192 |
| 310    | <b>Points of Interest - Commercial Services</b><br>Name: Winteringham Group Ltd<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, WF17 0JB<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location     | A8NE (SE)                              | 463                          | 12      | 423989<br>426984 |
| 310    | <b>Points of Interest - Commercial Services</b><br>Name: Master Cars Ltd<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, WF17 0JB<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location          | A8NE (SE)                              | 463                          | 12      | 423989<br>426984 |
| 310    | <b>Points of Interest - Commercial Services</b><br>Name: Leeds Fleet Services Ltd<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, WF17 0JB<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location | A8NE (SE)                              | 463                          | 12      | 423989<br>426984 |
| 311    | <b>Points of Interest - Commercial Services</b><br>Name: Freightlinks UK Ltd<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, WF17 0JB<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location        | A9NW (SE)                              | 509                          | 12      | 424089<br>427021 |
| 311    | <b>Points of Interest - Commercial Services</b><br>Name: The Winteringham Group<br>Location: Howden Clough Industrial Estate, Leeds Road, Birstall, Batley, WF17 0JB<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location     | A9NW (SE)                              | 509                          | 12      | 424090<br>427022 |
| 312    | <b>Points of Interest - Commercial Services</b><br>Name: Bedfords Ltd<br>Location: Pheasant Drive, Birstall, Batley, WF17 9LT<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                            | A7NE (SW)                              | 532                          | 12      | 423318<br>426956 |
| 312    | <b>Points of Interest - Commercial Services</b><br>Name: Bedfords<br>Location: Pheasant Drive, Birstall, Batley, WF17 9LT<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                                | A7NE (SW)                              | 533                          | 12      | 423317<br>426955 |
| 313    | <b>Points of Interest - Commercial Services</b><br>Name: Nightfreight<br>Location: Pennine View, Birstall, Batley, WF17 9NF<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                              | A7NE (SW)                              | 533                          | 12      | 423223<br>427058 |
| 313    | <b>Points of Interest - Commercial Services</b><br>Name: DX<br>Location: Pennine View, Birstall, Batley, WF17 9NF<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                                        | A7NE (SW)                              | 533                          | 12      | 423223<br>427058 |
| 313    | <b>Points of Interest - Commercial Services</b><br>Name: Vehicle Lease & Servicing Ltd<br>Location: Pennine View, Birstall, Batley, WF17 9NF<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                           | A7NE (SW)                              | 559                          | 12      | 423227<br>427013 |
| 314    | <b>Points of Interest - Commercial Services</b><br>Name: Tibbett & Britten Group Ltd<br>Location: Unit 27, Oakwell Way, Birstall, Batley, WF17 9LU<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                       | A12SW (W)                              | 643                          | 12      | 423004<br>427263 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 314    | <b>Points of Interest - Commercial Services</b><br>Name: A R Turbo<br>Location: Unit 6 Springwell 27, Dark Lane, Birstall, Batley, WF17 9LN<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                             | A12SW (W)                              | 716                          | 12      | 422929<br>427263 |
| 315    | <b>Points of Interest - Commercial Services</b><br>Name: Nab Lane Garage<br>Location: Nab Lane, Birstall, Batley, WF17 9NG<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                                              | A7NE (SW)                              | 664                          | 12      | 423173<br>426918 |
| 315    | <b>Points of Interest - Commercial Services</b><br>Name: Nab Lane Garage<br>Location: Nab Lane, Birstall, Batley, WF17 9NG<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                                              | A7NE (SW)                              | 664                          | 12      | 423173<br>426918 |
| 316    | <b>Points of Interest - Commercial Services</b><br>Name: C & P Transport Engineers<br>Location: Holden House Farm 215, Upper Batley Low Lane, Batley, WF17 0JF<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location            | A8SE (S)                               | 681                          | 12      | 423862<br>426678 |
| 317    | <b>Points of Interest - Commercial Services</b><br>Name: C Harwood Vehicle Repairs & Refinishing<br>Location: 1a Nab Lane, Birstall, Batley, WF17 9NG<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                   | A7NE (SW)                              | 721                          | 12      | 423044<br>426984 |
| 317    | <b>Points of Interest - Commercial Services</b><br>Name: J L Transport Ltd<br>Location: 29 Greenacres Drive, Birstall, Batley, WF17 9RA<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                   | A7NE (SW)                              | 770                          | 12      | 423044<br>426903 |
| 318    | <b>Points of Interest - Commercial Services</b><br>Name: Advanced Supply Chain<br>Location: Unit 1 West Yorkshire Retail Park, Holden Ing Way, Birstall, Batley, WF17 9AE<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location | A12NW (W)                              | 754                          | 12      | 422906<br>427647 |
| 319    | <b>Points of Interest - Commercial Services</b><br>Name: Future Forwarding<br>Location: Hawthorne House, Dark Lane, Birstall, Batley, WF17 9LW<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                            | A7NW (SW)                              | 785                          | 12      | 422937<br>427040 |
| 319    | <b>Points of Interest - Commercial Services</b><br>Name: Future Forwarding<br>Location: Hawthorne House, Dark Lane, Birstall, Batley, WF17 9LW<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                            | A7NW (SW)                              | 786                          | 12      | 422937<br>427040 |
| 320    | <b>Points of Interest - Commercial Services</b><br>Name: Master Cars<br>Location: Dark Lane, Birstall, Batley, WF17 9LW<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                                                 | A12SW (W)                              | 802                          | 12      | 422879<br>427135 |
| 321    | <b>Points of Interest - Commercial Services</b><br>Name: C I S Industrial<br>Location: Ower Lane, Birstall, Batley, WF17 9BW<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                              | A12NW (W)                              | 870                          | 12      | 422766<br>427552 |
| 321    | <b>Points of Interest - Commercial Services</b><br>Name: C I S Industrial Storage Ltd<br>Location: Ower Lane, Birstall, Batley, WF17 9BW<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                  | A12NW (W)                              | 891                          | 12      | 422752<br>427600 |

| Map ID | Details                                                                                                                                                                                                                                                                                               | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 321    | <b>Points of Interest - Commercial Services</b><br>Name: Wood Logistics & Lifting Ltd<br>Location: Owler Lane, Birstall, Batley, WF17 9BW<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location              | A12NW (W)                              | 892                          | 12      | 422752<br>427600 |
| 322    | <b>Points of Interest - Commercial Services</b><br>Name: Stearn<br>Location: Wakefield Road, Morley, Leeds, LS27 7HH<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                   | A19SE (NE)                             | 911                          | 12      | 424524<br>428016 |
| 322    | <b>Points of Interest - Commercial Services</b><br>Name: Stern Electric Company Ltd<br>Location: Wakefield Road, Morley, Leeds, LS27 7HH<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location               | A19SE (NE)                             | 915                          | 12      | 424528<br>428017 |
| 323    | <b>Points of Interest - Commercial Services</b><br>Name: J T Auto Valeting<br>Location: 104 Raikes Lane, Birstall, Batley, WF17 9QF<br>Category: Personal, Consumer and other Services<br>Class Code: Vehicle Cleaning Services<br>Positional Accuracy: Positioned to address or location             | A7NW (SW)                              | 926                          | 12      | 422851<br>426906 |
| 323    | <b>Points of Interest - Commercial Services</b><br>Name: Rafferty Pest Solutions<br>Location: 4 Welbeck Road, Birstall, Batley, WF17 9QG<br>Category: Contract Services<br>Class Code: Pest and Vermin Control<br>Positional Accuracy: Positioned to address or location                              | A7NW (SW)                              | 944                          | 12      | 422810<br>426941 |
| 324    | <b>Points of Interest - Commercial Services</b><br>Name: Gav Repairs<br>Location: 136 Leeds Road, Birstall, Batley, WF17 0HH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                         | A7SE (SW)                              | 929                          | 12      | 423230<br>426528 |
| 324    | <b>Points of Interest - Commercial Services</b><br>Name: Aeromotive Saab Specialist<br>Location: 136 Leeds Road, Birstall, Batley, WF17 0HH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location          | A7SE (SW)                              | 929                          | 12      | 423230<br>426528 |
| 324    | <b>Points of Interest - Commercial Services</b><br>Name: Carlton Garage<br>Location: 136 Leeds Road, Birstall, Batley, WF17 0HH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                      | A7SE (SW)                              | 929                          | 12      | 423230<br>426528 |
| 324    | <b>Points of Interest - Commercial Services</b><br>Name: Revolution Porsche<br>Location: 136 Leeds Road, Birstall, Batley, WF17 0HH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                  | A7SE (SW)                              | 939                          | 12      | 423208<br>426530 |
| 324    | <b>Points of Interest - Commercial Services</b><br>Name: Bryan Denton Motor Engineer<br>Location: 136 Leeds Road, Birstall, Batley, WF17 0HH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location         | A7SE (SW)                              | 939                          | 12      | 423208<br>426530 |
| 324    | <b>Points of Interest - Commercial Services</b><br>Name: Aeromotive Sports & Performance Ltd<br>Location: 136 Leeds Road, Birstall, Batley, WF17 0HH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location | A7SE (SW)                              | 939                          | 12      | 423208<br>426530 |
| 324    | <b>Points of Interest - Commercial Services</b><br>Name: Carlton Garage<br>Location: 136 Leeds Road, Birstall, Batley, WF17 0HH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                      | A7SE (SW)                              | 939                          | 12      | 423208<br>426530 |



| Map ID | Details                                                                                                                                                                                                                                                                                                        | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 324    | <b>Points of Interest - Commercial Services</b><br>Name: Gav Repairs<br>Location: 136 Leeds Road, Birstall, Batley, WF17 0HH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                                  | A7SE (SW)                              | 939                          | 12      | 423208<br>426530 |
| 324    | <b>Points of Interest - Commercial Services</b><br>Name: Bryan Denton Motor Engineer<br>Location: 136 Leeds Road, Birstall, Batley, WF17 0HH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                  | A7SE (SW)                              | 939                          | 12      | 423208<br>426530 |
| 325    | <b>Points of Interest - Commercial Services</b><br>Name: Encon Insulation<br>Location: Gelderd Road, Morley, Leeds, LS27 7JN<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location                                    | A19NW (NE)                             | 965                          | 12      | 424316<br>428284 |
| 325    | <b>Points of Interest - Commercial Services</b><br>Name: Green Oval Garage<br>Location: Unit 2 Overland Park, Gelderd Road, Morley, Leeds, LS27 7FE<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location           | A19NW (NE)                             | 967                          | 12      | 424312<br>428290 |
| 325    | <b>Points of Interest - Commercial Services</b><br>Name: The Vehicle Wrapping Centre<br>Location: Unit 5 Overland Park, Gelderd Road, Morley, Leeds, LS27 7FE<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location | A19NW (NE)                             | 988                          | 12      | 424349<br>428290 |
| 326    | <b>Points of Interest - Commercial Services</b><br>Name: Bamford Motors<br>Location: 2 Wakefield Road, Morley, Leeds, LS27 7HJ<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location                                | A19SE (NE)                             | 972                          | 12      | 424672<br>427889 |
| 327    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Business Park<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location                                                  | A13NW (NW)                             | 0                            | 12      | 423669<br>427463 |
| 328    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tank<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location                                                                                 | A13NE (E)                              | 24                           | 12      | 423814<br>427439 |
| 328    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Centre 27 Business Park<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location                                        | A13SE (SE)                             | 26                           | 12      | 423768<br>427387 |
| 329    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tank<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location                                                                                 | A13NW (NW)                             | 244                          | 12      | 423578<br>427726 |
| 330    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Triangle Business Park<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location                                         | A12SE (W)                              | 304                          | 12      | 423328<br>427368 |
| 330    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Triangle Business Park<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location                                         | A12SE (W)                              | 309                          | 12      | 423322<br>427369 |

| Map ID | Details                                                                                                                                                                                                                                                                         | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 331    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tank<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location                                                  | A13SW (SW)                             | 316                          | 12      | 423381<br>427208 |
| 332    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tank<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location                                                  | A12NE (W)                              | 346                          | 12      | 423284<br>427477 |
| 333    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Factory<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to address or location                                            | A12NE (W)                              | 466                          | 12      | 423170<br>427517 |
| 333    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Factory<br>Location: Not Supplied<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location                        | A12NE (W)                              | 485                          | 12      | 423151<br>427520 |
| 334    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Industrial Estate<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location               | A9NW (SE)                              | 468                          | 12      | 424070<br>427062 |
| 335    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Oakwell Industrial Park<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location         | A12SE (W)                              | 476                          | 12      | 423154<br>427363 |
| 335    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Oakwell Industrial Park<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location         | A12SE (W)                              | 524                          | 12      | 423109<br>427341 |
| 336    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tank<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to address or location                                                              | A7NE (SW)                              | 493                          | 12      | 423341<br>426987 |
| 336    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tanks<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location                                                 | A7NE (SW)                              | 494                          | 12      | 423343<br>426984 |
| 336    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tank<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location                                                  | A7NE (SW)                              | 563                          | 12      | 423270<br>426960 |
| 337    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Howden Clough Industrial Estate<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location | A8NE (SE)                              | 495                          | 12      | 424033<br>426981 |
| 338    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Industrial Estate<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location               | A7NE (SW)                              | 507                          | 12      | 423234<br>427086 |

| Map ID | Details                                                                                                                                                                                                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 338    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Industrial Estate<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location        | A7NE (SW)                              | 518                          | 12      | 423221<br>427085 |
| 339    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Norquest Industrial Park<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location | A7NE (SW)                              | 594                          | 12      | 423327<br>426866 |
| 339    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Norquest Industrial Park<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location | A7NE (SW)                              | 598                          | 12      | 423326<br>426862 |
| 340    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tanks<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location                                          | A7NE (SW)                              | 666                          | 12      | 423227<br>426857 |
| 341    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tank<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location                                           | A12NW (W)                              | 713                          | 12      | 422971<br>427704 |
| 342    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: Not Supplied<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location                   | A7NE (SW)                              | 729                          | 12      | 423050<br>426961 |
| 342    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to address or location                                       | A7NE (SW)                              | 729                          | 12      | 423050<br>426962 |
| 343    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to address or location                                       | A7NW (SW)                              | 786                          | 12      | 422935<br>427042 |
| 343    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: Not Supplied<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location                   | A7NW (SW)                              | 789                          | 12      | 422930<br>427046 |
| 343    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: Not Supplied<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location                   | A7NW (SW)                              | 819                          | 12      | 422927<br>426987 |
| 344    | <b>Points of Interest - Manufacturing and Production</b><br>Name: L N Dobson<br>Location: Hill Top Farm, Howdenclough Road, Morley, Leeds, LS27 0LU<br>Category: Farming<br>Class Code: Livestock Farming<br>Positional Accuracy: Positioned to address or location      | A14SE (E)                              | 801                          | 12      | 424593<br>427365 |
| 345    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: LS27<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location                           | A19SE (NE)                             | 878                          | 12      | 424488<br>428008 |

| Map ID | Details                                                                                                                                                                                                                                                                                         | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 345    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: Not Supplied<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location                                          | A19SE (NE)                             | 881                          | 12      | 424492<br>428008 |
| 345    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: LS27<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location                                                  | A19SE (NE)                             | 913                          | 12      | 424528<br>428014 |
| 346    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: WF17<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location                                                  | A7SE (SW)                              | 932                          | 12      | 423205<br>426540 |
| 347    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: Not Supplied<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location                                          | A18NE (N)                              | 941                          | 12      | 423988<br>428420 |
| 347    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Works<br>Location: LS27<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to address or location                                                              | A18NE (N)                              | 946                          | 12      | 423995<br>428423 |
| 348    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Business Park<br>Location: BD11<br>Category: Industrial Features<br>Class Code: Business Parks and Industrial Estates<br>Positional Accuracy: Positioned to an adjacent address or location                                   | A17NE (NW)                             | 973                          | 12      | 423209<br>428356 |
| 349    | <b>Points of Interest - Manufacturing and Production</b><br>Name: Tank<br>Location: LS27<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location                                                                  | A15NW (E)                              | 988                          | 12      | 424786<br>427484 |
| 350    | <b>Points of Interest - Public Infrastructure</b><br>Name: Sewage Bed<br>Location: WF17<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to an adjacent address or location                                  | A13SW (W)                              | 211                          | 12      | 423416<br>427408 |
| 350    | <b>Points of Interest - Public Infrastructure</b><br>Name: Sewage Bed<br>Location: WF17<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to an adjacent address or location                                  | A13SW (W)                              | 211                          | 12      | 423416<br>427408 |
| 351    | <b>Points of Interest - Public Infrastructure</b><br>Name: Recycling Centre<br>Location: Nab Lane, WF17<br>Category: Infrastructure and Facilities<br>Class Code: Recycling Centres<br>Positional Accuracy: Positioned to address or location                                                   | A8NW (S)                               | 354                          | 12      | 423661<br>426984 |
| 351    | <b>Points of Interest - Public Infrastructure</b><br>Name: Kirklees Waste Services<br>Location: Nab Lane, Birstall, Batley, WF17 0HU<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to address or location | A8NW (S)                               | 362                          | 12      | 423688<br>426975 |
| 352    | <b>Points of Interest - Public Infrastructure</b><br>Name: Sludge Tank<br>Location: WF17<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to an adjacent address or location                                 | A12NE (W)                              | 410                          | 12      | 423242<br>427568 |

| Map ID | Details                                                                                                                                                                                                                                                                                                        | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 353    | <b>Points of Interest - Public Infrastructure</b><br>Name: Sluice<br>Location: WF17<br>Category: Water<br>Class Code: Weirs, Sluices and Dams<br>Positional Accuracy: Positioned to an adjacent address or location                                                                                            | A8NE (SE)                              | 445                          | 12      | 423981<br>427002 |
| 354    | <b>Points of Interest - Public Infrastructure</b><br>Name: Refuse Tip<br>Location: LS27<br>Category: Infrastructure and Facilities<br>Class Code: Refuse Disposal Facilities<br>Positional Accuracy: Positioned to an adjacent address or location                                                             | A14NW (E)                              | 473                          | 12      | 424271<br>427480 |
| 355    | <b>Points of Interest - Public Infrastructure</b><br>Name: Kirklees Waste Services<br>Location: Nab Lane, Birstall, Batley, WF17 0HU<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to address or location                | A8NE (S)                               | 507                          | 12      | 423742<br>426832 |
| 356    | <b>Points of Interest - Public Infrastructure</b><br>Name: Sewage Works (Disused)<br>Location: WF17<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to an adjacent address or location                                     | A9NW (SE)                              | 600                          | 12      | 424054<br>426861 |
| 356    | <b>Points of Interest - Public Infrastructure</b><br>Name: Howden Clough Sewage Works (Disused)<br>Location: WF17<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to an adjacent address or location                       | A9NW (SE)                              | 610                          | 12      | 424073<br>426863 |
| 357    | <b>Points of Interest - Public Infrastructure</b><br>Name: Sewage Bed<br>Location: WF17<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to an adjacent address or location                                                 | A12SW (SW)                             | 692                          | 12      | 423003<br>427121 |
| 357    | <b>Points of Interest - Public Infrastructure</b><br>Name: Sewage Bed<br>Location: WF17<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to an adjacent address or location                                                 | A12SW (SW)                             | 699                          | 12      | 422997<br>427118 |
| 358    | <b>Points of Interest - Public Infrastructure</b><br>Name: North Fire Ltd<br>Location: Unit 7 Springwell 27, Dark Lane, Birstall, Batley, WF17 9LN<br>Category: Central and Local Government<br>Class Code: Fire Brigade Stations<br>Positional Accuracy: Positioned to address or location                    | A12SW (W)                              | 713                          | 12      | 422930<br>427273 |
| 359    | <b>Points of Interest - Public Infrastructure</b><br>Name: Foxhall Environmental<br>Location: Foxhall Farm, Owlser Lane, Birstall, Batley, WF17 9BW<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to address or location | A12NW (W)                              | 879                          | 12      | 422773<br>427633 |
| 360    | <b>Points of Interest - Recreational and Environmental</b><br>Name: Playground<br>Location: Leeds Road, WF17<br>Category: Recreational<br>Class Code: Playgrounds<br>Positional Accuracy: Positioned to address or location                                                                                    | A8SW (S)                               | 675                          | 12      | 423615<br>426666 |
| 360    | <b>Points of Interest - Recreational and Environmental</b><br>Name: Playground<br>Location: Not Supplied<br>Category: Recreational<br>Class Code: Playgrounds<br>Positional Accuracy: Positioned to an adjacent address or location                                                                            | A8SW (S)                               | 679                          | 12      | 423614<br>426662 |



| Map ID | Details                                                                                                                                                                                       | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 361    | <b>Ancient Woodland</b><br>Name: Birkby Brow Wood<br>Reference: 1103305<br>Area(m²): 110230.1<br>Type: Plantation on Ancient Woodland                                                         | A9NW (SE)                              | 539                          | 13      | 424106<br>426994 |
| 362    | <b>Areas of Adopted Green Belt</b><br>Authority: Kirklees Metropolitan Borough Council<br>Plan Name: Kirklees Unitary Development Plan<br><b>Status: Adopted</b><br>Plan Date: 1st March 1999 | A13SE (SE)                             | 65                           | 14      | 423807<br>427348 |
| 363    | <b>Areas of Adopted Green Belt</b><br>Authority: Leeds City Council<br>Plan Name: Proposal Map<br><b>Status: Adopted</b><br>Plan Date: 31st January 2018                                      | A13NE (E)                              | 214                          | 15      | 423993<br>427549 |
| 364    | <b>Areas of Adopted Green Belt</b><br>Authority: Kirklees Metropolitan Borough Council<br>Plan Name: Kirklees Unitary Development Plan<br><b>Status: Adopted</b><br>Plan Date: 1st March 1999 | A9NW (SE)                              | 539                          | 14      | 424084<br>426969 |
| 365    | <b>Areas of Unadopted Green Belt</b><br>Authority: Kirklees Metropolitan Borough Council<br>Plan Name: Kirklees Local Plan<br><b>Status: Submission Draft</b><br>Plan Date: 25th April 2017   | A13SE (SE)                             | 65                           | 14      | 423807<br>427348 |
| 366    | <b>Areas of Unadopted Green Belt</b><br>Authority: Kirklees Metropolitan Borough Council<br>Plan Name: Kirklees Local Plan<br><b>Status: Submission Draft</b><br>Plan Date: 25th April 2017   | A9NW (SE)                              | 539                          | 14      | 424084<br>426969 |
| 367    | <b>Nitrate Vulnerable Zones</b><br>Name: Milshaw Beck From Source To Low/Wortley/Pudsey Bks Nvz<br>Description: Surface Water<br>Source: Environment Agency, Head Office                      | A19NW (NE)                             | 808                          | 5       | 424150<br>428200 |

| Agency & Hydrological                                                                                                                                                                                                                                                | Version                                                  | Update Cycle                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Contaminated Land Register Entries and Notices</b><br>Leeds City Council - Planning and Development<br>Bradford Metropolitan City Council - Environmental Health<br>Environment Agency - Head Office<br>Kirklees Metropolitan Borough Council - Planning Services | April 2014<br>January 2020<br>June 2020<br>November 2013 | Annual Rolling Update<br>Annual Rolling Update<br>Annually<br>Annual Rolling Update |
| <b>Discharge Consents</b><br>Environment Agency - North East Region                                                                                                                                                                                                  | July 2020                                                | Quarterly                                                                           |
| <b>Enforcement and Prohibition Notices</b><br>Environment Agency - North East Region                                                                                                                                                                                 | March 2013                                               | Annual Rolling Update                                                               |
| <b>Integrated Pollution Controls</b><br>Environment Agency - North East Region                                                                                                                                                                                       | October 2008                                             | Variable                                                                            |
| <b>Integrated Pollution Prevention And Control</b><br>Environment Agency - North East Region                                                                                                                                                                         | July 2020                                                | Quarterly                                                                           |
| <b>Local Authority Integrated Pollution Prevention And Control</b><br>Kirklees Metropolitan Borough Council - Environmental Health Department<br>Leeds City Council - Neighbourhoods Department<br>Bradford Metropolitan City Council - Environmental Health         | April 2014<br>June 2014<br>October 2014                  | Variable<br>Variable<br>Variable                                                    |
| <b>Local Authority Pollution Prevention and Controls</b><br>Kirklees Metropolitan Borough Council - Environmental Health Department<br>Leeds City Council - Neighbourhoods Department<br>Bradford Metropolitan City Council - Environmental Health                   | April 2014<br>August 2014<br>October 2014                | Annual Rolling Update<br>Annual Rolling Update<br>Annual Rolling Update             |
| <b>Local Authority Pollution Prevention and Control Enforcements</b><br>Kirklees Metropolitan Borough Council - Environmental Health Department<br>Bradford Metropolitan City Council - Environmental Health<br>Leeds City Council - Neighbourhoods Department       | April 2014<br>January 2013<br>June 2014                  | Variable<br>Variable<br>Variable                                                    |
| <b>Nearest Surface Water Feature</b><br>Ordnance Survey                                                                                                                                                                                                              | August 2020                                              |                                                                                     |
| <b>Pollution Incidents to Controlled Waters</b><br>Environment Agency - North East Region                                                                                                                                                                            | December 1998                                            | Not Applicable                                                                      |
| <b>Prosecutions Relating to Authorised Processes</b><br>Environment Agency - North East Region                                                                                                                                                                       | March 2013                                               | Annual Rolling Update                                                               |
| <b>Prosecutions Relating to Controlled Waters</b><br>Environment Agency - North East Region                                                                                                                                                                          | March 2013                                               | Annual Rolling Update                                                               |
| <b>Registered Radioactive Substances</b><br>Environment Agency - North East Region                                                                                                                                                                                   | June 2016                                                |                                                                                     |
| <b>River Quality</b><br>Environment Agency - Head Office                                                                                                                                                                                                             | November 2001                                            | Not Applicable                                                                      |
| <b>River Quality Biology Sampling Points</b><br>Environment Agency - Head Office                                                                                                                                                                                     | July 2012                                                | Annually                                                                            |
| <b>River Quality Chemistry Sampling Points</b><br>Environment Agency - Head Office                                                                                                                                                                                   | July 2012                                                | Annually                                                                            |
| <b>Substantiated Pollution Incident Register</b><br>Environment Agency - North East Region - Ridings Area<br>Environment Agency - North East Region - Yorkshire Area                                                                                                 | July 2020<br>July 2020                                   | Quarterly<br>Quarterly                                                              |
| <b>Water Abstractions</b><br>Environment Agency - North East Region                                                                                                                                                                                                  | July 2020                                                | Quarterly                                                                           |
| <b>Water Industry Act Referrals</b><br>Environment Agency - North East Region                                                                                                                                                                                        | October 2017                                             | Quarterly                                                                           |
| <b>Groundwater Vulnerability Map</b><br>Environment Agency - Head Office                                                                                                                                                                                             | June 2018                                                | As notified                                                                         |
| <b>Bedrock Aquifer Designations</b><br>Environment Agency - Head Office                                                                                                                                                                                              | January 2018                                             | Annually                                                                            |

| Agency & Hydrological                                                                                                 | Version        | Update Cycle |
|-----------------------------------------------------------------------------------------------------------------------|----------------|--------------|
| <b>Superficial Aquifer Designations</b><br>Environment Agency - Head Office                                           | January 2018   | Annually     |
| <b>Source Protection Zones</b><br>Environment Agency - Head Office                                                    | October 2019   | Quarterly    |
| <b>Extreme Flooding from Rivers or Sea without Defences</b><br>Environment Agency - Head Office                       | September 2020 | Quarterly    |
| <b>Flooding from Rivers or Sea without Defences</b><br>Environment Agency - Head Office                               | September 2020 | Quarterly    |
| <b>Areas Benefiting from Flood Defences</b><br>Environment Agency - Head Office                                       | September 2020 | Quarterly    |
| <b>Flood Water Storage Areas</b><br>Environment Agency - Head Office                                                  | September 2020 | Quarterly    |
| <b>Flood Defences</b><br>Environment Agency - Head Office                                                             | September 2020 | Quarterly    |
| <b>OS Water Network Lines</b><br>Ordnance Survey                                                                      | June 2020      | Quarterly    |
| <b>Surface Water 1 in 30 year Flood Extent</b><br>Environment Agency - Head Office                                    | October 2013   | Annually     |
| <b>Surface Water 1 in 100 year Flood Extent</b><br>Environment Agency - Head Office                                   | October 2013   | Annually     |
| <b>Surface Water 1 in 1000 year Flood Extent</b><br>Environment Agency - Head Office                                  | October 2013   | Annually     |
| <b>Surface Water Suitability</b><br>Environment Agency - Head Office                                                  | October 2013   | Annually     |
| <b>BGS Groundwater Flooding Susceptibility</b><br>British Geological Survey - National Geoscience Information Service | May 2013       | Annually     |

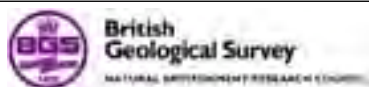
| Waste                                                                                                                                                                                                                      | Version                                       | Update Cycle                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------|
| <b>BGS Recorded Landfill Sites</b><br>British Geological Survey - National Geoscience Information Service                                                                                                                  | June 1996                                     | Not Applicable                                     |
| <b>Historical Landfill Sites</b><br>Environment Agency - Head Office                                                                                                                                                       | October 2019                                  | Quarterly                                          |
| <b>Integrated Pollution Control Registered Waste Sites</b><br>Environment Agency - North East Region                                                                                                                       | October 2008                                  | Not Applicable                                     |
| <b>Licensed Waste Management Facilities (Landfill Boundaries)</b><br>Environment Agency - North East Region - Ridings Area<br>Environment Agency - North East Region - Yorkshire Area                                      | July 2020<br>July 2020                        | Quarterly<br>Quarterly                             |
| <b>Licensed Waste Management Facilities (Locations)</b><br>Environment Agency - North East Region - Ridings Area<br>Environment Agency - North East Region - Yorkshire Area                                                | July 2020<br>July 2020                        | Quarterly<br>Quarterly                             |
| <b>Local Authority Landfill Coverage</b><br>Bradford Metropolitan City Council - Planning Department<br>Kirklees Metropolitan Borough Council - Planning Services<br>Leeds City Council - Planning and Development         | May 2000<br>May 2000<br>May 2000              | Not Applicable<br>Not Applicable<br>Not Applicable |
| <b>Local Authority Recorded Landfill Sites</b><br>Bradford Metropolitan City Council - Planning Department<br>Kirklees Metropolitan Borough Council - Planning Services<br>Leeds City Council - Planning and Development   | May 2000<br>May 2000<br>May 2000              | Not Applicable<br>Not Applicable<br>Not Applicable |
| <b>Potentially Infilled Land (Non-Water)</b><br>Landmark Information Group Limited                                                                                                                                         | December 1999                                 | Not Applicable                                     |
| <b>Potentially Infilled Land (Water)</b><br>Landmark Information Group Limited                                                                                                                                             | December 1999                                 | Not Applicable                                     |
| <b>Registered Landfill Sites</b><br>Environment Agency - North East Region - Ridings Area<br>Environment Agency - North East Region - Yorkshire Area                                                                       | March 2003<br>March 2003                      | Not Applicable<br>Not Applicable                   |
| <b>Registered Waste Transfer Sites</b><br>Environment Agency - North East Region - Ridings Area<br>Environment Agency - North East Region - Yorkshire Area                                                                 | March 2003<br>March 2003                      | Not Applicable<br>Not Applicable                   |
| <b>Registered Waste Treatment or Disposal Sites</b><br>Environment Agency - North East Region - Ridings Area<br>Environment Agency - North East Region - Yorkshire Area                                                    | March 2003<br>March 2003                      | Not Applicable<br>Not Applicable                   |
| Hazardous Substances                                                                                                                                                                                                       | Version                                       | Update Cycle                                       |
| <b>Control of Major Accident Hazards Sites (COMAH)</b><br>Health and Safety Executive                                                                                                                                      | April 2018                                    | Bi-Annually                                        |
| <b>Explosive Sites</b><br>Health and Safety Executive                                                                                                                                                                      | March 2017                                    | Annually                                           |
| <b>Notification of Installations Handling Hazardous Substances (NIHHS)</b><br>Health and Safety Executive                                                                                                                  | November 2000                                 | Not Applicable                                     |
| <b>Planning Hazardous Substance Enforcements</b><br>Kirklees Metropolitan Borough Council - Planning Services<br>Bradford Metropolitan City Council - Planning Department<br>Leeds City Council - Planning and Development | August 2015<br>February 2016<br>February 2016 | Variable<br>Variable<br>Variable                   |
| <b>Planning Hazardous Substance Consents</b><br>Kirklees Metropolitan Borough Council - Planning Services<br>Bradford Metropolitan City Council - Planning Department<br>Leeds City Council - Planning and Development     | August 2015<br>February 2016<br>February 2016 | Variable<br>Variable<br>Variable                   |

| Geological                                                                                                                                      | Version        | Update Cycle          |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------|
| <b>BGS 1:625,000 Solid Geology</b><br>British Geological Survey - National Geoscience Information Service                                       | January 2009   | Not Applicable        |
| <b>BGS Estimated Soil Chemistry</b><br>British Geological Survey - National Geoscience Information Service                                      | October 2015   | Annually              |
| <b>BGS Recorded Mineral Sites</b><br>British Geological Survey - National Geoscience Information Service                                        | June 2020      | Bi-Annually           |
| <b>CBSCB Compensation District</b><br>Cheshire Brine Subsidence Compensation Board (CBSCB)                                                      | August 2011    | Not Applicable        |
| <b>Coal Mining Affected Areas</b><br>The Coal Authority - Property Searches                                                                     | March 2014     | Annual Rolling Update |
| <b>Mining Instability</b><br>Ove Arup & Partners                                                                                                | October 2000   | Not Applicable        |
| <b>Non Coal Mining Areas of Great Britain</b><br>British Geological Survey - National Geoscience Information Service                            | May 2015       | Not Applicable        |
| <b>Potential for Collapsible Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service                | April 2020     | Annually              |
| <b>Potential for Compressible Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service               | January 2019   | Annually              |
| <b>Potential for Ground Dissolution Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service                | January 2019   | Annually              |
| <b>Potential for Landslide Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service                  | January 2019   | Annually              |
| <b>Potential for Running Sand Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service               | January 2019   | Annually              |
| <b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service | January 2019   | Annually              |
| <b>Radon Potential - Radon Affected Areas</b><br>British Geological Survey - National Geoscience Information Service                            | July 2011      | Annually              |
| <b>Radon Potential - Radon Protection Measures</b><br>British Geological Survey - National Geoscience Information Service                       | July 2011      | Annually              |
| Industrial Land Use                                                                                                                             | Version        | Update Cycle          |
| <b>Contemporary Trade Directory Entries</b><br>Thomson Directories                                                                              | July 2020      | Quarterly             |
| <b>Fuel Station Entries</b><br>Catalist Ltd - Experian                                                                                          | September 2020 | Quarterly             |
| <b>Gas Pipelines</b><br>National Grid                                                                                                           | September 2020 |                       |
| <b>Points of Interest - Commercial Services</b><br>PointX                                                                                       | September 2020 | Quarterly             |
| <b>Points of Interest - Education and Health</b><br>PointX                                                                                      | September 2020 | Quarterly             |
| <b>Points of Interest - Manufacturing and Production</b><br>PointX                                                                              | September 2020 | Quarterly             |
| <b>Points of Interest - Public Infrastructure</b><br>PointX                                                                                     | September 2020 | Quarterly             |
| <b>Points of Interest - Recreational and Environmental</b><br>PointX                                                                            | September 2020 | Quarterly             |
| <b>Underground Electrical Cables</b><br>National Grid                                                                                           | August 2020    |                       |



| Sensitive Land Use                                                                                                                                | Version                             | Update Cycle                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|
| <b>Ancient Woodland</b><br>Natural England                                                                                                        | April 2020                          | Bi-Annually                               |
| <b>Areas of Adopted Green Belt</b><br>Bradford Metropolitan City Council<br>Kirklees Metropolitan Borough Council<br>Leeds City Council           | June 2020<br>June 2020<br>June 2020 | As notified<br>As notified<br>As notified |
| <b>Areas of Unadopted Green Belt</b><br>Bradford Metropolitan City Council<br>Kirklees Metropolitan Borough Council<br>Leeds City Council         | June 2020<br>June 2020<br>June 2020 | As notified<br>As notified<br>As notified |
| <b>Areas of Outstanding Natural Beauty</b><br>Natural England                                                                                     | June 2019                           | Bi-Annually                               |
| <b>Environmentally Sensitive Areas</b><br>Natural England                                                                                         | January 2017                        |                                           |
| <b>Forest Parks</b><br>Forestry Commission                                                                                                        | April 1997                          | Not Applicable                            |
| <b>Local Nature Reserves</b><br>Natural England                                                                                                   | April 2020                          | Bi-Annually                               |
| <b>Marine Nature Reserves</b><br>Natural England                                                                                                  | July 2019                           | Bi-Annually                               |
| <b>National Nature Reserves</b><br>Natural England                                                                                                | July 2019                           | Bi-Annually                               |
| <b>National Parks</b><br>Natural England                                                                                                          | April 2017                          | Bi-Annually                               |
| <b>Nitrate Sensitive Areas</b><br>Natural England                                                                                                 | April 2016                          | Not Applicable                            |
| <b>Nitrate Vulnerable Zones</b><br>Environment Agency - Head Office<br>Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | December 2017<br>October 2015       | Bi-Annually                               |
| <b>Ramsar Sites</b><br>Natural England                                                                                                            | August 2020                         | Bi-Annually                               |
| <b>Sites of Special Scientific Interest</b><br>Natural England                                                                                    | May 2020                            | Bi-Annually                               |
| <b>Special Areas of Conservation</b><br>Natural England                                                                                           | July 2020                           | Bi-Annually                               |
| <b>Special Protection Areas</b><br>Natural England                                                                                                | September 2020                      | Bi-Annually                               |

A selection of organisations who provide data within this report

| Data Supplier                          | Data Supplier Logo                                                                    |
|----------------------------------------|---------------------------------------------------------------------------------------|
| Ordnance Survey                        |    |
| Environment Agency                     |    |
| Scottish Environment Protection Agency |    |
| The Coal Authority                     |    |
| British Geological Survey              |    |
| Centre for Ecology and Hydrology       |    |
| Natural Resources Wales                |   |
| Scottish Natural Heritage              |  |
| Natural England                        |  |
| Public Health England                  |  |
| Ove Arup                               |  |
| Stantec UK Ltd                         |  |

| Contact | Name and Address                                                                                                                                               | Contact Details                                                                                                           |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1       | <b>British Geological Survey - Enquiry Service</b><br>British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG | Telephone: 0115 936 3143<br>Fax: 0115 936 3276<br>Email: enquiries@bgs.ac.uk<br>Website: www.bgs.ac.uk                    |
| 2       | <b>Environment Agency - National Customer Contact Centre (NCCC)</b><br>PO Box 544, Templeborough, Rotherham, S60 1BY                                           | Telephone: 03708 506 506<br>Email: enquiries@environment-agency.gov.uk                                                    |
| 3       | <b>Kirklees Metropolitan Borough Council - Environmental Health Department</b><br>West Riding House, 9 Manchester Road, Huddersfield, West Yorkshire, HD1 3HH  | Telephone: 01484 221000<br>Email: customer.relations@kirklees.gov.uk<br>Website: www.kirklees.gov.uk                      |
| 4       | <b>Leeds City Council - Neighbourhoods Department</b><br>6 Floor South Point, South Accommodation Road, Leeds, West Yorkshire, LS10 1PP                        | Telephone: 0113 234 8080<br>Fax: 0113 242 1321<br>Website: www.leeds.gov.uk                                               |
| 5       | <b>Environment Agency - Head Office</b><br>Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD                                        | Telephone: 01454 624400<br>Fax: 01454 624409                                                                              |
| 6       | <b>Ordnance Survey</b><br>Adanac Drive, Southampton, Hampshire, SO16 0AS                                                                                       | Telephone: 03456 05 05 05<br>Email: customerservices@ordnancesurvey.co.uk<br>Website: www.ordnancesurvey.gov.uk           |
| 7       | <b>Kirklees Metropolitan Borough Council - Planning Services</b><br>PO BOX B93, Civic Centre III, Off Market Street, Huddersfield, West Yorkshire, HD1 2JR     | Telephone: 01484 221000<br>Fax: 01484 221613<br>Website: www.kirklees.gov.uk                                              |
| 8       | <b>Leeds City Council - Planning and Development</b><br>The Leonardo Building, 2 Rossington Street, Leeds, West Yorkshire, LS2 8HD                             | Telephone: 0113 247 8037<br>Fax: 0113 247 8009<br>Website: www.leeds.gov.uk                                               |
| 9       | <b>Health and Safety Executive</b><br>5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS                                                                        | Website: www.hse.gov.uk                                                                                                   |
| 10      | <b>The Coal Authority - Property Searches</b><br>200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG                                                      | Telephone: 0345 762 6848<br>Fax: 01623 637 338<br>Email: groundstability@coal.gov.uk<br>Website: www2.groundstability.com |
| 11      | <b>Stantec UK Ltd</b><br>Caversham Bridge House, Waterman Place, Reading, RG1 8DN                                                                              | Telephone: 0118 950 0761<br>Email: pba.reading@stantec.com<br>Website: www.stantec.com                                    |
| 12      | <b>PointX</b><br>7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY                                                                                      | Website: www.pointx.co.uk                                                                                                 |
| 13      | <b>Natural England</b><br>County Hall, Spetchley Road, Worcester, WR5 2NP                                                                                      | Telephone: 0300 060 3900<br>Email: enquiries@naturalengland.org.uk<br>Website: www.naturalengland.org.uk                  |
| 14      | <b>Kirklees Metropolitan Borough Council</b><br>Town Hall, Civic Centre, Huddersfield, West Yorkshire, HD1 2TA                                                 | Telephone: 01484 221000<br>Fax: 01484 442768<br>Website: www.kirklees.gov.uk                                              |
| 15      | <b>Leeds City Council</b><br>Civic Hall, Leeds, West Yorkshire, LS1 1UR                                                                                        | Telephone: 0113 234 8080<br>Fax: 0113 242 1321<br>Website: www.leeds.gov.uk                                               |

| Contact | Name and Address                                                                                                                                | Contact Details                                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| -       | <b>Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards</b><br>Chilton, Didcot, Oxfordshire, OX11 0RQ | Telephone: 01235 822622<br>Fax: 01235 833891<br>Email: radon@phe.gov.uk<br>Website: www.ukradon.org                             |
| -       | <b>Landmark Information Group Limited</b><br>Imperium, Imperial Way, Reading, Berkshire, RG2 0TD                                                | Telephone: 0844 844 9952<br>Fax: 0844 844 9951<br>Email: customerservices@landmarkinfo.co.uk<br>Website: www.landmarkinfo.co.uk |

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.





## Historical Land Use Information (1:10,000)

### General

- Specified Site Specified Buffer(s) Bearing Reference Point Map ID  
Several of Type at Location

### Potentially Contaminative Industrial Uses (Past Land Uses - Mining)

|                                                               | Point | Line | Polygon |
|---------------------------------------------------------------|-------|------|---------|
| Air Shafts                                                    |       |      |         |
| Disturbed Ground                                              |       |      |         |
| General Quarrying                                             |       |      |         |
| Heap, unknown constituents                                    |       |      |         |
| Mineral Railway                                               |       |      |         |
| Mining and Quarrying General                                  |       |      |         |
| Mining of Coal & Lignite                                      |       |      |         |
| Quarrying of Sand and Clay, Operation of Sand and Gravel Pits |       |      |         |

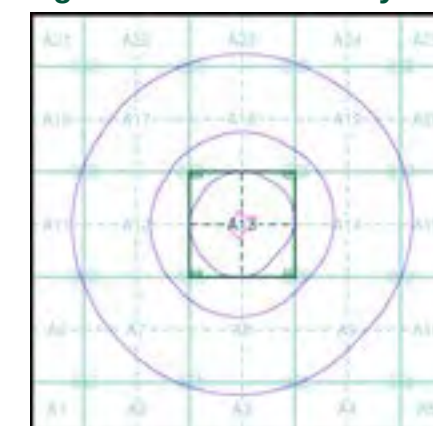
### Historical Land Use

|                                       | Point | Line | Polygon |
|---------------------------------------|-------|------|---------|
| Potentially Infilled Land (Non-Water) |       |      |         |
| Potentially Infilled Land (Water)     |       |      |         |
| Former Marsh                          |       |      |         |

### Mining Data

- Potential Mining Area  
BGS Recorded Mineral Site

### Mining and Ground Stability - Slice A



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

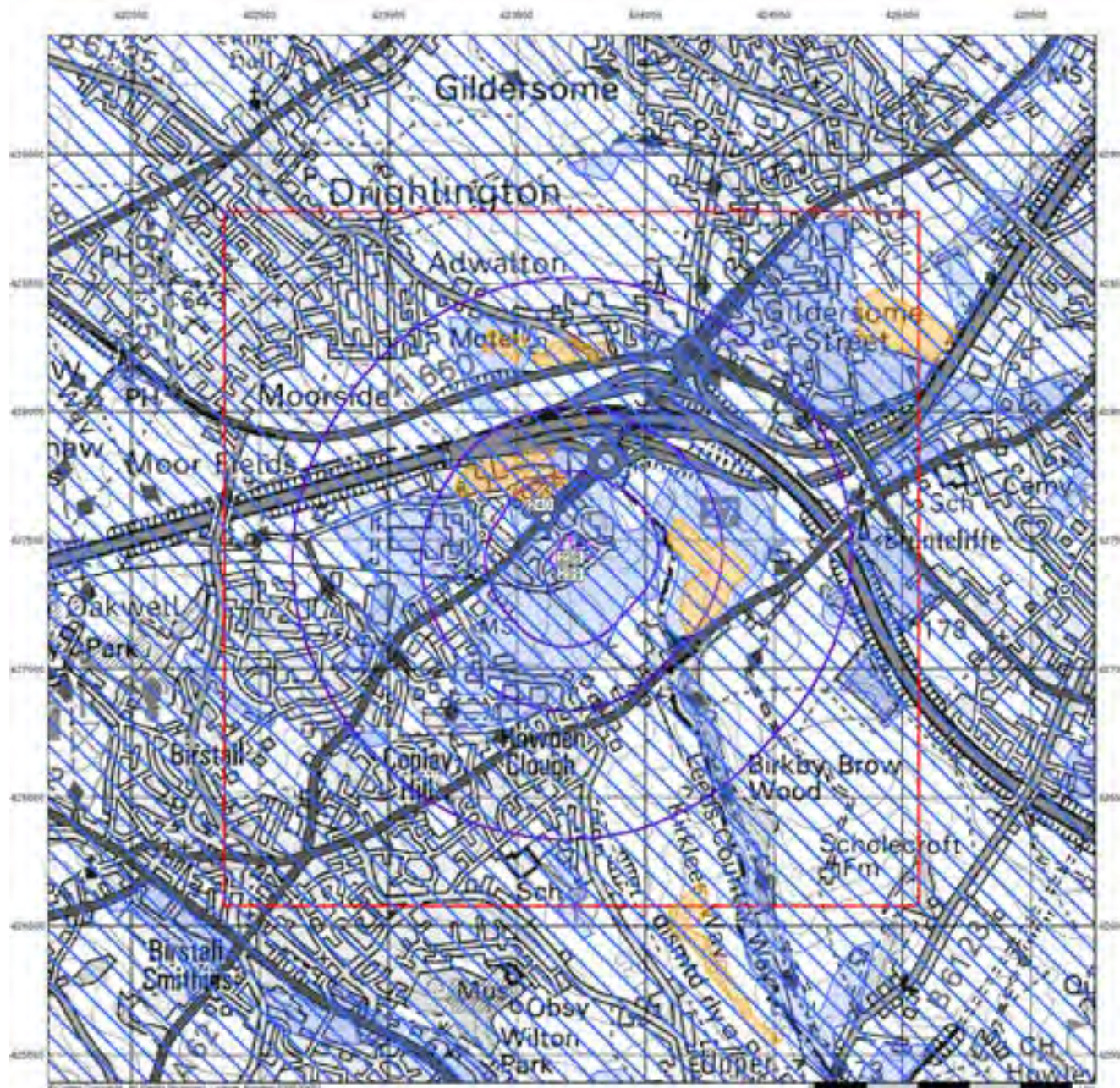
### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: www.envirocheck.co.uk





## Ground Stability Data (1:50,000)

### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Potential for Compressible Ground Stability Hazards

- High
- Moderate
- Low
- Very Low

### Potential for Collapsible Ground Stability Hazards

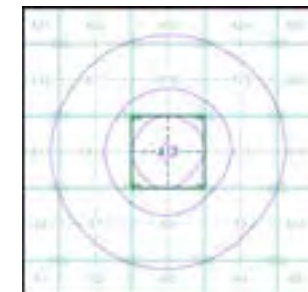
- High
- Moderate
- Low
- Very Low

### Brine Pumping and Salt Mining

- Brine Pumping Related Feature
- Salt Mining Related Feature

- | Point | Polygon |
|-------|---------|
|       |         |
|       |         |

### Mining and Ground Stability - Slice A

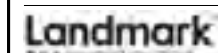


### Order Details

Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk





## Ground Stability Data (1:50,000)

### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Potential for Landslide Ground Stability Hazards

- High
- Low
- Moderate
- Very Low

### Potential for Ground Dissolution Stability Hazards

- High
- Low
- Moderate
- Very Low

### Mining and Ground Stability - Slice A



### Order Details

Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

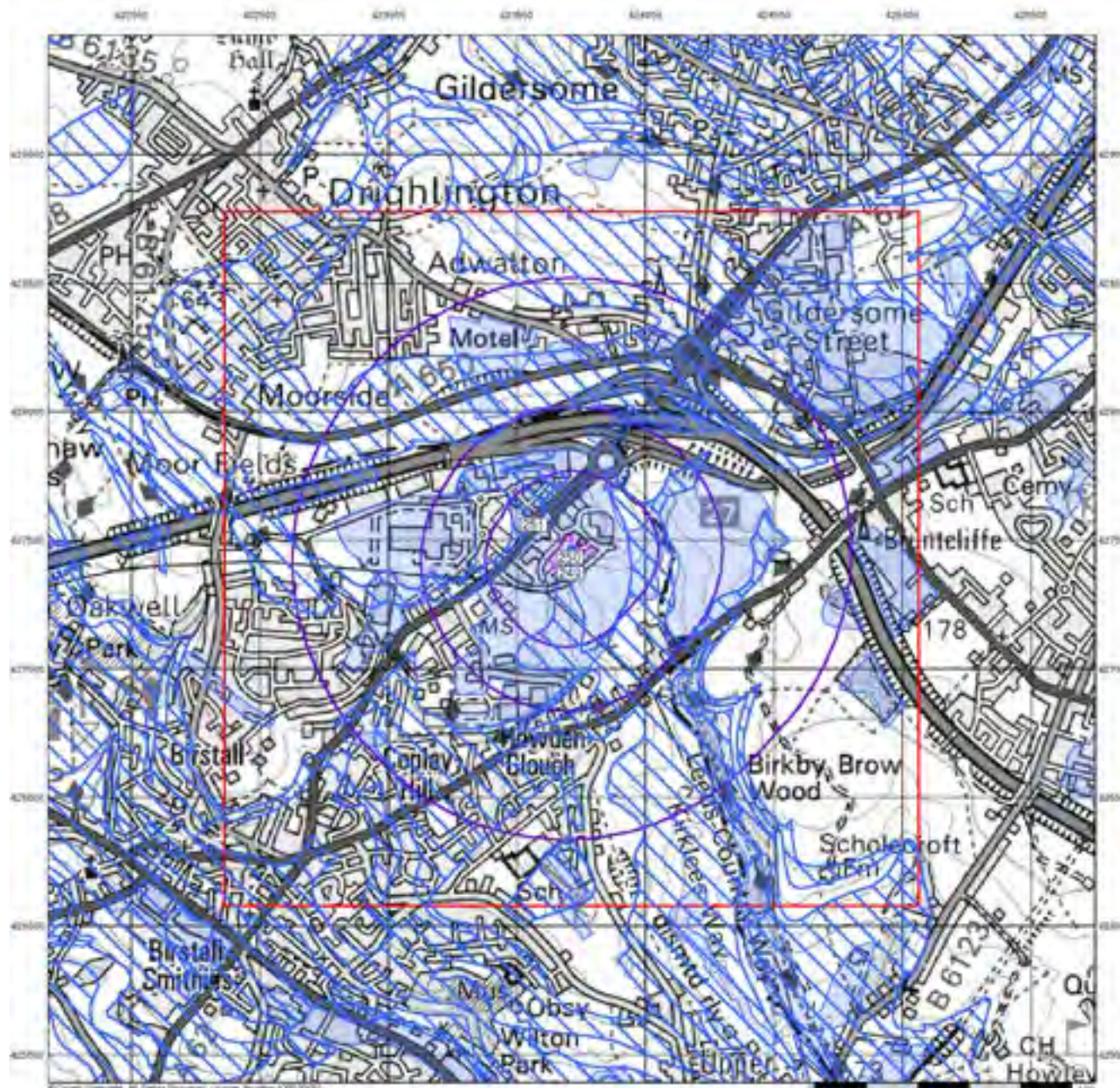
### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk





## Ground Stability Data (1:50,000)

### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

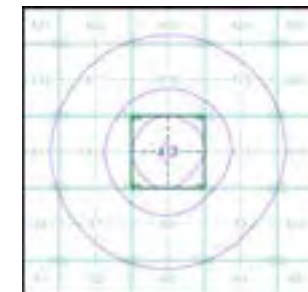
### Potential for Running Sand Ground Stability Hazards

- High
- Low
- Moderate
- Very Low

### Potential for Shrinking or Swelling Clay Ground Stability Hazards

- High
- Low
- Moderate
- Very Low

### Mining and Ground Stability - Slice A

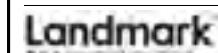


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Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
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Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



Tel: 0844 844 9952  
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## Envirocheck<sup>®</sup> Report:

### Mining and Ground Stability Datasheet

#### Order Details:

**Order Number:**

259373929\_1\_1

**Customer Reference:**

076893 - Bankwood Way, Birstall

**National Grid Reference:**

423710, 427430

**Slice:**

A

**Site Area (Ha):**

1.51

**Search Buffer (m):**

1000

#### Site Details:

Bankwood Way

Birstall

Batley

West Yorkshire

WF17 9TB

#### Client Details:

Mr A Drew

Curtins Consulting Ltd

Rose Wharf

78-80 East Street

Leeds

West Yorkshire

LS9 8EE



| Report Section and Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Page Number |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Summary</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | -           |
| <p>The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer selected.</p> <p>For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cavities Data, Historical Land Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data (1:50,000).</p>                                                                                                                                                                                                                              |             |
| <b>Mining and Natural Cavities Data</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>1</b>    |
| <p>The Mining and Natural Cavities Data section features data sets related to the existence of mining areas and their potential hazards; and details of naturally formed cavities.</p> <p>Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites and Potential Mining Areas which feature on the Historical Land Use Information (1:10,000) map.</p>                                                                                                                                                                                                                                                                                     |             |
| <b>Historical Land Use Information (1:2,500)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>15</b>   |
| <p>The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative.</p> <p>For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.</p> |             |
| <b>Historical Land Use Information (1:10,000)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>18</b>   |
| <p>The Historical Land Use (1:10,000) section covers data captured from the systematic analysis carried out by Landmark of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th century, identifying potentially contaminative past industrial land uses.</p> <p>For the purpose of this Envirocheck module, only data relating to mining and ground stability has been included and plotted on the accompanying Historical Land Use Information (1:10,000) map.</p>                                                                                                                                                                       |             |
| <b>Ground Stability Data (1:50,000)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>24</b>   |
| <p>The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.</p>                                                                                                                                                                                                                                                                                         |             |
| <b>Historical Map List</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>25</b>   |
| <p>The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |
| <b>Data Currency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>26</b>   |
| <b>Data Suppliers</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>27</b>   |
| <b>Useful Contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>28</b>   |

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## Report Version v53.0



| Data Type                                                            | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m |
|----------------------------------------------------------------------|-------------|---------|-----------|-------------|--------------|
| <b>Mining and Natural Cavities Data</b>                              |             |         |           |             |              |
| BGS Recorded Mineral Sites                                           | pg 1        |         | 6         | 6           | 17           |
| Coal Mining Affected Areas                                           | pg 5        | Yes     | n/a       | n/a         | n/a          |
| Man Made Mining Cavities                                             | pg 5        |         |           | 1           |              |
| Mining Instability                                                   | pg 6        | Yes     | n/a       | n/a         | n/a          |
| Natural Cavities                                                     |             |         |           |             |              |
| Non Coal Mining Areas of Great Britain                               |             |         |           | n/a         | n/a          |
| Potential Mining Areas                                               | pg 6        | 17      | 2         | 28          | 28           |
| <b>Historical Land Use Information (1:2,500)</b>                     |             |         |           |             |              |
| Extractive Industries or Potential Excavations from 1855-1909 (100m) | pg 15       |         | 7         | n/a         | n/a          |
| Extractive Industries or Potential Excavations from 1893-1915 (100m) | pg 15       |         | 5         | n/a         | n/a          |
| Extractive Industries or Potential Excavations from 1906-1937 (100m) | pg 16       |         | 4         | n/a         | n/a          |
| Extractive Industries or Potential Excavations from 1924-1949 (100m) | pg 16       |         | 4         | n/a         | n/a          |
| Extractive Industries or Potential Excavations from 1950-1980 (100m) | pg 16       |         | 4         | n/a         | n/a          |
| Subterranean Features (100m)                                         |             |         |           | n/a         | n/a          |
| <b>Historical Land Use Information (1:10,000)</b>                    |             |         |           |             |              |
| Air Shafts                                                           | pg 18       |         |           | 1           | 1            |
| Disturbed Ground                                                     | pg 18       |         | 2         |             |              |
| General Quarrying                                                    | pg 18       |         | 2         |             | 4            |
| Heap, unknown constituents                                           | pg 18       |         | 1         | 1           | 1            |
| Mineral Railway                                                      | pg 18       |         |           |             | 3            |
| Mining & quarrying general                                           | pg 18       |         |           |             | 1            |
| Mining of coal & lignite                                             | pg 18       |         | 8         | 6           | 13           |
| Quarrying of sand & clay, operation of sand & gravel pits            | pg 20       |         |           |             | 1            |
| Former Marshes                                                       |             |         |           |             |              |
| Potentially Infilled Land (Non-Water)                                | pg 20       |         | 10        | 7           | 19           |
| Potentially Infilled Land (Water)                                    | pg 21       |         | 4         | 3           | 22           |
| <b>Ground Stability Data (1:50,000)</b>                              |             |         |           |             |              |
| CBSCB Compensation District                                          |             |         | n/a       | n/a         | n/a          |
| Brine Pumping Related Features                                       |             |         |           |             |              |
| Brine Subsidence Solution Area                                       |             |         |           |             |              |
| Potential for Collapsible Ground Stability Hazards                   | pg 24       | Yes     |           | n/a         | n/a          |
| Potential for Compressible Ground Stability Hazards                  | pg 24       | Yes     | Yes       | n/a         | n/a          |
| Potential for Ground Dissolution Stability Hazards                   | pg 24       | Yes     |           | n/a         | n/a          |
| Potential for Landslide Ground Stability Hazards                     | pg 24       | Yes     | Yes       | n/a         | n/a          |
| Potential for Running Sand Ground Stability Hazards                  | pg 24       | Yes     | Yes       | n/a         | n/a          |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards    | pg 24       | Yes     | Yes       | n/a         | n/a          |
| Salt Mining Related Features                                         |             |         |           |             |              |



Report Version v53.0

## Summary

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 1      | <b>BGS Recorded Mineral Sites</b><br>Site Name: Paradise Coal Pit<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72471<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m         | A13NW (NW)                             | 72                           | 1       | 423585<br>427486 |
| 2      | <b>BGS Recorded Mineral Sites</b><br>Site Name: Horse Riggs<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72470<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Emley Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                                     | A13NW (N)                              | 110                          | 1       | 423654<br>427613 |
| 3      | <b>BGS Recorded Mineral Sites</b><br>Site Name: Birstall Fields Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72474<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A13SW (SW)                             | 153                          | 1       | 423583<br>427226 |
| 4      | <b>BGS Recorded Mineral Sites</b><br>Site Name: Horse Riggs<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72469<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Emley Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                                     | A13NW (N)                              | 164                          | 1       | 423702<br>427683 |
| 5      | <b>BGS Recorded Mineral Sites</b><br>Site Name: Horse Riggs Coal Pit<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72468<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m      | A13NE (N)                              | 183                          | 1       | 423763<br>427696 |
| 6      | <b>BGS Recorded Mineral Sites</b><br>Site Name: Paradise Coal Pit<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72472<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m         | A13NW (W)                              | 213                          | 1       | 423414<br>427445 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 7      | <b>BGS Recorded Mineral Sites</b><br>Site Name: Owlet Hall Colliery<br>Location: Morley, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72483<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m        | A18SE (N)                              | 280                          | 1       | 423737<br>427798 |
| 8      | <b>BGS Recorded Mineral Sites</b><br>Site Name: Moat Hill Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72475<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A13SW (SW)                             | 311                          | 1       | 423472<br>427114 |
| 9      | <b>BGS Recorded Mineral Sites</b><br>Site Name: Howden Clough<br>Location: Birstall, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73788<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m              | A12SE (W)                              | 324                          | 1       | 423316<br>427333 |
| 10     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Moat Hill Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72478<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A8NW (S)                               | 391                          | 1       | 423699<br>426946 |
| 11     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Moat Hill Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72477<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A8NW (S)                               | 414                          | 1       | 423535<br>426952 |
| 12     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Moat Hill Coal Pit<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 72476<br>Type: Underground<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A8NW (SW)                              | 440                          | 1       | 423445<br>426971 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 13     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Howden Clough South Occs<br>Location: Morley, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 2666<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Cobex Ltd.<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Lower Coal Measures Formation<br>Commodity: Coal - Opencast<br>Positional Accuracy: Located by supplier to within 100m | A14NW (E)                              | 504                          | 1       | 424300<br>427500 |
| 14     | <b>BGS Recorded Mineral Sites</b><br>Site Name: The Pheasant Inn<br>Location: Birstall, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73720<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m              | A12SE (W)                              | 587                          | 1       | 423050<br>427312 |
| 15     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Owllet Hall<br>Location: Gildersome, Bradford, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 13379<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Middle Coal Measures Formation<br>Commodity: Fireclay<br>Positional Accuracy: Located by supplier to within 10m       | A18SE (N)                              | 640                          | 1       | 423985<br>428100 |
| 16     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Prospect Terrace<br>Location: Birkenshaw, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73783<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m             | A17SE (NW)                             | 646                          | 1       | 423230<br>427970 |
| 16     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Prospect Terrace<br>Location: Birkenshaw, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73782<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m             | A17SE (NW)                             | 679                          | 1       | 423191<br>427978 |
| 17     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Holden Clough Mill<br>Location: Howden Clough, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 74103<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Thornhill Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                       | A14SE (SE)                             | 667                          | 1       | 424389<br>427150 |



| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 18     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Grey Stone Fields<br>Location: Gildersome Street, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73843<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m          | A18NW (N)                              | 685                          | 1       | 423624<br>428198 |
| 19     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Prospect Terrace<br>Location: Birkenshaw, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73781<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m                  | A17SE (NW)                             | 717                          | 1       | 423194<br>428034 |
| 20     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Wyre Hall<br>Location: Gildersome, Bradford, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 13378<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Middle Coal Measures Formation<br>Commodity: Common Clay and Shale<br>Positional Accuracy: Located by supplier to within 10m | A18NE (N)                              | 731                          | 1       | 423720<br>428250 |
| 21     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Wyre Hall<br>Location: Gildersome, Bradford, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 13377<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Middle Coal Measures Formation<br>Commodity: Common Clay and Shale<br>Positional Accuracy: Located by supplier to within 10m | A18NW (N)                              | 760                          | 1       | 423475<br>428240 |
| 22     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Holden Clough<br>Location: Howden Clough, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 74107<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Thornhill Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                                | A8SE (S)                               | 791                          | 1       | 423774<br>426550 |
| 23     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Rakes House<br>Location: Birstall, Batley, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 71977<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Birstall Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m                                        | A7NW (SW)                              | 818                          | 1       | 422902<br>427038 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 24     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Grey Stone<br>Location: Gildersome Street, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73844<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A19NW (NE)                             | 928                          | 1       | 424197<br>428312 |
| 25     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Grey Stone<br>Location: Gildersome Street, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73842<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A23SE (N)                              | 955                          | 1       | 423854<br>428464 |
| 26     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Penfield<br>Location: Penfield, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 74097<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m            | A17NE (NW)                             | 956                          | 1       | 423084<br>428253 |
| 27     | <b>BGS Recorded Mineral Sites</b><br>Site Name: The Shoulder Of Mutton<br>Location: Bruntcliffe, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 74102<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Thornhill Rock<br>Commodity: Sandstone<br>Positional Accuracy: Located by supplier to within 10m          | A15NW (E)                              | 966                          | 1       | 424764<br>427462 |
| 28     | <b>BGS Recorded Mineral Sites</b><br>Site Name: Prospect Terrace<br>Location: Birkenshaw, Leeds, West Yorkshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 73855<br>Type: Opencast<br><b>Status: Ceased</b><br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Coal Measures Group<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m  | A9SW (SE)                              | 991                          | 1       | 424335<br>426586 |
|        | <b>Coal Mining Affected Areas</b><br>Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.                                                                                                                                                                                                                   | A13NW (S)                              | 0                            | 2       | 423709<br>427432 |
|        | <b>Man Made Mining Cavities</b><br>Cavity Type: Not supplied<br>Commodity: Fireclay<br>Solid Geology Detail: No Details<br>Superficial Geology Detail: No Details                                                                                                                                                                                                                                                                                                                          | A18SE (N)                              | 390                          | 3       | 423800<br>427900 |

| Map ID | Details                                                                                                                                                                                                                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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|        | <b>Mining Instability</b><br>Mining Evidence: Inconclusive Coal Mining<br>Source: Ove Arup & Partners<br>Boundary Quality: As Supplied                                                                                                                                                   | A13NW (S)                              | 0                            | 4       | 423709<br>427432 |
|        | <b>Non Coal Mining Areas of Great Britain</b><br>No Hazard                                                                                                                                                                                                                               |                                        |                              |         |                  |
| 29     | <b>Potential Mining Areas</b><br>Name: Paradise<br>Ceased Operation: 1878<br>Commodity: Coal; Black Bed<br>Reference: 913<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                               | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
| 30     | <b>Potential Mining Areas</b><br>Name: Street Lane<br>Ceased Operation: 1869<br>Commodity: Coal; Middleton Main<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Childe and Rowand, 59 Westgate, Wakefield.                                | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
| 31     | <b>Potential Mining Areas</b><br>Name: Howden Clough<br>Ceased Operation: 1875<br>Commodity: Coal; Middleton Main<br>Reference: 363<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                     | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
| 32     | <b>Potential Mining Areas</b><br>Name: Howden Clough<br>Ceased Operation: 1881<br>Commodity: Coal; First Brown Metal; Second Brown Metal<br>Reference: 1275<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                             | A13NE (E)                              | 0                            | 5       | 423734<br>427433 |
| 33     | <b>Potential Mining Areas</b><br>Name: Howden Clough<br>Ceased Operation: 1927<br>Commodity: Coal; Brown Metal; Beeston Top<br>Reference: 8776<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                          | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
| 34     | <b>Potential Mining Areas</b><br>Name: Holden Clough or Howden Clough<br>Ceased Operation: 1867<br>Commodity: Coal; Middleton Main<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Greaves and Greaves, 69 Westgate, Wakefield.           | A13NE (E)                              | 0                            | 5       | 423734<br>427433 |
| 35     | <b>Potential Mining Areas</b><br>Name: Gildersome Street<br>Ceased Operation: 1871<br>Commodity: Coal; Middleton Main<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: S. and J. Bailey, Princes Chambers, Corporation Street, Birmingham. | A13NE (E)                              | 0                            | 5       | 423734<br>427433 |
| 36     | <b>Potential Mining Areas</b><br>Name: Howden Clough or Yorkshire West<br>Ceased Operation: 1933<br>Commodity: Coal; Low Moor Black bed<br>Reference: 11101<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                             | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                                     | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 37     | <b>Potential Mining Areas</b><br>Name: Horse Rigs<br>Ceased Operation: 1913<br>Commodity: Coal; First Brown Metal<br>Reference: 6019<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                                                                       | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
| 38     | <b>Potential Mining Areas</b><br>Name: Horse Rigs<br>Ceased Operation: Not Supplied<br>Commodity: Coal; Adwalton<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Embleton, Barton and Stancliff, Central Bank Chambers, Leeds.                                                               | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
| 39     | <b>Potential Mining Areas</b><br>Name: Howden Clough<br>Ceased Operation: 1926<br>Commodity: Coal; Adwalton Black Bed<br>Reference: 9915<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                                                                   | A13SW (S)                              | 0                            | 5       | 423710<br>427382 |
| 40     | <b>Potential Mining Areas</b><br>Name: Howden Clough (Yorkshire West)<br>Ceased Operation: 1875<br>Commodity: Coal; Middleton Main; Brown Metal; Churwell Thin; Seam unnamed<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Joseph Archer and Son, 9 Albion Place, Bennetthorpe, Doncaster. | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
| 41     | <b>Potential Mining Areas</b><br>Name: Gildersome<br>Ceased Operation: 1872<br>Commodity: Coal; Middleton Main<br>Reference: 81<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                                                                            | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
| 42     | <b>Potential Mining Areas</b><br>Name: Birstall<br>Ceased Operation: Not Supplied<br>Commodity: Coal<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                                                                            | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |
| 43     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1932<br>Commodity: Coal; Low Moor Black Bed<br>Reference: 10715<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                                                                       | A13NE (E)                              | 0                            | 5       | 423734<br>427433 |
| 44     | <b>Potential Mining Areas</b><br>Name: Yorkshire West (Howden Clough)<br>Ceased Operation: 1876<br>Commodity: Coal; Beeston Park<br>Reference: 459<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                                                         | A13SW (S)                              | 0                            | 5       | 423710<br>427382 |
| 45     | <b>Potential Mining Areas</b><br>Name: Yorkshire West (Howden Clough)<br>Ceased Operation: 1881<br>Commodity: Coal; Black Bed<br>Reference: 1234<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                                                           | A13NW (S)                              | 0                            | 5       | 423709<br>427432 |

| Map ID | Details                                                                                                                                                                                                                                                         | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 46     | <b>Potential Mining Areas</b><br>Name: End; West<br>Ceased Operation: 1895<br>Commodity: Coal; Cannel or Stone<br>Reference: 8419<br>Alternate: Brow Wood<br>Name/Mine:<br>Custodian: Not Supplied                                                              | A13SE (SE)                             | 4                            | 5       | 423735<br>427383 |
| 47     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1886<br>Commodity: Coal; Morley Main<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: S. and J. Bailey, Princes Chambers, Corporation Street, Birmingham. | A13SE (SE)                             | 4                            | 5       | 423735<br>427383 |
| 48     | <b>Potential Mining Areas</b><br>Name: Adwalton or Newmarket<br>Ceased Operation: 1858<br>Commodity: Coal; Seam unnamed<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: S. Rushforth, Brickworks, Drighlington, Bradford.     | A18SW (N)                              | 265                          | 5       | 423705<br>427784 |
| 49     | <b>Potential Mining Areas</b><br>Name: Bushy and Newmarket<br>Ceased Operation: 1889<br>Commodity: Coal; Brown Metal<br>Reference: 2332<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                     | A18SW (N)                              | 265                          | 5       | 423705<br>427784 |
| 50     | <b>Potential Mining Areas</b><br>Name: Newmarket<br>Ceased Operation: 1879<br>Commodity: Coal; Brown Metal<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: S. Rushforth, Brickworks, Drighlington, Bradford.                  | A18SW (N)                              | 265                          | 5       | 423705<br>427784 |
| 51     | <b>Potential Mining Areas</b><br>Name: Wire (Wyre) Hall<br>Ceased Operation: 1870<br>Commodity: Coal; Black Bed<br>Reference: Not Supplied<br>Alternate: Bushy<br>Name/Mine:<br>Custodian: S. Rushforth, Brickworks, Drighlington, Bradford.                    | A18SW (N)                              | 265                          | 5       | 423705<br>427784 |
| 52     | <b>Potential Mining Areas</b><br>Name: Owlet Hall<br>Ceased Operation: Not Supplied<br>Commodity: Coal<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                           | A18SE (N)                              | 266                          | 5       | 423730<br>427785 |
| 53     | <b>Potential Mining Areas</b><br>Name: Gildersome<br>Ceased Operation: Not Supplied<br>Commodity: Coal<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                           | A18SE (N)                              | 266                          | 5       | 423730<br>427785 |
| 54     | <b>Potential Mining Areas</b><br>Name: Gildersome<br>Ceased Operation: 1926<br>Commodity: Coal; Upper Brown Metal; Lower Brown Metal<br>Reference: 8396<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                     | A18SE (N)                              | 266                          | 5       | 423730<br>427785 |



| Map ID | Details                                                                                                                                                                                                                                                                                      | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 55     | <b>Potential Mining Areas</b><br>Name: Lane Side<br>Ceased Operation: 1911<br>Commodity: Coal; First Brown Metal; Second Brown Metal<br>Reference: 5739<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                     | A18SE (N)                              | 266                          | 5       | 423730<br>427785 |
| 56     | <b>Potential Mining Areas</b><br>Name: Lane Side<br>Ceased Operation: Not Supplied<br>Commodity: Coal; Seam unnamed<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Greaves and Greaves, 69 Westgate, Wakefield.                              | A18SE (N)                              | 266                          | 5       | 423730<br>427785 |
| 57     | <b>Potential Mining Areas</b><br>Name: Lane Side<br>Ceased Operation: 1859<br>Commodity: Coal; Middleton Main<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Embleton, Barton and Stancliff, Central Bank Chambers, Leeds.                   | A18SE (N)                              | 266                          | 5       | 423730<br>427785 |
| 58     | <b>Potential Mining Areas</b><br>Name: Birstall<br>Ceased Operation: 1848<br>Commodity: Coal; Barnsley; Adwalton Black<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Lord Allendale, Estate Office, Bretton, Wakefield.                     | A12SE (W)                              | 294                          | 5       | 423332<br>427427 |
| 59     | <b>Potential Mining Areas</b><br>Name: Raikes<br>Ceased Operation: 1870<br>Commodity: Coal; Middleton Main<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: A.W. Whitaker and Son, Nab House, Howden Clough, Birstall.                         | A12SE (W)                              | 294                          | 5       | 423332<br>427427 |
| 60     | <b>Potential Mining Areas</b><br>Name: Lodge<br>Ceased Operation: 1878<br>Commodity: Coal; Adwalton Black Bed<br>Reference: 744<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: Not Supplied                                                                             | A14NW (E)                              | 338                          | 5       | 424137<br>427438 |
| 61     | <b>Potential Mining Areas</b><br>Name: Lodge<br>Ceased Operation: Not Supplied<br>Commodity: Coal; Adwalton Black Bed<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: S. and J. Bailey, Princes Chambers, Corporation Street, Birmingham.     | A14NW (E)                              | 338                          | 5       | 424137<br>427438 |
| 62     | <b>Potential Mining Areas</b><br>Name: Dean Hall<br>Ceased Operation: 1883<br>Commodity: Coal; Little; Second Brown Metal<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: S. and J. Bailey, Princes Chambers, Corporation Street, Birmingham. | A14NW (E)                              | 338                          | 5       | 424137<br>427438 |
| 63     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1861<br>Commodity: Coal; Adwalton Black Bed<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine: Not Supplied<br>Custodian: S. and J. Bailey, Princes Chambers, Corporation Street, Birmingham.          | A14NW (E)                              | 338                          | 5       | 424137<br>427438 |

| Map ID | Details                                                                                                                                                                                                                                                                        | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 64     | <b>Potential Mining Areas</b><br>Name: Bruntcliffe Thorn and Birkby Brow<br>Ceased Operation: Not Supplied<br>Commodity: Coal; Middleton Main<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Walter Rowley and Wilson, 20 Park Row, Leeds.  | A14SW (E)                              | 347                          | 5       | 424137<br>427388 |
| 65     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1900<br>Commodity: Coal; Middleton Little<br>Reference: 8816<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                                          | A14SW (E)                              | 347                          | 5       | 424137<br>427388 |
| 66     | <b>Potential Mining Areas</b><br>Name: End; West<br>Ceased Operation: 1929<br>Commodity: Coal; Churwell Thin or Top Beeston<br>Reference: 9779<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                             | A14SW (E)                              | 347                          | 5       | 424137<br>427388 |
| 67     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1896<br>Commodity: Coal; Middleton Main<br>Reference: 3506<br>Alternate: Bruntcliffe<br>Name/Mine:<br>Custodian: Not Supplied                                                                             | A14SW (E)                              | 347                          | 5       | 424137<br>427388 |
| 68     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1901<br>Commodity: Coal; Cannel<br>Reference: 4185<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                                                    | A14SW (E)                              | 347                          | 5       | 424137<br>427388 |
| 69     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1902<br>Commodity: Coal; Little; Morley Stone<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: S. and J. Bailey, Princes Chambers, Corporation Street, Birmingham.       | A14SW (E)                              | 347                          | 5       | 424137<br>427388 |
| 70     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1895<br>Commodity: Coal; Cannel; Morley Main; Stone<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: S. and J. Bailey, Princes Chambers, Corporation Street, Birmingham. | A14SW (E)                              | 347                          | 5       | 424137<br>427388 |
| 71     | <b>Potential Mining Areas</b><br>Name: Batley<br>Ceased Operation: 1895<br>Commodity: Coal; Black Bed<br>Reference: 3335<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                                                   | A8NE (S)                               | 357                          | 5       | 423715<br>426980 |
| 72     | <b>Potential Mining Areas</b><br>Name: Batley<br>Ceased Operation: 1894<br>Commodity: Coal; Stone<br>Reference: 3105<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                                                       | A8NE (S)                               | 357                          | 5       | 423715<br>426980 |

| Map ID | Details                                                                                                                                                                                                                                                                                                                           | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 73     | <b>Potential Mining Areas</b><br>Name: Batley and End West<br>Ceased Operation: 1919<br>Commodity: Coal; Middleton Main<br>Reference: 8420<br>Alternate: Brow Wood<br>Name/Mine:<br>Alternate: Roche<br>Name/Mine:<br>Custodian: Not Supplied                                                                                     | A8NE (S)                               | 360                          | 5       | 423740<br>426980 |
| 74     | <b>Potential Mining Areas</b><br>Name: Sykes<br>Ceased Operation: 1877<br>Commodity: Coal; Middleton Main<br>Reference: 700A<br>Alternate: Crown Point<br>Name/Mine:<br>Alternate: Penn Field<br>Name/Mine:<br>Custodian: Not Supplied                                                                                            | A17SE (NW)                             | 444                          | 5       | 423328<br>427780 |
| 75     | <b>Potential Mining Areas</b><br>Name: Dean Hall<br>Ceased Operation: Not Supplied<br>Commodity: Coal; Seam unnamed<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Childe and Rowand, 59 Westgate, Wakefield.                                                                                  | A19SW (NE)                             | 465                          | 5       | 424132<br>427790 |
| 76     | <b>Potential Mining Areas</b><br>Name: Crown Point<br>Ceased Operation: 1877<br>Commodity: Coal; Brown Metal<br>Reference: 811<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                                                                                                | A7NE (SW)                              | 504                          | 5       | 423338<br>426975 |
| 77     | <b>Potential Mining Areas</b><br>Name: Morley West End<br>Ceased Operation: 1894<br>Commodity: Coal; Cannel<br>Reference: 3203<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                                                                                                | A9NW (SE)                              | 572                          | 5       | 424142<br>426986 |
| 78     | <b>Potential Mining Areas</b><br>Name: End; West<br>Ceased Operation: 1898<br>Commodity: Coal; Adwalton Black Bed or Flockton Thick<br>Reference: 8418<br>Alternate: Brow Wood<br>Name/Mine:<br>Custodian: Not Supplied                                                                                                           | A9NW (SE)                              | 572                          | 5       | 424142<br>426986 |
| 79     | <b>Potential Mining Areas</b><br>Name: Voctoria<br>Ceased Operation: 1869<br>Commodity: Coal; Adwalton Stone<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: S. and J. Bailey, Princes Chambers, Corporation Street, Birmingham.                                                                | A9NW (SE)                              | 572                          | 5       | 424142<br>426986 |
| 80     | <b>Potential Mining Areas</b><br>Name: Adwalton Water Loose<br>Ceased Operation: 1856<br>Commodity: Coal; Middleton Main<br>Reference: Not Supplied<br>Alternate: Quarry<br>Name/Mine:<br>Alternate: Spring Gardens<br>Name/Mine:<br>Alternate: Victoria<br>Name/Mine:<br>Custodian: Greaves and Greaves, 69 Westgate, Wakefield. | A18NW (N)                              | 668                          | 5       | 423699<br>428187 |

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| 81     | <b>Potential Mining Areas</b><br>Name: Greystone<br>Ceased Operation: 1877<br>Commodity: Coal; Adwalton Black Bed<br>Reference: 654<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                                    | A18NE (N)                              | 668                          | 5       | 423725<br>428187 |
| 82     | <b>Potential Mining Areas</b><br>Name: Greystone<br>Ceased Operation: Not Supplied<br>Commodity: Coal; Adwalton Black Bed<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: S. Rushforth, Brickworks, Drighlington, Bradford.              | A18NE (N)                              | 668                          | 5       | 423725<br>428187 |
| 83     | <b>Potential Mining Areas</b><br>Name: Greystone<br>Ceased Operation: 1920<br>Commodity: Coal; Top and Bottom Metal<br>Reference: 7099<br>Alternate: Bushey<br>Name/Mine:<br>Custodian: Not Supplied                                                                       | A18NW (N)                              | 668                          | 5       | 423699<br>428187 |
| 84     | <b>Potential Mining Areas</b><br>Name: Wyre Hall and Greystone<br>Ceased Operation: 1903<br>Commodity: Coal; Brown Metal<br>Reference: 4376<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                            | A18NW (N)                              | 668                          | 5       | 423699<br>428187 |
| 85     | <b>Potential Mining Areas</b><br>Name: Victoria and Wire (Wyre) Hall<br>Ceased Operation: 1887<br>Commodity: Coal; Brown Metal<br>Reference: Not Supplied<br>Alternate: Water Loose<br>Name/Mine:<br>Custodian: S. Rushforth, Brickworks, Drighlington, Bradford.          | A18NW (N)                              | 668                          | 5       | 423699<br>428187 |
| 86     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1872<br>Commodity: Coal; Middleton Main<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Joseph Archer and Son, 9 Albion Place, Bennetthorpe, Doncaster.             | A18NW (N)                              | 668                          | 5       | 423699<br>428187 |
| 87     | <b>Potential Mining Areas</b><br>Name: Wyre Hall<br>Ceased Operation: 1885<br>Commodity: Coal; Adwalton Black Bed<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Joseph Archer and Son, 9 Albion Place, Bennetthorpe, Doncaster.        | A18NW (N)                              | 668                          | 5       | 423699<br>428187 |
| 88     | <b>Potential Mining Areas</b><br>Name: Bushey Park (Greystone)<br>Ceased Operation: 1902<br>Commodity: Coal; Brown Metal<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Joseph Archer and Son, 9 Albion Place, Bennetthorpe, Doncaster. | A18NW (N)                              | 668                          | 5       | 423699<br>428187 |
| 89     | <b>Potential Mining Areas</b><br>Name: Wyre Hall<br>Ceased Operation: 1888<br>Commodity: Coal; Adwalton Black Bed<br>Reference: 2246<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                                   | A18NW (N)                              | 668                          | 5       | 423699<br>428187 |

| Map ID | Details                                                                                                                                                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 90     | <b>Potential Mining Areas</b><br>Name: Victoria<br>Ceased Operation: 1906<br>Commodity: Coal; Upper Brown Metal<br>Reference: 5015<br>Alternate: Bruntcliffe<br>Name/Mine:<br>Custodian: Not Supplied                                                  | A14SE (E)                              | 745                          | 5       | 424539<br>427393 |
| 91     | <b>Potential Mining Areas</b><br>Name: Brass Castle<br>Ceased Operation: Not Supplied<br>Commodity: Coal<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                | A8SE (S)                               | 759                          | 5       | 423720<br>426578 |
| 92     | <b>Potential Mining Areas</b><br>Name: Boggart and Newhall<br>Ceased Operation: Not Supplied<br>Commodity: Coal; Stone<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Walter Rowley and Wilson, 20 Park Row, Leeds. | A8SE (S)                               | 759                          | 5       | 423720<br>426578 |
| 93     | <b>Potential Mining Areas</b><br>Name: Bogherd<br>Ceased Operation: 1876<br>Commodity: Coal; Adwalton Stone<br>Reference: 501<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                      | A8SE (S)                               | 761                          | 5       | 423746<br>426578 |
| 94     | <b>Potential Mining Areas</b><br>Name: Batley<br>Ceased Operation: Not Supplied<br>Commodity: Coal<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                      | A8SE (S)                               | 761                          | 5       | 423746<br>426578 |
| 95     | <b>Potential Mining Areas</b><br>Name: Britannia Main<br>Ceased Operation: 1876<br>Commodity: Coal; Brown Metal<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Mammatt, White and Kay, Albion Walk Chambers, Leeds. | A17NE (NW)                             | 766                          | 5       | 423323<br>428182 |
| 96     | <b>Potential Mining Areas</b><br>Name: Sykes<br>Ceased Operation: 1876<br>Commodity: Coal; Middleton Main<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Mirfield Colliery Co. Ltd., Ravensthorpe, Dewsbury.        | A17SW (NW)                             | 783                          | 5       | 422926<br>427774 |
| 97     | <b>Potential Mining Areas</b><br>Name: Drake Lane<br>Ceased Operation: 1922<br>Commodity: Coal; Adwalton Stone<br>Reference: 7519<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                                  | A17SW (NW)                             | 783                          | 5       | 422926<br>427774 |
| 98     | <b>Potential Mining Areas</b><br>Name: Street Lane<br>Ceased Operation: 1861<br>Commodity: Coal; Middleton<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Childe and Rowand, 59 Westgate, Wakefield.                | A19SE (NE)                             | 808                          | 5       | 424534<br>427795 |



| Map ID | Details                                                                                                                                                                                                                               | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 99     | <b>Potential Mining Areas</b><br>Name: Dean Hall<br>Ceased Operation: 1861<br>Commodity: Coal; Middleton<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Childe and Rowand, 59 Westgate, Wakefield. | A19SE (NE)                             | 808                          | 5       | 424534<br>427795 |
| 100    | <b>Potential Mining Areas</b><br>Name: Dean Hall<br>Ceased Operation: 1866<br>Commodity: Coal; Little<br>Reference: Not Supplied<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Childe and Rowand, 59 Westgate, Wakefield.    | A19SE (NE)                             | 808                          | 5       | 424534<br>427795 |
| 101    | <b>Potential Mining Areas</b><br>Name: College<br>Ceased Operation: 1874<br>Commodity: Coal; Middleton<br>Reference: 105<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                                          | A7NW (SW)                              | 820                          | 5       | 422936<br>426970 |
| 102    | <b>Potential Mining Areas</b><br>Name: Brown Hill<br>Ceased Operation: 1895<br>Commodity: Coal; Adwalton Black Bed<br>Reference: 3357<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                             | A7SE (SW)                              | 838                          | 5       | 423343<br>426573 |
| 103    | <b>Potential Mining Areas</b><br>Name: Morley West End<br>Ceased Operation: 1891<br>Commodity: Coal; Middleton Main<br>Reference: 2605<br>Alternate: Not Supplied<br>Name/Mine:<br>Custodian: Not Supplied                            | A9NE (SE)                              | 881                          | 5       | 424545<br>426991 |

| Map ID | Details                                                                                                                                                                                        | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 104    | <b>Extractive Industries or Potential Excavations from 1855-1909</b><br>Use: Railway Cutting<br>First Map Published 1893<br>Date:<br>Last Map Published Not Applicable<br>Date:                | A13SW (W)                              | 69                           | -       | 423561<br>427399 |
| 105    | <b>Extractive Industries or Potential Excavations from 1855-1909</b><br>Use: Old Coal Pit<br>First Map Published 1893<br>Date:<br>Last Map Published Not Applicable<br>Date:                   | A13NW (N)                              | 78                           | -       | 423662<br>427581 |
| 106    | <b>Extractive Industries or Potential Excavations from 1855-1909</b><br>Use: Unspecified Deposited Material<br>First Map Published 1893<br>Date:<br>Last Map Published Not Applicable<br>Date: | A13NW (N)                              | 83                           | -       | 423655<br>427584 |
| 107    | <b>Extractive Industries or Potential Excavations from 1855-1909</b><br>Use: Unspecified Shaft<br>First Map Published 1893<br>Date:<br>Last Map Published Not Applicable<br>Date:              | A13NW (N)                              | 90                           | -       | 423648<br>427589 |
| 108    | <b>Extractive Industries or Potential Excavations from 1855-1909</b><br>Use: Unspecified Shaft<br>First Map Published 1893<br>Date:<br>Last Map Published Not Applicable<br>Date:              | A13NW (N)                              | 94                           | -       | 423645<br>427592 |
| 109    | <b>Extractive Industries or Potential Excavations from 1855-1909</b><br>Use: Unspecified Shaft<br>First Map Published 1893<br>Date:<br>Last Map Published Not Applicable<br>Date:              | A13NW (N)                              | 94                           | -       | 423661<br>427598 |
| 110    | <b>Extractive Industries or Potential Excavations from 1855-1909</b><br>Use: Unspecified Shaft<br>First Map Published 1893<br>Date:<br>Last Map Published Not Applicable<br>Date:              | A13NW (N)                              | 99                           | -       | 423653<br>427600 |
| 111    | <b>Extractive Industries or Potential Excavations from 1893-1915</b><br>Use: Railway Cutting<br>First Map Published 1907<br>Date:<br>Last Map Published Not Applicable<br>Date:                | A13SW (W)                              | 68                           | -       | 423562<br>427401 |
| 112    | <b>Extractive Industries or Potential Excavations from 1893-1915</b><br>Use: Unspecified Deposited Material<br>First Map Published 1907<br>Date:<br>Last Map Published Not Applicable<br>Date: | A13NW (N)                              | 82                           | -       | 423657<br>427584 |
| 113    | <b>Extractive Industries or Potential Excavations from 1893-1915</b><br>Use: Railway Embankment<br>First Map Published 1907<br>Date:<br>Last Map Published Not Applicable<br>Date:             | A13SE (SE)                             | 88                           | -       | 423805<br>427335 |
| 114    | <b>Extractive Industries or Potential Excavations from 1893-1915</b><br>Use: Railway Cutting<br>First Map Published 1907<br>Date:<br>Last Map Published Not Applicable<br>Date:                | A13NE (E)                              | 89                           | -       | 423884<br>427437 |

| Map ID | Details                                                                                                                                                                                          | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 115    | <b>Extractive Industries or Potential Excavations from 1893-1915</b><br>Use: Old Shaft<br>First Map Published 1907<br>Date:<br>Last Map Published Not Applicable<br>Date:                        | A13NW (N)                              | 94                           | -       | 423646<br>427592 |
| 116    | <b>Extractive Industries or Potential Excavations from 1906-1937</b><br>Use: Railway Cutting<br>First Map Published 1922<br>Date:<br>Last Map Published Not Applicable<br>Date:                  | A13SW (W)                              | 67                           | -       | 423563<br>427402 |
| 117    | <b>Extractive Industries or Potential Excavations from 1906-1937</b><br>Use: Unspecified Deposited Material<br>First Map Published 1922<br>Date:<br>Last Map Published Not Applicable<br>Date:   | A13NW (N)                              | 77                           | -       | 423664<br>427581 |
| 118    | <b>Extractive Industries or Potential Excavations from 1906-1937</b><br>Use: Unspecified Deposited Material<br>First Map Published 1922<br>Date:<br>Last Map Published Not Applicable<br>Date:   | A13SE (SE)                             | 87                           | -       | 423807<br>427339 |
| 119    | <b>Extractive Industries or Potential Excavations from 1906-1937</b><br>Use: Railway Cutting<br>First Map Published 1922<br>Date:<br>Last Map Published Not Applicable<br>Date:                  | A13NE (E)                              | 92                           | -       | 423886<br>427436 |
| 120    | <b>Extractive Industries or Potential Excavations from 1924-1949</b><br>Use: Railway Cutting<br>First Map Published 1938<br>Date:<br>Last Map Published Not Applicable<br>Date:                  | A13SW (W)                              | 70                           | -       | 423561<br>427398 |
| 121    | <b>Extractive Industries or Potential Excavations from 1924-1949</b><br>Use: Unspecified Deposited Material<br>First Map Published 1938<br>Date:<br>Last Map Published Not Applicable<br>Date:   | A13NW (N)                              | 80                           | -       | 423662<br>427584 |
| 122    | <b>Extractive Industries or Potential Excavations from 1924-1949</b><br>Use: Unspecified Deposited Material<br>First Map Published 1938<br>Date:<br>Last Map Published Not Applicable<br>Date:   | A13SE (SE)                             | 87                           | -       | 423806<br>427338 |
| 123    | <b>Extractive Industries or Potential Excavations from 1924-1949</b><br>Use: Railway Cutting<br>First Map Published 1938<br>Date:<br>Last Map Published Not Applicable<br>Date:                  | A13NE (E)                              | 89                           | -       | 423884<br>427437 |
| 124    | <b>Extractive Industries or Potential Excavations from 1950-1980</b><br>Use: Howden Clough Colliery (Disused)<br>First Map Published 1956<br>Date:<br>Last Map Published Not Applicable<br>Date: | A13SE (S)                              | 46                           | -       | 423728<br>427304 |
| 125    | <b>Extractive Industries or Potential Excavations from 1950-1980</b><br>Use: Unspecified Deposited Material<br>First Map Published 1956<br>Date:<br>Last Map Published N/A<br>Date:              | A13SE (S)                              | 46                           | -       | 423728<br>427304 |

| Map ID | Details                                                                                                                                                                             | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
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| 126    | <b>Extractive Industries or Potential Excavations from 1950-1980</b><br>Use: Railway Cutting<br>First Map Published 1956<br>Date:<br>Last Map Published N/A<br>Date:                | A13SW (W)                              | 62                           | -       | 423567<br>427404 |
| 127    | <b>Extractive Industries or Potential Excavations from 1950-1980</b><br>Use: Unspecified Deposited Material<br>First Map Published 1956<br>Date:<br>Last Map Published N/A<br>Date: | A13NW (N)                              | 76                           | -       | 423667<br>427581 |

| Map ID | Details                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 128    | <b>Air Shafts</b><br>Use: Not Supplied<br>Date of Mapping: 1908 - 1955                   | A14NW (E)                              | 463                          | -       | 424261<br>427466 |
| 129    | <b>Air Shafts</b><br>Use: Not Supplied<br>Date of Mapping: 1908                          | A8NE (SE)                              | 511                          | -       | 423984<br>426920 |
| 130    | <b>Disturbed Ground</b><br>Use: Not Supplied<br>Date of Mapping: 1908                    | A13SE (SE)                             | 139                          | -       | 423834<br>427291 |
| 131    | <b>Disturbed Ground</b><br>Use: Not Supplied<br>Date of Mapping: 1908                    | A13SE (E)                              | 221                          | -       | 424016<br>427428 |
| 132    | <b>General Quarrying</b><br>Use: Not Supplied<br>Date of Mapping: 1854                   | A13NW (N)                              | 110                          | -       | 423643<br>427608 |
| 133    | <b>General Quarrying</b><br>Use: Not Supplied<br>Date of Mapping: 1854                   | A13NW (N)                              | 170                          | -       | 423704<br>427689 |
| 134    | <b>General Quarrying</b><br>Use: Not Supplied<br>Date of Mapping: 1854 - 1894            | A14SW (E)                              | 646                          | -       | 424370<br>427159 |
| 135    | <b>General Quarrying</b><br>Use: Not Supplied<br>Date of Mapping: 1854                   | A8SE (S)                               | 798                          | -       | 423748<br>426541 |
| 136    | <b>General Quarrying</b><br>Use: Not Supplied<br>Date of Mapping: 1854                   | A7NW (SW)                              | 823                          | -       | 422893<br>427044 |
| 137    | <b>General Quarrying</b><br>Use: Not Supplied<br>Date of Mapping: 1854                   | A15NW (E)                              | 957                          | -       | 424755<br>427476 |
| 138    | <b>Heap, unknown constituents</b><br>Use: Not Supplied<br>Date of Mapping: 1995          | A13NE (NE)                             | 228                          | -       | 424006<br>427558 |
| 139    | <b>Heap, unknown constituents</b><br>Use: Not Supplied<br>Date of Mapping: 1938          | A14SW (E)                              | 393                          | -       | 424183<br>427386 |
| 140    | <b>Heap, unknown constituents</b><br>Use: Not Supplied<br>Date of Mapping: 1938          | A14SW (E)                              | 543                          | -       | 424284<br>427217 |
| 141    | <b>Mineral Railway</b><br>Use: Not Supplied<br>Date of Mapping: 1854                     | A18NE (N)                              | 693                          | -       | 423937<br>428175 |
| 142    | <b>Mineral Railway</b><br>Use: Not Supplied<br>Date of Mapping: 1854                     | A18NW (N)                              | 698                          | -       | 423568<br>428202 |
| 143    | <b>Mineral Railway</b><br>Use: Not Supplied<br>Date of Mapping: 1894 - 1908              | A9NW (SE)                              | 774                          | -       | 424218<br>426772 |
| 144    | <b>Mining &amp; quarrying general</b><br>Use: Not Supplied<br>Date of Mapping: 1854      | A17SE (NW)                             | 678                          | -       | 423324<br>428081 |
| 145    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A13NW (NW)                             | 84                           | -       | 423573<br>427490 |
| 146    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854 - 1938 | A13SW (SW)                             | 122                          | -       | 423575<br>427282 |
| 147    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A13SW (SW)                             | 154                          | -       | 423575<br>427234 |
| 148    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A13NE (N)                              | 185                          | -       | 423750<br>427701 |



| Map ID | Details                                                                                  | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 149    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1894        | A13SW (W)                              | 215                          | -       | 423418<br>427373 |
| 150    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A13NW (W)                              | 222                          | -       | 423406<br>427451 |
| 151    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A13NE (NE)                             | 230                          | -       | 423845<br>427709 |
| 152    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1894 - 1908 | A13NE (N)                              | 248                          | -       | 423757<br>427764 |
| 153    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A13SW (SW)                             | 323                          | -       | 423462<br>427107 |
| 154    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A8NW (S)                               | 385                          | -       | 423690<br>426952 |
| 155    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1894        | A8NE (S)                               | 393                          | -       | 423816<br>426965 |
| 156    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A8NW (S)                               | 415                          | -       | 423527<br>426955 |
| 157    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A8NW (SW)                              | 440                          | -       | 423436<br>426976 |
| 158    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1894        | A8NE (S)                               | 477                          | -       | 423920<br>426920 |
| 159    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1894        | A17SE (NW)                             | 568                          | -       | 423364<br>427977 |
| 160    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1908 - 1938 | A18SE (N)                              | 583                          | -       | 423939<br>428057 |
| 161    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A12SE (W)                              | 598                          | -       | 423039<br>427315 |
| 162    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854 - 1908 | A18NW (N)                              | 659                          | -       | 423606<br>428169 |
| 163    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A18NW (N)                              | 679                          | -       | 423699<br>428198 |
| 164    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A18NE (N)                              | 679                          | -       | 423998<br>428137 |
| 165    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1894 - 1908 | A9NW (SE)                              | 767                          | -       | 424225<br>426788 |
| 166    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A7NW (SW)                              | 777                          | -       | 423006<br>426940 |
| 167    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1938        | A14SE (E)                              | 900                          | -       | 424675<br>427256 |
| 168    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A17NW (NW)                             | 911                          | -       | 423036<br>428151 |
| 169    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854        | A19NW (NE)                             | 927                          | -       | 424183<br>428320 |

| Map ID | Details                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 170    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854                                      | A23SE (N)                              | 960                          | -       | 423847<br>428470 |
| 171    | <b>Mining of coal &amp; lignite</b><br>Use: Not Supplied<br>Date of Mapping: 1854                                      | A17NE (NW)                             | 962                          | -       | 423083<br>428260 |
| 172    | <b>Quarrying of sand &amp; clay, operation of sand &amp; gravel pits</b><br>Use: Not Supplied<br>Date of Mapping: 1908 | A19SW (NE)                             | 732                          | -       | 424370<br>427922 |
| 173    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NW (NW)                             | 84                           | -       | 423573<br>427490 |
| 174    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NW (N)                              | 110                          | -       | 423643<br>427608 |
| 175    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13SW (SW)                             | 122                          | -       | 423575<br>427282 |
| 176    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13SW (SW)                             | 154                          | -       | 423575<br>427234 |
| 177    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NW (N)                              | 170                          | -       | 423704<br>427689 |
| 178    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NE (N)                              | 185                          | -       | 423750<br>427701 |
| 179    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13SW (W)                              | 215                          | -       | 423418<br>427373 |
| 180    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NW (W)                              | 222                          | -       | 423406<br>427451 |
| 181    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NE (NE)                             | 230                          | -       | 423845<br>427709 |
| 182    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13NE (N)                              | 248                          | -       | 423757<br>427764 |
| 183    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A13SW (SW)                             | 323                          | -       | 423462<br>427107 |
| 184    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NW (S)                               | 385                          | -       | 423690<br>426952 |
| 185    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NE (S)                               | 393                          | -       | 423816<br>426965 |
| 186    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NW (S)                               | 415                          | -       | 423527<br>426955 |
| 187    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NW (SW)                              | 440                          | -       | 423436<br>426976 |
| 188    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A14NW (E)                              | 463                          | -       | 424261<br>427466 |
| 189    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NE (S)                               | 477                          | -       | 423920<br>426920 |
| 190    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995  | A8NE (SE)                              | 511                          | -       | 423984<br>426920 |

| Map ID | Details                                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 191    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A17SE (NW)                             | 568                          | -       | 423364<br>427977 |
| 192    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A18SE (N)                              | 583                          | -       | 423939<br>428057 |
| 193    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A12SE (W)                              | 598                          | -       | 423039<br>427315 |
| 194    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A14SW (E)                              | 646                          | -       | 424370<br>427159 |
| 195    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A18NW (N)                              | 661                          | -       | 423610<br>428172 |
| 196    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A18NW (N)                              | 679                          | -       | 423699<br>428198 |
| 197    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A18NE (N)                              | 679                          | -       | 423998<br>428137 |
| 198    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A19SW (NE)                             | 732                          | -       | 424370<br>427922 |
| 199    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A9NW (SE)                              | 767                          | -       | 424225<br>426788 |
| 200    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A7NW (SW)                              | 777                          | -       | 423006<br>426940 |
| 201    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A8SE (S)                               | 798                          | -       | 423748<br>426541 |
| 202    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A7NW (SW)                              | 823                          | -       | 422893<br>427044 |
| 203    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A14SE (E)                              | 900                          | -       | 424675<br>427256 |
| 204    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A17NW (NW)                             | 911                          | -       | 423036<br>428151 |
| 205    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A19NW (NE)                             | 927                          | -       | 424183<br>428320 |
| 206    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A15NW (E)                              | 957                          | -       | 424755<br>427476 |
| 207    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A23SE (N)                              | 960                          | -       | 423847<br>428470 |
| 208    | <b>Potentially Infilled Land (Non-Water)</b><br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1995                  | A17NE (NW)                             | 962                          | -       | 423083<br>428260 |
| 209    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A13SE (SE)                             | 141                          | -       | 423853<br>427310 |
| 210    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A13NW (W)                              | 175                          | -       | 423461<br>427484 |
| 211    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A13NE (N)                              | 221                          | -       | 423798<br>427726 |

| Map ID | Details                                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 212    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1908 | A13SE (SE)                             | 224                          | -       | 423922<br>427262 |
| 213    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1908 | A13SE (SE)                             | 308                          | -       | 423959<br>427178 |
| 214    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A18SE (N)                              | 323                          | -       | 423795<br>427832 |
| 215    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A8NE (SE)                              | 493                          | -       | 424018<br>426970 |
| 216    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A18SW (N)                              | 510                          | -       | 423523<br>427992 |
| 217    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A8NW (S)                               | 540                          | -       | 423613<br>426802 |
| 218    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A8SW (S)                               | 603                          | -       | 423570<br>426746 |
| 219    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A12NE (W)                              | 612                          | -       | 423073<br>427685 |
| 220    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A12SW (W)                              | 615                          | -       | 423033<br>427260 |
| 221    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A8SW (S)                               | 666                          | -       | 423575<br>426681 |
| 222    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A7SE (SW)                              | 786                          | -       | 423236<br>426694 |
| 223    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A9NW (SE)                              | 850                          | -       | 424320<br>426767 |
| 224    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A19NW (NE)                             | 867                          | -       | 424286<br>428186 |
| 225    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A19NW (NE)                             | 878                          | -       | 424364<br>428140 |
| 226    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A18NE (N)                              | 879                          | -       | 423735<br>428398 |
| 227    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A19NE (NE)                             | 897                          | -       | 424414<br>428119 |
| 228    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1854 | A19NW (NE)                             | 900                          | -       | 424144<br>428310 |
| 229    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A18NE (N)                              | 901                          | -       | 423730<br>428420 |
| 230    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A7NW (SW)                              | 903                          | -       | 422886<br>426893 |
| 231    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A17NE (N)                              | 938                          | -       | 423326<br>428372 |
| 232    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1854 | A19SE (NE)                             | 940                          | -       | 424513<br>428076 |

| Map ID | Details                                                                                                                                | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
| 233    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A19NW (NE)                             | 951                          | -       | 424263<br>428301 |
| 234    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A19SE (NE)                             | 972                          | -       | 424691<br>427845 |
| 235    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1894 | A7SE (SW)                              | 980                          | -       | 423162<br>426510 |
| 236    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1854 | A19SE (NE)                             | 985                          | -       | 424673<br>427915 |
| 237    | <b>Potentially Infilled Land (Water)</b><br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1955 | A7SE (S)                               | 986                          | -       | 423332<br>426418 |



| Map ID | Details                                                                                                                                                                               | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR              |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------|---------|------------------|
|        | <b>CBSCB Compensation District</b><br>The site does not fall within the brine compensation area.                                                                                      |                                        |                              |         |                  |
|        | <b>Brine Subsidence Solution Area</b><br>The site does not fall within the brine subsidence solution area.                                                                            |                                        |                              |         |                  |
| 238    | <b>Potential for Collapsible Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                 | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
| 239    | <b>Potential for Compressible Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
| 240    | <b>Potential for Compressible Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                | A13NW (NW)                             | 161                          | 1       | 423590<br>427638 |
|        | <b>Potential for Compressible Ground Stability Hazards</b><br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service               | A13NW (NW)                             | 78                           | 1       | 423609<br>427548 |
|        | <b>Potential for Ground Dissolution Stability Hazards</b><br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service                | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
| 241    | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                   | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
| 242    | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service                        | A13NE (NE)                             | 146                          | 1       | 423925<br>427536 |
| 243    | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                   | A13NE (NE)                             | 168                          | 1       | 423913<br>427591 |
| 244    | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                   | A13NE (NE)                             | 213                          | 1       | 423982<br>427570 |
| 245    | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                   | A13NE (NE)                             | 219                          | 1       | 423889<br>427672 |
| 246    | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                   | A13SE (SE)                             | 219                          | 1       | 423932<br>427280 |
| 247    | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service                        | A13SE (SE)                             | 220                          | 1       | 423933<br>427280 |
| 248    | <b>Potential for Landslide Ground Stability Hazards</b><br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service                   | A13NE (NE)                             | 245                          | 1       | 423959<br>427654 |
| 249    | <b>Potential for Running Sand Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service                | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |
|        | <b>Potential for Running Sand Ground Stability Hazards</b><br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service               | A13NW (NW)                             | 78                           | 1       | 423609<br>427548 |
| 250    | <b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service  | A13NW (NW)                             | 0                            | 1       | 423706<br>427434 |
| 251    | <b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b><br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service  | A13NW (NW)                             | 119                          | 1       | 423566<br>427558 |
|        | <b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b><br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A13NW (S)                              | 0                            | 1       | 423709<br>427432 |

The following mapping has been analysed for Historical Land Use Information (1:2,500):

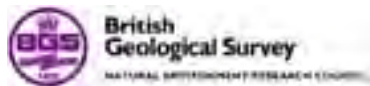
| 1:2,500              | Mapsheet | Published Date |
|----------------------|----------|----------------|
| Yorkshire            | 232_03   | 1893           |
| Yorkshire            | 232_03   | 1907           |
| Yorkshire            | 232_03   | 1922           |
| Yorkshire            | 232_03   | 1938           |
| Ordnance Survey Plan | SE2327   | 1956           |
| Ordnance Survey Plan | SE2427   | 1956           |

The following mapping has been analysed for Historical Land Use Information (1:10,000):

| 1:10,560             | Mapsheet | Published Date |
|----------------------|----------|----------------|
| Yorkshire            | 217_00   | 1852           |
| Yorkshire            | 232_00   | 1854           |
| Yorkshire            | 217_SE   | 1894           |
| Yorkshire            | 217_SW   | 1894           |
| Yorkshire            | 232_NE   | 1894           |
| Yorkshire            | 232_NW   | 1894           |
| Yorkshire            | 217_SE   | 1908           |
| Yorkshire            | 217_SW   | 1908           |
| Yorkshire            | 232_NE   | 1908           |
| Yorkshire            | 232_NW   | 1908           |
| Yorkshire            | 217_SE   | 1938           |
| Yorkshire            | 217_SW   | 1938           |
| Yorkshire            | 232_NE   | 1938           |
| Yorkshire            | 232_NW   | 1938           |
| Ordnance Survey Plan | SE22NW   | 1955           |
| Ordnance Survey Plan | SE22NE   | 1957           |
| 1:10,000             | Mapsheet | Published Date |
| Ordnance Survey Plan | SE22NW   | 1995           |
| Ordnance Survey Plan | SE22NE   | 1996           |

| Mining and Cavities Data                                                                                                                        | Version       | Update Cycle          |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|
| <b>BGS Recorded Mineral Sites</b><br>British Geological Survey - National Geoscience Information Service                                        | June 2020     | Bi-Annually           |
| <b>Coal Mining Affected Areas</b><br>The Coal Authority - Property Searches                                                                     | March 2014    | Annual Rolling Update |
| <b>Man Made Mining Cavities</b><br>Stantec UK Ltd                                                                                               | December 2019 | Bi-Annually           |
| <b>Mining Instability</b><br>Ove Arup & Partners                                                                                                | October 2000  | Not Applicable        |
| <b>Natural Cavities</b><br>Stantec UK Ltd                                                                                                       | December 2019 | Bi-Annually           |
| <b>Non Coal Mining Areas of Great Britain</b><br>British Geological Survey - National Geoscience Information Service                            | May 2015      | Not Applicable        |
| Historical Land Use Information (1:2,500)                                                                                                       | Version       | Update Cycle          |
| <b>Subterranean Features</b><br>Landmark Information Group Limited                                                                              | February 2020 | Bi-Annually           |
| Ground Stability Data (1:50,000)                                                                                                                | Version       | Update Cycle          |
| <b>CBSCB Compensation District</b><br>Cheshire Brine Subsidence Compensation Board (CBSCB)                                                      | August 2011   | Not Applicable        |
| <b>Potential for Collapsible Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service                | April 2020    | Annually              |
| <b>Potential for Compressible Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service               | January 2019  | Annually              |
| <b>Potential for Ground Dissolution Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service                | January 2019  | Annually              |
| <b>Potential for Landslide Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service                  | January 2019  | Annually              |
| <b>Potential for Running Sand Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service               | January 2019  | Annually              |
| <b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b><br>British Geological Survey - National Geoscience Information Service | January 2019  | Annually              |
| <b>Brine Subsidence Solution Area</b><br>Johnson Poole & Bloomer                                                                                | January 2015  | Annual Rolling Update |

A selection of organisations who provide data within this report

| Data Supplier             | Data Supplier Logo                                                                   |
|---------------------------|--------------------------------------------------------------------------------------|
| Ordnance Survey           |   |
| British Geological Survey |   |
| The Coal Authority        |   |
| Ove Arup                  |   |
| Stantec UK Ltd            |   |
| Wardell Armstrong         |   |
| Johnson Poole & Bloomer   |  |

| Contact | Name and Address                                                                                                                                                  | Contact Details                                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1       | <b>British Geological Survey - Enquiry Service</b><br>British Geological Survey, Environmental Science Centre, Keyworth,<br>Nottingham, Nottinghamshire, NG12 5GG | Telephone: 0115 936 3143<br>Fax: 0115 936 3276<br>Email: enquiries@bgs.ac.uk<br>Website: www.bgs.ac.uk                          |
| 2       | <b>The Coal Authority - Property Searches</b><br>200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG                                                         | Telephone: 0345 762 6848<br>Fax: 01623 637 338<br>Email: groundstability@coal.gov.uk<br>Website: www2.groundstability.com       |
| 3       | <b>Stantec UK Ltd</b><br>Caversham Bridge House, Waterman Place, Reading, RG1 8DN                                                                                 | Telephone: 0118 950 0761<br>Email: pba.reading@stantec.com<br>Website: www.stantec.com                                          |
| 4       | <b>Ove Arup &amp; Partners</b><br>Central Square, Forth Street, Newcastle upon Tyne, Tyne and Wear, NE1<br>3PL                                                    | Telephone: 0191 261 6080<br>Fax: 0191 261 7879                                                                                  |
| 5       | <b>Landmark Information Group Limited</b><br>Imperium, Imperial Way, Reading, Berkshire, RG2 0TD                                                                  | Telephone: 0844 844 9960<br>Fax: 0844 844 9951<br>Email: customerservice@promap.co.uk<br>Website: www.landmarkinfo.co.uk        |
| -       | <b>Landmark Information Group Limited</b><br>Imperium, Imperial Way, Reading, Berkshire, RG2 0TD                                                                  | Telephone: 0844 844 9952<br>Fax: 0844 844 9951<br>Email: customerservices@landmarkinfo.co.uk<br>Website: www.landmarkinfo.co.uk |





## Historical Land Use Information (1:2,500)

### General

Specified Site Specified Buffer(s) Bearing Reference Point Map ID  
Several of Type at Location

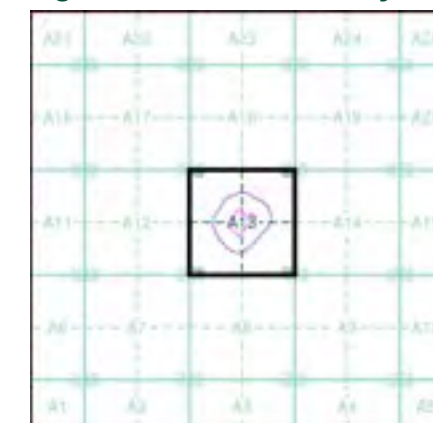
### Potentially Contaminative Industrial Uses (Extractive Industries Activity)

|                                                 | Point | Line | Polygon |
|-------------------------------------------------|-------|------|---------|
| Extractive Industries Activity from 1855 - 1909 | ▲     | —    | ■       |
| Extractive Industries Activity from 1893 - 1915 | ▲     | —    | ■       |
| Extractive Industries Activity from 1906 - 1937 | ▲     | —    | ■       |
| Extractive Industries Activity from 1924 - 1949 | ▲     | —    | ■       |
| Extractive Industries Activity from 1950 - 1980 | ▲     | —    | ■       |

### Subterranean Features

|                       | Point | Line | Polygon |
|-----------------------|-------|------|---------|
| Subterranean Features | ▼     | ---  | ■       |

### Mining and Ground Stability - Segment A13



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Plot Buffer (m): 100

### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: www.envirocheck.co.uk





## Geology 1:50,000 Maps Legends

### Artificial Ground and Landslip

| Map Colour                                                                        | Lex Code | Rock Name               | Rock Type          | Min and Max Age         |
|-----------------------------------------------------------------------------------|----------|-------------------------|--------------------|-------------------------|
|  | MGR      | Made Ground (Undivided) | Artificial Deposit | Not Supplied - Holocene |
|  | WMGR     | Infilled Ground         | Artificial Deposit | Not Supplied - Holocene |

### Bedrock and Faults

| Map Colour                                                                          | Lex Code | Rock Name                              | Rock Type                         | Min and Max Age            |
|-------------------------------------------------------------------------------------|----------|----------------------------------------|-----------------------------------|----------------------------|
|    | PMCM     | Pennine Middle Coal Measures Formation | Mudstone, Siltstone and Sandstone | Not Supplied - Westphalian |
|    | TR       | Thornhill Rock                         | Sandstone                         | Not Supplied - Westphalian |
|    | PLCM     | Pennine Lower Coal Measures Formation  | Mudstone, Siltstone and Sandstone | Not Supplied - Westphalian |
|    | ER       | Emley Rock                             | Sandstone                         | Not Supplied - Westphalian |
|    | BRSR     | Birstall Rock                          | Sandstone                         | Not Supplied - Westphalian |
|    | PLCM     | Pennine Lower Coal Measures Formation  | Sandstone                         | Not Supplied - Westphalian |
|    | LPE      | Lepton Edge Rock                       | Sandstone                         | Not Supplied - Westphalian |
|  | CLRK     | Clifton Rock                           | Sandstone                         | Not Supplied - Westphalian |
|  | KKBS     | Kirkburton Sandstone                   | Sandstone                         | Not Supplied - Westphalian |
|  | TKS      | Thick Stone                            | Sandstone                         | Not Supplied - Westphalian |
|  | GR       | Grenoside Sandstone                    | Sandstone                         | Not Supplied - Westphalian |
|  | GM       | Greenmoor Rock                         | Sandstone                         | Not Supplied - Westphalian |
|  |          | Rock Segments                          |                                   |                            |
|  |          | Faults                                 |                                   |                            |



### Geology 1:50,000 Maps

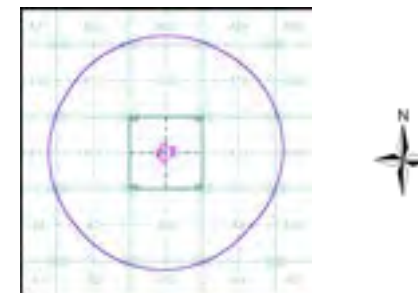
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

### Geology 1:50,000 Maps Coverage

|                      |              |
|----------------------|--------------|
| Map ID:              | 1            |
| Map Sheet No:        | 077          |
| Map Name:            | Huddersfield |
| Map Date:            | 2003         |
| Bedrock Geology:     | Available    |
| Superficial Geology: | Available    |
| Artificial Geology:  | Available    |
| Faults:              | Not Supplied |
| Landslip:            | Available    |
| Rock Segments:       | Not Supplied |

### Geology 1:50,000 Maps - Slice A



### Order Details:

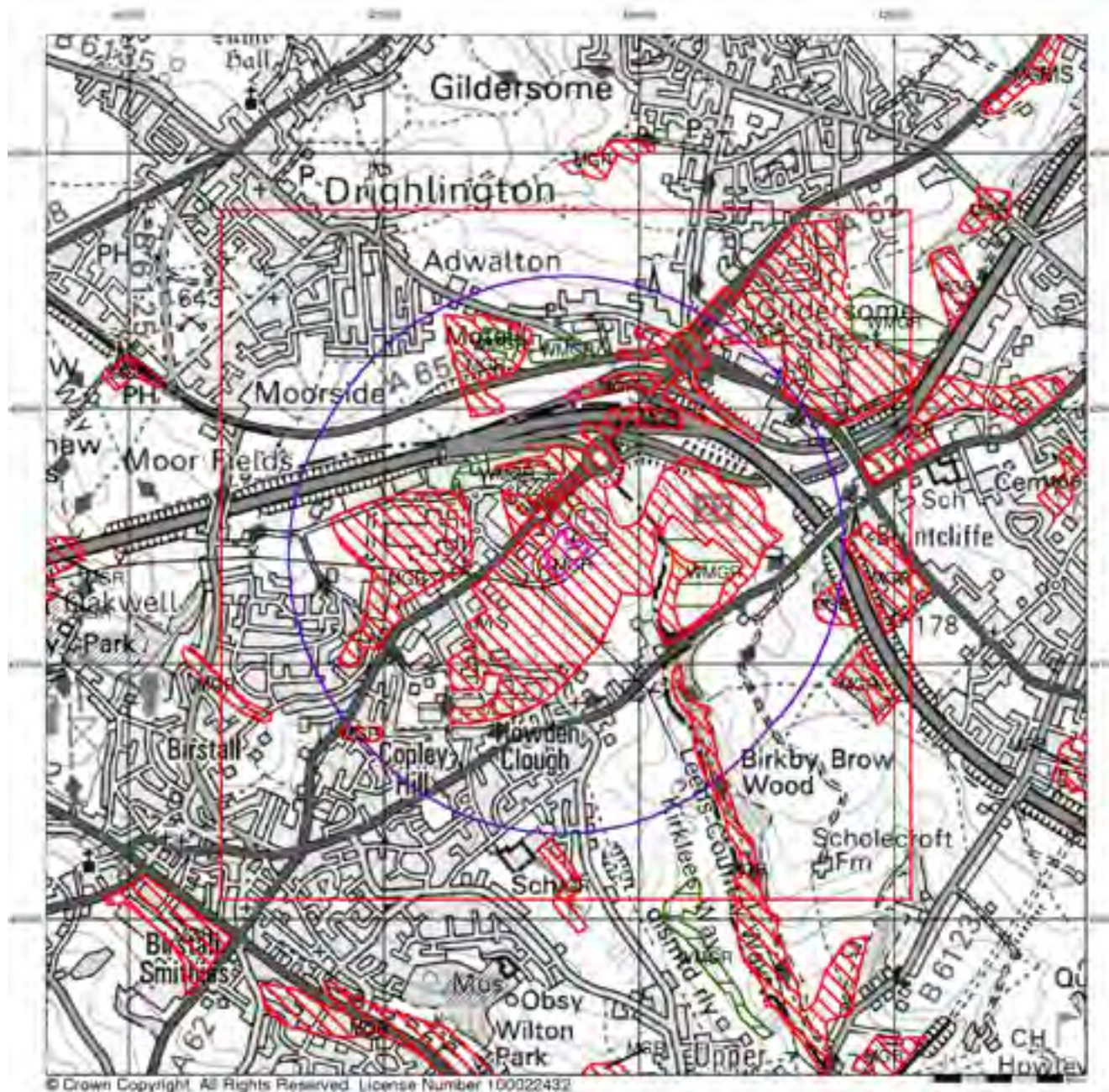
|                          |                                 |
|--------------------------|---------------------------------|
| Order Number:            | 259373929_1_1                   |
| Customer Reference:      | 076893 - Bankwood Way, Birstall |
| National Grid Reference: | 423710, 427430                  |
| Slice:                   | A                               |
| Site Area (Ha):          | 1.51                            |
| Search Buffer (m):       | 1000                            |

### Site Details:

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### Artificial Ground and Landslip

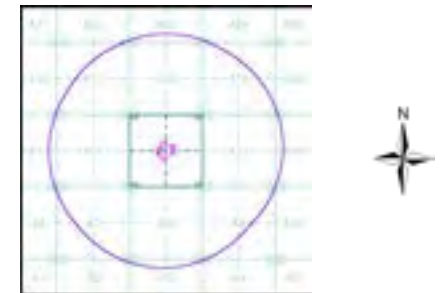
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

### Artificial Ground and Landslip Map - Slice A



### Order Details:

Order Number: 259373929\_1\_1  
 Customer Reference: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

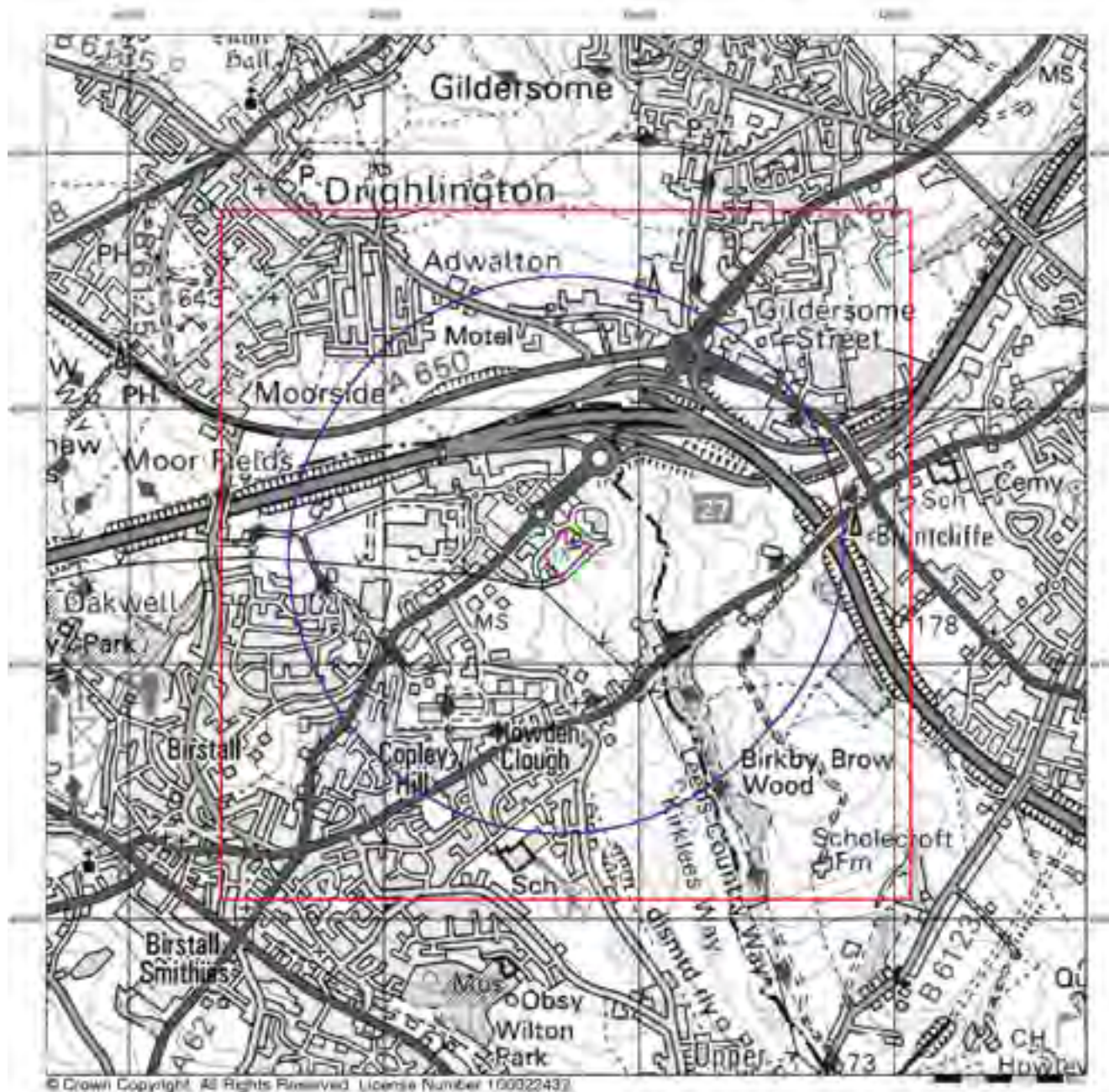
### Site Details:

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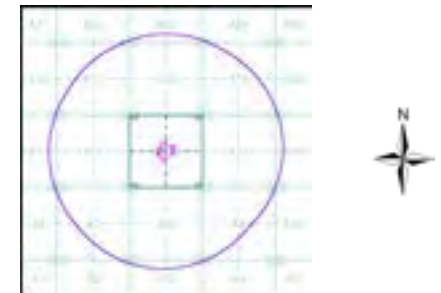
### Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

### Superficial Geology Map - Slice A



### Order Details:

Order Number: 259373929\_1\_1  
Customer Reference: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

### Site Details:

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB

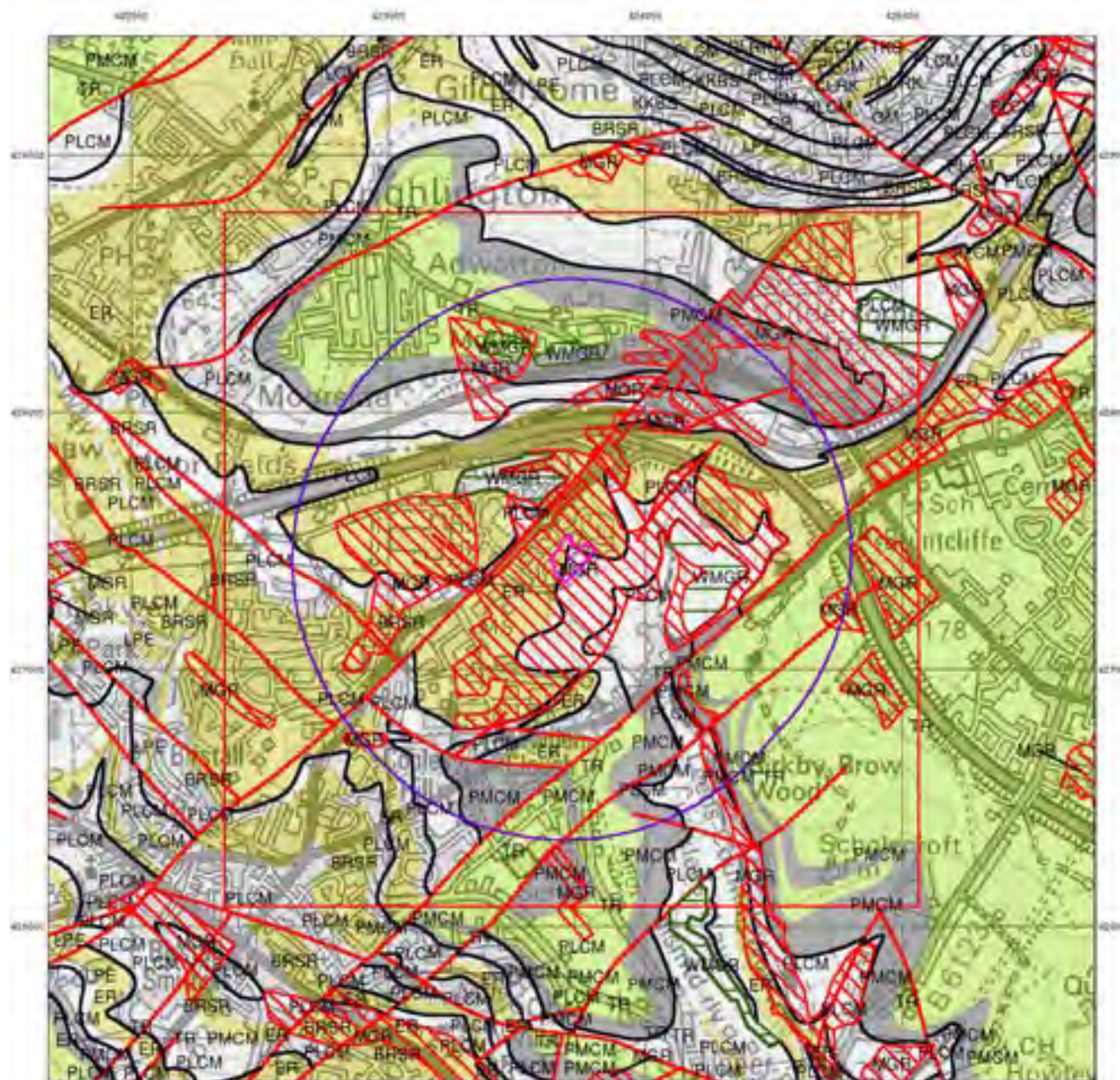


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### Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

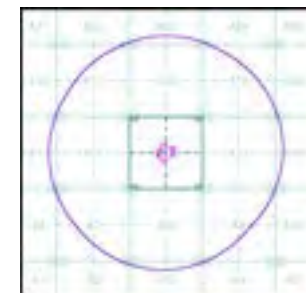
### Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

### Contact

British Geological Survey  
Kingsley Dunham Centre  
Keyworth  
Nottingham  
NG12 5GG  
Telephone: 0115 936 3143  
Fax: 0115 936 3276  
email: [enquiries@bgs.ac.uk](mailto:enquiries@bgs.ac.uk)  
website: [www.bgs.ac.uk](http://www.bgs.ac.uk)

### Combined Geology Map - Slice A



### Order Details:

Order Number: 259373929\_1\_1  
Customer Reference: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

### Site Details:

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Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit

Sand Pit

Other Pits

Quarry

Shingle

Orchard

Osiers

Reeds

Marsh

Mixed Wood

Deciduous

Brushwood

Fir

Furze

Rough Pasture

Arrow denotes flow of water

Trigonometrical Station

Site of Antiquities

Bench Mark

Pump, Guide Post, Signal Post

Well, Spring, Boundary Post

**-285** Surface Level

Sketched Contour

Instrumental Contour

Main Roads

Fenced

Un-Fenced

Minor Roads

Fenced

Un-Fenced

Sunken Road

Raised Road

Road over Railway

Railway over River

Railway over Road

Level Crossing

Road over River or Canal

Road over Stream

County Boundary (Geographical)

County & Civil Parish Boundary

Administrative County & Civil Parish Boundary

County Borough Boundary (England)

County Borough Boundary (Scotland)

Rural District Boundary

Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry

Gravel Pit

Sand Pit

Disused Pit or Quarry

Refuse or Slag Heap

Lake, Loch or Pond

Dunes

Boulders

Coniferous Trees

Non-Coniferous Trees

Orchard

Scrub

Coppice

Bracken

Heath

Rough Grassland

Marsh

Reeds

Saltings

Building

Glasshouse

Sloping Masonry

Pylon

Electricity Transmission Line

Pole

Cutting

Embankment

Standard Gauge Multiple Track

Standard Gauge Single Track

Siding, Tramway or Mineral Line

Narrow Gauge

Geographical County

Administrative County, County Borough or County of City

Municipal Borough, Urban or Rural District, Burgh or District Council

Borough, Burgh or County Constituency  
Shown only when not coincident with other boundaries

Civil Parish  
Shown alternately when coincidence of boundaries occurs

BP, BS Boundary Post or Stone

Ch Church

CH Club House

F E Sta Fire Engine Station

FB Foot Bridge

Fn Fountain

GP Guide Post

MP Mile Post

MS Mile Stone

Pol Sta Police Station

PO Post Office

PC Public Convenience

PH Public House

SB Signal Box

Spr Spring

TCB Telephone Call Box

TCP Telephone Call Post

W Well

1:10,000 Raster Mapping

Gravel Pit

Refuse tip or slag heap

Rock (scattered)

Boulders (scattered)

Shingle

Mud

Sand

Sand Pit

Slopes

Top of cliff

General detail

Overhead detail

Multi-track railway

Single track railway

County boundary (England only)

Civil, parish or community boundary

District, Unitary, Metropolitan, London Borough boundary

Constituency boundary

Area of wooded vegetation

Non-coniferous trees

Non-coniferous trees (scattered)

Coniferous trees

Coniferous trees (scattered)

Positioned tree

Orchard

Coppice or Osiers

Rough Grassland

Heath

Scrub

Marsh, Salt Marsh or Reeds

Water feature

Flow arrows

Mean high water (springs)

Mean low water (springs)

Telephone line (where shown)

Electricity transmission line (with poles)

Bench mark (where shown)

Triangulation station

Point feature (e.g. Guide Post or Mile Stone)

Pylon, flare stack or lighting tower

Site of (antiquity)

Glasshouse

General Building

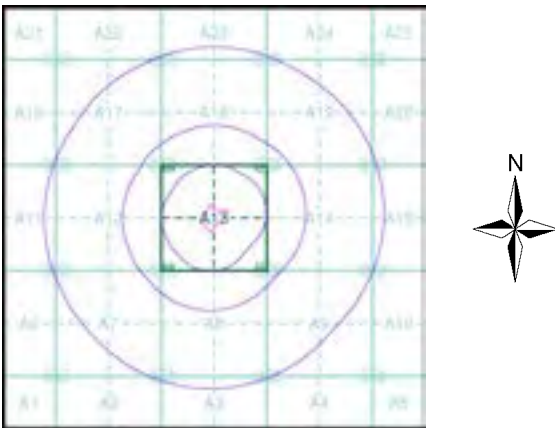
Important Building



Historical Mapping & Photography included:

| Mapping Type         | Scale    | Date        | Pg |
|----------------------|----------|-------------|----|
| Yorkshire            | 1:10,560 | 1852 - 1854 | 3  |
| Yorkshire            | 1:10,560 | 1894        | 4  |
| Yorkshire            | 1:10,560 | 1908        | 5  |
| Yorkshire            | 1:10,560 | 1932        | 6  |
| Yorkshire            | 1:10,560 | 1938        | 7  |
| Yorkshire            | 1:10,560 | 1938 - 1948 | 8  |
| Yorkshire            | 1:10,560 | 1948        | 9  |
| Ordnance Survey Plan | 1:10,000 | 1955 - 1957 | 10 |
| Ordnance Survey Plan | 1:10,000 | 1966        | 11 |
| Leeds                | 1:10,000 | 1972        | 12 |
| Ordnance Survey Plan | 1:10,000 | 1976 - 1977 | 13 |
| Batley               | 1:10,000 | 1983        | 14 |
| Ordnance Survey Plan | 1:10,000 | 1986        | 15 |
| Bradford             | 1:10,000 | 1990        | 16 |
| Ordnance Survey Plan | 1:10,000 | 1991 - 1995 | 17 |
| Ordnance Survey Plan | 1:10,000 | 1996        | 18 |
| 10K Raster Mapping   | 1:10,000 | 2000        | 19 |
| 10K Raster Mapping   | 1:10,000 | 2006        | 20 |
| VectorMap Local      | 1:10,000 | 2020        | 21 |

Historical Map - Slice A



Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

Site Details

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# Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale    b. Drawn to scale

Government and Administrative Buildings    Military and Industrial Buildings

Military and Communication Areas    Subway Entrance

Fireproof Building    Prominent Fireproof Building

Non-fireproof Building    Non-fireproof Building (non-dwelling)

Factory, mill, and flour mill, with chimneys    Factory, mill, and flour mill, without chimneys

Power Station, drawn to scale    Hydroelectric Power Station

Radio Station, drawn to scale    Telephone Station, drawn to scale

Abandoned Open-pit Mine or Quarry    Open-pit Salt Mine

Pit    Oil Deposit or Well    Oil Seepage

Tailings Pile    Fuel Storage Tanks    Natural Gas Tank

Bench Mark    Drill Hole    Burial Mound    Triangulation Point on Burial Mound

Single-track Railroad    Double-track Railroad    Tunnel    Small Bridge    Pipe (Culvert)    Railroad and Station Building

Coniferous Forest    Deciduous Forest    Mixed Forest

Lawns    Citrus Orchard    Wet Ground    Scattered Vegetation

243.8    Values for prominent elevations

186.0    Numbers for spot elevations, depth soundings, contour lines, etc.

0.2    Velocity of the current, width of river bed, depth of river

182.12    Fractional terms; length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

**Russian Alphabet** (For reference and phonetic interpretation of map text)

|          |         |          |                |
|----------|---------|----------|----------------|
| А а (A)  | З з (Z) | П п (P)  | Ч ч (CH)       |
| Б б (B)  | И и (I) | Р р (R)  | Ш ш (SH)       |
| В в (V)  | Й й (Y) | С с (S)  | Щ щ (SHCH)     |
| Г г (G)  | К к (K) | Т т (T)  | Ъ ъ (-)        |
| Д д (D)  | Л л (L) | У у (U)  | Ы ы (Y)        |
| Е е (E)  | М м (M) | Ф ф (F)  | Ь ь (')        |
| Ё ё (YO) | Н н (N) | Х х (KH) | Э э (E)        |
| Ж ж (ZH) | О о (O) | Ц ц (TS) | Ю ю (YU or IU) |
|          |         |          | Я я (YA or IA) |

1:25,000 mapping

a. Not drawn to scale    b. Drawn to scale

Government and Administrative Buildings    Military and Industrial Buildings

Military and Communication Areas    Subway Entrance

Partly Demolished Buildings    Demolished Buildings

Built-Up Area with Fireproof Buildings Predominant    Built-Up Area with Non-Fireproof Buildings Predominant

Individual Fireproof Building    Prominent Industrial Building

Individual Dwelling, Fireproof    Ruins of an Individual Dwelling

Factory or Mill Chimney    Factory or Mill with Chimney    Factory or Mill without Chimney    Mine or Open Pit Mine

Operating Shaft or Mine    Non-Operating Shaft or Mine    Salt Mine    Tailings Pile

Pit    Stone Quarry    Gas Pump or Service Station    Fuel Storage or Natural Gas Tank

Oil or Natural Gas Derrick    Small Hydroelectric Power Station    Power Station    Transformer Station

Cemetery    Burial Mound (height in metres)    Triangulation Point on Burial Mound    Triangulation Point

Bench Mark    Bench Mark (monumented)    Telegraph Office    Telephone Station

Radio Station    Radio Tower    Airfield or Seaplane Base    Landing Strip

Telegraph/Telephone Lines    Main Highway    Highway under Construction    Improved Dirt Road (former truck road)

Small Bridge    Pipe (Culvert)    Tunnel    Dismantled Railroad    Double-track Railroad with First Class Station    Railroad Under Construction

Shore Embankment    River or Ditch with Embankment    Direction and velocity of current    Water Gauge    Water Level Mark

Well    Water Reservoir or Rain Water Pit    Spring    Isobath with value

Heavy (Index) Contour Line    Contour Line and Value    Half Contour Line    Spot Elevation Value

Coniferous    Deciduous    Mixed    Scrub

Key to Numbers on Mapping

## SE22NW\_Leeds

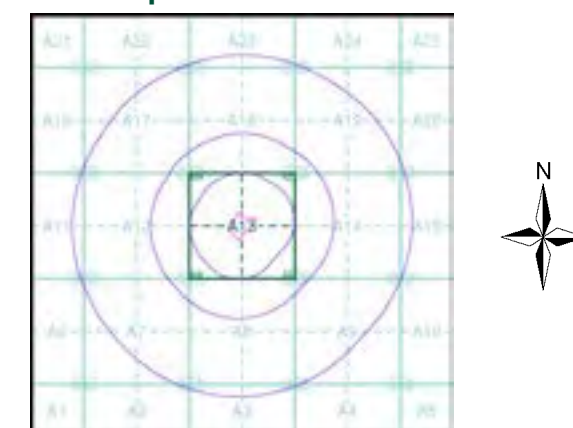
| No. | Description         |
|-----|---------------------|
| 38  | Factory (Machinery) |



## Historical Mapping & Photography included:

| Mapping Type         | Scale    | Date        | Pg |
|----------------------|----------|-------------|----|
| Yorkshire            | 1:10,560 | 1852 - 1854 | 3  |
| Yorkshire            | 1:10,560 | 1894        | 4  |
| Yorkshire            | 1:10,560 | 1908        | 5  |
| Yorkshire            | 1:10,560 | 1932        | 6  |
| Yorkshire            | 1:10,560 | 1938        | 7  |
| Yorkshire            | 1:10,560 | 1938 - 1948 | 8  |
| Yorkshire            | 1:10,560 | 1948        | 9  |
| Ordnance Survey Plan | 1:10,000 | 1955 - 1957 | 10 |
| Ordnance Survey Plan | 1:10,000 | 1966        | 11 |
| Leeds                | 1:10,000 | 1972        | 12 |
| Ordnance Survey Plan | 1:10,000 | 1976 - 1977 | 13 |
| Batley               | 1:10,000 | 1983        | 14 |
| Ordnance Survey Plan | 1:10,000 | 1986        | 15 |
| Bradford             | 1:10,000 | 1990        | 16 |
| Ordnance Survey Plan | 1:10,000 | 1991 - 1995 | 17 |
| Ordnance Survey Plan | 1:10,000 | 1996        | 18 |
| 10K Raster Mapping   | 1:10,000 | 2000        | 19 |
| 10K Raster Mapping   | 1:10,000 | 2006        | 20 |
| VectorMap Local      | 1:10,000 | 2020        | 21 |

## Russian Map - Slice A



## Order Details

Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

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Yorkshire

Published 1852 - 1854

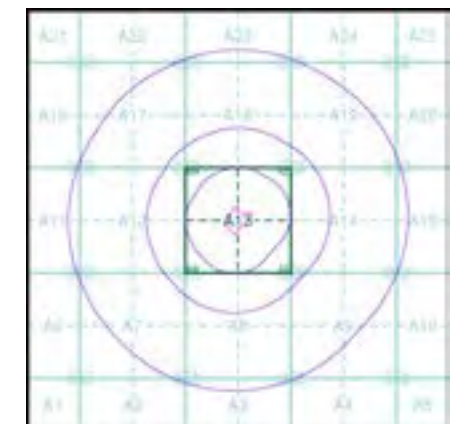
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

#### Map Name(s) and Date(s)

|          |
|----------|
| 21700    |
| 1852     |
| 1:10,560 |
| 23200    |
| 1854     |
| 1:10,560 |

#### Historical Map - Slice A



#### Order Details

Order Number: 259373929\_1\_1  
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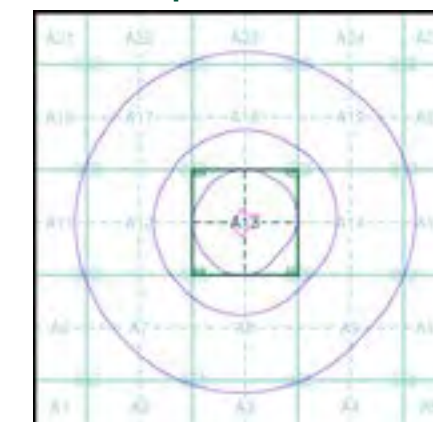


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

### Map Name(s) and Date(s)

|                           |                           |
|---------------------------|---------------------------|
| 217SW<br>1894<br>1:10,560 | 217SE<br>1894<br>1:10,560 |
| 232NW<br>1894<br>1:10,560 | 232NE<br>1894<br>1:10,560 |

### Historical Map - Slice A

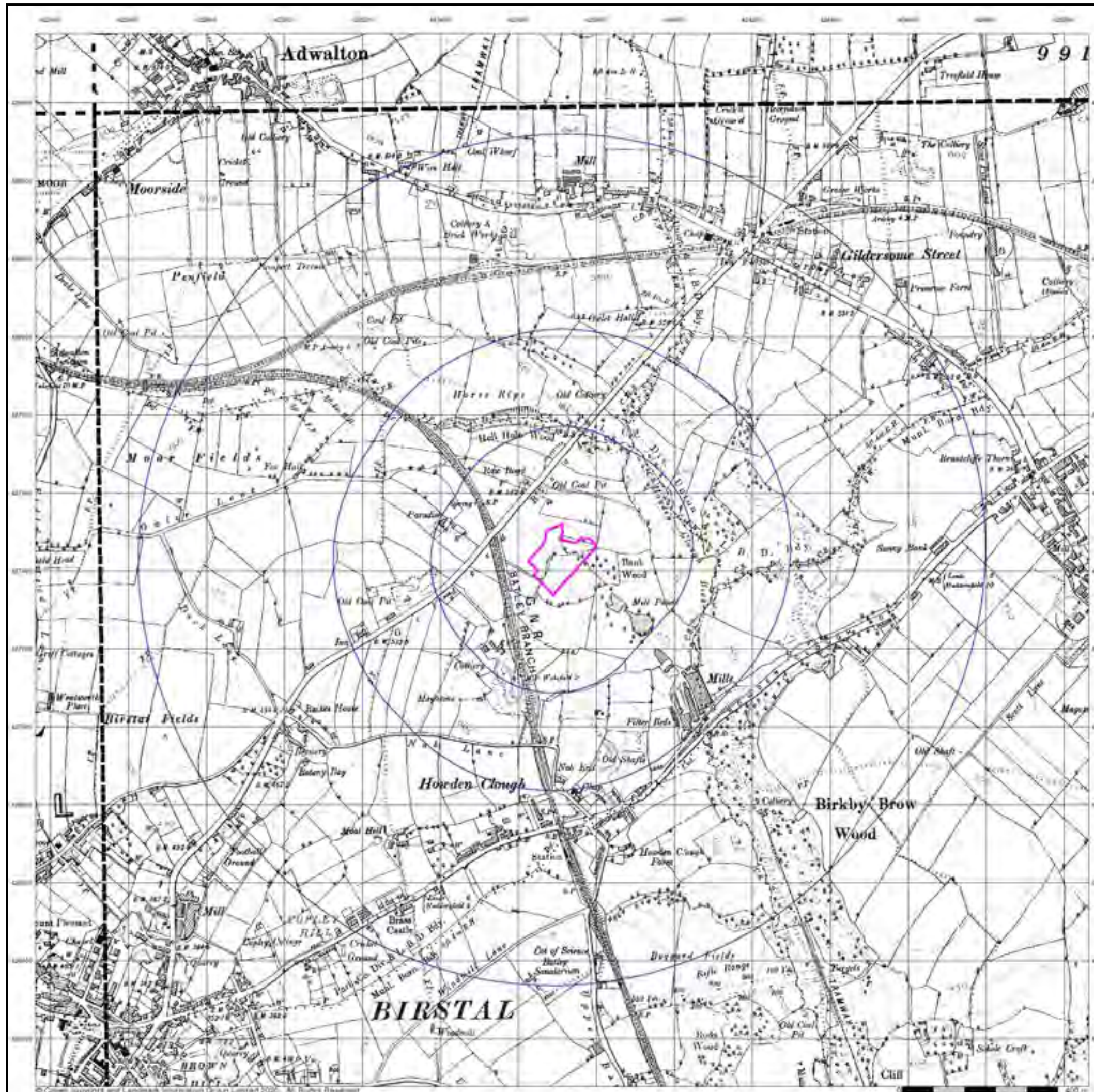


### Order Details

Order Number: 259373929\_1\_1  
 Customer Ref: 076893 - Bankwood Way, Birstall  
 National Grid Reference: 423710, 427430  
 Slice: A  
 Site Area (Ha): 1.51  
 Search Buffer (m): 1000

### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB







Yorkshire

Published 1908

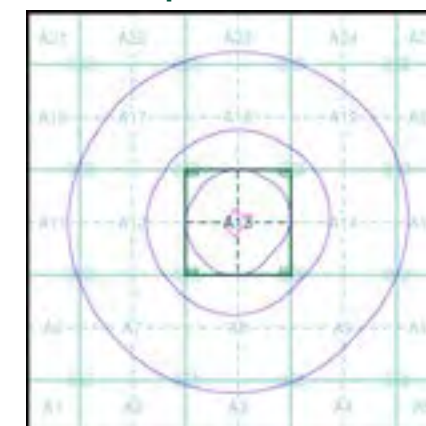
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

#### Map Name(s) and Date(s)

|                           |                           |
|---------------------------|---------------------------|
| 217SW<br>1908<br>1:10,560 | 217SE<br>1908<br>1:10,560 |
| 232NW<br>1908<br>1:10,560 | 232NE<br>1908<br>1:10,560 |

#### Historical Map - Slice A



#### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
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Yorkshire

Published 1932

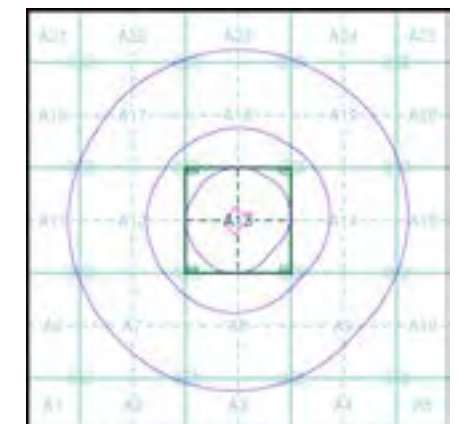
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

#### Map Name(s) and Date(s)

|                           |                           |
|---------------------------|---------------------------|
| 217SW<br>1932<br>1:10,560 | 217SE<br>1932<br>1:10,560 |
| 232NW<br>1932<br>1:10,560 | 232NE<br>1932<br>1:10,560 |

#### Historical Map - Slice A



#### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

#### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB



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Yorkshire

Published 1938

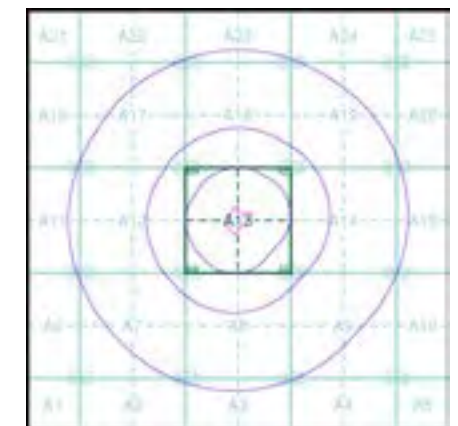
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

#### Map Name(s) and Date(s)

|                           |                           |
|---------------------------|---------------------------|
| 217SW<br>1938<br>1:10,560 | 217SE<br>1938<br>1:10,560 |
| 232NW<br>1938<br>1:10,560 | 232NE<br>1938<br>1:10,560 |

#### Historical Map - Slice A



#### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

#### Site Details

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Yorkshire

Published 1938 - 1948

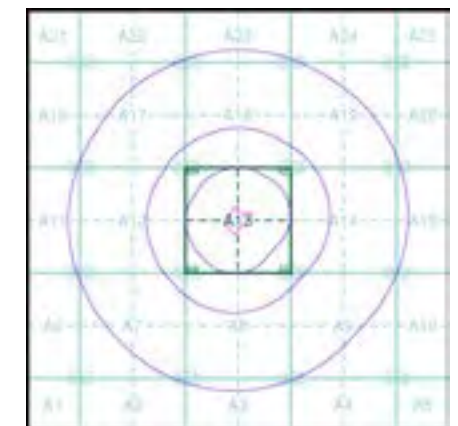
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

#### Map Name(s) and Date(s)

|                           |                           |
|---------------------------|---------------------------|
| 217SW<br>1948<br>1:10,560 | 217SE<br>1948<br>1:10,560 |
| 232NW<br>1948<br>1:10,560 | 232NE<br>1938<br>1:10,560 |

#### Historical Map - Slice A



#### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

#### Site Details

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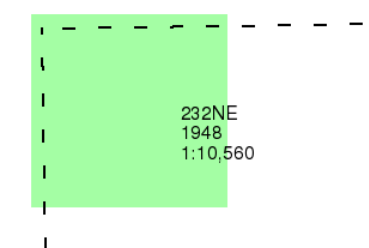


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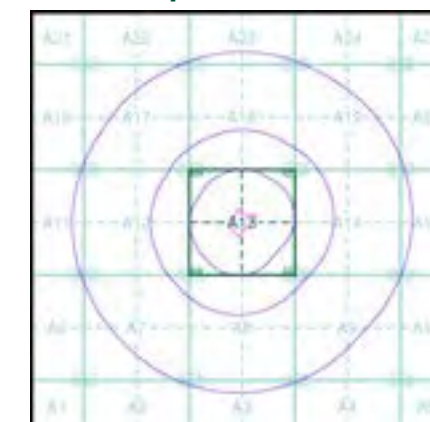


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

### Map Name(s) and Date(s)



### Historical Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB





## Ordnance Survey Plan

Published 1955 - 1957

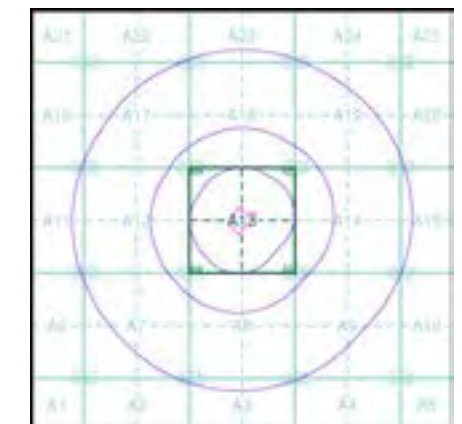
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

### Map Name(s) and Date(s)

|                             |                             |
|-----------------------------|-----------------------------|
| SE 22NW<br>1955<br>1:10,560 | SE 22NE<br>1957<br>1:10,560 |
|-----------------------------|-----------------------------|

### Historical Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

### Site Details

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## Ordnance Survey Plan

Published 1966

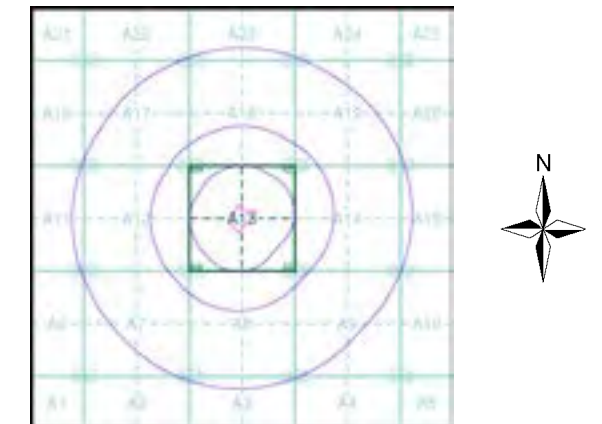
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

### Map Name(s) and Date(s)

|                             |                             |
|-----------------------------|-----------------------------|
| SE 22NW<br>1966<br>1:10,560 | SE 22NE<br>1966<br>1:10,560 |
|-----------------------------|-----------------------------|

### Historical Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

### Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB

**Landmark**  
INFORMATION GROUP

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Leeds

Published 1972

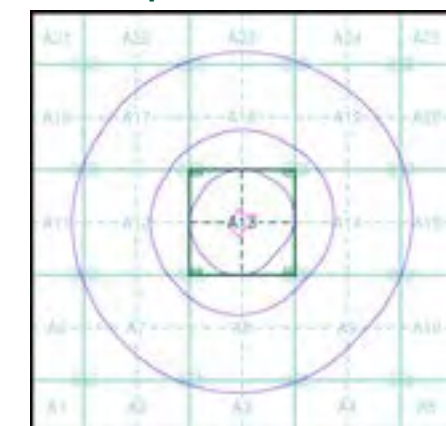
Source map scale - 1:10,000

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use. They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

### Map Name(s) and Date(s)

|                            |                            |
|----------------------------|----------------------------|
| SE22NW<br>1972<br>1:10,000 | SE22NE<br>1972<br>1:10,000 |
|----------------------------|----------------------------|

### Russian Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

### Site Details

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## Ordnance Survey Plan

Published 1976 - 1977

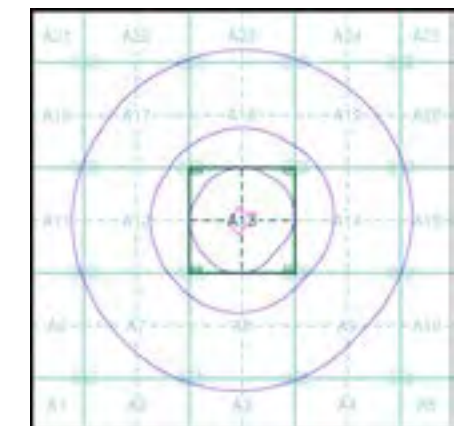
Source map scale - 1:10,000

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### Map Name(s) and Date(s)

|                            |                            |
|----------------------------|----------------------------|
| SE22NW<br>1976<br>1:10,000 | SE22NE<br>1977<br>1:10,000 |
|----------------------------|----------------------------|

### Historical Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

### Site Details

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## Batley

Published 1983

Source map scale - 1:10,000

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.

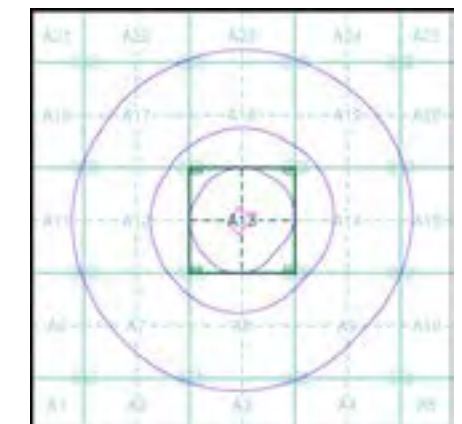
They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

## Map Name(s) and Date(s)

SE22NW  
1983  
1:10,000

SE22NE  
1983  
1:10,000

## Russian Map - Slice A



## Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

## Site Details

Bankwood Way, Birstall, Batley, West Yorkshire, WF17 9TB







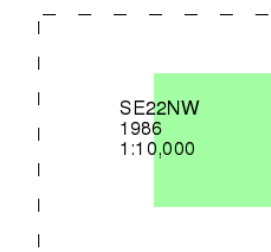
## Ordnance Survey Plan

Published 1986

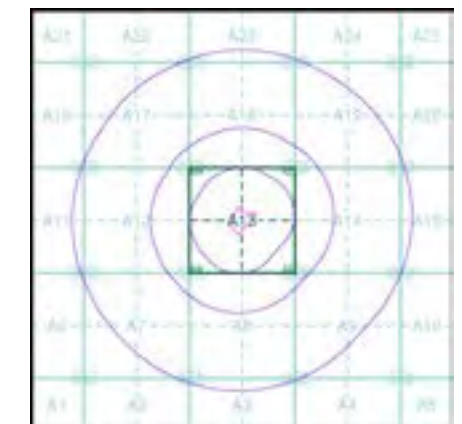
Source map scale - 1:10,000

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### Map Name(s) and Date(s)



### Historical Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

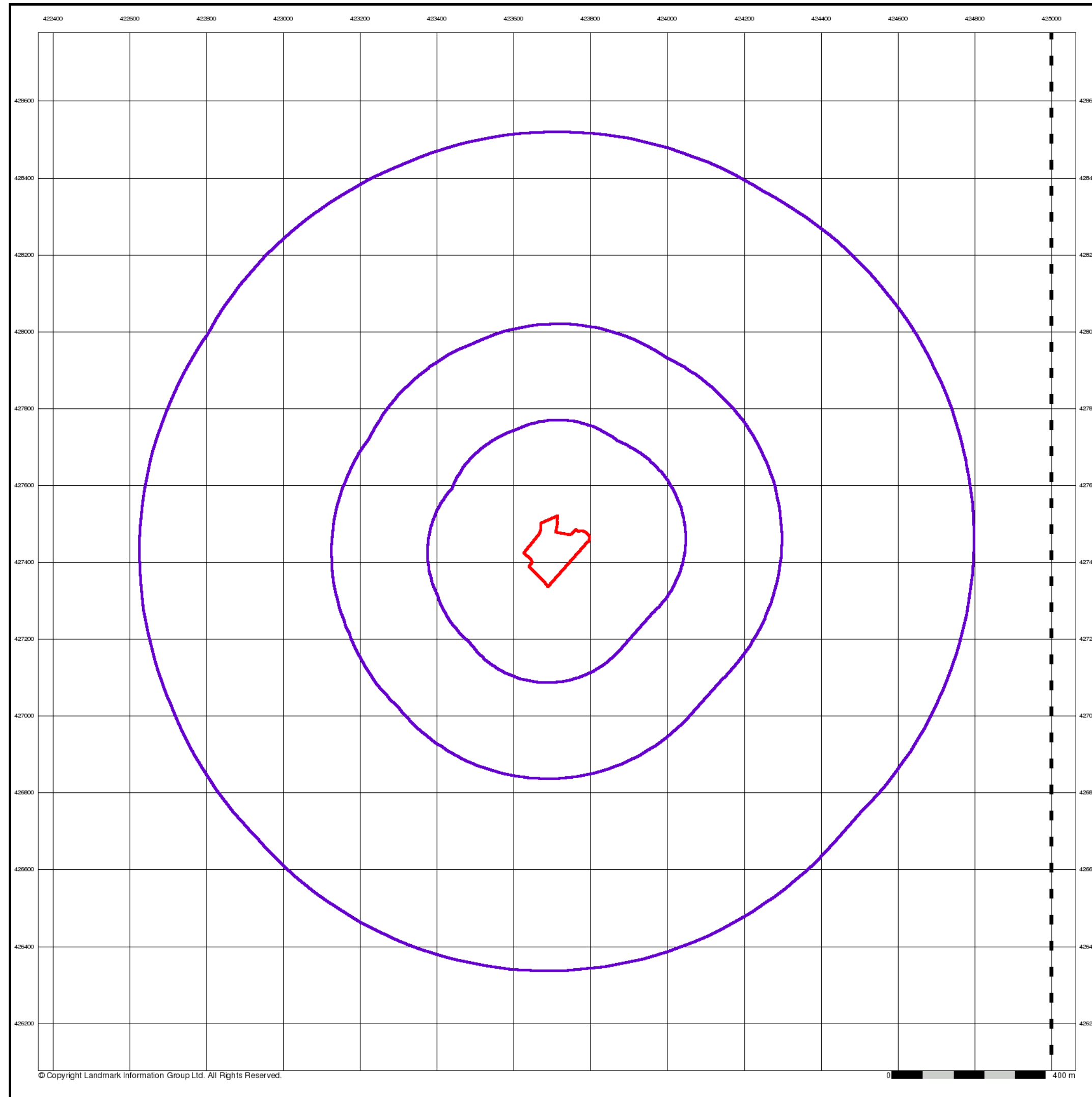
### Site Details

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**Bradford**

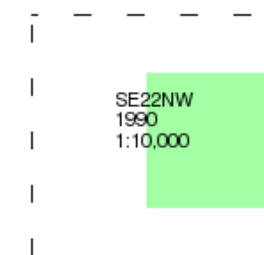
**Published 1990**

**Source map scale - 1:10,000**

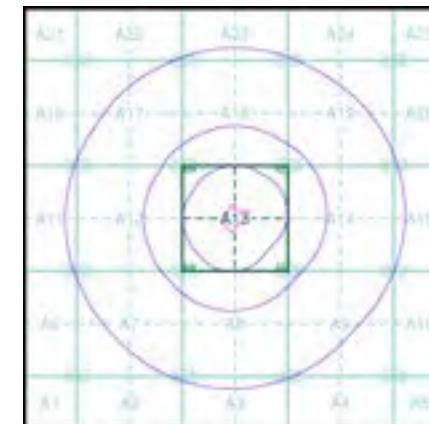
These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.

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### Map Name(s) and Date(s)



### Russian Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
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### Site Details

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## Ordnance Survey Plan

Published 1991 - 1995

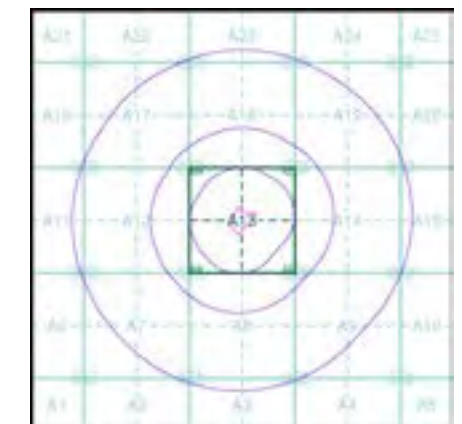
Source map scale - 1:10,000

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### Map Name(s) and Date(s)

|                             |                             |
|-----------------------------|-----------------------------|
| SE 22NW<br>1995<br>1:10,000 | SE 22NE<br>1991<br>1:10,000 |
|-----------------------------|-----------------------------|

### Historical Map - Slice A



### Order Details

Order Number: 259373929\_1\_1  
Customer Ref: 076893 - Bankwood Way, Birstall  
National Grid Reference: 423710, 427430  
Slice: A  
Site Area (Ha): 1.51  
Search Buffer (m): 1000

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